ATLANTIC WOOD WORKS
ROTHESAY RECREATIONAL FACILITY
ROTHESAY, NEW BRUNSWICK

COMPARATIVE STUDY

October 15, 2013

Hanscomb

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1. INTRODUCTION

1.1 Purpose:

This Comparative Study is intended to provide a realistic comparison of direct construction costs for common and potential structural construction elements which may be included in the construction of the Rothesay Recreational Facility, located in Rothesay, New Brunswick, with exceptions of excluded items listed in 1.4 below.

This report will provide an opinion of costs based on a detailed comparison of the unit rates of the specific elements under review and some of the implications in costs resulting from a basic substitution of building materials.

The content of this report is not intended to imply or suggest any code or standard variations, design decisions or any other variations to the current building design.

This report is not intended to provide this project with a total construction cost but rather to look objectively at a series of common construction elements both in the vertical and horizontal planes, specifically columns and walls, floors and roofs, and roof decking, and their cost impacts to the project's potential total costs and duration.

1. INTRODUCTION

1.2 Methodology:

A re-affirming of current knowledge and known pricing of engineered wood elements and in particular the costs of the CLT panels was undertaken.

A direct contact of the major suppliers of engineered wood was undertaken along with a comprehensive research of the content of those firms web sites.

These firms included Goodfellow Inc, Structurlam Products Ltd., Structure Craft Builders Ltd., and Nordic Engineered Wood Ltd., and Kent Building Supplies Ltd.
Detailed retail pricing of the products produced by the above suppliers was received and this information was noted in the tables and used for calculations.

Simpson Strong-Tie Company Inc. provided a very detailed listing of their products along with associated pricing and is the source for connector costs considered.

Timmerman Timberworks provided detailed installation costs of engineered wood components contained in this report.

Discussions with local larger general contractors including Bird Construction, PCL Construction, and Ellis Don Construction, who were asked about their experiences using engineered wood on their projects and their opinions of time required to complete some of the traditional tasks under review were also considered.

Known budget pricing for traditional construction methods and elements for concrete and steel was input and pricing provided by the above wood suppliers and installers was used as comparators to determine basic viability of engineered wood.

Using tables containing a series of sliding unit rate scales, we expect to establish a more precise level of “comparable benchmarks” for budgeting costs in the overall process of determining the viability of engineered wood systems and products versus more traditional construction methods involving concrete and steel.

Pricing shown reflects probable construction costs obtainable in the Rothesay, New Brunswick area on the effective date of this report. This estimate is a determination of fair market value for the construction of these project elements. It is not a prediction of low bid.
Pricing assumes competitive bidding for every portion of the work.

1. INTRODUCTION

1.3 Specifications: Reference to documents provided by engineered wood manufacturers stating material sizes, span and design load tables, product limitations, and applications were used to determine comparatives to traditional construction methods and materials such as concrete and steel.

1.4 Limitations: The project design documents for our report are at a schematic stage and do not provide any relevant dimensions of any element, except potential rough gross horizontal and vertical surface areas.

General conversations were held with engineers to discuss potential scenarios and ask to confirm basic presumptions.

Compared elements cannot be confirmed by designers as this is currently beyond their mandate of providing a schematic design.

Calculations and exact representations of elements are not available at this time and costing assumptions will be subject to change as progress is made to identify more closely an “apples to apples” comparison as the project design evolves.

For example, due to design implications, it is not sure which size of concrete column or steel column would be replaced by any particular glue lam element.

Since it is accepted that there are possible multiple variations in any particular assembly requirement for such considerations as size, strength, load bearing abilities, and spans to name a few, this should be kept in mind when any assemblies are mentioned herein.

An example would be a concrete assembly where the actual size of the element, the rebar content, and the concrete strength suggest many variables depending on the project conditions.

Costs for glue lam systems for large span roofs are generally not available as a square foot unit rate from any manufacturer as it’s eventual cost is totally dependant on the roof’s design which is commonly never identical especially in large span projects.

Reference to upper floor and roof work will be limited to more traditional post and beam construction with lesser spans, however there will be comments for large span structures included in this report but only based on general discussions of costs.

1. INTRODUCTION

1.5 Exclusions:

This Comparative Study does not provide for quantities of works or costs in excess of what is specified for the following items:

- All project soft costs and General Requirements
- Any site cost implications for excavations, remediation, fill, water
- Phased Construction Premiums
- Location Premiums
- Escalation Allowance
- Design and Pricing Allowance
- Construction Allowance (for Change Orders)
- Development Charges
- Permits (Building, Plumbing, Access, etc)
- Value Added Taxes (GST, HST, QST, etc.)
- Winter Conditions Affecting the Work

2. DOCUMENTATION

The project drawings that are provided for this comparison study are currently in schematic design stage.

The design has a linked option for the field house, a community centre element, and includes renovations and an addition to an existing rink.

All of the design documentation in regards to the Wedgewood Park Recreation Facility was received from EXP Architects Inc. and was supplemented with information gathered in meeting(s) and / or telephone conversations with the design team, as applicable.

Along with product brochures, substantial baseline material pricing and references to actual project costs were received from GoodFellow Inc., and StructurLam Ltd., while general discussions was provided by Nordic Engineered Wood.

Baseline cost information through discussion from Structure Craft Builders was also received in regards to constructability costs of large span projects, the innovative design of their “Wood Wave” truss system and NLT (nailed laminated timber).

Insight on impacts of costs of engineered wood systems involving large span projects from Goodfellow Inc, Structurlam Products Ltd., Structure Craft Builders Ltd., and Nordic Engineered Wood Ltd., is that is very variable and always depending on the particular designs of the project and that no single unit rate was available especially when designs were complex. This opinion was concurrent with all four specialists.

Timmerman Timberworks provided substantial insight into costs of CLT, wood decking, and stick framing installation rates as well as some costs for previous large span projects that they have built.

Simpson Strong Tie Ltd. provided retail costs and catalogues of all their products through their on-line price list.

This Comparative Study of potential building elements has been prepared from the documentation included in Appendix Z of this report and the details disclosed in section 2, Documentation.

3. COST CONSIDERATIONS

3.1 Cost Base:

For this comparative study, all costs are estimated on the basis of competitive bid pricing (a minimum of 5 general contractor bids and at least 3 subcontractor bids for each trade) being received in October, 2013 from general contractors and all major subcontractors and suppliers based on a construction elements comparison form of contract.

3.2 Unit Rates:

The unit rates in the preparation of this Comparative Study include labour and material, equipment, subcontractor's overheads and profits.

Rates used do not include any discounts for material supply which may be considered for an economy of scale on a larger project and that the install rates are generally conservative and achievable.

3.3 Taxes:

No provision has been made for any value added taxes (GST, HST, PST, QST, etc.). It is recommended that the owner make separate provision for Tax Requirements in the project budget as applicable.

3.4 Statement of Probable Costs:

Hanscomb has no control over the cost of labour and materials, the contractor's method of determining prices, or competitive bidding and market conditions.
This opinion of probable cost of construction is made on the basis of experience, qualifications and best judgment of the professional consultant familiar with the construction industry.

Hanscomb cannot and does not guarantee that proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.

Hanscomb has prepared this series of estimated potential cost comparisons in accordance with generally accepted principles and practices. Hanscomb's staff is available to discuss its contents with any interested party.

4. COST COMPARISONS

4.1.A CLT Wall Construction:

CLT Panels as Walls – Table 1

Refer to **Table 1** in Appendix A in regards to CLT Panels installed vertically as walls in order to compare with concrete walls from **Table 2** in Appendix B, and concrete block masonry walls from **Table 3** in Appendix C.

Table 1 consists of four (4) matrices which separately show total costs and their breakdown for a three (3), five (5), seven (7), and nine (9) layer CLT panel which are installed vertically as walls.

Each matrix shows labour and equipment costs ranging from about $4 to $7 / SF or about $43 - $75 /m2. These rates have been suggested as reasonable install unit rates for labour and equipment, for the purpose of the following comparisons.

We indicate a test wall that is 18m long and 3.05m high and are assuming a platform framing method to coincide with a typical suspended concrete slab and wall construction method.

Table 1 indicates total hours for labour and equipment which coincides with the floating rate mentioned above between $43 - $75 /m2.

In this analysis the CLT panels range from the lowest cost of about $141 /m2 ($13.12 /SF) for a three layer panel, of which about $43 / m2 ($4 /SF) is for install, to about $345 /m2 ($32 /SF) for a nine layer panel of which, $75 /m2 ($7 /SF) was for cost of install for labour and equipment.

4. COST COMPARISONS

4.1.B Concrete Wall Construction:

Concrete Wall – Table 2 – Group 1 & 2

Table 2 consist of two (2) groups of five (5) separate matrices.
Each matrix identifies concrete walls of varying thicknesses from 150mm thick to 600mm thick.

Table 2 - Group 1 matrix presumes that rebar weight remains constant while concrete volume and strength increases.

Table 2 – Group 2 presumes that rebar weight increases proportionately with the volume and strength of the concrete wall.

The first analysis in **Table 2–Group 1** assumes that the rebar weight or grid will remain constant or at a base minimum while the concrete volume or wall thickness increases as shown and the concrete type is increasing in strength and cost.

Table 2–Group 1 matrices presume a baseline rebar grid of about 27 Kg/m2 or about 5 Lbs/SF in a 150mm thick wall.

This includes 15M verticals each face at 300mm o.c., and 10M horizontals each face at 300mm o.c.

Also includes 10M hooks each 1.2m of length of wall for full height of wall at each V/H intersection each face and an allowance for dowelling / splicing at top and bottom of wall.

In Table 2–Group 1, this rebar quantity is highlighted in red and the Kg/m2 column is constant at about 27 Kg/m2 while the Kg/m3 quantity reduces as the wall thickness increases.

Five (5) different concrete strengths at retail pricing are considered for walls ranging from 25, 30, 35, 40, and 45 Mpa.

Under the conditions of **Table 2-Group 1**, the least expensive concrete wall appears to be 150mm thick at a rate of about $305 /m2 ($28 /SF), and where the most expensive wall is identified as 600mm thick for about $417 /m2 ($39 /SF).

4. COST COMPARISONS

4.1.B Concrete Wall Construction:

In Table 2–Group 2, the following 5 matrices consider that the rebar weight will increase proportionately with the volume.

The highlighted portions show the **Kg/m2 ratio** increasing in proportion with the wall thickness while the **Kg/m3 ratio** remains constant representing our baseline assumption.

Under the conditions of **Table 2–Group 2**, the least expensive concrete wall appears to again logically be the 150mm thick wall at a rate of about $305 /m2 ($28 /SF), and where the most expensive wall is identified as 600mm thick for about $578 /m2 ($54 /SF).

The impact of the rebar can be noted in **Table 2-Group 2** conditions where, for the same wall, it's unit rate increases by about 30%

4. COST COMPARISONS

4.1.C CLT and Concrete Wall Analysis:

Summary of CLT and Concrete Wall

Concrete walls are recognized as being strong in compressive strength without the use of reinforcing steel.

This supporting strength is increased by various factors with the installation of reinforcing steel bars within the concrete shape of the bearing element.

Concrete wall bearing and strength requirements are addressed by either using stronger mixes of concrete and thicker walls with larger cross sectional load bearing areas instead or by increasing the use of rebar or reinforcing steel.

Although the time of the concrete activity is not shown, experience allows that in a typical floor scenario when getting ready to pour a concrete wall of this scope, it is usually a whole day event which must include time for the hydration process (curing) of concrete to complete before stripping the forms.

When using fly form wall panels of about 9m each, and adding the total time for the process of setting one side of the forms in place using a tower crane, getting a rebar crew to install the rebar, closing the wall with the other half of the panels, and finally pouring the concrete with the tower crane, this could easily take 4 – 6 hours.

Add the coordination of 4 separate crews and the concrete supply, including form setters, rodmen, labourers to place the concrete and a crew to strip the forms.
Stripping the forms should allow for an additional hour or two the next day.

In comparison, by refering to **Table 1**, for the CLT panels, the shortest duration appears to be 2.1 hours to complete the same wall surface at about $43 /m2 ($4 /SF) install rate and ranging to about 3.7 hours if we consider a slower pace of install at about $75 /m2 ($7 /SF).

It would appear that the CLT method is quicker to install than concrete walls of the same surface area, regardless of the thickness of the concrete wall.

4. COST COMPARISONS

4.1.C CLT and Concrete Wall Analysis:

Summary of CLT and Concrete Wall

The largest contributing factor is that all of the work for the concrete work is done on site while the fabrication of the CLT panels is done off site, so install is the only process to consider once delivery of the CLT is made.

Precast concrete would likely be a close competitor to the CLT install rates but would also likely be in the same range of cost as the site cast concrete wall.

Tilt up concrete wall panel method can range from about $24 / SF for a plain un-insulated panel to $35+ / SF for more complex sandwich panels, depending on the level of openings, and exterior finish.

Per **Table 1**, CLT panels of five (5) or seven (7) layers would range to being less cost ($/SF) in the thinner CLT panel and competitive in cost for the seven layer CLT panels when compared to the plain un-insulated tilt up panels

In regards to costs, the most expensive nine (9) layer panel is about $345 /m2 ($32 /SF) and this would compare at the most to a 200mm wall from **Table 2-Group 2**, for all concrete strengths.

A higher range of wall thicknesses are cost comparable in **Table 2-Group 1.**

Overall, CLT panels installed vertically are more economical to install than concrete walls of almost any width, depending on the application.

Because of the off-site fabrication component and potentials for off loading directly from truck beds where site lay down areas may be not available such as in city cores, CLT panels allow for a higher potential daily productivity.

4. COST COMPARISONS

4.1.D Concrete Block Wall Construction:

Concrete Block Wall – Table 3

Table 3 consists of five (5) separate matrices.

Each matrix identifies concrete block walls of varying thicknesses starting at 100mm thick to 300mm thick.

Even though the straight line productivity calculation indicates that total install time for the concrete block walls ranges from about 8 hours or one (1) day to 14 hours or about (1.75 days), due to the curing and load bearing characteristics of the mortar.

Installation needs to be sequenced to allow the hydration process of the mortar to achieve sufficient further load bearing abilities.

Because of the weight of concrete block and the plasticity of the mortar, there is a limiting height to consider due to the curing and subsequent load bearing capabilities of the mortar during assembly.

Masonry work is usually completed from a scaffold system which requires set up and dismantling.

Unit Rates expressed include reinforcing and solid fill.

4. COST COMPARISONS

4.1.E CLT and Concrete Block Wall Analysis:

Summary of CLT and Concrete Block Wall

In reference to **Table 3**, It would seem that if the comparison were to be made based on cost per square foot ($/SF) alone, it is apparent that there are not too many options where CLT is a better value.

The value for the CLT panel would have to be realized in a trade off scenario promoting productivity instead of a direct cost comparison.

As previously stated, for the CLT panels, the shortest duration appears to be 2.1 hours to complete the same wall surface at about $23 /m2 ($4 /SF) install rate and ranging to about 3.7 hours if we consider a much slower pace of install at about $75 /m2 ($7 /SF).

With a conservative outlook, the CLT wall surface installation versus block installation in one day could be doubled on the first day and added to for the following day(s) while the masonry work is completed.

The delta in eventual cost would ultimately depend on the designer's choice of CLT panel vs. the choice of concrete block wall and the impact of task duration to the Project.

4. COST COMPARISONS

4.2.A CLT Floor Construction:

CLT (Suspended Floor) – Table 4

Table 4 consists of four (4) matrices which separately show total costs and their breakdown for a three (3), five (5), seven (7), and nine (9) layer CLT panel which are installed horizontally as floor.

Each matrix shows labour and equipment costs ranging from about $2.50 to $4 / SF or about $27 - $43 /m2. These rates have been suggested as reasonable install unit rates for labour and equipment, for the purpose of the following comparisons.

We indicate a test floor bay that is 12m long and 6m wide and are assuming a platform framing method to coincide with a typical suspended concrete slab and OWSJ construction method.

Table 4 indicates total hours for labour and equipment which coincides with the floating rate mentioned above between $27 - $43 /m2.

In this analysis the CLT panels range from the lowest cost of about $112 /m2 ($10.37 /SF) for a three layer panel, of which about $27 / m2 ($2.50 /SF) is for install, to about $291 /m2 ($27.06 /SF) for a nine layer panel of which, $43 /m2 ($4 /SF) was for cost of install for labour and equipment.

Refer to **Table 4** in Appendix D in regards to CLT Panels installed horizontally in order to compare with concrete slabs from **Table 5** in Appendix E, and open web steel joist (OWSJ) assemblies from **Table 6, 7, 8, and 9** in Appendix F.

4. COST COMPARISONS

4.2.B Concrete Floor Construction:

Concrete Floor – Table 5

Table 5 consists of four (4) groups of four (4) separate matrices.

Each group identifies concrete slabs of varying thicknesses ranging from 150mm, to 200mm, 250mm and 300mm thick.

Each group of **Table 5** has a sliding scale for the rebar weight. In **Group 1** for the 150mm slab, this weight is ranging from about 25 kg/m2 (5 Lbs/SF) which represents a lightly reinforced slab to about 44 kg/m2 (9 Lbs/SF) which represents a more robust reinforcing grid.

This weight range increases in proportion with the slab thickness where **Group 4** rebar weight is ranging from about 44 kg/m2 (9 Lbs/SF) to about 69 kg/m2 (14 Lbs/SF).

Under the conditions of **Table 5 - Group 1 to 4**, the least expensive concrete slab appears to be 150mm thick at a rate of about $230 /m2 ($21 /SF), and where the most expensive slab is identified as 300mm thick for about $375 /m2 ($35 /SF).

4. COST COMPARISONS

4.2.C CLT and Concrete Floor Analysis:

Summary of CLT and Concrete Slab

Although the time of the concrete activity is not shown, experience allows that in a typical floor scenario when getting ready to pour a concrete slab of this sample scope, it is usually a whole day event which must include time for the hydration process (curing) of concrete to complete before stripping the forms.

When using fly form slab panels which can be fabricated to fit this sample bay size, and adding the total time for the process of setting the forms in place using a tower crane, getting a rebar crew to install the rebar, pouring the concrete with the tower crane, this could easily take 4 – 6 hours.

Add the coordination of 4 separate crews and the concrete supply, including form setters, rodmen, labourers to pour, screed, and time to trowel finish the slab, and a crew to strip the forms.
Stripping the forms should allow for an additional hour or two within the next couple of days.

The delta in eventual cost would ultimately depend on the designer's choice of CLT panel vs. the choice of concrete slab and the impact of task duration to the Project.

The largest contributing factor is that all of the work for the concrete work is done on site while the fabrication of the CLT panels is done off site so install is the only process to consider once delivery is made.

On a direct unit rate cost comparison, the CLT panels in shorter span scenarios involving three (3), five (5), and (7) layer panels, range from being more economical to being reasonably competitive for larger spans using nine (9) layer CLT panel.

Refer to **Table 4** in Appendix D in regards to CLT Panels installed horizontally in order to compare with concrete slabs from **Table 5** in Appendix E, and open web steel joist (OWSJ) assemblies from **Table 6, 7, 8, and 9** in Appendix F.

4. COST COMPARISONS

4.2.C CLT and Concrete Floor Analysis:

Summary of CLT and Concrete Slab

For the CLT panels, the shortest duration appears to be 2.0 hours to complete the same floor surface at about $27 /m2 ($2.50 /SF) install rate and ranging to about 3.2 hours if we consider a slower pace of install at about $43 /m2 ($4 /SF).

To conclude, it would appear that the CLT method is quicker to install than cast in place concrete floors of the same surface area, regardless of the thickness of the concrete slab.

The CLT panel can have a higher daily productivity on a daily basis and at a potentially lower cost depending on design of comparator.

With a conservative outlook, the CLT floor surface installation versus suspended concrete installation in one day could be doubled on the first day and added to for the following day(s) while the concrete work is completed.

The delta in eventual cost would ultimately depend on the designer's choice of CLT panel vs. the choice of concrete slab and the impact of task duration to the Project.

The largest contributing factor is that all of the work for the concrete work is done on site while the fabrication of the CLT panels is done off site so install is the only process to consider once delivery is made.

The precast slabs have similar characteristics to CLT for span and cost is reasonable.
The precast slab has a top finish requirement which normally includes a concrete topping to allow a level surface for the following floor finishes and there is also usually a camber to the precast panels.

The Precast Panel would be a viable alternative cost wise to the CLT panel in many regards.

Precast concrete would likely be a close competitor to the CLT install and supply rates.

4. COST COMPARISONS

4.2.D OWSJ Floor Construction:

Open Web Steel Joist (OWSJ) Floor –Table 6, 7, 8, and 9

The Can-Am Joist Catalogue, shows it's tables in different matrices considering various ranges of factored loads, joist mass, and spans, to name of few of their table characteristics.

OWSJ Tables, re-tabulated here-in from the Can Am Catalogue, identify joists depths to support various spans under various factored load conditions.

Each OWSJ assembly in **Tables 6, 7, and 8**, includes the joist, metal deck and a 75mm concrete topping.

Unit rates will considered from OWSJ tables from the catalogue with factored loads ranging from

- **Table 7** at 9.0 kN/m as the lower end,
- **Table 6** 13.5 kN/m as the mid point, and
- **Table 8** 18.0 kN/m as the higher end

Refer to **Table 6, 7, 8, and 9** in Appendix F, in regards to Open Web Steel Joist (OWSJ) floor assembly unit rates.

Tables 6, 7, and 8, each consist of 8 groups, with 4 matrices per group expressing 4 various joist depths, spacing, and mass characteristics within their respective assemblies.

Each Group represents a certain span.

Example: Group 1 is 3m span, **Group 2** is 4m span, etc up to 10m span in each Table.

Each Table (6, 7, and 8) is identical in content with the only variable difference between tables being the factored load presumptions.

Table 9 is provided as a comparative summary of **Table 6, 7, and 8**.

Groups 1 to 8 of each Table identify joist depth, spans from 3m (10 Ft) to 10m (33 Ft), mass of OWSJ, and assumed spacing starting at a 1:1 ratio and increasing by 50mm increments.

Example of 1:1 ratio (one to one): a 200mm deep joist set on a 200mm spacing.

4. COST COMPARISONS

4.2.E CLT and OWSJ Floor Analysis:

Summary of CLT and OWSJ Floor

The main reason for the elevated scrutiny to potential costs using the OWSJ construction method is because this is the main alternative choice to concrete construction methods when costs, building dynamics, and speed of construction are an issue.

The dead load of the structural steel construction method is also generally accepted by Engineers to be lighter than concrete and works well in areas where poor soil bearing capacity conditions exist and lighter structures are required.

It is a concurrence in supporting discussions with engineers, engineered wood designers, and contractors during the preparation of this report, that wood construction is an even substantially lighter alternative in overall structural dead load than steel.

The construction method of steel is comparable to the wood alternative in the sense that most materials are fabricated off site and the work comprises mostly of assembly of the parts.

For longer spans, it would appear that the OWSJ may have the advantage on cost analysis basis of $/m2 or $/SF versus some thicker CLT panels.

As the span increases, it seems that the thicker CLT panels are more even in costs with the OWSJ assembly, and in some cases, more expensive.

In the shorter spans, up to about 6 -7m depending on OWSJ design, the cost for OWSJ are generally higher than CLT in certain scenarios.

Overall, the CLT panel is not a clear advantage directly in a cost per SF comparison because of the immense design variables available in the OWSJ tables.

It's possible however, based on an Engineer's determination of acceptable product, for either assembly to prove that it has the cost advantage under specific conditions.

4. COST COMPARISONS

4.2.E CLT and OWSJ Floor Analysis:

Summary of CLT and OWSJ Floor

The factored load and the choice of the depth of a particular OWSJ in a particular span, has a direct bearing on the mass (kg/m) of that OWSJ and it's eventual potential unit rate.

Rule of Thumb: A lighter joist costs less than a heavier one.

In regards to the data in **Table 6, 7, and 8**, a constant can be determined where in each Table, besides the consideration of the mass of the joist, when based on spacing criteria;

- The highest cost for an OWSJ of any depth, is when they are spaced on a 1:1 ratio or less
- Spacing in any ratio greater than 1:1 determines the overall economy of the OWSJ system
- The wider the spacing on any particular joist the lower the cost per m2 or SF

Example 1: To demonstrate how a deeper joist can be less expensive than a shallower joist,

refer to **Table 6 - Group 1** where in a 3m span, using the same factored loading, and a 1:1 spacing ratio,

- a 250mm joist on a 1:1 spacing is $220/m2 ($20.40/SF) and,
- a 350mm joist with the same criteria of 1:1 spacing is $201/m2 ($18.68/SF) for the same span.

The reason that a 350mm deep joist is less expensive than a 250mm joist for the same job is simply because the spacing ability of the 350mm joist is greater and and it's joist mass based on the factored loading , although higher than the 250 joist per meter, for that span. and likely for other similar conditions this is where the OSJW can provide the economy within it's own system.

4. COST COMPARISONS

4.2.E CLT and OWSJ Floor Analysis:

Summary of CLT and OWSJ Floor

From Example 1, if you refer to **Table 7 Group 1,** which has a lower factored load, the unit rate for these OWSJ are the same, because the joist mass has not changed.

From Example 1, if you refer to **Table 8 Group 1,** which has a higher factored load, the unit rate for these OWSJ are relatively the same, because the joist mass has only increased slightly for the 250 joist and remains constant for the 350 joist.

This indicates a minimum fabrication mass under certain conditions, and this is where the CLT panels gain some ground in regards to cost viability in shorter span conditions versus steel.

Example 2: To demonstrate how two (2) OWSJ of any identical depth can have a multitude of different unit rates,

Refer to **Table 6 - Group 1** where;

- in a 3m span, a 250mm joist assembly on a 1:1 spacing is $220/m2 ($20.40/SF) and

Where the same joist in **Table 6 - Group 2**, using a longer span;

- for a greater span at 4m is $244/m2 ($22.66/SF)

The reason is that when span increases for an OWSJ, according to the tables, the mass of the joist (kg/m) to be used also increases accordingly.

Of course, conversely, if the span decreases for an OWSJ, the opposite conclusion applies.

So it should not possible to state that a OWSJ of any particular depth is $x / SF because it's unit rate is directly dependent on it's span.

According to the summary shown at **Table 9**, it seems that on the shorter spans, there is less change to the joist mass than in the larger span when changing factored loads.

4. COST COMPARISONS

4.2.E CLT and OWSJ Floor Analysis:

Summary of CLT and OWSJ Floor

The ratio of change from the baseline in regards to the mass of the joist, when going to a higher factored load is greater than when going to a lower factored load.
This affects the OWSJ unit rate cost proportionately.

Depending on the application, an engineer can choose from a wide array of joists, their factored load, and their spacing, in order to achieve the design parameters required.

In regards to productivity, it is generally agreed that similarly to the concrete comparator, the OWSJ assembly requires coordination of multiple trades to complete this task including the coordination of the supply and placing of the concrete and it's finishing.

These would include, steel erectors for the joists, welding, and decking, and concrete labourers to place and finish the concrete.

The timeline to accomplish the OWSJ and decking installation for the sample bay could be accomplished in the range of four to six (4-6) hours and about one (1) hour to place the concrete and another two (2) hours to finish it.

Curing time would not be a factor as there is no stripping of forms involved but no use of the OWSJ floor could be allowed until the concrete was ready.

CLT in reference to **Table 4** indicates a range of about two (2) to 3 ½ hours to install the same size bay.

This process would involve the placing of roughly two (2) panels of about 12m long x 3m wide to accomplish the task.

The timeline comparison indicates that the CLT installation productivity for closing in floor area would be greater than any OWSJ assembly method by potentially a doubling factor as a conservative estimate when assuming the lowest CLT productivity of $43/m2 ($4/SF).

Depending on design, the differences in cost per $m2 between either system is not substantial at any degree but the productivity offers a clear distinction that the installation of any CLT product would be more productive on a site.

4. COST COMPARISONS

4.3.A Glulam Column – SPF Type
Construction:

Glulam Column – Table 10

Table 10 considers Glulam Columns fabricated out of SPF and Western Fir / Larch materials.

The breakdown consists of **6 groups**, which are broken out further into 3 groups per wood type.

Table 10 Groups 1, 2, and 3, are SPF Columns with increasing thicknesses from;

- 130mm (5 1/8") to
- 217mm (8 ½") wide

And with varying depths ranging from

- 115mm (about 4") to
- 650mm (about 26") deep

Table 10 Groups 4, 5, and 6, are Western Fir / Larch Columns with the same dimensions as **Group 1, 2, 3**.

Refer to **Table 10** in Appendix G in regards to Glulam installed vertically in order to compare with concrete columns from **Table 11** in Appendix H, and structural steel and HSS (hollow structural steel) columns from **Table 12** in Appendix I.

4. COST COMPARISONS

4.3.B Concrete Column Construction:

Concrete Column – Table 11

Table 11 – Groups 1 to 11, consists of eleven (11) groups of four (4) separate matrices each.

Table 11 identifies multiple scenarios involving a range from 150mm to 450mm thick concrete columns with varying depths ranging from 150mm to 700mm using a sample height of 3.05m (10 Ft).

Increasing concrete strengths are highlighted as well as rebar reinforcing assumptions.

Table 11 – Group 1 allows a lighter baseline 20M bar vertical reinforcing grid with 10M stirrups at 0.3m (1 Ft) intervals, allowance for splice included for a 150mm wide column.

Table 11 – Group 2 allows a heavier baseline 25M bar vertical reinforcing grid with 10M stirrups at 0.3m (1 Ft) intervals, allowance for splice included for a 150mm wide column.

Concrete Column assumptions showed above is used to provide increases to all factors such as rebar weight, concrete strength, and column dimensions **in Table 11 Group 1 through to 11**.

4. COST COMPARISONS

4.3.C Glulam and Concrete Column Analysis:

Summary of Glulam and Concrete Column

The premium for Western Fir Glulam over SPF type seems to be mostly about 10% but ranges up to 15-20% in some cases.

In large span conditions, these wood columns may be further laminated using various connectors to increase their bearing capacity as required.

The unit rates would likely increase accordingly with added premiums for laminations and connections.

For **SPF type Glulam at 130mm thick / wide**, supply and install costs ranging from about $53/m ($16.07/Ft) to $135/m ($41.17/Ft).

For **SPF type Glulam at 177mm thick / wide**, supply and install costs ranging from about $68/m ($20.74/Ft) to $169/m ($51.48/Ft).

For **SPF type Glulam at 217mm thick / wide**, supply and install costs ranging from about $87/m ($26.62/Ft) to $213/m ($65.00/Ft).

For **Western Fir type Glulam at 130mm thick / wide**, supply and install costs ranging from about $59/m ($17.94/Ft) to $156/m ($47/ Ft).

For **Western Fir type Glulam at 177mm thick / wide**, supply and install costs ranging from about $76/m ($23.31/Ft) to $226/m ($69.01/Ft).

For Western Fir type Glulam at 217mm thick / wide, supply and install costs ranging from about $104/m ($31.72/Ft) to $265/m ($80.69/Ft).

4. COST COMPARISONS

4.3.C Glulam and Concrete Column Analysis:

Summary of Glulam and Concrete Column

The main reason for the elevated scrutiny to potential costs using concrete columns is because this is one of the main alternative choices to wood and steel construction methods when non-combustible construction requirements are an issue.

A detailed review of potential unit rates of this item is required to evaluate any considered “apple to apple” replacement cost if wood were to be the option in place.

Concrete Column assumptions in Table 11 Group 1 start with range in costs from $106/m ($32.41/Ft for the lightest column with the lowest Concrete type of 25 Mpa to about $296/m ($90.09/Ft) for the heaviest column of 150mm wide x 700mm depth and with the highest concrete strength of 45 Mpa.

Table 11 – Group 2 allows a heavier baseline 25M bar vertical reinforcing grid with 10M stirrups at 0.3m (1 Ft) intervals, allowance for splice included for a 150mm wide column.

Concrete Column assumptions increases all factors such as rebar weight, concrete strength, and column dimensions **in Table 11 Group 1 through to 11**.

Unit rates ($/m) for the concrete column scenarios range from a lowest point of about $106/m ($32.41/Ft) to about $1,140/m ($347.34/Ft).

This is a very wide range of potential costs for the concrete columns and consequently allows the engineer a variety of potential assembly possibilities with associated varied potential costs.

Although the time of the concrete activity is not shown, experience allows that in a typical floor scenario when getting ready to pour a concrete column based on this sample scope, it is usually a whole day event which must include time for the hydration process (curing) of concrete to complete before stripping the forms.

Varying types of forms allows for generally the possibility of rapid set up of the forms and overall, this task could be one of the quickest to complete in the concrete industry in regards to structural members.

4. COST COMPARISONS

4.3.C Glulam and Concrete Column Analysis:

Summary of Glulam and Concrete Column

The ability for the rebar crew to be able to pre-fabricate the rebar grid for the column and simply fly it into place identifies some of the same characteristics associated with engineered wood for "off site" preparation.

When using fly form columns, they are dropped in place, a rebar crew to install the rebar is done quickly if pre-assembled and closing and bracing the column to prep for pour should be complete also relatively quick, and finally pouring the concrete with the tower crane or pump, this process could easily take 1-2 hours if done continuously.

Add the coordination of 3 separate crews and the concrete supply, including form setters, rodmen, labourers to pour the concrete, and a crew to strip the forms the next day.

Based on **Table 10 – Group 6,** on a direct unit rate cost comparison, the most expensive Glulam column shown is the Western Fir type at about $265/m ($80.69/Ft).

This unit rate appears reasonable and likely comparable to / and potentially better value than concrete depending on a comparable design evaluation.

The duration of installation in Table 10 for the Glulam column is again a fraction of the best time available for any concrete column.

The Glulam column has a higher daily productivity potential and at a lower productivity cost depending on design of concrete comparator.

The delta in eventual cost would ultimately depend on the designer's choice of Glulam column vs. the choice of concrete column and the impact of task duration to the Project.

Without an Engineer's input on an "apple to apple" replacement or substitution, the cost benefit is still uncertain for the wood option but this analysis allows some beginning of insight into the associated costs.

4. COST COMPARISONS

4.3.D Structural Steel Column Construction:

Structural Steel Column – Table 12

Table 12, in Appendix J, consists of thirteen (13) groups.

The groups are established in order to break out the different sizes of steel columns and to identify reference points in the comparison.

Our project experiences identify many various sizes of structural steel beams that have been used in a variety of different conditions.

The most usual sizes noticed range within the mid to lighter ends of **Table 7, 8, 9, 10, and 11.**

Hollow Structural Steel – Table 13

Table 13, in Appendix K, consists of six (6) groups.

The groups are established in order to break out the different sizes of HSS and to identify reference points in the comparison.

4. COST COMPARISONS

4.3.E Glulam and Stuctural Steel Column Analysis:

Summary of Glulam and Structural Steel Column

We can identify that it appears structural steel wide flange shapes within **Table 12 – Group 12 and 13,** are close comparators in cost to our glulam comparator group of **Table 10** if the comparison was being made directly according to width and depth.

The mid to lower range of **Table 12 – Group 11** is within the cost range of the gluelam column ranges.

The lower ranges of **Table 12 – Group 8, 9, and 10** seem to fall within the higher range of gluelam column costs and the heavier range of the table seems to escalate quickly where we would be looking at more massive gluelam columns for comparison of cost.

Table 12 – Group 1, to 7, are all massive beams and are not within the comparability range of our glulam **Table 10**.

The trend is obvious that the heavier the steel member, the more expensive per lineal metre.

The least expensive structural steel beam appears to be a W150 x 13 which translates roughly to a steel beam of about 150mm depth weighing about 13 Kg/m for about $57 /m ($17.43 /Ft).

In comparison, the least expensive glulam column appears to be SPF 130mm x 120mm (5 1/8” x 4” dp) at about $53 /m ($16.07 / Ft)

Table 13, Hollow Structural Steel, has much more potential to be considered as direct competitor to the gluelam columns of **Table 10**.

The hollow nature of the HSS allows it to be used in a wide variety of lighter structural steel framing projects at a relatively lower cost compared to structural steel beams.

The HSS cost range of **Table 13 – Group 1, to 6** is low and not out of line with the costs of comparable sized glulam beams.

This HSS element would form one of the greater deciding cost factors if structural steel that would be used versus engineered wood framing.

Without a direct substitution requirement for steel versus glulam column, it is difficult to determine the true cost comparison of steel identified in either **Table 12 or 13.**

4. COST COMPARISONS

4.4.A Wood Deck Construction:

Wood Deck – Table 14

Table 14, Wood decking was evaluated according to four (4) available thicknesses ranging from 25mm x 150mm (1" x 6") to 100mm x 150mm (4" x 6")

Labour and equipment rates range from $13.45/m2 ($1.25/SF) to $26.91/m2 ($2.50/SF)

Refer to **Table 14,** in Appendix L, in regards to Wood Decking.

4. COST COMPARISONS

4.4.B Metal Deck Construction:

Metal Deck – Table 15

Table 15, Metal decking was evaluated according to **Roof Deck and Floor Deck** in metal gauges ranging from 22G to 18G and 16G.

Refer to **Table 15,** in Appendix M, in regards to Metal Decking.

4. COST COMPARISONS

4.4.C Wood and Metal Deck Analysis:

Summary to Wood and Metal Deck

The comparison between wood decking and metal decking is a more direct evaluation.

Both materials require an almost identical supporting substrate framing which if required, could be suitable and inter-changeable from wood to steel for either product.

There would however be a slight advantage in having wood framing when ease of connection is considered. The consideration would be nailing and connectors versus welding.

Productivity in laying the decking would likely be more productive with metal decking as the product is available in sheets where the wood decking is available in narrow plank widths.

The balancing point on installation productivity may be in the length of the deck boards, which may offset some of the advantage held by the metal deck sheets.

The low cost range for the 25mm (1") thick wood decking was according to the highest productivity or lowest cost per meter square ($/m2) of labour rate which was about $13.45 /m2 ($1.25 /SF) for labour only, which was contributing to a total install rate of about $28 /m2 ($2.63 /SF).

The higher cost range for the 100mm (4") thick decking starts according to the highest productivity or lowest cost per meter square ($/m2) of labour rate which was about $13.45 /m2 ($1.25 /SF) for labour only, which was contributing to a total install rate of about $71 /m2 ($6.59 /SF).

The 25mm x 150mm (1" x 6") wood decking appears to be more economical to install than either the 38mm (1 ½") roof or floor deck under certain productivity scenarios.

The 50mm x 150mm (2" x 6") wood decking is competitive in cost to the 38mm (1 ½") metal roof decking as well to the 51mm (2") floor deck.

4. COST COMPARISONS

4.4.C Wood and Metal Deck Analysis:

Summary to Wood and Metal Deck

The 75mm x 150mm (3" x 6") wood decking appears to be competitive to the 76mm (3") metal roof deck but less competitive to the interior 76mm (3") metal floor deck.

The 100mm x 150mm (4" x 6") wood decking appears to be competitive to the 76mm (3") metal roof deck's heavier gauge, but less competitive to the interior 76mm (3") metal floor deck.

In regards to metal decking;

The low cost range for the 38mm (1 1/2") ribbed roof decking is about $32.31/m2 ($3.00 /SF) for a 22 Gauge deck in comparison to the higher end cost of about $46.33 /m2 ($4.30 /SF) for a 16 Gauge deck.
The heavier gauge deck is about 30% more expensive.

The low cost range for the 76mm (3") ribbed roof decking is about $52.06 /m2 ($4.84 /SF) for a 22 Gauge deck in comparison to the higher end cost of about $71.94 /m2 ($6.68 /SF) for a 16 Gauge deck.
The heavier gauge deck is about 28% more expensive.

The low cost range for the 51mm (2") composite floor decking is about $33.87 /m2 ($3.15 /SF) for a 22 Gauge deck in comparison to the higher end cost of about $41.92 /m2 ($3.89 /SF) for a 18 Gauge floor deck.
The heavier gauge deck is about 19% more expensive.

The low cost range for the 76mm (3") composite ribbed floor decking is about $47.11 /m2 ($4.38 /SF) for a 22 Gauge deck in comparison to the higher end cost of about $56.39 /m2 ($5.24 /SF) for a 18 Gauge deck.
The heavier gauge deck is about 16% more expensive.

Note that the floor deck only goes to 18 Gauge thickness while the roof deck includes a 16 Gauge thickness.

4. COST COMPARISONS

4.5.A Dimensioned Wood Floor Framing Construction:

Dimensioned Wood Floor Framing – Table 16

Table 16 consists of four (4) Groups.

Each group in **Table 16** represents a dimensioned wood size starting from

- 2" x 6",
- 2" x 8",
- 2" x 10",
- 2" x 12"

Each Group has **5 identical matrices** which have identical framing criteria.

One of the Matrix variables is the spacing of the floor joists which start at 150mm (6") on centre (o.c.) and increase incrementally to 400mm (16") o.c.

The sheathing supply costs are constant, however the labour portion for both the framing and sheathing installation productivity ratings vary, and are calculated on a sliding scale.

Each matrix shows labour and equipment costs which have been suggested as reasonable and achievable install unit rates for labour and equipment, and suitable for the purposes of the following comparisons.

We indicate a test floor that is 4.88 long x 3.05m wide which is mounted on foundation wall on all sides and includes a sill plate and anchor bolts, as well as bridging.

We are assuming a platform framing method to coincide with a typical suspended concrete slab construction method for additional comparison.

4. COST COMPARISONS

4.5.B TJI (Truss Joist) Floor Framing Construction:

Truss Joist (TJI) Floor Framing – Table 17, 18, and 19

Table 17, and 18 consists of four (4) Groups each while **Table 19** consists of five (5) Groups due to an additional depth of joist selection.

Each group in **Table 17, and 18** represents a Truss Joist size starting from

- 3" x 9 1/2",
- 3" x 12",
- 3" x 14",
- 3" x 16"

Each group in **Table 19** represents a Truss Joist size starting from

- 4" x 12",
- 4" x 14",
- 4" x 16"
- 4" x 18"
- 4" x 20"

Each Group has **5 identical matrices** which have identical framing criteria exactly identical to the Dimensioned Wood Floor framing model.

One of the Matrix variables is the spacing of the floor joists which start at 150mm (6") on centre (o.c.) and increase incrementally to 400mm (16") o.c.

The sheathing supply costs are constant, however the labour portion for both the framing and sheathing installation productivity ratings vary, and are calculated on a sliding scale.

Each matrix shows labour and equipment costs which have been suggested as reasonable and achievable install unit rates for labour and equipment, and suitable for the purposes of the following comparisons.

We are assuming a platform framing method with a sample floor that is 4.88 long x 3.05m wide which is mounted on foundation wall on all sides and includes a sill plate and anchor bolts, as well as bridging.

4. COST COMPARISONS

4.5.C Dimensioned Wood and TJI Floor Framing Analysis:

Summary to Dimensioned Wood and TJI Floor Framing

The initial mandate of the report is to compare potential wood built elements with more traditional concrete and steel building components.

This will be completed after this brief wood to wood review.

The main reason why this wood on wood review is required for the floor framing work is based on the needs of two finite criteria,

- Short span framing
- Longer span framing

It is common knowledge that Dimensioned Lumber has less of a spanning ability than the Truss Joist assembly.

It would therefore be logical to determine where one method is more economical than the other.
Further, the sheathing being considered in this comparison is also considered an engineered wood and it's cost is of interest as well.

The sheathing considered, in order of ascending cost are as follows;

- 5/8" (16mm) Tongue and Groove (T&G) OSB
- 23/32" (19mm) T&G OSB
- 7/8" (23mm) T&G OSB
- 5/8" (16mm) T&G Spruce Ply – Select
- 3/4" (20mm) T&G Spruce Ply – Select

Based on **Table 16 Group 1** with a 2" x 6" Dimensioned Wood framing grid of 150mm (6") o.c. and using 1/2" OSB, the assembly cost ranges from,

- $98.82 /m2 ($9.18 /SF) to
- $66.93 /m2 ($6.22 /SF) with a framing grid that is 400mm (16") o.c. and using 3/4" Spruce Select ply

The constant within each Matrix in each Group is the fact that regardless of which size of Dimensioned Wood is used, the most expensive assembly will be;

- Any framing on 150mm (6") centre
- Any assembly using the 3/4" (20mm) Select Spruce ply

4. COST COMPARISONS

4.5.C Dimensioned Wood and TJI Floor Framing Analysis:

Summary to Dimensioned Wood and TJI Floor Framing

Therefore with that information, the most expensive assemblies are as follows within **Table 16**;

- Group 1, 2" x 6" SPF with 3/4" Select T&G Spruce Ply at $69.88 /m2 ($6.49 /SF)
- Group 2, 2" x 8" SPF with 3/4" Select T&G Spruce Ply at $79.36 /m2 ($7.37 /SF)
- Group 3, 2" x 10" SPF with 3/4" Select T&G Spruce Ply at $92.24 /m2 ($8.57 /SF)
- Group 4, 2" x 12" SPF with 3/4" Select T&G Spruce Ply at $113.97 /m2 ($10.59 /SF)

Conversely the least expensive assembly in each Group of Table 17 will be any Dimensioned Wood that is framed at 400mm (16") o.c., and sheathed with 5/8" (16mm) OSB.

Therefore with that information, the least expensive assemblies are as follows within **Table 16**;

- Group 1, 2" x 6" SPF with 5/8" T&G OSB at $40.19 /m2 ($3.73 /SF)
- Group 2, 2" x 8" SPF with 5/8" T&G OSB at $44.78 /m2 ($4.16 /SF)
- Group 3, 2" x 10" SPF with 5/8" T&G OSB at $51.19 /m2 ($4.76 /SF)
- Group 4, 2" x 12" SPF with 5/8" T&G OSB at $61.90 /m2 ($5.75 /SF)

From this information we can conclude that the most expensive assembly in **Table 16**, will be roughly slightly less than double in cost of the least costly option.

A further evident conclusion is that since the TJI breakdown in **Table 17, 18, and 19** was exactly the same as for Dimensioned Wood, the resulting cost ratios should also be proportionately identical, but more expensive per SF, to reflect the additional costs of the TJI joists which is the only variable from **Table 16**.

This means that TJI assemblies framed at 150mm (6") o.c., and using 3/4" T&G Spruce ply – Select will be the most expensive assembly regardless of which TJI depth is measured.

4. COST COMPARISONS

4.5.C Dimensioned Wood and TJI Floor Framing Analysis:

Summary to Dimensioned Wood and TJI Floor Framing

Therefore again, with that information, the most expensive assemblies are as follows within **Table 17**;

- Group 1, 3" x 10" TJI (s31) with 3/4" Select T&G Spruce Ply at $107.16 /m2 ($9.96 /SF)
- Group 2, 3" x 12" TJI (s31) with 3/4" Select T&G Spruce Ply at $113.96 /m2 ($10.59 /SF)
- Group 3, 3" x 14" TJI (s31) with 3/4" Select T&G Spruce Ply at $133.65 /m2 ($12.42 /SF)
- Group 4, 3" x 16" TJI (s31) with 3/4" Select T&G Spruce Ply at $148.17 /m2 ($13.77 /SF)

Therefore again, with that information, the most expensive assemblies are as follows within **Table 18**;

- Group 1, 3" x 10" TJI (s33) with 3/4" Select T&G Spruce Ply at $114.29 /m2 ($10.62 /SF)
- Group 2, 3" x 12" TJI (s33) with 3/4" Select T&G Spruce Ply at $123.18 /m2 ($11.44 /SF)
- Group 3, 3" x 14" TJI (s33) with 3/4" Select T&G Spruce Ply at $141.00 /m2 ($13.10 /SF)
- Group 4, 3" x 16" TJI (s33) with 3/4" Select T&G Spruce Ply at $153.86 /m2 ($14.29 /SF)

Therefore again, with that information, the most expensive assemblies are as follows within **Table 19**;

- Group 1, 4" x 12" TJI (s47) with 3/4" Select T&G Spruce Ply at $164.07 /m2 ($15.24 /SF)
- Group 2, 4" x 14" TJI (s47) with 3/4" Select T&G Spruce Ply at $178.79 /m2 ($16.61 /SF)
- Group 3, 4" x 16" TJI (s47) with 3/4" Select T&G Spruce Ply at $189.71 /m2 ($17.82 /SF)
- Group 4, 4" x 18" TJI (s47) with 3/4" Select T&G Spruce Ply at $210.72 /m2 ($19.58 /SF)
- Group 5, 4" x 20" TJI (s47) with 3/4" Select T&G Spruce Ply at $225.48 /m2 ($20.95 /SF)

4. COST COMPARISONS

4.5.C Dimensioned Wood and TJI Floor Framing Analysis:

Summary to Dimensioned Wood and TJI Floor Framing

The Building Code tables do not provide framing options under a spacing of 12".
A possible reason would be to suggest that it is likely that the current intentions of wood framing tables used in the Building Code are to provide for more of a residential application.

This assembly analysis from 150mm (6") to 300mm (12") o.c. is to identify the potential costs of a "more compressed spacing assembly".

This "compressed spacing assembly" would be expected to be able to mitigate most vibration issues that have been identified as issues with wood floor framing.

From our conversations with Engineers, a common comment and practice in regards to "wood framed floors", is to pour a concrete topping on the wood floor assembly to alleviate vibrations from dynamic loads.

It is uncertain under which condition the floors that have vibration issues and which required concrete toppings were constructed and which spacing of members was used.
Engineers would be best able to determine if a tighter framing grid would alleviate vibration issues or requirements for toppings.

We are including framing conditions and determining some cost scenarios where if we considered a more aggressive spacing condition such as 150mm (6") spacing of joists, would this still be less expensive than a concrete slab.

In comparison to **Table 5 – Concrete Slab** the least expensive suspended slab assembly is shown at about $230 /m2 ($21.40).

According to **Table 19**, this amount is about $5.00 /m2 more than the most expensive TJI scenario shown previously (6" spacing grid).

If a 20" high TJI assembly joist spacing was to be spread out to 400mm (16") o.c., this would be budgeted at $92.23 /m2 ($8.57 /SF) which is more than half of the cost of the least expensive slab shown in **Table 5.**

4. COST COMPARISONS

4.5.C Dimensioned Wood and TJI Floor Framing Analysis:

Summary to Dimensioned Wood and TJI Floor Framing

Basically, and depending on Engineer directives , it appears very possible that any TJI assembly would be a viable option in a direct cost per m2 comparison, to most OWSJ floor framing assemblies in **Table 6, 7, and 8.**

Although the CLT Panels in **Table 4** have their positive elements in regards to productivity, on direct comparison based on $/m2, the TJI and Dimensioned Wood floor assemblies would be very a competitive choice.

There is one downside to framing with the deeper Truss Joist system where for that exact reason, their depth, which ranges to 500mm (20”), requires considerations for head room and the impact of floor thickness on the overall project.

Conversely, supporting wall heights of the deeper TJI system would be shorter and thus providing a saving in regards to those bearing walls.

One approach to the condition created by deeper joists is to consider this space as a plenum, if able.

Also, a greater coordination of mechanical and electrical services would be required due to restrictions of having openings in the floor systems near the bearing points along the floor edges.

4. COST COMPARISONS

4.6.A Dimensioned Wood Exterior Wall Framing Construction:

Dimensioned Wood Wall Framing – Table 20

Table 20 consists of four (5) Groups.

Each group in **Table 16** represents a dimensioned wood size starting from

- 2” x 4”
- 2” x 6”,
- 2” x 8”,
- 2” x 10”,
- 2” x 12”

Each Group has **7 identical matrices** which have identical framing criteria.

One of the Matrix variables is the spacing of the wall studs which start at 150mm (6”) on centre (o.c.) and increase incrementally to 400mm (16”) o.c.

The sheathing supply costs are constant, however the labour portion for both the framing and sheathing installation productivity ratings vary, and are calculated on a sliding scale.

Each matrix shows labour and equipment costs which have been suggested as reasonable and achievable install unit rates for labour and equipment, and suitable for the purposes of the following comparisons.

We are presuming a sample wall that is 4.88 long x 3.05m high and constructed using a platform framing method for additional comparison.

4. COST COMPARISONS

4.6.B Heavy Gauge Metal Stud Exterior Wall Framing Construction:

Metal Stud Exterior Wall Framing – Table 21, 22, 23, and 24

Table 21, 22, 23, and 24 consists of four (4) Groups each.

Each group in **Table 21, 22, 23, and 24** represents a Metal Gauge sorted in ascending Gauge and cost,
(lower the Gauge number, the thicker the metal – Example: 20 Gauge Stud is lighter and less expensive than a 14 Gauge Stud)

- 20 Gauge,
- 18 Gauge,
- 16 Gauge,
- 14 Gauge

Each group in **Table 21, 22, 23, and 24** represents a Metal Stud size starting from

- 2" x 3 5/8",
- 2" x 4",
- 2" x 6",
- 2" x 8",

Each Group has **7 identical matrices** which have identical framing criteria exactly identical to the Dimensioned Wood Floor framing model.

One of the Matrix variables is the spacing of the wall studs which start at 150mm (6") on centre (o.c.) and increase incrementally to 400mm (16") o.c.

The sheathing supply costs are constant, however the labour portion for both the framing and sheathing installation productivity ratings vary, and are calculated on a sliding scale.

Each matrix shows labour and equipment costs which have been suggested as reasonable and achievable install unit rates for labour and equipment, and suitable for the purposes of the following comparisons.

We are presuming a sample wall that is 4.88 long x 3.05m high and constructed using a platform framing method for additional comparison.

4. COST COMPARISONS

4.6.C Dimensioned Wood and Metal Stud Wall Framing Analysis:

Summary to Dimensioned Wood and Metal Stud Framing

The sheathing being considered in this comparison is also considered an engineered wood.

The sheathing considered is square edged (SE), in order of ascending cost are as follows;

- 1/2" (13mm) OSB,
- 1/2" (13mm) Densglas or Glasroc,
- 1/2" (13mm) Spruce Ply – Standard,
- 5/8" (16mm) OSB,
- 5/8" (16mm) Spruce Ply – Standard,
- 23/32" (19mm) T&G OSB,
- 3/4" (20mm) T&G Spruce Ply – Select

Based on **Table 20 Group 1** with a 2" x 4" Dimensioned Wood framing grid of 150mm (6") o.c., the assembly cost ranges from,

- $38.45 /m2 ($3.57 /SF) to
- $32.75 /m2 ($3.04 /SF) with a framing grid that is 400mm (16") o.c. and using 3/4" Spruce Standard ply

The constant within each Matrix in each Group is the fact that regardless of which size of Dimensioned Wood is used, the most expensive assembly will be;

- Any framing on 150mm (6") centre
- Any assembly using the 3/4" (20mm) Select Spruce ply

4. COST COMPARISONS

4.6.C Dimensioned Wood and Metal Stud Wall Framing Analysis:

Summary to Dimensioned Wood and Metal Stud Framing

Therefore with that information, the most expensive assemblies are as follows within **Table 20**;

- Group 1, 2" x 4" SPF with 3/4" Standard Spruce Ply SE at $48.45 /m2 ($4.50 /SF)
- Group 2, 2" x 6" SPF with 3/4" Standard Spruce Ply SE at $54.25 /m2 ($5.04 /SF)
- Group 3, 2" x 8" SPF with 3/4" Standard Spruce Ply SE at $62.09 /m2 ($5.85 /SF)
- Group 4, 2" x 10" SPF with 3/4" Standard Spruce Ply SE at $74.04 /m2 ($6.88 /SF)
- Group 5, 2" x 12" SPF with 3/4" Standard Spruce Ply SE at $93.22 /m2 ($8.66 /SF)

Conversely the least expensive assembly in each Group of **Table 20** will be any Dimensioned Wood that is framed at 400mm (16") o.c., and sheathed with 1/2" (13mm) OSB.

Therefore with that information, the least expensive assemblies are as follows within **Table 20**;

- Group 1, 2" x 4" SPF with 1/2" OSB SE at $23.68 /m2 ($2.20 /SF)
- Group 2, 2" x 6" SPF with 1/2" OSB SE at $26.62 /m2 ($2.47 /SF)
- Group 3, 2" x 8" SPF with 1/2" OSB SE at $30.99 /m2 ($2.88 /SF)
- Group 4, 2" x 10" SPF with 1/2" OSB SE at $36.52 /m2 ($3.39 /SF)
- Group 5, 2" x 12" SPF with 1/2" OSB SE at $46.06 /m2 ($4.26 /SF)

From this information we can conclude that the most expensive assembly in **Table 20**, will be roughly double in cost of the least costly option.

A further evident conclusion is that since the Metal Stud breakdown in **Table 21, 22, 23, and 24** was exactly the same as for Dimensioned Wood, the resulting cost ratios should also be proportionately identical, but more expensive per SF, to reflect the additional costs of the Metal Studs which along with the method of attaching the sheathing, is the only variable from **Table 20**.

4. COST COMPARISONS

4.6.C Dimensioned Wood and Metal Stud Wall Framing Analysis:

Summary to Dimensioned Wood and Metal Stud Framing

This means that Metal Stud assemblies framed at 150mm (6") o.c., and using 3/4" T&G Spruce ply – Standard SE will be the most expensive assembly regardless of which Metal Stud width is measured.

Summary to Dimensioned Wood and Metal Stud Wall Framing

Therefore again, with that information, the most expensive assemblies are as follows within **Table 21 with 20G Metal Studs**;

- Group 1, 2" x 3 5/8" Metal Stud 20G with 3/4" Standard SE Spruce Ply at $78.46 /m2 ($7.29 /SF)
- Group 2, 2" x 4" Metal Stud 20G with 3/4" Standard SE Spruce Ply at $80.04 /m2 ($7.44 /SF)
- Group 3, 2" x 6" Metal Stud 20G with 3/4" Standard SE Spruce Ply at $86.96 /m2 ($8.08 /SF)
- Group 4, 2" x 8" Metal Stud 20G with 3/4" Standard SE Spruce Ply at $94.46 /m2 ($8.78 /SF)

Therefore again, with that information, the most expensive assemblies are as follows within **Table 22 with 18G Metal Studs**;

- Group 1, 2" x 3 5/8" Metal Stud 18G with 3/4" Standard SE Spruce Ply at $88.01 /m2 ($8.18 /SF)
- Group 2, 2" x 4" Metal Stud 18G with 3/4" Standard SE Spruce Ply at $89.96 /m2 ($8.36 /SF)
- Group 3, 2" x 6" Metal Stud 18G with 3/4" Standard SE Spruce Ply at $99.12 /m2 ($9.21 /SF)
- Group 4, 2" x 8" Metal Stud 18G with 3/4" Standard SE Spruce Ply at $108.69 /m2 ($10.10 /SF)

4. COST COMPARISONS

4.6.C Dimensioned Wood and Metal Stud Wall Framing Analysis:

Summary to Dimensioned Wood and Metal Stud Wall Framing

Therefore again, with that information, the most expensive assemblies are as follows within **Table 23 with 16G Metal Studs**;

- Group 1, 2" x 3 5/8" Metal Stud 16G with 3/4" Standard SE Spruce Ply at $98.30 /m2 ($9.13 /SF)
- Group 2, 2" x 4" Metal Stud 16G with 3/4" Standard SE Spruce Ply at $100.57 /m2 ($9.34 /SF)
- Group 3, 2" x 6" Metal Stud 16G with 3/4" Standard SE Spruce Ply at $112.37 /m2 ($10.44 /SF)
- Group 4, 2" x 8" Metal Stud 16G with 3/4" Standard SE Spruce Ply at $124.15 /m2 ($11.53 /SF)

Therefore again, with that information, the most expensive assemblies are as follows within **Table 24 with 14G Metal Studs**;

- Group 1, 2" x 3 5/8" Metal Stud 14G with 3/4" Standard SE Spruce Ply at $109.45 /m2 ($10.17 /SF)
- Group 2, 2" x 4" Metal Stud 14G with 3/4" Standard SE Spruce Ply at $111.34 /m2 ($10.34 /SF)
- Group 3, 2" x 6" Metal Stud 14G with 3/4" Standard SE Spruce Ply at $125.73 /m2 ($11.68 /SF)
- Group 4, 2" x 8" Metal Stud 14G with 3/4" Standard SE Spruce Ply at $140.13 /m2 ($13.02 /SF)

4. COST COMPARISONS

4.6.C Dimensioned Wood and Metal Stud Wall Framing Analysis:

Summary to Dimensioned Wood and Metal Stud Wall Framing

The Building Code tables do not provide framing options under a spacing of 12".
A possible reason would be to suggest that it is likely that the current intentions of wood framing tables used in the Building Code are to provide for more of a residential application.

This assembly analysis from 150mm (6") to 300mm (12") o.c. is to identify the potential costs of a "more compressed spacing assembly".

This "compressed spacing assembly" would be expected to be able to mitigate additional loads that could be superimposed on a bearing wall due multi-floor construction beyond normal residential limits.

Normal practice in the construction of multi-floor structures is that the lower levels are required to be much more robust than the upper levels.
This is the logic for the tighter spacing data for bearing walls in this report.

We are including framing conditions and determining some cost scenarios where if we considered a more aggressive spacing condition such as 150mm (6") spacing of joists, would this still be less expensive than a concrete wall under certain conditions.

In comparison to **Table 2 Group 1 – Concrete Wall** the least expensive reinforced concrete wall assembly is shown at about $305.00 /m2 ($28.36).

According to **Table 24 Group 4 – 14 Gauge Metal Stud**, this concrete wall unit rate amount is about,

- $165.00 /m2 ($15.32/SF) more than the most expensive 14 Gauge Metal Stud Framing scenario shown previously (6" spacing grid).

And according to **Table 1 – CLT Vertical**, this concrete wall unit rate amount is about,

- $8.00 /m2 ($15.24/SF) less than a 9 Layer CLT Panel shown previously at the highest productivity level.

4. COST COMPARISONS

4.6.C Dimensioned Wood and Metal Stud Wall Framing Analysis:

Summary to Dimensioned Wood and Metal Stud Wall Framing

If a 2" x 8" 14 Gauge wall assembly spacing was to be spread out to 400mm (16") o.c., this would be budgeted at $78.33 /m2 ($7.28 /SF) would be nearly 4 times less of the cost of the least expensive concrete wall shown in **Table 2.**

Basically, and depending on Engineer directives , it appears very possible that any Metal Stud assembly would be a very viable option in a direct cost per m2 comparison, to potentially all Concrete Walls framing assemblies in **Table 2.**

Although the CLT Panels in **Table 1** have their positive elements in regards to productivity, on direct comparison based on $/m2, the Metal Stud and particularly Dimensioned Wood wall assemblies would be very a competitive choice.

There is one difference to framing with the Metal Studs versus Dimensioned Wood and that is on the method in which sheathing is fixed.

In platform framing with wood, the sheathing is nailed while the wall is laying on the deck and then the whole assembly is usually lifted and braced into place.
The following floor is usually framed on top of these bearing walls and the process repeats until complete.

With Metal Stud construction, the usual method of installation involves a more segmented approach where the base and ceiling tracks are fixed to concrete slabs or other ceiling construction, and then the studs are placed one by one and screwed to the tracks.
The sheathing is usually installed from some kind of set-up from the outside face of the wall.
If that wall is on an upper floor, this sheathing work requires lifting devices for man and materials.

5. CONCLUSION

5.1 Conclusion:

Comments on Engineered Wood Elements

This detailed analysis of unit rates for walls, floors, columns and decking was completed in order to provide the Atlantic Wood Works a reasoned evaluation of unit rates of these work items.

This comparative study was also produced in order to identify possible cost savings if the opportunity to use engineered wood was available to the Rothesay Recreational Facility.

The result required was to provide an unbiased evaluation and to determine if the work element on a “stand alone basis” could be built either less expensively in a direct cost comparison scenario of $/m2 ($/SF), or potential productivity benefit which involves project time, or both, or none.

During our consultations, it became evident that there were many other engineered wood products that are currently available on the market that are not included within the scope of the comparisons within this report.

This includes a product known as wood wave roof truss and deck system produced by Structure Craft Builders which depending on quantity can be installed to wide span roof structures for about $269 to $322 /m2 ($25 - $30 /SF).

Structure Craft Builders also have available product called NLT which is a nailed panel system for about 10% less than CLT which is a glued panel system.

Their NLT fabrication system is also mobile and can be brought to bear near the project and incorporate the local wood types into fabrication.

There is also engineered wood products and standard dimensioned lumber products which are produced in panelized systems for both wall and floor construction.

Panelized systems are more productive to install than traditional wood stick framing.

5. CONCLUSION

5.1 Conclusion:

Comments on Engineered Wood Elements

The cost to produce the panels is slightly more than stick framing.

The overall saving on this type of project is the install time with the panelized system costing slightly more than the stick built costs.

In Regards to Larger Span Structures

References to larger span structures were provided by Timmerman Timberworks to give a sense of framing costs of a complete wood structure.

The first scenario was a community pool, where the structure included approximately a 36m (120Ft) span, glulam, bowstring trusses, purlins, and wood decking ranging at about $215 /m2 ($20 /SF).

A larger span and higher profile project similarly where the span was 51m (167Ft) and a higher and more complex roof system was completed for about $490 /m2 ($45 /SF).

The following three sample projects for large span and more standard bay dimensioned conditions using structural steel, range from military, recreational, and educational types of construction.

For a large span military vehicle storage facility the structural steel framing costs for an upper floor framing ranged at about $360 /m2 ($33 /SF) and structural framing for a roof without a parapet, including metal deck for almost a similar cost of about $352 /m2 ($32/SF).

This facility would have been considered more of a heavy duty application and with an approximate lower height of about 8m (26 Ft).

For a large span recreational facility the structural steel framing costs for a 50m span arena roof with 4 rows of tiered seating all around including metal deck without parapet is approximately similar in cost ranging to about $345 /m2 ($32 /SF).

For a school where the structural steel framing for the roof is of less a large span and more compartmentalized, the upper floor framing which includes the metal deck and concrete topping ranges to about $140 /m2 ($13 /SF).

The roof construction which is considered without parapet and includes metal deck, ranges to about $150 /m2 ($14 /SF).

5. CONCLUSION

5.1 Conclusion:

Comments on Impact of Costs to Foundations

When comparing the use of engineered wood to more traditional construction methods involving either concrete or steel, we have based the impact of costs to the foundations on a simple analogy.

Based on discussions regarding relative dead load weights of 3 different building systems including concrete, structural steel, and wood, with structural Engineers, and discussions with various other designers, the consensus was that concrete was heavier than steel and that wood was lighter than steel.

The proportions of weight between the methods of construction were not able to be determined exactly at this time but further examinations of relative dead weights of structures could more precisely be determined by Engineers.

The concurrence of the Engineer's opinions offers the ability to postulate that if we accept that the compressive weight of the structure being applied upon the cross sectional bearing points of the foundation is greater with a building using concrete construction rather than a similar steel framed or wood construction, the design of the foundations could be reduced according to direct load mass, and requirements due to bearing capacity limits of the soils, if any.

The soil condition and it's bearing capacity typically dictates the footprint of concrete pads, mat foundations, and strip footings in order to spread out the point loads from above.

Since bearing elements are usually designed larger in poor soil conditions, the savings by building a lighter structure to foundation costs may be greater in poor soil conditions that in ideal soil conditions.
This would also impact excavation costs to be lower accordingly.

In Regards to Fire Issues and their Costs

This Report has not considered the cost impact of fire protection, prevention, or impacts to encapsulate assemblies to in any degree to achieve "non-combustible" levels of protection.

The various potential solutions are very numerous and are beyond the scope of this report.

5. CONCLUSION

5.1 Conclusion:

In Regards to Fire Issues and their Costs

Generally, beyond the non-combustible construction materials used to achieve the mandate of being non-combustible, the traditional requirements for fire protection usually also include a sprinkler system, hand held extinguishing devices, smoke evacuation systems, and sensors tied into alarm systems as a minimum.

These same items would be required in a structure constructed of wood, but likely in order to meet code standards, to a greater degree.

Any facility would require water source for the sprinkler system, and pumps if pressure is an issue.

If the sprinkler system, sensor and alarms, for fire safety requirements for a wood structure was, let's say, double that of a non combustible structure, then likely the resources to operate the system such as water, alarms, and pumps, would be increased accordingly and those would be the additional costs for a sprinkler system.

A standard sprinkler distribution is about $2.00 to $3.50 / SF plus the costs of bringing the water lines and pumps or any other equipment.

Fire stopping for plumbing and other penetrations as well as fire separations, are already included in any basic non-combustible design.

Escape issues from any facility may have to be more exaggerated and include additional stairs, exit doors, and even shorter distances of egress, each adding to the overall construction cost to meet more stringent fire code restrictions.

We suggest, that through the savings that have been identified within this report on various assemblies, that the overall cost of achieving a very stringent fire protection requirement in both design and construction may be offset, and help to contribute to reducing those costs.

As well, due to increased productivity of certain wood applications, if the potential earnings gained as a result of a potential earlier occupancy is added to the savings this would further lighten the cost impact of achieving the more onerous fire protection conditions.

5. CONCLUSION

5.1 Conclusion:

In Regards to Fire Issues and their Costs

As cost consultants, we would like to offer the following simple approach to your future discussions that may take place between principals in the discussions of this subject, on the issue of costs of fire protection in a wood constructed structure,.

We will agree that there are a variety of different projects with an equally numerous bucket list of requirements in order to meet fire protection standards so we further agree that there are going to be variances in the following logic.

Simply, if we consider that a non-combustible type project's fire protection requirements is relatively predictable, and typically consumes a range of 1.5% to 4% of a project's hard costs, then depending on occupancy type, the math becomes more predictable. (Soft costs for land, design, etc, is not part of this example)

So for example if a project has hard costs of $30,000,000 then;

- Normally required Fire protection for non-combustible structure, cost could range from 450K to 1,200K
- Additional Costs for wood structure Fire Protection requirements will vary over and above this number

Without a proper analysis from the Design team in regards to fire protection requirements, forecasting the final cost would be difficult but at least a starting point has been established for discussion purposes.

The same logic can be applied to calculation of the additional costs required for the Design Team to consider the additional fire protection requirements.

An Architect is usually the lead designer for a project and in most project delivery instances, is responsible for assembling the Design disciplines required for the project.

The Architect's normal Fee Proposal is all inclusive for the complete design team and a Fire Protection Specialist would represent additional design costs.

5. CONCLUSION

5.1 Conclusion:

In Regards to Fire Issues and their Costs

If an Architect's Fee may range, depending on project complexity, level of competition between the Designers, and the condition of the construction market in general (busy or slow), this fee may range from 7% to 10%+ of project hard costs, then likely the detailed examination of fire protection requirements should be a small portion of that Fee in addition to the Architect's base fee.

The Fire Protection Specialist may add from a fraction, and up to 1% of Project hard costs to the project.

So for example if a project has hard costs of $30,000,000 then;

- Fire Protection Specialist costs could range up to 300K depending on complexity

In Regards to Project Delivery Method of Wood Structures

Stipulated Sum for Simple Wood Projects

In a project where the construction elements are relatively simple, wood products are readily available, the traditional method of Lump Sum type of Contracts should be a reasonable approach.

This type of project would be potentially highly competitive for Contractors of both Union and Non-Union environments.

Stipulated Sum for Complicated Wood Projects

In Canada, there are very few (count on one hand) firms that are able to design, and produce complicated Engineered Wood elements.

This would include mostly large span type of projects, or project with non traditional shapes.

In this case, it would make very little sense to submit any Contractor to the task of finding a competitive price for such a complicated structure, with extreme cantilevers, vaults, etc.

The complicated beams, etc, usually are part of roof systems and would comprise only part of the project.

5. CONCLUSION

5.1 Conclusion:

Stipulated Sum for Complicated Projects

Because of the speciality of the complicated work, the Owner should approach the overall project in two (2) steps in regards to Tender.

- It would be more economical to have the few specialist companies who can provide these complicated wood structures, compete to supply and install the specialty item and be an integral part of the Design Team
  - Specialist could provide presentations / pre-qualifications etc, as part of their competition to increase potential for competitive pricing for that portion of the work
  - Consider a "Design Build" contract within a "Stipulated Sum" Main Contract for these specialists

- It would be advantageous to have this specialist Tender during early design stages
  - Due to time required to design the Wood elements
  - To provide as much time as possible to coordinate connections and other Design issues with the remaining Design Team disciplines
  - Due to time required to produce and transport the larger products
  - Would allow long lead item to be ready at time when the project is ready to start
  - Take the onus and "rush" to delivery away from the contractor and provide a higher quality product

- Tender the remaining portion of work through traditional Lump Sum Contract

- Allow additional contingency for potential issues integrating wood design elements

CM (Construction Manager)

The CM project delivery could work very well as long as the relationship is maintained as "CM not at Risk", and that the Owner, whom the CM Service is representing, is diligent enough to keep the CM Services on track and on budget.

5. CONCLUSION

5.1 Conclusion:

CM (Construction Manager)

When the CM is not at Risk, their services are provided for a % of total project hard costs, usually in the range of 3%.

The greatest benefit to have a valued CM Service, is that there is substantial construction abilities and knowledge that can be brought to bear during the design and during construction.

The advantage would be the greatest on the more complicated projects and less so on traditional type of construction jobs.

This knowledge can potentially head off job conditions during design that can represent savings in possible change orders due to design conflicts in constructability.

Overall, the use of engineered wood elements as listed in this report should generally be able to provide savings in both time and money for the Wedgewood Park Recreational Facility depending on design.

If work elements involving the use of engineered wood is considered beyond the current indicated scope, it may be beneficial cost wise to allow the opportunity to extract further savings through an economy of scale.

Appendix

A - TABLE 1 - CLT VERTICAL

Hanscomb

TABLE 1 - CLT VERTICAL

Group 1

OCTOBER 2013

3 Layer CLT Panel

Vertical Install - Platform Framing Method 3.05m height
Labour and Equipment Rate Ranging from $4 - $7 / SF

										$/m2	%	%	%	$/hour	$/hour				
										75.56	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
18.00	x	0.10	x	3.05	3	54.9	9.0	2.1	2.1	$4,148	$622	$415	$207	$1,418	$945	$7,755	$141	$1,413	$13.12
18.00	x	0.10	x	3.05	3	54.9	9.0	2.6	2.6	$4,148	$622	$415	$207	$1,775	$1,184	$8,351	$152	$1,521	$14.13
18.00	x	0.10	x	3.05	3	54.9	9.0	3.2	3.2	$4,148	$622	$415	$207	$2,133	$1,422	$8,948	$163	$1,630	$15.14
18.00	x	0.10	x	3.05	3	54.9	9.0	3.7	3.7	$4,148	$622	$415	$207	$2,484	$1,656	$9,533	$174	$1,736	$16.13

5 Layer CLT Panel

Vertical Install - Platform Framing Method 3.05m height
Labour and Equipment Rate Ranging from $4 - $7 / SF

										$/m2	%	%	%	$/hour	$/hour				
										120.70	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
18.00	x	0.17	x	3.05	5	54.9	9.0	2.1	2.1	$6,626	$994	$663	$50	$1,418	$945	$10,695	$195	$1,146	$18.10
18.00	x	0.17	x	3.05	5	54.9	9.0	2.6	2.6	$6,626	$994	$663	$50	$1,775	$1,184	$11,291	$206	$1,210	$19.11
18.00	x	0.17	x	3.05	5	54.9	9.0	3.2	3.2	$6,626	$994	$663	$50	$2,133	$1,422	$11,888	$217	$1,274	$20.12
18.00	x	0.17	x	3.05	5	54.9	9.0	3.7	3.7	$6,626	$994	$663	$50	$2,484	$1,656	$12,473	$227	$1,336	$21.11

7 Layer CLT Panel

Vertical Install - Platform Framing Method 3.05m height
Labour and Equipment Rate Ranging from $4 - $7 / SF

										$/m2	%	%	%	$/hour	$/hour				
										171.50	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
18.00	x	0.24	x	3.05	7	54.9	9.0	2.1	2.1	$9,415	$1,412	$942	$71	$1,418	$945	$14,202	$259	$1,078	$24.03
18.00	x	0.24	x	3.05	7	54.9	9.0	2.6	2.6	$9,415	$1,412	$942	$71	$1,775	$1,184	$14,799	$270	$1,123	$25.04
18.00	x	0.24	x	3.05	7	54.9	9.0	3.2	3.2	$9,415	$1,412	$942	$71	$2,133	$1,422	$15,395	$280	$1,168	$26.05
18.00	x	0.24	x	3.05	7	54.9	9.0	3.7	3.7	$9,415	$1,412	$942	$71	$2,484	$1,656	$15,980	$291	$1,213	$27.04

9 Layer CLT Panel

Vertical Install - Platform Framing Method 3.05m height
Labour and Equipment Rate Ranging from $4 - $7 / SF

										$/m2	%	%	%	$/hour	$/hour				
										214.20	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
18.00	x	0.31	x	3.05	9	54.9	9.0	2.1	2.1	$11,760	$1,764	$1,176	$88	$1,418	$945	$17,150	$312	$1,008	$29.02
18.00	x	0.31	x	3.05	9	54.9	9.0	2.6	2.6	$11,760	$1,764	$1,176	$88	$1,775	$1,184	$17,746	$323	$1,043	$30.03
18.00	x	0.31	x	3.05	9	54.9	9.0	3.2	3.2	$11,760	$1,764	$1,176	$88	$2,133	$1,422	$18,343	$334	$1,078	$31.04
18.00	x	0.31	x	3.05	9	54.9	9.0	3.7	3.7	$11,760	$1,764	$1,176	$88	$2,484	$1,656	$18,928	$345	$1,112	$32.03

Source: Structurlam
Timmerman Timberworks
Structurecraft Builders
Hanscomb Ltd.

Appendix
B - TABLE 2 - CONCRETE WALL

Hanscomb

TABLE 2 - CONCRETE WALL

Group 1

OCTOBER 2013

Concrete Wall

Rebar Weight Remains Constant While Concrete Volume and Type Increases

										$/Kg	$/m3	$/m2						
										2.00	183.30	112.00						
Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 25 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,509	$12,298	$16,757	$305	$2,035	$28.36
18.00	x	0.20	x	3.05	10.98	110	1,475	26.87	134.34	5.49	$2,950	$2,013	$12,298	$17,260	$314	$1,572	$29.21
18.00	x	0.25	x	3.05	13.73	110	1,475	26.87	107.47	5.49	$2,950	$2,516	$12,298	$17,763	$324	$1,294	$30.06
18.00	x	0.30	x	3.05	16.47	110	1,475	26.87	89.56	5.49	$2,950	$3,019	$12,298	$18,267	$333	$1,109	$30.91
18.00	x	0.35	x	3.05	19.22	110	1,475	26.87	76.76	5.49	$2,950	$3,522	$12,298	$18,770	$342	$977	$31.76
18.00	x	0.40	x	3.05	21.96	110	1,475	26.87	67.17	5.49	$2,950	$4,025	$12,298	$19,273	$351	$878	$32.61
18.00	x	0.45	x	3.05	24.71	110	1,475	26.87	59.70	5.49	$2,950	$4,528	$12,298	$19,776	$360	$800	$33.47
18.00	x	0.60	x	3.05	32.94	110	1,475	26.87	44.78	5.49	$2,950	$6,038	$12,298	$21,286	$388	$646	$36.02

Concrete Wall

Rebar Weight Remains Constant While Concrete Volume and Type Increases

										$/Kg	$/m3	$/m2						
										2.00	193.10	112.00						
Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 30 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,590	$12,298	$16,838	$307	$2,045	$28.49
18.00	x	0.20	x	3.05	10.98	110	1,475	26.87	134.34	5.49	$2,950	$2,120	$12,298	$17,368	$316	$1,582	$29.39
18.00	x	0.25	x	3.05	13.73	110	1,475	26.87	107.47	5.49	$2,950	$2,650	$12,298	$17,898	$326	$1,304	$30.29
18.00	x	0.30	x	3.05	16.47	110	1,475	26.87	89.56	5.49	$2,950	$3,180	$12,298	$18,428	$336	$1,119	$31.18
18.00	x	0.35	x	3.05	19.22	110	1,475	26.87	76.76	5.49	$2,950	$3,710	$12,298	$18,958	$345	$987	$32.08
18.00	x	0.40	x	3.05	21.96	110	1,475	26.87	67.17	5.49	$2,950	$4,240	$12,298	$19,488	$355	$887	$32.98
18.00	x	0.45	x	3.05	24.71	110	1,475	26.87	59.70	5.49	$2,950	$4,771	$12,298	$20,018	$365	$810	$33.88
18.00	x	0.60	x	3.05	32.94	110	1,475	26.87	44.78	5.49	$2,950	$6,361	$12,298	$21,608	$394	$656	$36.57

Concrete Wall

Rebar Weight Remains Constant While Concrete Volume and Type Increases

										$/Kg	$/m3	$/m2						
										2.00	206.20	112.00						
Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 35 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,698	$12,298	$16,946	$309	$2,058	$28.68
18.00	x	0.20	x	3.05	10.98	110	1,475	26.87	134.34	5.49	$2,950	$2,264	$12,298	$17,512	$319	$1,595	$29.63
18.00	x	0.25	x	3.05	13.73	110	1,475	26.87	107.47	5.49	$2,950	$2,830	$12,298	$18,078	$329	$1,317	$30.59
18.00	x	0.30	x	3.05	16.47	110	1,475	26.87	89.56	5.49	$2,950	$3,396	$12,298	$18,644	$340	$1,132	$31.55
18.00	x	0.35	x	3.05	19.22	110	1,475	26.87	76.76	5.49	$2,950	$3,962	$12,298	$19,210	$350	$1,000	$32.51
18.00	x	0.40	x	3.05	21.96	110	1,475	26.87	67.17	5.49	$2,950	$4,528	$12,298	$19,776	$360	$901	$33.47
18.00	x	0.45	x	3.05	24.71	110	1,475	26.87	59.70	5.49	$2,950	$5,094	$12,298	$20,342	$371	$823	$34.42
18.00	x	0.60	x	3.05	32.94	110	1,475	26.87	44.78	5.49	$2,950	$6,792	$12,298	$22,040	$401	$669	$37.30

Concrete Wall

Rebar Weight Remains Constant While Concrete Volume and Type Increases

										$/Kg	$/m3	$/m2						
										2.00	219.25	112.00						
Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 40 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,806	$12,298	$17,053	$311	$2,071	$28.86
18.00	x	0.20	x	3.05	10.98	110	1,475	26.87	134.34	5.49	$2,950	$2,407	$12,298	$17,655	$322	$1,608	$29.88
18.00	x	0.25	x	3.05	13.73	110	1,475	26.87	107.47	5.49	$2,950	$3,009	$12,298	$18,257	$333	$1,330	$30.89
18.00	x	0.30	x	3.05	16.47	110	1,475	26.87	89.56	5.49	$2,950	$3,611	$12,298	$18,859	$344	$1,145	$31.91
18.00	x	0.35	x	3.05	19.22	110	1,475	26.87	76.76	5.49	$2,950	$4,213	$12,298	$19,460	$354	$1,013	$32.93
18.00	x	0.40	x	3.05	21.96	110	1,475	26.87	67.17	5.49	$2,950	$4,815	$12,298	$20,062	$365	$914	$33.95
18.00	x	0.45	x	3.05	24.71	110	1,475	26.87	59.70	5.49	$2,950	$5,417	$12,298	$20,664	$376	$836	$34.97
18.00	x	0.60	x	3.05	32.94	110	1,475	26.87	44.78	5.49	$2,950	$7,222	$12,298	$22,470	$409	$682	$38.02

Concrete Wall

Rebar Weight Remains Constant While Concrete Volume and Type Increases

										$/Kg	$/m3	$/m2						
										2.00	232.35	112.00						
Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 45 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,913	$12,298	$17,161	$313	$2,084	$29.04
18.00	x	0.20	x	3.05	10.98	110	1,475	26.87	134.34	5.49	$2,950	$2,551	$12,298	$17,799	$324	$1,621	$30.12
18.00	x	0.25	x	3.05	13.73	110	1,475	26.87	107.47	5.49	$2,950	$3,189	$12,298	$18,437	$336	$1,343	$31.20
18.00	x	0.30	x	3.05	16.47	110	1,475	26.87	89.56	5.49	$2,950	$3,827	$12,298	$19,074	$347	$1,158	$32.28
18.00	x	0.35	x	3.05	19.22	110	1,475	26.87	76.76	5.49	$2,950	$4,465	$12,298	$19,712	$359	$1,026	$33.36
18.00	x	0.40	x	3.05	21.96	110	1,475	26.87	67.17	5.49	$2,950	$5,102	$12,298	$20,350	$371	$927	$34.44
18.00	x	0.45	x	3.05	24.71	110	1,475	26.87	59.70	5.49	$2,950	$5,740	$12,298	$20,988	$382	$850	$35.52
18.00	x	0.60	x	3.05	32.94	110	1,475	26.87	44.78	5.49	$2,950	$7,654	$12,298	$22,901	$417	$695	$38.75

Source: Hanscomb Ltd

Hanscomb

TABLE 2 - CONCRETE WALL

Group 2

OCTOBER 2013

Concrete Wall

Same Data but Rebar Increases proportionally with Concrete Volume

$/Kg	$/m3	$/m2
2.00	183.30	112.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 25 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,509	$12,298	$16,757	$305	$2,035	$28.36
18.00	x	0.20	x	3.05	10.98	110	1,967	35.82	179.11	7.32	$3,933	$2,013	$12,298	$18,244	$332	$1,662	$30.87
18.00	x	0.25	x	3.05	13.73	110	2,458	44.78	179.11	9.15	$4,917	$2,516	$12,298	$19,730	$359	$1,438	$33.39
18.00	x	0.30	x	3.05	16.47	110	2,950	53.73	179.11	10.98	$5,900	$3,019	$12,298	$21,217	$386	$1,288	$35.90
18.00	x	0.35	x	3.05	19.22	110	3,442	62.69	179.11	12.81	$6,883	$3,522	$12,298	$22,703	$414	$1,182	$38.42
18.00	x	0.40	x	3.05	21.96	110	3,933	71.65	179.11	14.64	$7,867	$4,025	$12,298	$24,190	$441	$1,102	$40.93
18.00	x	0.45	x	3.05	24.71	110	4,425	80.60	179.11	16.47	$8,850	$4,528	$12,298	$25,676	$468	$1,039	$43.45
18.00	x	0.60	x	3.05	32.94	110	5,900	107.47	179.11	21.97	$11,800	$6,038	$12,298	$30,136	$549	$915	$51.00

Concrete Wall

Same Data but Rebar Increases proportionally with Concrete Volume

$/Kg	$/m3	$/m2
2.00	193.10	112.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 30 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,590	$12,298	$16,838	$307	$2,045	$28.49
18.00	x	0.20	x	3.05	10.98	110	1,967	35.82	179.11	7.32	$3,933	$2,120	$12,298	$18,351	$334	$1,671	$31.05
18.00	x	0.25	x	3.05	13.73	110	2,458	44.78	179.11	9.15	$4,917	$2,650	$12,298	$19,865	$362	$1,447	$33.62
18.00	x	0.30	x	3.05	16.47	110	2,950	53.73	179.11	10.98	$5,900	$3,180	$12,298	$21,378	$389	$1,298	$36.18
18.00	x	0.35	x	3.05	19.22	110	3,442	62.69	179.11	12.81	$6,883	$3,710	$12,298	$22,891	$417	$1,191	$38.74
18.00	x	0.40	x	3.05	21.96	110	3,933	71.65	179.11	14.64	$7,867	$4,240	$12,298	$24,405	$445	$1,111	$41.30
18.00	x	0.45	x	3.05	24.71	110	4,425	80.60	179.11	16.47	$8,850	$4,771	$12,298	$25,918	$472	$1,049	$43.86
18.00	x	0.60	x	3.05	32.94	110	5,900	107.47	179.11	21.97	$11,800	$6,361	$12,298	$30,458	$555	$925	$51.54

Concrete Wall

Same Data but Rebar Increases proportionally with Concrete Volume

$/Kg	$/m3	$/m2
2.00	206.20	112.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 35 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,698	$12,298	$16,946	$309	$2,058	$28.68
18.00	x	0.20	x	3.05	10.98	110	1,967	35.82	179.11	7.32	$3,933	$2,264	$12,298	$18,495	$337	$1,684	$31.30
18.00	x	0.25	x	3.05	13.73	110	2,458	44.78	179.11	9.15	$4,917	$2,830	$12,298	$20,044	$365	$1,460	$33.92
18.00	x	0.30	x	3.05	16.47	110	2,950	53.73	179.11	10.98	$5,900	$3,396	$12,298	$21,594	$393	$1,311	$36.54
18.00	x	0.35	x	3.05	19.22	110	3,442	62.69	179.11	12.81	$6,883	$3,962	$12,298	$23,143	$422	$1,204	$39.16
18.00	x	0.40	x	3.05	21.96	110	3,933	71.65	179.11	14.64	$7,867	$4,528	$12,298	$24,692	$450	$1,124	$41.79
18.00	x	0.45	x	3.05	24.71	110	4,425	80.60	179.11	16.47	$8,850	$5,094	$12,298	$26,242	$478	$1,062	$44.41
18.00	x	0.60	x	3.05	32.94	110	5,900	107.47	179.11	21.97	$11,800	$6,792	$12,298	$30,890	$563	$938	$52.27

Concrete Wall

Same Data but Rebar Increases proportionally with Concrete Volume

$/Kg	$/m3	$/m2
2.00	219.25	112.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 40 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,806	$12,298	$17,053	$311	$2,071	$28.86
18.00	x	0.20	x	3.05	10.98	110	1,967	35.82	179.11	7.32	$3,933	$2,407	$12,298	$18,638	$339	$1,697	$31.54
18.00	x	0.25	x	3.05	13.73	110	2,458	44.78	179.11	9.15	$4,917	$3,009	$12,298	$20,223	$368	$1,473	$34.22
18.00	x	0.30	x	3.05	16.47	110	2,950	53.73	179.11	10.98	$5,900	$3,611	$12,298	$21,809	$397	$1,324	$36.91
18.00	x	0.35	x	3.05	19.22	110	3,442	62.69	179.11	12.81	$6,883	$4,213	$12,298	$23,394	$426	$1,217	$39.59
18.00	x	0.40	x	3.05	21.96	110	3,933	71.65	179.11	14.64	$7,867	$4,815	$12,298	$24,979	$455	$1,137	$42.27
18.00	x	0.45	x	3.05	24.71	110	4,425	80.60	179.11	16.47	$8,850	$5,417	$12,298	$26,564	$484	$1,075	$44.95
18.00	x	0.60	x	3.05	32.94	110	5,900	107.47	179.11	21.97	$11,800	$7,222	$12,298	$31,320	$570	$951	$53.00

Concrete Wall

Same Data but Rebar Increases proportionally with Concrete Volume

$/Kg	$/m3	$/m2
2.00	232.35	112.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Kg/m2 Kg	Kg/m3 Kg	Lbs/SF	Rebar $	Conc 45 Mpa	Form m2	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	8.24	110	1,475	26.87	179.11	5.49	$2,950	$1,913	$12,298	$17,161	$313	$2,084	$29.04
18.00	x	0.20	x	3.05	10.98	110	1,967	35.82	179.11	7.32	$3,933	$2,551	$12,298	$18,782	$342	$1,711	$31.78
18.00	x	0.25	x	3.05	13.73	110	2,458	44.78	179.11	9.15	$4,917	$3,189	$12,298	$20,403	$372	$1,487	$34.53
18.00	x	0.30	x	3.05	16.47	110	2,950	53.73	179.11	10.98	$5,900	$3,827	$12,298	$22,024	$401	$1,337	$37.27
18.00	x	0.35	x	3.05	19.22	110	3,442	62.69	179.11	12.81	$6,883	$4,465	$12,298	$23,646	$431	$1,231	$40.01
18.00	x	0.40	x	3.05	21.96	110	3,933	71.65	179.11	14.64	$7,867	$5,102	$12,298	$25,267	$460	$1,151	$42.76
18.00	x	0.45	x	3.05	24.71	110	4,425	80.60	179.11	16.47	$8,850	$5,740	$12,298	$26,888	$490	$1,088	$45.50
18.00	x	0.60	x	3.05	32.94	110	5,900	107.47	179.11	21.97	$11,800	$7,654	$12,298	$31,751	$578	$964	$53.73

Source: Hanscomb Ltd

Appendix

C – TABLE 3 – CONCRETE MASONRY BLOCK

Hanscomb

TABLE 3 - GROUP 1

OCTOBER 2013

100mm Concrete Masonry Block

Variable Productivity

										$/m2											
										17.19											
Length		Width		Height	Block m2	m2 per hour	Crew	Total Labour Hours	Total Equip. Hours	Block $	Mortar $	Solid Fill and Re-inforcing $	Scaffold $	Delivery $	Labour $	Mixer and Lift $	Total	$/m2	$/m3	$/SF
18.00	x	0.10	x	3.05	54.9	5.2	6.0	10.6	10.6	$944	$121	$625	$467	$238	$3,378	$1,636	$7,409	$135	$1,350	$12.54
18.00	x	0.10	x	3.05	54.9	6.0	6.0	9.2	9.2	$944	$121	$625	$467	$238	$2,928	$1,418	$6,740	$123	$1,228	$11.41
18.00	x	0.10	x	3.05	54.9	6.5	6.0	8.4	8.4	$944	$121	$625	$467	$238	$2,703	$1,309	$6,406	$117	$1,167	$10.84
18.00	x	0.10	x	3.05	54.9	7.0	6.0	7.8	7.8	$944	$121	$625	$467	$238	$2,510	$1,216	$6,119	$111	$1,115	$10.36

150mm Concrete Masonry Block

Variable Productivity

										$/m2											
										20.78											
Length		Width		Height	Block m2	m2 per hour	Crew	Total Labour Hours	Total Equip. Hours	Block $	Mortar $	Solid Fill and Re-inforcing $	Scaffold $	Delivery $	Labour $	Mixer and Lift $	Total	$/m2	$/m3	$/SF
18.00	x	0.15	x	3.05	54.9	4.5	6.0	12.2	12.2	$1,141	$168	$707	$467	$238	$3,904	$1,891	$8,514	$155	$1,034	$14.41
18.00	x	0.15	x	3.05	54.9	5.0	6.0	11.0	11.0	$1,141	$168	$707	$467	$238	$3,514	$1,702	$7,935	$145	$964	$13.43
18.00	x	0.15	x	3.05	54.9	5.5	6.0	10.0	10.0	$1,141	$168	$707	$467	$238	$3,194	$1,547	$7,461	$136	$906	$12.62
18.00	x	0.15	x	3.05	54.9	6.0	6.0	9.2	9.2	$1,141	$168	$707	$467	$238	$2,928	$1,418	$7,065	$129	$858	$11.96

200mm Concrete Masonry Block

Variable Productivity

										$/m2											
										25.73											
Length		Width		Height	Block m2	m2 per hour	Crew	Total Labour Hours	Total Equip. Hours	Block $	Mortar $	Solid Fill and Re-inforcing $	Scaffold $	Delivery $	Labour $	Mixer and Lift $	Total	$/m2	$/m3	$/SF
18.00	x	0.20	x	3.05	54.9	4.2	6.0	13.1	13.1	$1,413	$234	$823	$467	$238	$4,183	$2,026	$9,383	$171	$855	$15.88
18.00	x	0.20	x	3.05	54.9	5.0	6.0	11.0	11.0	$1,413	$234	$823	$467	$238	$3,514	$1,702	$8,389	$153	$764	$14.20
18.00	x	0.20	x	3.05	54.9	5.5	6.0	10.0	10.0	$1,413	$234	$823	$467	$238	$3,194	$1,547	$7,915	$144	$721	$13.39
18.00	x	0.20	x	3.05	54.9	6.0	6.0	9.2	9.2	$1,413	$234	$823	$467	$238	$2,928	$1,418	$7,520	$137	$685	$12.73

250mm Concrete Masonry Block

Variable Productivity

										$/m2											
										33.89											
Length		Width		Height	Block m2	m2 per hour	Crew	Total Labour Hours	Total Equip. Hours	Block $	Mortar $	Solid Fill and Re-inforcing $	Scaffold $	Delivery $	Labour $	Mixer and Lift $	Total	$/m2	$/m3	$/SF
18.00	x	0.25	x	3.05	54.9	4.1	6.0	13.4	13.4	$1,861	$305	$948	$467	$238	$4,285	$2,075	$10,178	$185	$742	$17.22
18.00	x	0.25	x	3.05	54.9	5.0	6.0	11.0	11.0	$1,861	$305	$948	$467	$238	$3,514	$1,702	$9,033	$165	$658	$15.29
18.00	x	0.25	x	3.05	54.9	5.5	6.0	10.0	10.0	$1,861	$305	$948	$467	$238	$3,194	$1,547	$8,559	$156	$624	$14.48
18.00	x	0.25	x	3.05	54.9	6.0	6.0	9.2	9.2	$1,861	$305	$948	$467	$238	$2,928	$1,418	$8,164	$149	$595	$13.82

300mm Concrete Masonry Block

Variable Productivity

										$/m2											
										51.46											
Length		Width		Height	Block m2	m2 per hour	Crew	Total Labour Hours	Total Equip. Hours	Block $	Mortar $	Solid Fill and Re-inforcing $	Scaffold $	Delivery $	Labour $	Mixer and Lift $	Total	$/m2	$/m3	$/SF
18.00	x	0.30	x	3.05	54.9	4.0	6.0	13.7	13.7	$2,825	$435	$1,168	$467	$238	$4,392	$2,127	$11,652	$212	$707	$19.72
18.00	x	0.30	x	3.05	54.9	4.5	6.0	12.2	12.2	$2,825	$435	$1,168	$467	$238	$3,904	$1,891	$10,928	$199	$663	$18.49
18.00	x	0.30	x	3.05	54.9	5.0	6.0	11.0	11.0	$2,825	$435	$1,168	$467	$238	$3,514	$1,702	$10,348	$188	$628	$17.51
18.00	x	0.30	x	3.05	54.9	5.5	6.0	10.0	10.0	$2,825	$435	$1,168	$467	$238	$3,194	$1,547	$9,874	$180	$600	$16.71

Source: Hanscomb Ltd

Appendix
D – TABLE 4 – CLT HORIZONTAL

Hanscomb

TABLE 4 - GROUP 1 - CLT HORIZONTAL

MAY 2013

3 Layer CLT Panel

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $2.50, $3.00, $3.50, & $4.00 / SF

										$/m2	%	%	%	$/hour	$/hour				
										65.12	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.10	3	73.1	7.0	2.0	2.0	$4,763	$714	$476	$238	$1,061	$909	$8,161	$112	$1,116	$10.37
12.19	x	6.00	x	0.10	3	73.1	7.0	2.4	2.4	$4,763	$714	$476	$238	$1,271	$1,089	$8,551	$117	$1,169	$10.86
12.19	x	6.00	x	0.10	3	73.1	7.0	2.8	2.8	$4,763	$714	$476	$238	$1,481	$1,269	$8,941	$122	$1,222	$11.36
12.19	x	6.00	x	0.10	3	73.1	7.0	3.2	3.2	$4,763	$714	$476	$238	$1,696	$1,454	$9,341	$128	$1,277	$11.87

5 Layer CLT Panel

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $2.50, $3.00, $3.50, & $4.00 / SF

										$/m2	%	%	%	$/hour	$/hour				
										106.90	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.17	5	73.1	7.0	2.0	2.0	$7,819	$1,173	$782	$391	$1,061	$909	$12,134	$166	$976	$15.41
12.19	x	6.00	x	0.17	5	73.1	7.0	2.4	2.4	$7,819	$1,173	$782	$391	$1,271	$1,089	$12,524	$171	$1,007	$15.91
12.19	x	6.00	x	0.17	5	73.1	7.0	2.8	2.8	$7,819	$1,173	$782	$391	$1,481	$1,269	$12,914	$177	$1,039	$16.40
12.19	x	6.00	x	0.17	5	73.1	7.0	3.2	3.2	$7,819	$1,173	$782	$391	$1,696	$1,454	$13,314	$182	$1,071	$16.91

7 Layer CLT Panel

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $2.50, $3.00, $3.50, & $4.00 / SF

										$/m2	%	%	%	$/hour	$/hour				
										150.90	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.24	7	73.1	7.0	2.0	2.0	$11,037	$1,656	$1,104	$552	$1,061	$909	$16,317	$223	$930	$20.73
12.19	x	6.00	x	0.24	7	73.1	7.0	2.4	2.4	$11,037	$1,656	$1,104	$552	$1,271	$1,089	$16,707	$228	$952	$21.22
12.19	x	6.00	x	0.24	7	73.1	7.0	2.8	2.8	$11,037	$1,656	$1,104	$552	$1,481	$1,269	$17,097	$234	$974	$21.72
12.19	x	6.00	x	0.24	7	73.1	7.0	3.2	3.2	$11,037	$1,656	$1,104	$552	$1,696	$1,454	$17,497	$239	$997	$22.23

9 Layer CLT Panel

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $2.50, $3.00, $3.50, & $4.00 / SF

										$/m2	%	%	%	$/hour	$/hour				
										193.45	15%	10%	5%	75.00	450.00				
Length		Width		Height	Layers	CLT m2	Crew	Total Labour Hours	Total Crane Hours	CLT $	(material) Connections $	(material) Fitting $	(material) Delivery $	Labour $	Crane (1) $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.31	9	73.1	6.0	2.0	2.0	$14,149	$2,122	$1,415	$707	$909	$909	$20,212	$276	$891	$25.67
12.19	x	6.00	x	0.31	9	73.1	6.0	2.4	2.4	$14,149	$2,122	$1,415	$707	$1,089	$1,089	$20,572	$281	$907	$26.13
12.19	x	6.00	x	0.31	9	73.1	6.0	2.8	2.8	$14,149	$2,122	$1,415	$707	$1,269	$1,269	$20,932	$286	$923	$26.59
12.19	x	6.00	x	0.31	9	73.1	6.0	3.2	3.2	$14,149	$2,122	$1,415	$707	$1,454	$1,454	$21,301	$291	$939	$27.06

Source: Structurlam
Timmerman Timberworks
Structurecraft Builders
Hanscomb Ltd.

Appendix
E – TABLE 5 – CONCRETE SLAB

Hanscomb

TABLE 5 - GROUP 1 - CONCRETE SLAB

OCTOBER 2013

Concrete Slab 150mm (6")

Data Remains Constant - Concrete Type 30 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	209.10	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 30 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.15	11	73	1,789	24.46	5	$3,579	$2,294	$8,777	$1,465	$731	$16,846	$230	$1,535	$21.40
12.2	x	6.0	x	0.15	11	73	2,147	29.36	6	$4,294	$2,294	$8,777	$1,537	$731	$17,633	$241	$1,607	$22.40
12.2	x	6.0	x	0.15	11	73	2,505	34.25	7	$5,010	$2,294	$8,777	$1,608	$731	$18,420	$252	$1,679	$23.40
12.2	x	6.0	x	0.15	11	73	2,863	39.14	8	$5,726	$2,294	$8,777	$1,680	$731	$19,207	$263	$1,751	$24.40
12.2	x	6.0	x	0.15	11	73	3,221	44.03	9	$6,441	$2,294	$8,777	$1,751	$731	$19,995	$273	$1,823	$25.40

Concrete Slab 150mm (6")

Data Remains Constant - Concrete Type 35 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	222.20	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 35 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.15	11	73	1,789	24.46	5	$3,579	$2,438	$8,777	$1,479	$731	$17,004	$232	$1,550	$21.60
12.2	x	6.0	x	0.15	11	73	2,147	29.36	6	$4,294	$2,438	$8,777	$1,551	$731	$17,791	$243	$1,622	$22.60
12.2	x	6.0	x	0.15	11	73	2,505	34.25	7	$5,010	$2,438	$8,777	$1,622	$731	$18,578	$254	$1,693	$23.60
12.2	x	6.0	x	0.15	11	73	2,863	39.14	8	$5,726	$2,438	$8,777	$1,694	$731	$19,366	$265	$1,765	$24.60
12.2	x	6.0	x	0.15	11	73	3,221	44.03	9	$6,441	$2,438	$8,777	$1,766	$731	$20,153	$276	$1,837	$25.60

Concrete Slab 150mm (6")

Data Remains Constant - Concrete Type 40 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	235.25	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 40 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.15	11	73	1,789	24.46	5	$3,579	$2,581	$8,777	$1,494	$731	$17,161	$235	$1,564	$21.80
12.2	x	6.0	x	0.15	11	73	2,147	29.36	6	$4,294	$2,581	$8,777	$1,565	$731	$17,949	$245	$1,636	$22.80
12.2	x	6.0	x	0.15	11	73	2,505	34.25	7	$5,010	$2,581	$8,777	$1,637	$731	$18,736	$256	$1,708	$23.80
12.2	x	6.0	x	0.15	11	73	2,863	39.14	8	$5,726	$2,581	$8,777	$1,708	$731	$19,523	$267	$1,780	$24.80
12.2	x	6.0	x	0.15	11	73	3,221	44.03	9	$6,441	$2,581	$8,777	$1,780	$731	$20,310	$278	$1,851	$25.80

Concrete Slab 150mm (6")

Data Remains Constant - Concrete Type 45 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	248.35	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 45 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.15	11	73	1,789	24.46	5	$3,579	$2,725	$8,777	$1,508	$731	$17,319	$237	$1,579	$22.00
12.2	x	6.0	x	0.15	11	73	2,147	29.36	6	$4,294	$2,725	$8,777	$1,580	$731	$18,107	$248	$1,650	$23.00
12.2	x	6.0	x	0.15	11	73	2,505	34.25	7	$5,010	$2,725	$8,777	$1,651	$731	$18,894	$258	$1,722	$24.00
12.2	x	6.0	x	0.15	11	73	2,863	39.14	8	$5,726	$2,725	$8,777	$1,723	$731	$19,681	$269	$1,794	$25.00
12.2	x	6.0	x	0.15	11	73	3,221	44.03	9	$6,441	$2,725	$8,777	$1,794	$731	$20,468	$280	$1,866	$26.00

Source: Hanscomb Ltd

Hanscomb

TABLE 5 - GROUP 2 - CONCRETE SLAB

OCTOBER 2013

Concrete Slab 200mm (8")

Data Remains Constant - Concrete Type 30 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	209.10	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 30 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.20	15	73	2,147	29.36	6	$4,294	$3,059	$8,777	$1,613	$731	$18,474	$253	$1,263	$23.47
12.2	x	6.0	x	0.20	15	73	2,505	34.25	7	$5,010	$3,059	$8,777	$1,685	$731	$19,261	$263	$1,317	$24.47
12.2	x	6.0	x	0.20	15	73	2,863	39.14	8	$5,726	$3,059	$8,777	$1,756	$731	$20,049	$274	$1,371	$25.47
12.2	x	6.0	x	0.20	15	73	3,221	44.03	9	$6,441	$3,059	$8,777	$1,828	$731	$20,836	$285	$1,424	$26.47
12.2	x	6.0	x	0.20	15	73	3,579	48.93	10	$7,157	$3,059	$8,777	$1,899	$731	$21,623	$296	$1,478	$27.47

Concrete Slab 200mm (8")

Data Remains Constant - Concrete Type 35 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	222.20	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 35 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.20	15	73	2,147	29.36	6	$4,294	$3,250	$8,777	$1,632	$731	$18,685	$255	$1,277	$23.73
12.2	x	6.0	x	0.20	15	73	2,505	34.25	7	$5,010	$3,250	$8,777	$1,704	$731	$19,472	$266	$1,331	$24.73
12.2	x	6.0	x	0.20	15	73	2,863	39.14	8	$5,726	$3,250	$8,777	$1,775	$731	$20,259	$277	$1,385	$25.73
12.2	x	6.0	x	0.20	15	73	3,221	44.03	9	$6,441	$3,250	$8,777	$1,847	$731	$21,047	$288	$1,439	$26.73
12.2	x	6.0	x	0.20	15	73	3,579	48.93	10	$7,157	$3,250	$8,777	$1,918	$731	$21,834	$299	$1,493	$27.73

Concrete Slab 200mm (8")

Data Remains Constant - Concrete Type 40 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	235.25	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 40 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.20	15	73	2,147	29.36	6	$4,294	$3,441	$8,777	$1,651	$731	$18,895	$258	$1,292	$24.00
12.2	x	6.0	x	0.20	15	73	2,505	34.25	7	$5,010	$3,441	$8,777	$1,723	$731	$19,682	$269	$1,346	$25.00
12.2	x	6.0	x	0.20	15	73	2,863	39.14	8	$5,726	$3,441	$8,777	$1,794	$731	$20,469	$280	$1,399	$26.00
12.2	x	6.0	x	0.20	15	73	3,221	44.03	9	$6,441	$3,441	$8,777	$1,866	$731	$21,257	$291	$1,453	$27.00
12.2	x	6.0	x	0.20	15	73	3,579	48.93	10	$7,157	$3,441	$8,777	$1,938	$731	$22,044	$301	$1,507	$28.00

Concrete Slab 200mm (8")

Data Remains Constant - Concrete Type 45 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	248.35	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 45 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.20	15	73	2,147	29.36	6	$4,294	$3,633	$8,777	$1,670	$731	$19,106	$261	$1,306	$24.27
12.2	x	6.0	x	0.20	15	73	2,505	34.25	7	$5,010	$3,633	$8,777	$1,742	$731	$19,893	$272	$1,360	$25.27
12.2	x	6.0	x	0.20	15	73	2,863	39.14	8	$5,726	$3,633	$8,777	$1,814	$731	$20,680	$283	$1,414	$26.27
12.2	x	6.0	x	0.20	15	73	3,221	44.03	9	$6,441	$3,633	$8,777	$1,885	$731	$21,467	$294	$1,468	$27.27
12.2	x	6.0	x	0.20	15	73	3,579	48.93	10	$7,157	$3,633	$8,777	$1,957	$731	$22,255	$304	$1,521	$28.27

Source: Hanscomb Ltd

Hanscomb

TABLE 5 - GROUP 3 - CONCRETE SLAB

OCTOBER 2013

Concrete Slab 250mm (10")

Data Remains Constant - Concrete Type 30 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	209.10	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 30 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.25	18	73	2,505	34.25	7	$5,010	$3,823	$8,777	$1,761	$731	$20,103	$275	$1,099	$25.53
12.2	x	6.0	x	0.25	18	73	2,863	39.14	8	$5,726	$3,823	$8,777	$1,833	$731	$20,890	$286	$1,142	$26.53
12.2	x	6.0	x	0.25	18	73	3,221	44.03	9	$6,441	$3,823	$8,777	$1,904	$731	$21,677	$296	$1,186	$27.53
12.2	x	6.0	x	0.25	18	73	3,579	48.93	10	$7,157	$3,823	$8,777	$1,976	$731	$22,464	$307	$1,229	$28.53
12.2	x	6.0	x	0.25	18	73	3,936	53.82	11	$7,873	$3,823	$8,777	$2,047	$731	$23,252	$318	$1,272	$29.53
12.2	x	6.0	x	0.25	18	73	4,294	58.71	12	$8,588	$3,823	$8,777	$2,119	$731	$24,039	$329	$1,315	$30.53

Concrete Slab 250mm (10")

Data Remains Constant - Concrete Type 35 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	222.20	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 35 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.25	18	73	2,505	34.25	7	$5,010	$4,063	$8,777	$1,785	$731	$20,366	$278	$1,114	$25.87
12.2	x	6.0	x	0.25	18	73	2,863	39.14	8	$5,726	$4,063	$8,777	$1,857	$731	$21,153	$289	$1,157	$26.87
12.2	x	6.0	x	0.25	18	73	3,221	44.03	9	$6,441	$4,063	$8,777	$1,928	$731	$21,941	$300	$1,200	$27.87
12.2	x	6.0	x	0.25	18	73	3,579	48.93	10	$7,157	$4,063	$8,777	$2,000	$731	$22,728	$311	$1,243	$28.87
12.2	x	6.0	x	0.25	18	73	3,936	53.82	11	$7,873	$4,063	$8,777	$2,071	$731	$23,515	$322	$1,286	$29.87
12.2	x	6.0	x	0.25	18	73	4,294	58.71	12	$8,588	$4,063	$8,777	$2,143	$731	$24,302	$332	$1,329	$30.87

Concrete Slab 250mm (10")

Data Remains Constant - Concrete Type 40 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	235.25	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 40 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.25	18	73	2,505	34.25	7	$5,010	$4,302	$8,777	$1,809	$731	$20,628	$282	$1,128	$26.20
12.2	x	6.0	x	0.25	18	73	2,863	39.14	8	$5,726	$4,302	$8,777	$1,880	$731	$21,416	$293	$1,171	$27.20
12.2	x	6.0	x	0.25	18	73	3,221	44.03	9	$6,441	$4,302	$8,777	$1,952	$731	$22,203	$304	$1,214	$28.20
12.2	x	6.0	x	0.25	18	73	3,579	48.93	10	$7,157	$4,302	$8,777	$2,024	$731	$22,990	$314	$1,257	$29.20
12.2	x	6.0	x	0.25	18	73	3,936	53.82	11	$7,873	$4,302	$8,777	$2,095	$731	$23,778	$325	$1,300	$30.20
12.2	x	6.0	x	0.25	18	73	4,294	58.71	12	$8,588	$4,302	$8,777	$2,167	$731	$24,565	$336	$1,343	$31.20

Concrete Slab 250mm (10")

Data Remains Constant - Concrete Type 45 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	248.35	120.00	0.10	10.00

					Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 45 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.25	18	73	2,505	34.25	7	$5,010	$4,541	$8,777	$1,833	$731	$20,892	$286	$1,143	$26.54
12.2	x	6.0	x	0.25	18	73	2,863	39.14	8	$5,726	$4,541	$8,777	$1,904	$731	$21,679	$296	$1,186	$27.54
12.2	x	6.0	x	0.25	18	73	3,221	44.03	9	$6,441	$4,541	$8,777	$1,976	$731	$22,467	$307	$1,229	$28.54
12.2	x	6.0	x	0.25	18	73	3,579	48.93	10	$7,157	$4,541	$8,777	$2,047	$731	$23,254	$318	$1,272	$29.54
12.2	x	6.0	x	0.25	18	73	3,936	53.82	11	$7,873	$4,541	$8,777	$2,119	$731	$24,041	$329	$1,315	$30.54
12.2	x	6.0	x	0.25	18	73	4,294	58.71	12	$8,588	$4,541	$8,777	$2,191	$731	$24,828	$339	$1,358	$31.54

Source: Hanscomb Ltd

Hanscomb

TABLE 5 - GROUP 4 - CONCRETE SLAB

OCTOBER 2013

Concrete Slab 300mm (12")

Data Remains Constant - Concrete Type 30 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	209.10	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 30 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.30	22	73	3,221	44.03	9	$6,441	$4,588	$8,777	$1,981	$731	$22,518	$308	$1,026	$28.60
12.2	x	6.0	x	0.30	22	73	3,579	48.93	10	$7,157	$4,588	$8,777	$2,052	$731	$23,305	$319	$1,062	$29.60
12.2	x	6.0	x	0.30	22	73	3,936	53.82	11	$7,873	$4,588	$8,777	$2,124	$731	$24,093	$329	$1,098	$30.60
12.2	x	6.0	x	0.30	22	73	4,294	58.71	12	$8,588	$4,588	$8,777	$2,195	$731	$24,880	$340	$1,134	$31.60
12.2	x	6.0	x	0.30	22	73	4,652	63.60	13	$9,304	$4,588	$8,777	$2,267	$731	$25,667	$351	$1,170	$32.60
12.2	x	6.0	x	0.30	22	73	5,010	68.50	14	$10,020	$4,588	$8,777	$2,338	$731	$26,455	$362	$1,206	$33.60

Concrete Slab 300mm (12")

Data Remains Constant - Concrete Type 35 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	222.20	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 35 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.30	22	73	3,221	44.03	9	$6,441	$4,876	$8,777	$2,009	$731	$22,834	$312	$1,041	$29.00
12.2	x	6.0	x	0.30	22	73	3,579	48.93	10	$7,157	$4,876	$8,777	$2,081	$731	$23,622	$323	$1,077	$30.00
12.2	x	6.0	x	0.30	22	73	3,936	53.82	11	$7,873	$4,876	$8,777	$2,153	$731	$24,409	$334	$1,112	$31.00
12.2	x	6.0	x	0.30	22	73	4,294	58.71	12	$8,588	$4,876	$8,777	$2,224	$731	$25,196	$344	$1,148	$32.00
12.2	x	6.0	x	0.30	22	73	4,652	63.60	13	$9,304	$4,876	$8,777	$2,296	$731	$25,983	$355	$1,184	$33.00
12.2	x	6.0	x	0.30	22	73	5,010	68.50	14	$10,020	$4,876	$8,777	$2,367	$731	$26,771	$366	$1,220	$34.00

Concrete Slab 300mm (12")

Data Remains Constant - Concrete Type 40 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	235.25	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 40 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.30	22	73	3,221	44.03	9	$6,441	$5,162	$8,777	$2,038	$731	$23,149	$317	$1,055	$29.40
12.2	x	6.0	x	0.30	22	73	3,579	48.93	10	$7,157	$5,162	$8,777	$2,110	$731	$23,937	$327	$1,091	$30.40
12.2	x	6.0	x	0.30	22	73	3,936	53.82	11	$7,873	$5,162	$8,777	$2,181	$731	$24,724	$338	$1,127	$31.40
12.2	x	6.0	x	0.30	22	73	4,294	58.71	12	$8,588	$5,162	$8,777	$2,253	$731	$25,511	$349	$1,163	$32.40
12.2	x	6.0	x	0.30	22	73	4,652	63.60	13	$9,304	$5,162	$8,777	$2,324	$731	$26,298	$360	$1,199	$33.40
12.2	x	6.0	x	0.30	22	73	5,010	68.50	14	$10,020	$5,162	$8,777	$2,396	$731	$27,086	$370	$1,234	$34.40

Concrete Slab 300mm (12")

Data Remains Constant - Concrete Type 45 Mpa - Rebar Varies

$/Kg	$/m3	$/m2	%	$/m2
2.00	248.35	120.00	0.10	10.00

Length		Width		Height	Concrete m3	Form m2	Rebar Kg	Rebar Kg/m2	Rebar Lbs/SF	Rebar $	Conc 45 Mpa	Form m2	Drop Panels	Finish m2	Total	$/m2	$/m3	$/SF
12.2	x	6.0	x	0.30	22	73	3,221	44.03	9	$6,441	$5,449	$8,777	$2,067	$731	$23,466	$321	$1,069	$29.81
12.2	x	6.0	x	0.30	22	73	3,579	48.93	10	$7,157	$5,449	$8,777	$2,138	$731	$24,253	$332	$1,105	$30.81
12.2	x	6.0	x	0.30	22	73	3,936	53.82	11	$7,873	$5,449	$8,777	$2,210	$731	$25,040	$342	$1,141	$31.81
12.2	x	6.0	x	0.30	22	73	4,294	58.71	12	$8,588	$5,449	$8,777	$2,281	$731	$25,827	$353	$1,177	$32.81
12.2	x	6.0	x	0.30	22	73	4,652	63.60	13	$9,304	$5,449	$8,777	$2,353	$731	$26,615	$364	$1,213	$33.81
12.2	x	6.0	x	0.30	22	73	5,010	68.50	14	$10,020	$5,449	$8,777	$2,425	$731	$27,402	$375	$1,249	$34.81

Source: Hanscomb Ltd

Appendix

F – TABLE 6,7,8,9 – OPEN WEB STEEL JOIST (OWSJ)

Hanscomb

TABLE 6 - GROUP 1 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 200mm (8") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
200	8.2	62	12.2	3.0	36.6	1,524	0.20	41.7	$6,096	$914	$1,573	$688	$9,270	$253	$23.55
200	8.2	50	12.2	3.0	36.6	1,224	0.25	33.5	$4,896	$734	$1,573	$688	$7,891	$216	$20.05
200	8.2	42	12.2	3.0	36.6	1,024	0.30	28.0	$4,097	$615	$1,573	$688	$6,971	$191	$17.71
200	8.2	36	12.2	3.0	36.6	881	0.35	24.1	$3,526	$529	$1,573	$688	$6,314	$173	$16.04
200	8.2	31	12.2	3.0	36.6	774	0.40	21.2	$3,097	$465	$1,573	$688	$5,822	$159	$14.79
200	8.2	28	12.2	3.0	36.6	691	0.45	18.9	$2,764	$415	$1,573	$688	$5,439	$149	$13.82
200	8.2	25	12.2	3.0	36.6	624	0.50	17.1	$2,497	$375	$1,573	$688	$5,132	$140	$13.04

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
250	8.4	50	12.2	3.0	36.6	1,254	0.25	34.3	$5,016	$752	$1,573	$688	$8,028	$220	$20.40
250	8.4	42	12.2	3.0	36.6	1,049	0.30	28.7	$4,197	$629	$1,573	$688	$7,086	$194	$18.00
250	8.4	36	12.2	3.0	36.6	903	0.35	24.7	$3,612	$542	$1,573	$688	$6,413	$175	$16.29
250	8.4	31	12.2	3.0	36.6	793	0.40	21.7	$3,173	$476	$1,573	$688	$5,909	$162	$15.01
250	8.4	28	12.2	3.0	36.6	708	0.45	19.4	$2,831	$425	$1,573	$688	$5,516	$151	$14.01
250	8.4	25	12.2	3.0	36.6	640	0.50	17.5	$2,558	$384	$1,573	$688	$5,202	$142	$13.22
250	8.4	23	12.2	3.0	36.6	584	0.55	16.0	$2,335	$350	$1,573	$688	$4,945	$135	$12.56

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	10.0	42	12.2	3.0	36.6	1,250	0.30	34.2	$5,001	$750	$1,573	$688	$8,011	$219	$20.35
300	10.0	36	12.2	3.0	36.6	1,076	0.35	29.4	$4,304	$646	$1,573	$688	$7,209	$197	$18.31
300	10.0	31	12.2	3.0	36.6	945	0.40	25.8	$3,781	$567	$1,573	$688	$6,608	$181	$16.79
300	10.0	28	12.2	3.0	36.6	844	0.45	23.1	$3,374	$506	$1,573	$688	$6,140	$168	$15.60
300	10.0	25	12.2	3.0	36.6	762	0.50	20.8	$3,049	$457	$1,573	$688	$5,766	$158	$14.65
300	10.0	23	12.2	3.0	36.6	696	0.55	19.0	$2,782	$417	$1,573	$688	$5,460	$149	$13.87
300	10.0	21	12.2	3.0	36.6	640	0.60	17.5	$2,561	$384	$1,573	$688	$5,205	$142	$13.22

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	10.3	36	12.2	3.0	36.6	1,107	0.35	30.3	$4,428	$664	$1,573	$688	$7,353	$201	$18.68
350	10.3	31	12.2	3.0	36.6	973	0.40	26.6	$3,890	$584	$1,573	$688	$6,734	$184	$17.11
350	10.3	28	12.2	3.0	36.6	868	0.45	23.7	$3,472	$521	$1,573	$688	$6,253	$171	$15.88
350	10.3	25	12.2	3.0	36.6	784	0.50	21.4	$3,137	$471	$1,573	$688	$5,868	$160	$14.91
350	10.3	23	12.2	3.0	36.6	716	0.55	19.6	$2,863	$429	$1,573	$688	$5,553	$152	$14.11
350	10.3	21	12.2	3.0	36.6	659	0.60	18.0	$2,635	$395	$1,573	$688	$5,290	$145	$13.44
350	10.3	20	12.2	3.0	36.6	610	0.65	16.7	$2,442	$366	$1,573	$688	$5,068	$139	$12.87

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 6 - GROUP 2 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
250	9.7	50	12.2	4.0	48.8	1,931	0.25	39.6	$7,723	$1,158	$2,097	$917	$11,895	$244	$22.66
250	9.7	42	12.2	4.0	48.8	1,615	0.30	33.1	$6,461	$969	$2,097	$917	$10,444	$214	$19.90
250	9.7	36	12.2	4.0	48.8	1,390	0.35	28.5	$5,561	$834	$2,097	$917	$9,408	$193	$17.93
250	9.7	31	12.2	4.0	48.8	1,221	0.40	25.0	$4,885	$733	$2,097	$917	$8,631	$177	$16.44
250	9.7	28	12.2	4.0	48.8	1,090	0.45	22.4	$4,359	$654	$2,097	$917	$8,027	$165	$15.29
250	9.7	25	12.2	4.0	48.8	985	0.50	20.2	$3,939	$591	$2,097	$917	$7,543	$155	$14.37
250	9.7	23	12.2	4.0	48.8	899	0.55	18.4	$3,595	$539	$2,097	$917	$7,148	$147	$13.62

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	9.6	42	12.2	4.0	48.8	1,599	0.30	32.8	$6,395	$959	$2,097	$917	$10,367	$213	$19.75
300	9.6	36	12.2	4.0	48.8	1,376	0.35	28.2	$5,503	$825	$2,097	$917	$9,342	$192	$17.80
300	9.6	31	12.2	4.0	48.8	1,209	0.40	24.8	$4,835	$725	$2,097	$917	$8,573	$176	$16.33
300	9.6	28	12.2	4.0	48.8	1,079	0.45	22.1	$4,314	$647	$2,097	$917	$7,975	$164	$15.19
300	9.6	25	12.2	4.0	48.8	975	0.50	20.0	$3,898	$585	$2,097	$917	$7,496	$154	$14.28
300	9.6	23	12.2	4.0	48.8	889	0.55	18.2	$3,558	$534	$2,097	$917	$7,105	$146	$13.54
300	9.6	21	12.2	4.0	48.8	819	0.60	16.8	$3,274	$491	$2,097	$917	$6,779	$139	$12.92

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	10.1	36	12.2	4.0	48.8	1,447	0.35	29.7	$5,790	$868	$2,097	$917	$9,672	$198	$18.43
350	10.1	31	12.2	4.0	48.8	1,272	0.40	26.1	$5,086	$763	$2,097	$917	$8,863	$182	$16.89
350	10.1	28	12.2	4.0	48.8	1,135	0.45	23.3	$4,539	$681	$2,097	$917	$8,233	$169	$15.69
350	10.1	25	12.2	4.0	48.8	1,025	0.50	21.0	$4,101	$615	$2,097	$917	$7,730	$159	$14.73
350	10.1	23	12.2	4.0	48.8	936	0.55	19.2	$3,743	$561	$2,097	$917	$7,318	$150	$13.94
350	10.1	21	12.2	4.0	48.8	861	0.60	17.7	$3,445	$517	$2,097	$917	$6,975	$143	$13.29
350	10.1	20	12.2	4.0	48.8	798	0.65	16.4	$3,192	$479	$2,097	$917	$6,684	$137	$12.74

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	10.3	31	12.2	4.0	48.8	1,297	0.40	26.6	$5,187	$778	$2,097	$917	$8,979	$184	$17.11
400	10.3	28	12.2	4.0	48.8	1,157	0.45	23.7	$4,629	$694	$2,097	$917	$8,337	$171	$15.88
400	10.3	25	12.2	4.0	48.8	1,046	0.50	21.4	$4,183	$627	$2,097	$917	$7,823	$160	$14.91
400	10.3	23	12.2	4.0	48.8	954	0.55	19.6	$3,817	$573	$2,097	$917	$7,403	$152	$14.11
400	10.3	21	12.2	4.0	48.8	878	0.60	18.0	$3,513	$527	$2,097	$917	$7,053	$145	$13.44
400	10.3	20	12.2	4.0	48.8	814	0.65	16.7	$3,255	$488	$2,097	$917	$6,757	$139	$12.87
400	10.3	18	12.2	4.0	48.8	759	0.70	15.6	$3,035	$455	$2,097	$917	$6,503	$133	$12.39

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 6 - GROUP 3 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	12.4	42	12.2	5.0	61.0	2,581	0.30	42.4	$10,325	$1,549	$2,621	$1,146	$15,641	$257	$23.84
300	12.4	36	12.2	5.0	61.0	2,221	0.35	36.4	$8,885	$1,333	$2,621	$1,146	$13,985	$229	$21.32
300	12.4	31	12.2	5.0	61.0	1,951	0.40	32.0	$7,806	$1,171	$2,621	$1,146	$12,743	$209	$19.42
300	12.4	28	12.2	5.0	61.0	1,742	0.45	28.6	$6,966	$1,045	$2,621	$1,146	$11,778	$193	$17.95
300	12.4	25	12.2	5.0	61.0	1,574	0.50	25.8	$6,294	$944	$2,621	$1,146	$11,005	$181	$16.77
300	12.4	23	12.2	5.0	61.0	1,436	0.55	23.6	$5,745	$862	$2,621	$1,146	$10,373	$170	$15.81
300	12.4	21	12.2	5.0	61.0	1,322	0.60	21.7	$5,287	$793	$2,621	$1,146	$9,846	$162	$15.01

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	12.0	36	12.2	5.0	61.0	2,150	0.35	35.3	$8,599	$1,290	$2,621	$1,146	$13,655	$224	$20.81
350	12.0	31	12.2	5.0	61.0	1,889	0.40	31.0	$7,554	$1,133	$2,621	$1,146	$12,454	$204	$18.98
350	12.0	28	12.2	5.0	61.0	1,685	0.45	27.7	$6,741	$1,011	$2,621	$1,146	$11,519	$189	$17.56
350	12.0	25	12.2	5.0	61.0	1,523	0.50	25.0	$6,091	$914	$2,621	$1,146	$10,772	$177	$16.42
350	12.0	23	12.2	5.0	61.0	1,390	0.55	22.8	$5,559	$834	$2,621	$1,146	$10,160	$167	$15.49
350	12.0	21	12.2	5.0	61.0	1,279	0.60	21.0	$5,116	$767	$2,621	$1,146	$9,650	$158	$14.71
350	12.0	20	12.2	5.0	61.0	1,185	0.65	19.4	$4,741	$711	$2,621	$1,146	$9,219	$151	$14.05

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	10.6	31	12.2	5.0	61.0	1,668	0.40	27.4	$6,673	$1,001	$2,621	$1,146	$11,440	$188	$17.44
400	10.6	28	12.2	5.0	61.0	1,489	0.45	24.4	$5,955	$893	$2,621	$1,146	$10,615	$174	$16.18
400	10.6	25	12.2	5.0	61.0	1,345	0.50	22.1	$5,381	$807	$2,621	$1,146	$9,954	$163	$15.17
400	10.6	23	12.2	5.0	61.0	1,228	0.55	20.1	$4,911	$737	$2,621	$1,146	$9,414	$154	$14.35
400	10.6	21	12.2	5.0	61.0	1,130	0.60	18.5	$4,519	$678	$2,621	$1,146	$8,964	$147	$13.66
400	10.6	20	12.2	5.0	61.0	1,047	0.65	17.2	$4,188	$628	$2,621	$1,146	$8,583	$141	$13.08
400	10.6	18	12.2	5.0	61.0	976	0.70	16.0	$3,904	$586	$2,621	$1,146	$8,256	$135	$12.58

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	10.9	28	12.2	5.0	61.0	1,531	0.45	25.1	$6,123	$919	$2,621	$1,146	$10,809	$177	$16.48
450	10.9	25	12.2	5.0	61.0	1,383	0.50	22.7	$5,533	$830	$2,621	$1,146	$10,129	$166	$15.44
450	10.9	23	12.2	5.0	61.0	1,262	0.55	20.7	$5,050	$757	$2,621	$1,146	$9,574	$157	$14.59
450	10.9	21	12.2	5.0	61.0	1,162	0.60	19.1	$4,647	$697	$2,621	$1,146	$9,111	$149	$13.89
450	10.9	20	12.2	5.0	61.0	1,077	0.65	17.7	$4,306	$646	$2,621	$1,146	$8,719	$143	$13.29
450	10.9	18	12.2	5.0	61.0	1,004	0.70	16.5	$4,014	$602	$2,621	$1,146	$8,383	$138	$12.78
450	10.9	16	12.2	5.0	61.0	885	0.80	14.5	$3,540	$531	$2,621	$1,146	$7,837	$129	$11.95

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 6 - GROUP 4 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	14.9	36	12.2	6.0	73.1	3,203	0.35	43.8	$12,812	$1,922	$3,145	$1,375	$19,254	$263	$24.46
350	14.9	31	12.2	6.0	73.1	2,814	0.40	38.5	$11,255	$1,688	$3,145	$1,375	$17,464	$239	$22.18
350	14.9	28	12.2	6.0	73.1	2,511	0.45	34.3	$10,045	$1,507	$3,145	$1,375	$16,071	$220	$20.41
350	14.9	25	12.2	6.0	73.1	2,269	0.50	31.0	$9,076	$1,361	$3,145	$1,375	$14,957	$205	$19.00
350	14.9	23	12.2	6.0	73.1	2,071	0.55	28.3	$8,283	$1,242	$3,145	$1,375	$14,046	$192	$17.84
350	14.9	21	12.2	6.0	73.1	1,906	0.60	26.1	$7,623	$1,143	$3,145	$1,375	$13,286	$182	$16.88
350	14.9	20	12.2	6.0	73.1	1,766	0.65	24.1	$7,064	$1,060	$3,145	$1,375	$12,644	$173	$16.06

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	13.6	31	12.2	6.0	73.1	2,568	0.40	35.1	$10,273	$1,541	$3,145	$1,375	$16,335	$223	$20.75
400	13.6	28	12.2	6.0	73.1	2,292	0.45	31.3	$9,168	$1,375	$3,145	$1,375	$15,063	$206	$19.13
400	13.6	25	12.2	6.0	73.1	2,071	0.50	28.3	$8,284	$1,243	$3,145	$1,375	$14,047	$192	$17.84
400	13.6	23	12.2	6.0	73.1	1,890	0.55	25.8	$7,561	$1,134	$3,145	$1,375	$13,215	$181	$16.79
400	13.6	21	12.2	6.0	73.1	1,739	0.60	23.8	$6,958	$1,044	$3,145	$1,375	$12,521	$171	$15.90
400	13.6	20	12.2	6.0	73.1	1,612	0.65	22.0	$6,448	$967	$3,145	$1,375	$11,935	$163	$15.16
400	13.6	18	12.2	6.0	73.1	1,503	0.70	20.5	$6,010	$902	$3,145	$1,375	$11,432	$156	$14.52

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	13.5	28	12.2	6.0	73.1	2,275	0.45	31.1	$9,101	$1,365	$3,145	$1,375	$14,986	$205	$19.04
450	13.5	25	12.2	6.0	73.1	2,056	0.50	28.1	$8,223	$1,233	$3,145	$1,375	$13,977	$191	$17.75
450	13.5	23	12.2	6.0	73.1	1,876	0.55	25.7	$7,505	$1,126	$3,145	$1,375	$13,151	$180	$16.70
450	13.5	21	12.2	6.0	73.1	1,727	0.60	23.6	$6,907	$1,036	$3,145	$1,375	$12,463	$170	$15.83
450	13.5	20	12.2	6.0	73.1	1,600	0.65	21.9	$6,400	$960	$3,145	$1,375	$11,880	$162	$15.09
450	13.5	18	12.2	6.0	73.1	1,492	0.70	20.4	$5,966	$895	$3,145	$1,375	$11,381	$156	$14.46
450	13.5	17	12.2	6.0	73.1	1,398	0.75	19.1	$5,590	$839	$3,145	$1,375	$10,949	$150	$13.91

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	13.0	25	12.2	6.0	73.1	1,980	0.50	27.1	$7,919	$1,188	$3,145	$1,375	$13,626	$186	$17.31
500	13.0	23	12.2	6.0	73.1	1,807	0.55	24.7	$7,227	$1,084	$3,145	$1,375	$12,831	$175	$16.30
500	13.0	21	12.2	6.0	73.1	1,663	0.60	22.7	$6,651	$998	$3,145	$1,375	$12,168	$166	$15.46
500	13.0	20	12.2	6.0	73.1	1,541	0.65	21.1	$6,163	$924	$3,145	$1,375	$11,608	$159	$14.74
500	13.0	18	12.2	6.0	73.1	1,436	0.70	19.6	$5,745	$862	$3,145	$1,375	$11,127	$152	$14.13
500	13.0	17	12.2	6.0	73.1	1,346	0.75	18.4	$5,383	$807	$3,145	$1,375	$10,711	$146	$13.60
500	13.0	16	12.2	6.0	73.1	1,267	0.80	17.3	$5,066	$760	$3,145	$1,375	$10,346	$141	$13.14

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 6 - GROUP 5 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	17.9	31	12.2	7.0	85.3	3,944	0.40	46.2	$15,775	$2,366	$3,669	$1,604	$23,415	$274	$25.49
400	17.9	28	12.2	7.0	85.3	3,520	0.45	41.2	$14,078	$2,112	$3,669	$1,604	$21,463	$252	$23.37
400	17.9	25	12.2	7.0	85.3	3,180	0.50	37.3	$12,720	$1,908	$3,669	$1,604	$19,902	$233	$21.67
400	17.9	23	12.2	7.0	85.3	2,902	0.55	34.0	$11,610	$1,741	$3,669	$1,604	$18,624	$218	$20.28
400	17.9	21	12.2	7.0	85.3	2,671	0.60	31.3	$10,684	$1,603	$3,669	$1,604	$17,560	$206	$19.12
400	17.9	20	12.2	7.0	85.3	2,475	0.65	29.0	$9,901	$1,485	$3,669	$1,604	$16,659	$195	$18.14
400	17.9	18	12.2	7.0	85.3	2,307	0.70	27.0	$9,229	$1,384	$3,669	$1,604	$15,887	$186	$17.30

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	16.5	28	12.2	7.0	85.3	3,244	0.45	38.0	$12,977	$1,947	$3,669	$1,604	$20,197	$237	$21.99
450	16.5	25	12.2	7.0	85.3	2,931	0.50	34.4	$11,726	$1,759	$3,669	$1,604	$18,758	$220	$20.42
450	16.5	23	12.2	7.0	85.3	2,675	0.55	31.4	$10,702	$1,605	$3,669	$1,604	$17,580	$206	$19.14
450	16.5	21	12.2	7.0	85.3	2,462	0.60	28.9	$9,848	$1,477	$3,669	$1,604	$16,599	$195	$18.07
450	16.5	20	12.2	7.0	85.3	2,282	0.65	26.7	$9,126	$1,369	$3,669	$1,604	$15,769	$185	$17.17
450	16.5	18	12.2	7.0	85.3	2,127	0.70	24.9	$8,507	$1,276	$3,669	$1,604	$15,057	$176	$16.39
450	16.5	17	12.2	7.0	85.3	1,993	0.75	23.4	$7,971	$1,196	$3,669	$1,604	$14,440	$169	$15.72

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	16.2	25	12.2	7.0	85.3	2,878	0.50	33.7	$11,512	$1,727	$3,669	$1,604	$18,513	$217	$20.16
500	16.2	23	12.2	7.0	85.3	2,627	0.55	30.8	$10,507	$1,576	$3,669	$1,604	$17,356	$203	$18.90
500	16.2	21	12.2	7.0	85.3	2,417	0.60	28.3	$9,669	$1,450	$3,669	$1,604	$16,393	$192	$17.85
500	16.2	20	12.2	7.0	85.3	2,240	0.65	26.3	$8,960	$1,344	$3,669	$1,604	$15,578	$183	$16.96
500	16.2	18	12.2	7.0	85.3	2,088	0.70	24.5	$8,353	$1,253	$3,669	$1,604	$14,879	$174	$16.20
500	16.2	17	12.2	7.0	85.3	1,957	0.75	22.9	$7,826	$1,174	$3,669	$1,604	$14,273	$167	$15.54
500	16.2	16	12.2	7.0	85.3	1,841	0.80	21.6	$7,365	$1,105	$3,669	$1,604	$13,744	$161	$14.96

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	15.2	21	12.2	7.0	85.3	2,268	0.60	26.6	$9,072	$1,361	$3,669	$1,604	$15,707	$184	$17.10
600	15.2	20	12.2	7.0	85.3	2,102	0.65	24.6	$8,407	$1,261	$3,669	$1,604	$14,942	$175	$16.27
600	15.2	18	12.2	7.0	85.3	1,959	0.70	23.0	$7,837	$1,176	$3,669	$1,604	$14,286	$167	$15.55
600	15.2	17	12.2	7.0	85.3	1,836	0.75	21.5	$7,343	$1,101	$3,669	$1,604	$13,718	$161	$14.94
600	15.2	16	12.2	7.0	85.3	1,728	0.80	20.2	$6,911	$1,037	$3,669	$1,604	$13,221	$155	$14.39
600	15.2	15	12.2	7.0	85.3	1,632	0.85	19.1	$6,529	$979	$3,669	$1,604	$12,782	$150	$13.92
600	15.2	15	12.2	7.0	85.3	1,548	0.90	18.1	$6,190	$929	$3,669	$1,604	$12,392	$145	$13.49

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 6 - GROUP 6 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	20.2	28	12.2	8.0	97.5	4,539	0.45	46.5	$18,157	$2,723	$4,193	$1,833	$26,907	$276	$25.63
450	20.2	25	12.2	8.0	97.5	4,101	0.50	42.1	$16,406	$2,461	$4,193	$1,833	$24,893	$255	$23.71
450	20.2	23	12.2	8.0	97.5	3,743	0.55	38.4	$14,973	$2,246	$4,193	$1,833	$23,246	$238	$22.15
450	20.2	21	12.2	8.0	97.5	3,445	0.60	35.3	$13,779	$2,067	$4,193	$1,833	$21,873	$224	$20.84
450	20.2	20	12.2	8.0	97.5	3,192	0.65	32.7	$12,769	$1,915	$4,193	$1,833	$20,711	$212	$19.73
450	20.2	18	12.2	8.0	97.5	2,976	0.70	30.5	$11,903	$1,785	$4,193	$1,833	$19,715	$202	$18.78
450	20.2	17	12.2	8.0	97.5	2,788	0.75	28.6	$11,153	$1,673	$4,193	$1,833	$18,852	$193	$17.96

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	17.0	25	12.2	8.0	97.5	3,452	0.50	35.4	$13,807	$2,071	$4,193	$1,833	$21,904	$225	$20.87
500	17.0	23	12.2	8.0	97.5	3,150	0.55	32.3	$12,601	$1,890	$4,193	$1,833	$20,518	$210	$19.55
500	17.0	21	12.2	8.0	97.5	2,899	0.60	29.7	$11,596	$1,739	$4,193	$1,833	$19,362	$199	$18.45
500	17.0	20	12.2	8.0	97.5	2,687	0.65	27.5	$10,746	$1,612	$4,193	$1,833	$18,385	$189	$17.51
500	17.0	18	12.2	8.0	97.5	2,504	0.70	25.7	$10,017	$1,503	$4,193	$1,833	$17,547	$180	$16.72
500	17.0	17	12.2	8.0	97.5	2,346	0.75	24.1	$9,386	$1,408	$4,193	$1,833	$16,820	$172	$16.02
500	17.0	16	12.2	8.0	97.5	2,208	0.80	22.6	$8,833	$1,325	$4,193	$1,833	$16,185	$166	$15.42

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	15.6	21	12.2	8.0	97.5	2,660	0.60	27.3	$10,641	$1,596	$4,193	$1,833	$18,264	$187	$17.40
600	15.6	20	12.2	8.0	97.5	2,465	0.65	25.3	$9,861	$1,479	$4,193	$1,833	$17,367	$178	$16.54
600	15.6	18	12.2	8.0	97.5	2,298	0.70	23.6	$9,192	$1,379	$4,193	$1,833	$16,598	$170	$15.81
600	15.6	17	12.2	8.0	97.5	2,153	0.75	22.1	$8,613	$1,292	$4,193	$1,833	$15,932	$163	$15.18
600	15.6	16	12.2	8.0	97.5	2,026	0.80	20.8	$8,106	$1,216	$4,193	$1,833	$15,348	$157	$14.62
600	15.6	15	12.2	8.0	97.5	1,915	0.85	19.6	$7,658	$1,149	$4,193	$1,833	$14,834	$152	$14.13
600	15.6	15	12.2	8.0	97.5	1,815	0.90	18.6	$7,261	$1,089	$4,193	$1,833	$14,376	$147	$13.70

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	16.1	18	12.2	8.0	97.5	2,372	0.70	24.3	$9,487	$1,423	$4,193	$1,833	$16,937	$174	$16.13
700	16.1	17	12.2	8.0	97.5	2,222	0.75	22.8	$8,889	$1,333	$4,193	$1,833	$16,249	$167	$15.48
700	16.1	16	12.2	8.0	97.5	2,091	0.80	21.4	$8,366	$1,255	$4,193	$1,833	$15,647	$160	$14.91
700	16.1	15	12.2	8.0	97.5	1,976	0.85	20.3	$7,904	$1,186	$4,193	$1,833	$15,116	$155	$14.40
700	16.1	15	12.2	8.0	97.5	1,873	0.90	19.2	$7,493	$1,124	$4,193	$1,833	$14,644	$150	$13.95
700	16.1	14	12.2	8.0	97.5	1,782	0.95	18.3	$7,126	$1,069	$4,193	$1,833	$14,222	$146	$13.55
700	16.1	13	12.2	8.0	97.5	1,699	1.00	17.4	$6,795	$1,019	$4,193	$1,833	$13,842	$142	$13.19

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 6 - GROUP 7 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	20.1	25	12.2	9.0	109.7	4,591	0.50	41.8	$18,365	$2,755	$4,718	$2,063	$27,900	$254	$23.63
500	20.1	23	12.2	9.0	109.7	4,190	0.55	38.2	$16,761	$2,514	$4,718	$2,063	$26,055	$237	$22.06
500	20.1	21	12.2	9.0	109.7	3,856	0.60	35.1	$15,425	$2,314	$4,718	$2,063	$24,519	$223	$20.76
500	20.1	20	12.2	9.0	109.7	3,573	0.65	32.6	$14,294	$2,144	$4,718	$2,063	$23,218	$212	$19.66
500	20.1	18	12.2	9.0	109.7	3,331	0.70	30.4	$13,325	$1,999	$4,718	$2,063	$22,103	$201	$18.72
500	20.1	17	12.2	9.0	109.7	3,121	0.75	28.4	$12,485	$1,873	$4,718	$2,063	$21,137	$193	$17.90
500	20.1	16	12.2	9.0	109.7	2,937	0.80	26.8	$11,749	$1,762	$4,718	$2,063	$20,292	$185	$17.18

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	18.3	21	12.2	9.0	109.7	3,511	0.60	32.0	$14,043	$2,107	$4,718	$2,063	$22,930	$209	$19.42
600	18.3	20	12.2	9.0	109.7	3,253	0.65	29.7	$13,014	$1,952	$4,718	$2,063	$21,746	$198	$18.41
600	18.3	18	12.2	9.0	109.7	3,033	0.70	27.6	$12,131	$1,820	$4,718	$2,063	$20,731	$189	$17.56
600	18.3	17	12.2	9.0	109.7	2,842	0.75	25.9	$11,366	$1,705	$4,718	$2,063	$19,852	$181	$16.81
600	18.3	16	12.2	9.0	109.7	2,674	0.80	24.4	$10,697	$1,605	$4,718	$2,063	$19,082	$174	$16.16
600	18.3	15	12.2	9.0	109.7	2,527	0.85	23.0	$10,107	$1,516	$4,718	$2,063	$18,403	$168	$15.58
600	18.3	15	12.2	9.0	109.7	2,395	0.90	21.8	$9,582	$1,437	$4,718	$2,063	$17,799	$162	$15.07

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	17.3	18	12.2	9.0	109.7	2,867	0.70	26.1	$11,468	$1,720	$4,718	$2,063	$19,969	$182	$16.91
700	17.3	17	12.2	9.0	109.7	2,686	0.75	24.5	$10,745	$1,612	$4,718	$2,063	$19,137	$174	$16.21
700	17.3	16	12.2	9.0	109.7	2,528	0.80	23.0	$10,113	$1,517	$4,718	$2,063	$18,410	$168	$15.59
700	17.3	15	12.2	9.0	109.7	2,389	0.85	21.8	$9,554	$1,433	$4,718	$2,063	$17,768	$162	$15.05
700	17.3	15	12.2	9.0	109.7	2,265	0.90	20.6	$9,058	$1,359	$4,718	$2,063	$17,197	$157	$14.56
700	17.3	14	12.2	9.0	109.7	2,154	0.95	19.6	$8,614	$1,292	$4,718	$2,063	$16,687	$152	$14.13
700	17.3	13	12.2	9.0	109.7	2,054	1.00	18.7	$8,215	$1,232	$4,718	$2,063	$16,227	$148	$13.74

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
750	17.6	17	12.2	9.0	109.7	2,733	0.75	24.9	$10,932	$1,640	$4,718	$2,063	$19,352	$176	$16.39
750	17.6	16	12.2	9.0	109.7	2,572	0.80	23.4	$10,288	$1,543	$4,718	$2,063	$18,611	$170	$15.76
750	17.6	15	12.2	9.0	109.7	2,430	0.85	22.1	$9,720	$1,458	$4,718	$2,063	$17,958	$164	$15.21
750	17.6	15	12.2	9.0	109.7	2,304	0.90	21.0	$9,215	$1,382	$4,718	$2,063	$17,378	$158	$14.72
750	17.6	14	12.2	9.0	109.7	2,191	0.95	20.0	$8,764	$1,315	$4,718	$2,063	$16,858	$154	$14.28
750	17.6	13	12.2	9.0	109.7	2,089	1.00	19.0	$8,357	$1,254	$4,718	$2,063	$16,391	$149	$13.88
750	17.6	13	12.2	9.0	109.7	1,997	1.05	18.2	$7,989	$1,198	$4,718	$2,063	$15,968	$146	$13.52

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 6 - GROUP 8 - OWSJ - BASED ON 13.5 KN/m

OCTOBER 2013

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	21.8	21	12.2	10.0	121.9	4,647	0.60	38.1	$18,588	$2,788	$5,242	$2,292	$28,910	$237	$22.03
600	21.8	20	12.2	10.0	121.9	4,306	0.65	35.3	$17,225	$2,584	$5,242	$2,292	$27,343	$224	$20.84
600	21.8	18	12.2	10.0	121.9	4,014	0.70	32.9	$16,057	$2,409	$5,242	$2,292	$25,999	$213	$19.81
600	21.8	17	12.2	10.0	121.9	3,761	0.75	30.9	$15,045	$2,257	$5,242	$2,292	$24,835	$204	$18.93
600	21.8	16	12.2	10.0	121.9	3,540	0.80	29.0	$14,159	$2,124	$5,242	$2,292	$23,816	$195	$18.15
600	21.8	15	12.2	10.0	121.9	3,344	0.85	27.4	$13,378	$2,007	$5,242	$2,292	$22,918	$188	$17.47
600	21.8	15	12.2	10.0	121.9	3,171	0.90	26.0	$12,683	$1,902	$5,242	$2,292	$22,119	$181	$16.86

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	19.9	18	12.2	10.0	121.9	3,664	0.70	30.1	$14,658	$2,199	$5,242	$2,292	$24,390	$200	$18.59
700	19.9	17	12.2	10.0	121.9	3,433	0.75	28.2	$13,734	$2,060	$5,242	$2,292	$23,327	$191	$17.78
700	19.9	16	12.2	10.0	121.9	3,231	0.80	26.5	$12,925	$1,939	$5,242	$2,292	$22,397	$184	$17.07
700	19.9	15	12.2	10.0	121.9	3,053	0.85	25.0	$12,212	$1,832	$5,242	$2,292	$21,577	$177	$16.44
700	19.9	15	12.2	10.0	121.9	2,894	0.90	23.7	$11,577	$1,737	$5,242	$2,292	$20,847	$171	$15.89
700	19.9	14	12.2	10.0	121.9	2,752	0.95	22.6	$11,010	$1,651	$5,242	$2,292	$20,195	$166	$15.39
700	19.9	13	12.2	10.0	121.9	2,625	1.00	21.5	$10,499	$1,575	$5,242	$2,292	$19,608	$161	$14.94

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
750	18.3	17	12.2	10.0	121.9	3,157	0.75	25.9	$12,629	$1,894	$5,242	$2,292	$22,057	$181	$16.81
750	18.3	16	12.2	10.0	121.9	2,971	0.80	24.4	$11,886	$1,783	$5,242	$2,292	$21,202	$174	$16.16
750	18.3	15	12.2	10.0	121.9	2,807	0.85	23.0	$11,230	$1,684	$5,242	$2,292	$20,448	$168	$15.58
750	18.3	15	12.2	10.0	121.9	2,662	0.90	21.8	$10,647	$1,597	$5,242	$2,292	$19,777	$162	$15.07
750	18.3	14	12.2	10.0	121.9	2,531	0.95	20.8	$10,125	$1,519	$5,242	$2,292	$19,177	$157	$14.62
750	18.3	13	12.2	10.0	121.9	2,414	1.00	19.8	$9,655	$1,448	$5,242	$2,292	$18,637	$153	$14.20
750	18.3	13	12.2	10.0	121.9	2,308	1.05	18.9	$9,230	$1,385	$5,242	$2,292	$18,148	$149	$13.83

OWSJ 800mm (32") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
800	19.3	16	12.2	10.0	121.9	3,134	0.80	25.7	$12,535	$1,880	$5,242	$2,292	$21,949	$180	$16.73
800	19.3	15	12.2	10.0	121.9	2,961	0.85	24.3	$11,843	$1,777	$5,242	$2,292	$21,153	$174	$16.12
800	19.3	15	12.2	10.0	121.9	2,807	0.90	23.0	$11,228	$1,684	$5,242	$2,292	$20,446	$168	$15.58
800	19.3	14	12.2	10.0	121.9	2,669	0.95	21.9	$10,678	$1,602	$5,242	$2,292	$19,813	$163	$15.10
800	19.3	13	12.2	10.0	121.9	2,546	1.00	20.9	$10,183	$1,527	$5,242	$2,292	$19,244	$158	$14.67
800	19.3	13	12.2	10.0	121.9	2,434	1.05	20.0	$9,735	$1,460	$5,242	$2,292	$18,728	$154	$14.27
800	19.3	12	12.2	10.0	121.9	2,332	1.10	19.1	$9,327	$1,399	$5,242	$2,292	$18,260	$150	$13.92

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

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TABLE 7 - GROUP 1 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 200mm (8") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
200	8.2	62	12.2	3.0	36.6	1,524	0.20	41.7	$6,096	$914	$1,573	$688	$9,270	$253	$23.55
200	8.2	50	12.2	3.0	36.6	1,224	0.25	33.5	$4,896	$734	$1,573	$688	$7,891	$216	$20.05
200	8.2	42	12.2	3.0	36.6	1,024	0.30	28.0	$4,097	$615	$1,573	$688	$6,971	$191	$17.71
200	8.2	36	12.2	3.0	36.6	881	0.35	24.1	$3,526	$529	$1,573	$688	$6,314	$173	$16.04
200	8.2	31	12.2	3.0	36.6	774	0.40	21.2	$3,097	$465	$1,573	$688	$5,822	$159	$14.79
200	8.2	28	12.2	3.0	36.6	691	0.45	18.9	$2,764	$415	$1,573	$688	$5,439	$149	$13.82
200	8.2	25	12.2	3.0	36.6	624	0.50	17.1	$2,497	$375	$1,573	$688	$5,132	$140	$13.04

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
250	8.4	50	12.2	3.0	36.6	1,254	0.25	34.3	$5,016	$752	$1,573	$688	$8,028	$220	$20.40
250	8.4	42	12.2	3.0	36.6	1,049	0.30	28.7	$4,197	$629	$1,573	$688	$7,086	$194	$18.00
250	8.4	36	12.2	3.0	36.6	903	0.35	24.7	$3,612	$542	$1,573	$688	$6,413	$175	$16.29
250	8.4	31	12.2	3.0	36.6	793	0.40	21.7	$3,173	$476	$1,573	$688	$5,909	$162	$15.01
250	8.4	28	12.2	3.0	36.6	708	0.45	19.4	$2,831	$425	$1,573	$688	$5,516	$151	$14.01
250	8.4	25	12.2	3.0	36.6	640	0.50	17.5	$2,558	$384	$1,573	$688	$5,202	$142	$13.22
250	8.4	23	12.2	3.0	36.6	584	0.55	16.0	$2,335	$350	$1,573	$688	$4,945	$135	$12.56

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	10.1	42	12.2	3.0	36.6	1,261	0.30	34.5	$5,046	$757	$1,573	$688	$8,063	$220	$20.48
300	10.1	36	12.2	3.0	36.6	1,086	0.35	29.7	$4,342	$651	$1,573	$688	$7,254	$198	$18.43
300	10.1	31	12.2	3.0	36.6	954	0.40	26.1	$3,815	$572	$1,573	$688	$6,647	$182	$16.89
300	10.1	28	12.2	3.0	36.6	851	0.45	23.3	$3,404	$511	$1,573	$688	$6,175	$169	$15.69
300	10.1	25	12.2	3.0	36.6	769	0.50	21.0	$3,076	$461	$1,573	$688	$5,797	$159	$14.73
300	10.1	23	12.2	3.0	36.6	702	0.55	19.2	$2,807	$421	$1,573	$688	$5,489	$150	$13.94
300	10.1	21	12.2	3.0	36.6	646	0.60	17.7	$2,584	$388	$1,573	$688	$5,231	$143	$13.29

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	10.3	36	12.2	3.0	36.6	1,107	0.35	30.3	$4,428	$664	$1,573	$688	$7,353	$201	$18.68
350	10.3	31	12.2	3.0	36.6	973	0.40	26.6	$3,890	$584	$1,573	$688	$6,734	$184	$17.11
350	10.3	28	12.2	3.0	36.6	868	0.45	23.7	$3,472	$521	$1,573	$688	$6,253	$171	$15.88
350	10.3	25	12.2	3.0	36.6	784	0.50	21.4	$3,137	$471	$1,573	$688	$5,868	$160	$14.91
350	10.3	23	12.2	3.0	36.6	716	0.55	19.6	$2,863	$429	$1,573	$688	$5,553	$152	$14.11
350	10.3	21	12.2	3.0	36.6	659	0.60	18.0	$2,635	$395	$1,573	$688	$5,290	$145	$13.44
350	10.3	20	12.2	3.0	36.6	610	0.65	16.7	$2,442	$366	$1,573	$688	$5,068	$139	$12.87

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 7 - GROUP 2 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
250	8.0	50	12.2	4.0	48.8	1,592	0.25	32.7	$6,369	$955	$2,097	$917	$10,338	$212	$19.70
250	8.0	42	12.2	4.0	48.8	1,332	0.30	27.3	$5,329	$799	$2,097	$917	$9,142	$187	$17.42
250	8.0	36	12.2	4.0	48.8	1,147	0.35	23.5	$4,586	$688	$2,097	$917	$8,287	$170	$15.79
250	8.0	31	12.2	4.0	48.8	1,007	0.40	20.7	$4,029	$604	$2,097	$917	$7,646	$157	$14.57
250	8.0	28	12.2	4.0	48.8	899	0.45	18.4	$3,595	$539	$2,097	$917	$7,148	$147	$13.62
250	8.0	25	12.2	4.0	48.8	812	0.50	16.7	$3,249	$487	$2,097	$917	$6,749	$138	$12.86
250	8.0	23	12.2	4.0	48.8	741	0.55	15.2	$2,965	$445	$2,097	$917	$6,423	$132	$12.24

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	9.6	42	12.2	4.0	48.8	1,599	0.30	32.8	$6,395	$959	$2,097	$917	$10,367	$213	$19.75
300	9.6	36	12.2	4.0	48.8	1,376	0.35	28.2	$5,503	$825	$2,097	$917	$9,342	$192	$17.80
300	9.6	31	12.2	4.0	48.8	1,209	0.40	24.8	$4,835	$725	$2,097	$917	$8,573	$176	$16.33
300	9.6	28	12.2	4.0	48.8	1,079	0.45	22.1	$4,314	$647	$2,097	$917	$7,975	$164	$15.19
300	9.6	25	12.2	4.0	48.8	975	0.50	20.0	$3,898	$585	$2,097	$917	$7,496	$154	$14.28
300	9.6	23	12.2	4.0	48.8	889	0.55	18.2	$3,558	$534	$2,097	$917	$7,105	$146	$13.54
300	9.6	21	12.2	4.0	48.8	819	0.60	16.8	$3,274	$491	$2,097	$917	$6,779	$139	$12.92

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	9.8	36	12.2	4.0	48.8	1,404	0.35	28.8	$5,618	$843	$2,097	$917	$9,474	$194	$18.05
350	9.8	31	12.2	4.0	48.8	1,234	0.40	25.3	$4,935	$740	$2,097	$917	$8,689	$178	$16.56
350	9.8	28	12.2	4.0	48.8	1,101	0.45	22.6	$4,404	$661	$2,097	$917	$8,078	$166	$15.39
350	9.8	25	12.2	4.0	48.8	995	0.50	20.4	$3,980	$597	$2,097	$917	$7,590	$156	$14.46
350	9.8	23	12.2	4.0	48.8	908	0.55	18.6	$3,632	$545	$2,097	$917	$7,190	$147	$13.70
350	9.8	21	12.2	4.0	48.8	836	0.60	17.1	$3,342	$501	$2,097	$917	$6,857	$141	$13.07
350	9.8	20	12.2	4.0	48.8	774	0.65	15.9	$3,097	$465	$2,097	$917	$6,575	$135	$12.53

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	9.9	31	12.2	4.0	48.8	1,246	0.40	25.6	$4,986	$748	$2,097	$917	$8,747	$179	$16.67
400	9.9	28	12.2	4.0	48.8	1,112	0.45	22.8	$4,449	$667	$2,097	$917	$8,130	$167	$15.49
400	9.9	25	12.2	4.0	48.8	1,005	0.50	20.6	$4,020	$603	$2,097	$917	$7,637	$157	$14.55
400	9.9	23	12.2	4.0	48.8	917	0.55	18.8	$3,669	$550	$2,097	$917	$7,233	$148	$13.78
400	9.9	21	12.2	4.0	48.8	844	0.60	17.3	$3,377	$506	$2,097	$917	$6,896	$141	$13.14
400	9.9	20	12.2	4.0	48.8	782	0.65	16.0	$3,129	$469	$2,097	$917	$6,612	$136	$12.60
400	9.9	18	12.2	4.0	48.8	729	0.70	15.0	$2,917	$438	$2,097	$917	$6,368	$131	$12.13

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 7 - GROUP 3 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	9.9	42	12.2	5.0	61.0	2,061	0.30	33.8	$8,243	$1,237	$2,621	$1,146	$13,247	$217	$20.19
300	9.9	36	12.2	5.0	61.0	1,774	0.35	29.1	$7,094	$1,064	$2,621	$1,146	$11,925	$196	$18.18
300	9.9	31	12.2	5.0	61.0	1,558	0.40	25.6	$6,232	$935	$2,621	$1,146	$10,934	$179	$16.67
300	9.9	28	12.2	5.0	61.0	1,390	0.45	22.8	$5,562	$834	$2,621	$1,146	$10,163	$167	$15.49
300	9.9	25	12.2	5.0	61.0	1,256	0.50	20.6	$5,025	$754	$2,621	$1,146	$9,546	$157	$14.55
300	9.9	23	12.2	5.0	61.0	1,147	0.55	18.8	$4,586	$688	$2,621	$1,146	$9,041	$148	$13.78
300	9.9	21	12.2	5.0	61.0	1,055	0.60	17.3	$4,221	$633	$2,621	$1,146	$8,621	$141	$13.14

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	9.8	36	12.2	5.0	61.0	1,756	0.35	28.8	$7,022	$1,053	$2,621	$1,146	$11,842	$194	$18.05
350	9.8	31	12.2	5.0	61.0	1,542	0.40	25.3	$6,169	$925	$2,621	$1,146	$10,861	$178	$16.56
350	9.8	28	12.2	5.0	61.0	1,376	0.45	22.6	$5,505	$826	$2,621	$1,146	$10,098	$166	$15.39
350	9.8	25	12.2	5.0	61.0	1,244	0.50	20.4	$4,974	$746	$2,621	$1,146	$9,487	$156	$14.46
350	9.8	23	12.2	5.0	61.0	1,135	0.55	18.6	$4,540	$681	$2,621	$1,146	$8,988	$147	$13.70
350	9.8	21	12.2	5.0	61.0	1,045	0.60	17.1	$4,178	$627	$2,621	$1,146	$8,571	$141	$13.07
350	9.8	20	12.2	5.0	61.0	968	0.65	15.9	$3,872	$581	$2,621	$1,146	$8,219	$135	$12.53

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	10.0	31	12.2	5.0	61.0	1,574	0.40	25.8	$6,295	$944	$2,621	$1,146	$11,006	$181	$16.78
400	10.0	28	12.2	5.0	61.0	1,404	0.45	23.0	$5,618	$843	$2,621	$1,146	$10,227	$168	$15.59
400	10.0	25	12.2	5.0	61.0	1,269	0.50	20.8	$5,076	$761	$2,621	$1,146	$9,604	$158	$14.64
400	10.0	23	12.2	5.0	61.0	1,158	0.55	19.0	$4,633	$695	$2,621	$1,146	$9,094	$149	$13.86
400	10.0	21	12.2	5.0	61.0	1,066	0.60	17.5	$4,263	$640	$2,621	$1,146	$8,670	$142	$13.21
400	10.0	20	12.2	5.0	61.0	988	0.65	16.2	$3,951	$593	$2,621	$1,146	$8,310	$136	$12.67
400	10.0	18	12.2	5.0	61.0	921	0.70	15.1	$3,683	$552	$2,621	$1,146	$8,002	$131	$12.20

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	10.2	28	12.2	5.0	61.0	1,433	0.45	23.5	$5,730	$860	$2,621	$1,146	$10,356	$170	$15.79
450	10.2	25	12.2	5.0	61.0	1,294	0.50	21.2	$5,178	$777	$2,621	$1,146	$9,721	$159	$14.82
450	10.2	23	12.2	5.0	61.0	1,181	0.55	19.4	$4,725	$709	$2,621	$1,146	$9,201	$151	$14.02
450	10.2	21	12.2	5.0	61.0	1,087	0.60	17.8	$4,349	$652	$2,621	$1,146	$8,768	$144	$13.36
450	10.2	20	12.2	5.0	61.0	1,007	0.65	16.5	$4,030	$604	$2,621	$1,146	$8,401	$138	$12.81
450	10.2	18	12.2	5.0	61.0	939	0.70	15.4	$3,757	$563	$2,621	$1,146	$8,087	$133	$12.33
450	10.2	16	12.2	5.0	61.0	828	0.80	13.6	$3,312	$497	$2,621	$1,146	$7,576	$124	$11.55

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 7 - GROUP 4 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	11.7	36	12.2	6.0	73.1	2,515	0.35	34.4	$10,061	$1,509	$3,145	$1,375	$16,090	$220	$20.44
350	11.7	31	12.2	6.0	73.1	2,210	0.40	30.2	$8,838	$1,326	$3,145	$1,375	$14,684	$201	$18.65
350	11.7	28	12.2	6.0	73.1	1,972	0.45	27.0	$7,887	$1,183	$3,145	$1,375	$13,591	$186	$17.26
350	11.7	25	12.2	6.0	73.1	1,782	0.50	24.4	$7,127	$1,069	$3,145	$1,375	$12,716	$174	$16.15
350	11.7	23	12.2	6.0	73.1	1,626	0.55	22.2	$6,504	$976	$3,145	$1,375	$12,000	$164	$15.24
350	11.7	21	12.2	6.0	73.1	1,496	0.60	20.5	$5,986	$898	$3,145	$1,375	$11,404	$156	$14.49
350	11.7	20	12.2	6.0	73.1	1,387	0.65	19.0	$5,547	$832	$3,145	$1,375	$10,899	$149	$13.84

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	10.6	31	12.2	6.0	73.1	2,002	0.40	27.4	$8,007	$1,201	$3,145	$1,375	$13,728	$188	$17.44
400	10.6	28	12.2	6.0	73.1	1,786	0.45	24.4	$7,146	$1,072	$3,145	$1,375	$12,738	$174	$16.18
400	10.6	25	12.2	6.0	73.1	1,614	0.50	22.1	$6,457	$969	$3,145	$1,375	$11,945	$163	$15.17
400	10.6	23	12.2	6.0	73.1	1,473	0.55	20.1	$5,893	$884	$3,145	$1,375	$11,297	$154	$14.35
400	10.6	21	12.2	6.0	73.1	1,356	0.60	18.5	$5,423	$813	$3,145	$1,375	$10,756	$147	$13.66
400	10.6	20	12.2	6.0	73.1	1,256	0.65	17.2	$5,025	$754	$3,145	$1,375	$10,299	$141	$13.08
400	10.6	18	12.2	6.0	73.1	1,171	0.70	16.0	$4,685	$703	$3,145	$1,375	$9,907	$135	$12.58

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	10.5	28	12.2	6.0	73.1	1,770	0.45	24.2	$7,078	$1,062	$3,145	$1,375	$12,660	$173	$16.08
450	10.5	25	12.2	6.0	73.1	1,599	0.50	21.9	$6,396	$959	$3,145	$1,375	$11,875	$162	$15.08
450	10.5	23	12.2	6.0	73.1	1,459	0.55	20.0	$5,837	$876	$3,145	$1,375	$11,233	$154	$14.27
450	10.5	21	12.2	6.0	73.1	1,343	0.60	18.4	$5,372	$806	$3,145	$1,375	$10,698	$146	$13.59
450	10.5	20	12.2	6.0	73.1	1,244	0.65	17.0	$4,978	$747	$3,145	$1,375	$10,245	$140	$13.01
450	10.5	18	12.2	6.0	73.1	1,160	0.70	15.9	$4,640	$696	$3,145	$1,375	$9,857	$135	$12.52
450	10.5	17	12.2	6.0	73.1	1,087	0.75	14.9	$4,348	$652	$3,145	$1,375	$9,520	$130	$12.09

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	10.7	25	12.2	6.0	73.1	1,629	0.50	22.3	$6,518	$978	$3,145	$1,375	$12,015	$164	$15.26
500	10.7	23	12.2	6.0	73.1	1,487	0.55	20.3	$5,948	$892	$3,145	$1,375	$11,361	$155	$14.43
500	10.7	21	12.2	6.0	73.1	1,369	0.60	18.7	$5,474	$821	$3,145	$1,375	$10,815	$148	$13.74
500	10.7	20	12.2	6.0	73.1	1,268	0.65	17.3	$5,073	$761	$3,145	$1,375	$10,354	$142	$13.15
500	10.7	18	12.2	6.0	73.1	1,182	0.70	16.2	$4,729	$709	$3,145	$1,375	$9,958	$136	$12.65
500	10.7	17	12.2	6.0	73.1	1,108	0.75	15.1	$4,431	$665	$3,145	$1,375	$9,615	$131	$12.21
500	10.7	16	12.2	6.0	73.1	1,042	0.80	14.3	$4,170	$625	$3,145	$1,375	$9,315	$127	$11.83

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 7 - GROUP 5 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	13.0	31	12.2	7.0	85.3	2,864	0.40	33.6	$11,457	$1,719	$3,669	$1,604	$18,449	$216	$20.09
400	13.0	28	12.2	7.0	85.3	2,556	0.45	30.0	$10,224	$1,534	$3,669	$1,604	$17,031	$200	$18.54
400	13.0	25	12.2	7.0	85.3	2,310	0.50	27.1	$9,238	$1,386	$3,669	$1,604	$15,897	$186	$17.31
400	13.0	23	12.2	7.0	85.3	2,108	0.55	24.7	$8,432	$1,265	$3,669	$1,604	$14,970	$175	$16.30
400	13.0	21	12.2	7.0	85.3	1,940	0.60	22.7	$7,759	$1,164	$3,669	$1,604	$14,197	$166	$15.46
400	13.0	20	12.2	7.0	85.3	1,798	0.65	21.1	$7,190	$1,079	$3,669	$1,604	$13,542	$159	$14.74
400	13.0	18	12.2	7.0	85.3	1,676	0.70	19.6	$6,703	$1,005	$3,669	$1,604	$12,982	$152	$14.13

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	12.9	28	12.2	7.0	85.3	2,536	0.45	29.7	$10,146	$1,522	$3,669	$1,604	$16,941	$199	$18.44
450	12.9	25	12.2	7.0	85.3	2,292	0.50	26.9	$9,167	$1,375	$3,669	$1,604	$15,816	$185	$17.22
450	12.9	23	12.2	7.0	85.3	2,092	0.55	24.5	$8,367	$1,255	$3,669	$1,604	$14,895	$175	$16.22
450	12.9	21	12.2	7.0	85.3	1,925	0.60	22.6	$7,700	$1,155	$3,669	$1,604	$14,128	$166	$15.38
450	12.9	20	12.2	7.0	85.3	1,784	0.65	20.9	$7,135	$1,070	$3,669	$1,604	$13,479	$158	$14.67
450	12.9	18	12.2	7.0	85.3	1,663	0.70	19.5	$6,651	$998	$3,669	$1,604	$12,922	$151	$14.07
450	12.9	17	12.2	7.0	85.3	1,558	0.75	18.3	$6,232	$935	$3,669	$1,604	$12,440	$146	$13.54

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	12.6	25	12.2	7.0	85.3	2,239	0.50	26.2	$8,954	$1,343	$3,669	$1,604	$15,571	$182	$16.95
500	12.6	23	12.2	7.0	85.3	2,043	0.55	23.9	$8,172	$1,226	$3,669	$1,604	$14,671	$172	$15.97
500	12.6	21	12.2	7.0	85.3	1,880	0.60	22.0	$7,521	$1,128	$3,669	$1,604	$13,922	$163	$15.16
500	12.6	20	12.2	7.0	85.3	1,742	0.65	20.4	$6,969	$1,045	$3,669	$1,604	$13,288	$156	$14.47
500	12.6	18	12.2	7.0	85.3	1,624	0.70	19.0	$6,497	$974	$3,669	$1,604	$12,744	$149	$13.88
500	12.6	17	12.2	7.0	85.3	1,522	0.75	17.8	$6,087	$913	$3,669	$1,604	$12,273	$144	$13.36
500	12.6	16	12.2	7.0	85.3	1,432	0.80	16.8	$5,729	$859	$3,669	$1,604	$11,861	$139	$12.91

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	12.9	21	12.2	7.0	85.3	1,925	0.60	22.6	$7,700	$1,155	$3,669	$1,604	$14,128	$166	$15.38
600	12.9	20	12.2	7.0	85.3	1,784	0.65	20.9	$7,135	$1,070	$3,669	$1,604	$13,479	$158	$14.67
600	12.9	18	12.2	7.0	85.3	1,663	0.70	19.5	$6,651	$998	$3,669	$1,604	$12,922	$151	$14.07
600	12.9	17	12.2	7.0	85.3	1,558	0.75	18.3	$6,232	$935	$3,669	$1,604	$12,440	$146	$13.54
600	12.9	16	12.2	7.0	85.3	1,466	0.80	17.2	$5,865	$880	$3,669	$1,604	$12,018	$141	$13.08
600	12.9	15	12.2	7.0	85.3	1,385	0.85	16.2	$5,541	$831	$3,669	$1,604	$11,646	$136	$12.68
600	12.9	15	12.2	7.0	85.3	1,313	0.90	15.4	$5,253	$788	$3,669	$1,604	$11,315	$133	$12.32

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 7 - GROUP 6 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	14.1	28	12.2	8.0	97.5	3,168	0.45	32.5	$12,674	$1,901	$4,193	$1,833	$20,601	$211	$19.63
450	14.1	25	12.2	8.0	97.5	2,863	0.50	29.4	$11,451	$1,718	$4,193	$1,833	$19,196	$197	$18.29
450	14.1	23	12.2	8.0	97.5	2,613	0.55	26.8	$10,451	$1,568	$4,193	$1,833	$18,046	$185	$17.19
450	14.1	21	12.2	8.0	97.5	2,405	0.60	24.7	$9,618	$1,443	$4,193	$1,833	$17,088	$175	$16.28
450	14.1	20	12.2	8.0	97.5	2,228	0.65	22.8	$8,913	$1,337	$4,193	$1,833	$16,277	$167	$15.51
450	14.1	18	12.2	8.0	97.5	2,077	0.70	21.3	$8,309	$1,246	$4,193	$1,833	$15,582	$160	$14.84
450	14.1	17	12.2	8.0	97.5	1,946	0.75	20.0	$7,785	$1,168	$4,193	$1,833	$14,979	$154	$14.27

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	13.4	25	12.2	8.0	97.5	2,721	0.50	27.9	$10,883	$1,632	$4,193	$1,833	$18,542	$190	$17.66
500	13.4	23	12.2	8.0	97.5	2,483	0.55	25.5	$9,933	$1,490	$4,193	$1,833	$17,449	$179	$16.62
500	13.4	21	12.2	8.0	97.5	2,285	0.60	23.4	$9,141	$1,371	$4,193	$1,833	$16,538	$170	$15.76
500	13.4	20	12.2	8.0	97.5	2,118	0.65	21.7	$8,470	$1,271	$4,193	$1,833	$15,768	$162	$15.02
500	13.4	18	12.2	8.0	97.5	1,974	0.70	20.2	$7,896	$1,184	$4,193	$1,833	$15,107	$155	$14.39
500	13.4	17	12.2	8.0	97.5	1,850	0.75	19.0	$7,398	$1,110	$4,193	$1,833	$14,535	$149	$13.85
500	13.4	16	12.2	8.0	97.5	1,741	0.80	17.8	$6,963	$1,044	$4,193	$1,833	$14,034	$144	$13.37

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	14.1	21	12.2	8.0	97.5	2,405	0.60	24.7	$9,618	$1,443	$4,193	$1,833	$17,088	$175	$16.28
600	14.1	20	12.2	8.0	97.5	2,228	0.65	22.8	$8,913	$1,337	$4,193	$1,833	$16,277	$167	$15.51
600	14.1	18	12.2	8.0	97.5	2,077	0.70	21.3	$8,309	$1,246	$4,193	$1,833	$15,582	$160	$14.84
600	14.1	17	12.2	8.0	97.5	1,946	0.75	20.0	$7,785	$1,168	$4,193	$1,833	$14,979	$154	$14.27
600	14.1	16	12.2	8.0	97.5	1,832	0.80	18.8	$7,326	$1,099	$4,193	$1,833	$14,452	$148	$13.77
600	14.1	15	12.2	8.0	97.5	1,730	0.85	17.7	$6,922	$1,038	$4,193	$1,833	$13,987	$143	$13.32
600	14.1	15	12.2	8.0	97.5	1,641	0.90	16.8	$6,562	$984	$4,193	$1,833	$13,574	$139	$12.93

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	14.4	18	12.2	8.0	97.5	2,121	0.70	21.8	$8,485	$1,273	$4,193	$1,833	$15,785	$162	$15.04
700	14.4	17	12.2	8.0	97.5	1,988	0.75	20.4	$7,950	$1,193	$4,193	$1,833	$15,170	$156	$14.45
700	14.4	16	12.2	8.0	97.5	1,871	0.80	19.2	$7,482	$1,122	$4,193	$1,833	$14,631	$150	$13.94
700	14.4	15	12.2	8.0	97.5	1,767	0.85	18.1	$7,069	$1,060	$4,193	$1,833	$14,156	$145	$13.49
700	14.4	15	12.2	8.0	97.5	1,676	0.90	17.2	$6,702	$1,005	$4,193	$1,833	$13,734	$141	$13.08
700	14.4	14	12.2	8.0	97.5	1,593	0.95	16.3	$6,374	$956	$4,193	$1,833	$13,356	$137	$12.72
700	14.4	13	12.2	8.0	97.5	1,519	1.00	15.6	$6,078	$912	$4,193	$1,833	$13,016	$133	$12.40

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 7 - GROUP 7 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	14.8	25	12.2	9.0	109.7	3,381	0.50	30.8	$13,522	$2,028	$4,718	$2,063	$22,331	$204	$18.91
500	14.8	23	12.2	9.0	109.7	3,085	0.55	28.1	$12,342	$1,851	$4,718	$2,063	$20,973	$191	$17.76
500	14.8	21	12.2	9.0	109.7	2,839	0.60	25.9	$11,358	$1,704	$4,718	$2,063	$19,841	$181	$16.80
500	14.8	20	12.2	9.0	109.7	2,631	0.65	24.0	$10,525	$1,579	$4,718	$2,063	$18,884	$172	$15.99
500	14.8	18	12.2	9.0	109.7	2,453	0.70	22.4	$9,811	$1,472	$4,718	$2,063	$18,063	$165	$15.30
500	14.8	17	12.2	9.0	109.7	2,298	0.75	20.9	$9,193	$1,379	$4,718	$2,063	$17,352	$158	$14.69
500	14.8	16	12.2	9.0	109.7	2,163	0.80	19.7	$8,651	$1,298	$4,718	$2,063	$16,729	$152	$14.17

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	14.2	21	12.2	9.0	109.7	2,724	0.60	24.8	$10,897	$1,635	$4,718	$2,063	$19,312	$176	$16.35
600	14.2	20	12.2	9.0	109.7	2,525	0.65	23.0	$10,098	$1,515	$4,718	$2,063	$18,393	$168	$15.58
600	14.2	18	12.2	9.0	109.7	2,353	0.70	21.5	$9,413	$1,412	$4,718	$2,063	$17,605	$160	$14.91
600	14.2	17	12.2	9.0	109.7	2,205	0.75	20.1	$8,820	$1,323	$4,718	$2,063	$16,923	$154	$14.33
600	14.2	16	12.2	9.0	109.7	2,075	0.80	18.9	$8,301	$1,245	$4,718	$2,063	$16,326	$149	$13.82
600	14.2	15	12.2	9.0	109.7	1,961	0.85	17.9	$7,842	$1,176	$4,718	$2,063	$15,799	$144	$13.38
600	14.2	15	12.2	9.0	109.7	1,859	0.90	16.9	$7,435	$1,115	$4,718	$2,063	$15,330	$140	$12.98

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	14.7	18	12.2	9.0	109.7	2,436	0.70	22.2	$9,745	$1,462	$4,718	$2,063	$17,987	$164	$15.23
700	14.7	17	12.2	9.0	109.7	2,283	0.75	20.8	$9,130	$1,370	$4,718	$2,063	$17,280	$158	$14.63
700	14.7	16	12.2	9.0	109.7	2,148	0.80	19.6	$8,593	$1,289	$4,718	$2,063	$16,662	$152	$14.11
700	14.7	15	12.2	9.0	109.7	2,030	0.85	18.5	$8,119	$1,218	$4,718	$2,063	$16,116	$147	$13.65
700	14.7	15	12.2	9.0	109.7	1,924	0.90	17.5	$7,697	$1,155	$4,718	$2,063	$15,632	$142	$13.24
700	14.7	14	12.2	9.0	109.7	1,830	0.95	16.7	$7,320	$1,098	$4,718	$2,063	$15,198	$139	$12.87
700	14.7	13	12.2	9.0	109.7	1,745	1.00	15.9	$6,980	$1,047	$4,718	$2,063	$14,807	$135	$12.54

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
750	14.9	17	12.2	9.0	109.7	2,314	0.75	21.1	$9,255	$1,388	$4,718	$2,063	$17,423	$159	$14.75
750	14.9	16	12.2	9.0	109.7	2,177	0.80	19.8	$8,710	$1,306	$4,718	$2,063	$16,796	$153	$14.22
750	14.9	15	12.2	9.0	109.7	2,057	0.85	18.8	$8,229	$1,234	$4,718	$2,063	$16,243	$148	$13.76
750	14.9	15	12.2	9.0	109.7	1,950	0.90	17.8	$7,802	$1,170	$4,718	$2,063	$15,752	$144	$13.34
750	14.9	14	12.2	9.0	109.7	1,855	0.95	16.9	$7,419	$1,113	$4,718	$2,063	$15,312	$140	$12.97
750	14.9	13	12.2	9.0	109.7	1,769	1.00	16.1	$7,075	$1,061	$4,718	$2,063	$14,916	$136	$12.63
750	14.9	13	12.2	9.0	109.7	1,691	1.05	15.4	$6,764	$1,015	$4,718	$2,063	$14,558	$133	$12.33

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 7 - GROUP 8 - OWSJ - BASED ON 9.0 KN/m

OCTOBER 2013

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	14.4	21	12.2	10.0	121.9	3,070	0.60	25.2	$12,278	$1,842	$5,242	$2,292	$21,654	$178	$16.50
600	14.4	20	12.2	10.0	121.9	2,845	0.65	23.3	$11,378	$1,707	$5,242	$2,292	$20,618	$169	$15.71
600	14.4	18	12.2	10.0	121.9	2,652	0.70	21.8	$10,607	$1,591	$5,242	$2,292	$19,731	$162	$15.04
600	14.4	17	12.2	10.0	121.9	2,484	0.75	20.4	$9,938	$1,491	$5,242	$2,292	$18,962	$156	$14.45
600	14.4	16	12.2	10.0	121.9	2,338	0.80	19.2	$9,353	$1,403	$5,242	$2,292	$18,289	$150	$13.94
600	14.4	15	12.2	10.0	121.9	2,209	0.85	18.1	$8,837	$1,325	$5,242	$2,292	$17,695	$145	$13.49
600	14.4	15	12.2	10.0	121.9	2,094	0.90	17.2	$8,378	$1,257	$5,242	$2,292	$17,168	$141	$13.08

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	14.3	18	12.2	10.0	121.9	2,633	0.70	21.6	$10,533	$1,580	$5,242	$2,292	$19,646	$161	$14.97
700	14.3	17	12.2	10.0	121.9	2,467	0.75	20.2	$9,869	$1,480	$5,242	$2,292	$18,883	$155	$14.39
700	14.3	16	12.2	10.0	121.9	2,322	0.80	19.0	$9,288	$1,393	$5,242	$2,292	$18,214	$149	$13.88
700	14.3	15	12.2	10.0	121.9	2,194	0.85	18.0	$8,775	$1,316	$5,242	$2,292	$17,625	$145	$13.43
700	14.3	15	12.2	10.0	121.9	2,080	0.90	17.1	$8,319	$1,248	$5,242	$2,292	$17,101	$140	$13.03
700	14.3	14	12.2	10.0	121.9	1,978	0.95	16.2	$7,912	$1,187	$5,242	$2,292	$16,632	$136	$12.68
700	14.3	13	12.2	10.0	121.9	1,886	1.00	15.5	$7,545	$1,132	$5,242	$2,292	$16,210	$133	$12.35

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
750	14.4	17	12.2	10.0	121.9	2,484	0.75	20.4	$9,938	$1,491	$5,242	$2,292	$18,962	$156	$14.45
750	14.4	16	12.2	10.0	121.9	2,338	0.80	19.2	$9,353	$1,403	$5,242	$2,292	$18,289	$150	$13.94
750	14.4	15	12.2	10.0	121.9	2,209	0.85	18.1	$8,837	$1,325	$5,242	$2,292	$17,695	$145	$13.49
750	14.4	15	12.2	10.0	121.9	2,094	0.90	17.2	$8,378	$1,257	$5,242	$2,292	$17,168	$141	$13.08
750	14.4	14	12.2	10.0	121.9	1,992	0.95	16.3	$7,967	$1,195	$5,242	$2,292	$16,695	$137	$12.72
750	14.4	13	12.2	10.0	121.9	1,899	1.00	15.6	$7,597	$1,140	$5,242	$2,292	$16,270	$133	$12.40
750	14.4	13	12.2	10.0	121.9	1,816	1.05	14.9	$7,263	$1,089	$5,242	$2,292	$15,886	$130	$12.11

OWSJ 800mm (32") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 9.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
800	14.5	16	12.2	10.0	121.9	2,354	0.80	19.3	$9,418	$1,413	$5,242	$2,292	$18,364	$151	$14.00
800	14.5	15	12.2	10.0	121.9	2,224	0.85	18.2	$8,898	$1,335	$5,242	$2,292	$17,766	$146	$13.54
800	14.5	15	12.2	10.0	121.9	2,109	0.90	17.3	$8,436	$1,265	$5,242	$2,292	$17,235	$141	$13.13
800	14.5	14	12.2	10.0	121.9	2,006	0.95	16.5	$8,022	$1,203	$5,242	$2,292	$16,759	$137	$12.77
800	14.5	13	12.2	10.0	121.9	1,913	1.00	15.7	$7,650	$1,148	$5,242	$2,292	$16,331	$134	$12.45
800	14.5	13	12.2	10.0	121.9	1,828	1.05	15.0	$7,314	$1,097	$5,242	$2,292	$15,944	$131	$12.15
800	14.5	12	12.2	10.0	121.9	1,752	1.10	14.4	$7,007	$1,051	$5,242	$2,292	$15,592	$128	$11.88

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 8 - GROUP 1 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 200mm (8") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
200	9.8	62	12.2	3.0	36.6	1,821	0.20	49.8	$7,285	$1,093	$1,573	$688	$10,638	$291	$27.03
200	9.8	50	12.2	3.0	36.6	1,463	0.25	40.0	$5,852	$878	$1,573	$688	$8,990	$246	$22.84
200	9.8	42	12.2	3.0	36.6	1,224	0.30	33.5	$4,896	$734	$1,573	$688	$7,891	$216	$20.05
200	9.8	36	12.2	3.0	36.6	1,053	0.35	28.8	$4,213	$632	$1,573	$688	$7,105	$194	$18.05
200	9.8	31	12.2	3.0	36.6	925	0.40	25.3	$3,701	$555	$1,573	$688	$6,517	$178	$16.56
200	9.8	28	12.2	3.0	36.6	826	0.45	22.6	$3,303	$495	$1,573	$688	$6,059	$166	$15.39
200	9.8	25	12.2	3.0	36.6	746	0.50	20.4	$2,985	$448	$1,573	$688	$5,692	$156	$14.46

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
250	8.6	50	12.2	3.0	36.6	1,284	0.25	35.1	$5,135	$770	$1,573	$688	$8,166	$223	$20.74
250	8.6	42	12.2	3.0	36.6	1,074	0.30	29.4	$4,297	$644	$1,573	$688	$7,201	$197	$18.29
250	8.6	36	12.2	3.0	36.6	924	0.35	25.3	$3,698	$555	$1,573	$688	$6,512	$178	$16.54
250	8.6	31	12.2	3.0	36.6	812	0.40	22.2	$3,248	$487	$1,573	$688	$5,995	$164	$15.23
250	8.6	28	12.2	3.0	36.6	725	0.45	19.8	$2,899	$435	$1,573	$688	$5,594	$153	$14.21
250	8.6	25	12.2	3.0	36.6	655	0.50	17.9	$2,619	$393	$1,573	$688	$5,272	$144	$13.39
250	8.6	23	12.2	3.0	36.6	598	0.55	16.3	$2,390	$359	$1,573	$688	$5,009	$137	$12.73

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	10.1	42	12.2	3.0	36.6	1,261	0.30	34.5	$5,046	$757	$1,573	$688	$8,063	$220	$20.48
300	10.1	36	12.2	3.0	36.6	1,086	0.35	29.7	$4,342	$651	$1,573	$688	$7,254	$198	$18.43
300	10.1	31	12.2	3.0	36.6	954	0.40	26.1	$3,815	$572	$1,573	$688	$6,647	$182	$16.89
300	10.1	28	12.2	3.0	36.6	851	0.45	23.3	$3,404	$511	$1,573	$688	$6,175	$169	$15.69
300	10.1	25	12.2	3.0	36.6	769	0.50	21.0	$3,076	$461	$1,573	$688	$5,797	$159	$14.73
300	10.1	23	12.2	3.0	36.6	702	0.55	19.2	$2,807	$421	$1,573	$688	$5,489	$150	$13.94
300	10.1	21	12.2	3.0	36.6	646	0.60	17.7	$2,584	$388	$1,573	$688	$5,231	$143	$13.29

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 3m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	10.3	36	12.2	3.0	36.6	1,107	0.35	30.3	$4,428	$664	$1,573	$688	$7,353	$201	$18.68
350	10.3	31	12.2	3.0	36.6	973	0.40	26.6	$3,890	$584	$1,573	$688	$6,734	$184	$17.11
350	10.3	28	12.2	3.0	36.6	868	0.45	23.7	$3,472	$521	$1,573	$688	$6,253	$171	$15.88
350	10.3	25	12.2	3.0	36.6	784	0.50	21.4	$3,137	$471	$1,573	$688	$5,868	$160	$14.91
350	10.3	23	12.2	3.0	36.6	716	0.55	19.6	$2,863	$429	$1,573	$688	$5,553	$152	$14.11
350	10.3	21	12.2	3.0	36.6	659	0.60	18.0	$2,635	$395	$1,573	$688	$5,290	$145	$13.44
350	10.3	20	12.2	3.0	36.6	610	0.65	16.7	$2,442	$366	$1,573	$688	$5,068	$139	$12.87

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 8 - GROUP 2 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
250	12.6	50	12.2	4.0	48.8	2,508	0.25	51.4	$10,032	$1,505	$2,097	$917	$14,550	$298	$27.72
250	12.6	42	12.2	4.0	48.8	2,098	0.30	43.0	$8,393	$1,259	$2,097	$917	$12,666	$260	$24.13
250	12.6	36	12.2	4.0	48.8	1,806	0.35	37.0	$7,223	$1,083	$2,097	$917	$11,320	$232	$21.57
250	12.6	31	12.2	4.0	48.8	1,586	0.40	32.5	$6,345	$952	$2,097	$917	$10,311	$211	$19.64
250	12.6	28	12.2	4.0	48.8	1,416	0.45	29.0	$5,663	$849	$2,097	$917	$9,525	$195	$18.15
250	12.6	25	12.2	4.0	48.8	1,279	0.50	26.2	$5,117	$767	$2,097	$917	$8,897	$182	$16.95
250	12.6	23	12.2	4.0	48.8	1,167	0.55	23.9	$4,670	$700	$2,097	$917	$8,384	$172	$15.97

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	12.4	42	12.2	4.0	48.8	2,065	0.30	42.4	$8,260	$1,239	$2,097	$917	$12,512	$257	$23.84
300	12.4	36	12.2	4.0	48.8	1,777	0.35	36.4	$7,108	$1,066	$2,097	$917	$11,188	$229	$21.32
300	12.4	31	12.2	4.0	48.8	1,561	0.40	32.0	$6,245	$937	$2,097	$917	$10,195	$209	$19.42
300	12.4	28	12.2	4.0	48.8	1,393	0.45	28.6	$5,573	$836	$2,097	$917	$9,422	$193	$17.95
300	12.4	25	12.2	4.0	48.8	1,259	0.50	25.8	$5,035	$755	$2,097	$917	$8,804	$181	$16.77
300	12.4	23	12.2	4.0	48.8	1,149	0.55	23.6	$4,596	$689	$2,097	$917	$8,298	$170	$15.81
300	12.4	21	12.2	4.0	48.8	1,057	0.60	21.7	$4,229	$634	$2,097	$917	$7,877	$162	$15.01

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	10.5	36	12.2	4.0	48.8	1,505	0.35	30.9	$6,019	$903	$2,097	$917	$9,935	$204	$18.93
350	10.5	31	12.2	4.0	48.8	1,322	0.40	27.1	$5,288	$793	$2,097	$917	$9,094	$187	$17.33
350	10.5	28	12.2	4.0	48.8	1,180	0.45	24.2	$4,719	$708	$2,097	$917	$8,440	$173	$16.08
350	10.5	25	12.2	4.0	48.8	1,066	0.50	21.9	$4,264	$640	$2,097	$917	$7,917	$162	$15.08
350	10.5	23	12.2	4.0	48.8	973	0.55	20.0	$3,891	$584	$2,097	$917	$7,489	$154	$14.27
350	10.5	21	12.2	4.0	48.8	895	0.60	18.4	$3,581	$537	$2,097	$917	$7,132	$146	$13.59
350	10.5	20	12.2	4.0	48.8	830	0.65	17.0	$3,319	$498	$2,097	$917	$6,830	$140	$13.01

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 4m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	10.4	31	12.2	4.0	48.8	1,309	0.40	26.9	$5,237	$786	$2,097	$917	$9,036	$185	$17.22
400	10.4	28	12.2	4.0	48.8	1,168	0.45	24.0	$4,674	$701	$2,097	$917	$8,388	$172	$15.98
400	10.4	25	12.2	4.0	48.8	1,056	0.50	21.7	$4,223	$633	$2,097	$917	$7,870	$161	$14.99
400	10.4	23	12.2	4.0	48.8	964	0.55	19.8	$3,854	$578	$2,097	$917	$7,446	$153	$14.19
400	10.4	21	12.2	4.0	48.8	887	0.60	18.2	$3,547	$532	$2,097	$917	$7,093	$145	$13.51
400	10.4	20	12.2	4.0	48.8	822	0.65	16.9	$3,287	$493	$2,097	$917	$6,793	$139	$12.94
400	10.4	18	12.2	4.0	48.8	766	0.70	15.7	$3,064	$460	$2,097	$917	$6,537	$134	$12.46

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 8 - GROUP 3 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
300	15.3	42	12.2	5.0	61.0	3,185	0.30	52.3	$12,740	$1,911	$2,621	$1,146	$18,417	$302	$28.07
300	15.3	36	12.2	5.0	61.0	2,741	0.35	45.0	$10,964	$1,645	$2,621	$1,146	$16,375	$269	$24.96
300	15.3	31	12.2	5.0	61.0	2,408	0.40	39.5	$9,631	$1,445	$2,621	$1,146	$14,843	$244	$22.62
300	15.3	28	12.2	5.0	61.0	2,149	0.45	35.3	$8,595	$1,289	$2,621	$1,146	$13,651	$224	$20.81
300	15.3	25	12.2	5.0	61.0	1,942	0.50	31.9	$7,766	$1,165	$2,621	$1,146	$12,698	$208	$19.35
300	15.3	23	12.2	5.0	61.0	1,772	0.55	29.1	$7,088	$1,063	$2,621	$1,146	$11,918	$196	$18.17
300	15.3	21	12.2	5.0	61.0	1,631	0.60	26.8	$6,523	$978	$2,621	$1,146	$11,268	$185	$17.18

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	14.4	36	12.2	5.0	61.0	2,580	0.35	42.3	$10,319	$1,548	$2,621	$1,146	$15,633	$256	$23.83
350	14.4	31	12.2	5.0	61.0	2,266	0.40	37.2	$9,065	$1,360	$2,621	$1,146	$14,191	$233	$21.63
350	14.4	28	12.2	5.0	61.0	2,022	0.45	33.2	$8,090	$1,213	$2,621	$1,146	$13,070	$214	$19.92
350	14.4	25	12.2	5.0	61.0	1,827	0.50	30.0	$7,309	$1,096	$2,621	$1,146	$12,173	$200	$18.55
350	14.4	23	12.2	5.0	61.0	1,668	0.55	27.4	$6,671	$1,001	$2,621	$1,146	$11,439	$188	$17.44
350	14.4	21	12.2	5.0	61.0	1,535	0.60	25.2	$6,139	$921	$2,621	$1,146	$10,827	$178	$16.50
350	14.4	20	12.2	5.0	61.0	1,422	0.65	23.3	$5,689	$853	$2,621	$1,146	$10,309	$169	$15.71

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	13.6	31	12.2	5.0	61.0	2,140	0.40	35.1	$8,561	$1,284	$2,621	$1,146	$13,612	$223	$20.75
400	13.6	28	12.2	5.0	61.0	1,910	0.45	31.3	$7,640	$1,146	$2,621	$1,146	$12,553	$206	$19.13
400	13.6	25	12.2	5.0	61.0	1,726	0.50	28.3	$6,903	$1,036	$2,621	$1,146	$11,706	$192	$17.84
400	13.6	23	12.2	5.0	61.0	1,575	0.55	25.8	$6,301	$945	$2,621	$1,146	$11,012	$181	$16.79
400	13.6	21	12.2	5.0	61.0	1,450	0.60	23.8	$5,798	$870	$2,621	$1,146	$10,435	$171	$15.90
400	13.6	20	12.2	5.0	61.0	1,343	0.65	22.0	$5,373	$806	$2,621	$1,146	$9,946	$163	$15.16
400	13.6	18	12.2	5.0	61.0	1,252	0.70	20.5	$5,009	$751	$2,621	$1,146	$9,527	$156	$14.52

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 5m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	13.4	28	12.2	5.0	61.0	1,882	0.45	30.9	$7,528	$1,129	$2,621	$1,146	$12,424	$204	$18.94
450	13.4	25	12.2	5.0	61.0	1,700	0.50	27.9	$6,802	$1,020	$2,621	$1,146	$11,589	$190	$17.66
450	13.4	23	12.2	5.0	61.0	1,552	0.55	25.5	$6,208	$931	$2,621	$1,146	$10,906	$179	$16.62
450	13.4	21	12.2	5.0	61.0	1,428	0.60	23.4	$5,713	$857	$2,621	$1,146	$10,337	$170	$15.76
450	13.4	20	12.2	5.0	61.0	1,324	0.65	21.7	$5,294	$794	$2,621	$1,146	$9,855	$162	$15.02
450	13.4	18	12.2	5.0	61.0	1,234	0.70	20.2	$4,935	$740	$2,621	$1,146	$9,442	$155	$14.39
450	13.4	16	12.2	5.0	61.0	1,088	0.80	17.8	$4,352	$653	$2,621	$1,146	$8,771	$144	$13.37

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 8 - GROUP 4 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
350	19.0	36	12.2	6.0	73.1	4,084	0.35	55.8	$16,338	$2,451	$3,145	$1,375	$23,309	$319	$29.61
350	19.0	31	12.2	6.0	73.1	3,588	0.40	49.1	$14,353	$2,153	$3,145	$1,375	$21,026	$287	$26.71
350	19.0	28	12.2	6.0	73.1	3,202	0.45	43.8	$12,809	$1,921	$3,145	$1,375	$19,250	$263	$24.45
350	19.0	25	12.2	6.0	73.1	2,893	0.50	39.6	$11,573	$1,736	$3,145	$1,375	$17,829	$244	$22.65
350	19.0	23	12.2	6.0	73.1	2,641	0.55	36.1	$10,563	$1,584	$3,145	$1,375	$16,667	$228	$21.17
350	19.0	21	12.2	6.0	73.1	2,430	0.60	33.2	$9,720	$1,458	$3,145	$1,375	$15,699	$215	$19.94
350	19.0	20	12.2	6.0	73.1	2,252	0.65	30.8	$9,008	$1,351	$3,145	$1,375	$14,879	$203	$18.90

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	16.9	31	12.2	6.0	73.1	3,192	0.40	43.6	$12,766	$1,915	$3,145	$1,375	$19,201	$263	$24.39
400	16.9	28	12.2	6.0	73.1	2,848	0.45	38.9	$11,393	$1,709	$3,145	$1,375	$17,622	$241	$22.38
400	16.9	25	12.2	6.0	73.1	2,574	0.50	35.2	$10,294	$1,544	$3,145	$1,375	$16,358	$224	$20.78
400	16.9	23	12.2	6.0	73.1	2,349	0.55	32.1	$9,395	$1,409	$3,145	$1,375	$15,324	$210	$19.47
400	16.9	21	12.2	6.0	73.1	2,162	0.60	29.6	$8,646	$1,297	$3,145	$1,375	$14,463	$198	$18.37
400	16.9	20	12.2	6.0	73.1	2,003	0.65	27.4	$8,012	$1,202	$3,145	$1,375	$13,734	$188	$17.45
400	16.9	18	12.2	6.0	73.1	1,867	0.70	25.5	$7,469	$1,120	$3,145	$1,375	$13,109	$179	$16.65

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	16.4	28	12.2	6.0	73.1	2,764	0.45	37.8	$11,056	$1,658	$3,145	$1,375	$17,234	$236	$21.89
450	16.4	25	12.2	6.0	73.1	2,497	0.50	34.1	$9,990	$1,498	$3,145	$1,375	$16,008	$219	$20.33
450	16.4	23	12.2	6.0	73.1	2,279	0.55	31.2	$9,117	$1,368	$3,145	$1,375	$15,005	$205	$19.06
450	16.4	21	12.2	6.0	73.1	2,098	0.60	28.7	$8,390	$1,259	$3,145	$1,375	$14,169	$194	$18.00
450	16.4	20	12.2	6.0	73.1	1,944	0.65	26.6	$7,775	$1,166	$3,145	$1,375	$13,461	$184	$17.10
450	16.4	18	12.2	6.0	73.1	1,812	0.70	24.8	$7,248	$1,087	$3,145	$1,375	$12,855	$176	$16.33
450	16.4	17	12.2	6.0	73.1	1,698	0.75	23.2	$6,791	$1,019	$3,145	$1,375	$12,330	$169	$15.66

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 6m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	15.7	25	12.2	6.0	73.1	2,391	0.50	32.7	$9,563	$1,434	$3,145	$1,375	$15,518	$212	$19.71
500	15.7	23	12.2	6.0	73.1	2,182	0.55	29.8	$8,728	$1,309	$3,145	$1,375	$14,557	$199	$18.49
500	15.7	21	12.2	6.0	73.1	2,008	0.60	27.5	$8,032	$1,205	$3,145	$1,375	$13,757	$188	$17.47
500	15.7	20	12.2	6.0	73.1	1,861	0.65	25.4	$7,443	$1,116	$3,145	$1,375	$13,080	$179	$16.61
500	15.7	18	12.2	6.0	73.1	1,735	0.70	23.7	$6,939	$1,041	$3,145	$1,375	$12,499	$171	$15.88
500	15.7	17	12.2	6.0	73.1	1,625	0.75	22.2	$6,501	$975	$3,145	$1,375	$11,996	$164	$15.24
500	15.7	16	12.2	6.0	73.1	1,530	0.80	20.9	$6,118	$918	$3,145	$1,375	$11,556	$158	$14.68

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

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TABLE 8 - GROUP 5 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
400	22.6	31	12.2	7.0	85.3	4,979	0.40	58.4	$19,917	$2,988	$3,669	$1,604	$28,178	$330	$30.68
400	22.6	28	12.2	7.0	85.3	4,444	0.45	52.1	$17,775	$2,666	$3,669	$1,604	$25,714	$301	$28.00
400	22.6	25	12.2	7.0	85.3	4,015	0.50	47.1	$16,060	$2,409	$3,669	$1,604	$23,743	$278	$25.85
400	22.6	23	12.2	7.0	85.3	3,664	0.55	42.9	$14,658	$2,199	$3,669	$1,604	$22,130	$259	$24.09
400	22.6	21	12.2	7.0	85.3	3,372	0.60	39.5	$13,489	$2,023	$3,669	$1,604	$20,786	$244	$22.63
400	22.6	20	12.2	7.0	85.3	3,125	0.65	36.6	$12,500	$1,875	$3,669	$1,604	$19,649	$230	$21.39
400	22.6	18	12.2	7.0	85.3	2,913	0.70	34.1	$11,653	$1,748	$3,669	$1,604	$18,674	$219	$20.33

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	20.7	28	12.2	7.0	85.3	4,070	0.45	47.7	$16,280	$2,442	$3,669	$1,604	$23,996	$281	$26.13
450	20.7	25	12.2	7.0	85.3	3,678	0.50	43.1	$14,710	$2,207	$3,669	$1,604	$22,190	$260	$24.16
450	20.7	23	12.2	7.0	85.3	3,356	0.55	39.3	$13,426	$2,014	$3,669	$1,604	$20,713	$243	$22.55
450	20.7	21	12.2	7.0	85.3	3,089	0.60	36.2	$12,355	$1,853	$3,669	$1,604	$19,482	$228	$21.21
450	20.7	20	12.2	7.0	85.3	2,862	0.65	33.5	$11,449	$1,717	$3,669	$1,604	$18,440	$216	$20.08
450	20.7	18	12.2	7.0	85.3	2,668	0.70	31.3	$10,673	$1,601	$3,669	$1,604	$17,547	$206	$19.10
450	20.7	17	12.2	7.0	85.3	2,500	0.75	29.3	$10,000	$1,500	$3,669	$1,604	$16,773	$197	$18.26

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	18.7	25	12.2	7.0	85.3	3,322	0.50	38.9	$13,289	$1,993	$3,669	$1,604	$20,556	$241	$22.38
500	18.7	23	12.2	7.0	85.3	3,032	0.55	35.5	$12,128	$1,819	$3,669	$1,604	$19,221	$225	$20.93
500	18.7	21	12.2	7.0	85.3	2,790	0.60	32.7	$11,161	$1,674	$3,669	$1,604	$18,109	$212	$19.72
500	18.7	20	12.2	7.0	85.3	2,586	0.65	30.3	$10,343	$1,551	$3,669	$1,604	$17,168	$201	$18.69
500	18.7	18	12.2	7.0	85.3	2,410	0.70	28.2	$9,642	$1,446	$3,669	$1,604	$16,361	$192	$17.81
500	18.7	17	12.2	7.0	85.3	2,258	0.75	26.5	$9,034	$1,355	$3,669	$1,604	$15,662	$184	$17.05
500	18.7	16	12.2	7.0	85.3	2,125	0.80	24.9	$8,502	$1,275	$3,669	$1,604	$15,051	$176	$16.39

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 7m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	17.9	21	12.2	7.0	85.3	2,671	0.60	31.3	$10,684	$1,603	$3,669	$1,604	$17,560	$206	$19.12
600	17.9	20	12.2	7.0	85.3	2,475	0.65	29.0	$9,901	$1,485	$3,669	$1,604	$16,659	$195	$18.14
600	17.9	18	12.2	7.0	85.3	2,307	0.70	27.0	$9,229	$1,384	$3,669	$1,604	$15,887	$186	$17.30
600	17.9	17	12.2	7.0	85.3	2,162	0.75	25.3	$8,647	$1,297	$3,669	$1,604	$15,218	$178	$16.57
600	17.9	16	12.2	7.0	85.3	2,035	0.80	23.8	$8,138	$1,221	$3,669	$1,604	$14,632	$171	$15.93
600	17.9	15	12.2	7.0	85.3	1,922	0.85	22.5	$7,689	$1,153	$3,669	$1,604	$14,116	$165	$15.37
600	17.9	15	12.2	7.0	85.3	1,822	0.90	21.4	$7,290	$1,093	$3,669	$1,604	$13,657	$160	$14.87

Source: Canam Steel Works - Joist Catalogue - 2002
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TABLE 8 - GROUP 6 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
450	25.9	28	12.2	8.0	97.5	5,820	0.45	59.7	$23,280	$3,492	$4,193	$1,833	$32,799	$336	$31.25
450	25.9	25	12.2	8.0	97.5	5,259	0.50	53.9	$21,035	$3,155	$4,193	$1,833	$30,217	$310	$28.79
450	25.9	23	12.2	8.0	97.5	4,800	0.55	49.2	$19,198	$2,880	$4,193	$1,833	$28,104	$288	$26.77
450	25.9	21	12.2	8.0	97.5	4,417	0.60	45.3	$17,667	$2,650	$4,193	$1,833	$26,344	$270	$25.10
450	25.9	20	12.2	8.0	97.5	4,093	0.65	42.0	$16,372	$2,456	$4,193	$1,833	$24,855	$255	$23.68
450	25.9	18	12.2	8.0	97.5	3,815	0.70	39.1	$15,262	$2,289	$4,193	$1,833	$23,578	$242	$22.46
450	25.9	17	12.2	8.0	97.5	3,575	0.75	36.7	$14,300	$2,145	$4,193	$1,833	$22,471	$230	$21.41

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	20.5	25	12.2	8.0	97.5	4,162	0.50	42.7	$16,649	$2,497	$4,193	$1,833	$25,173	$258	$23.98
500	20.5	23	12.2	8.0	97.5	3,799	0.55	39.0	$15,195	$2,279	$4,193	$1,833	$23,501	$241	$22.39
500	20.5	21	12.2	8.0	97.5	3,496	0.60	35.8	$13,984	$2,098	$4,193	$1,833	$22,108	$227	$21.06
500	20.5	20	12.2	8.0	97.5	3,240	0.65	33.2	$12,959	$1,944	$4,193	$1,833	$20,929	$215	$19.94
500	20.5	18	12.2	8.0	97.5	3,020	0.70	31.0	$12,080	$1,812	$4,193	$1,833	$19,918	$204	$18.98
500	20.5	17	12.2	8.0	97.5	2,830	0.75	29.0	$11,318	$1,698	$4,193	$1,833	$19,043	$195	$18.14
500	20.5	16	12.2	8.0	97.5	2,663	0.80	27.3	$10,652	$1,598	$4,193	$1,833	$18,276	$187	$17.41

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	18.1	21	12.2	8.0	97.5	3,087	0.60	31.7	$12,347	$1,852	$4,193	$1,833	$20,225	$207	$19.27
600	18.1	20	12.2	8.0	97.5	2,860	0.65	29.3	$11,441	$1,716	$4,193	$1,833	$19,184	$197	$18.28
600	18.1	18	12.2	8.0	97.5	2,666	0.70	27.3	$10,666	$1,600	$4,193	$1,833	$18,292	$188	$17.43
600	18.1	17	12.2	8.0	97.5	2,498	0.75	25.6	$9,993	$1,499	$4,193	$1,833	$17,519	$180	$16.69
600	18.1	16	12.2	8.0	97.5	2,351	0.80	24.1	$9,405	$1,411	$4,193	$1,833	$16,842	$173	$16.04
600	18.1	15	12.2	8.0	97.5	2,221	0.85	22.8	$8,886	$1,333	$4,193	$1,833	$16,245	$167	$15.48
600	18.1	15	12.2	8.0	97.5	2,106	0.90	21.6	$8,424	$1,264	$4,193	$1,833	$15,714	$161	$14.97

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 8m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	18.0	18	12.2	8.0	97.5	2,652	0.70	27.2	$10,607	$1,591	$4,193	$1,833	$18,224	$187	$17.36
700	18.0	17	12.2	8.0	97.5	2,484	0.75	25.5	$9,938	$1,491	$4,193	$1,833	$17,455	$179	$16.63
700	18.0	16	12.2	8.0	97.5	2,338	0.80	24.0	$9,353	$1,403	$4,193	$1,833	$16,782	$172	$15.99
700	18.0	15	12.2	8.0	97.5	2,209	0.85	22.7	$8,837	$1,325	$4,193	$1,833	$16,189	$166	$15.42
700	18.0	15	12.2	8.0	97.5	2,094	0.90	21.5	$8,378	$1,257	$4,193	$1,833	$15,661	$161	$14.92
700	18.0	14	12.2	8.0	97.5	1,992	0.95	20.4	$7,967	$1,195	$4,193	$1,833	$15,189	$156	$14.47
700	18.0	13	12.2	8.0	97.5	1,899	1.00	19.5	$7,597	$1,140	$4,193	$1,833	$14,764	$151	$14.06

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 8 - GROUP 7 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
500	30.5	25	12.2	9.0	109.7	6,967	0.50	63.5	$27,867	$4,180	$4,718	$2,063	$38,827	$354	$32.88
500	30.5	23	12.2	9.0	109.7	6,358	0.55	58.0	$25,434	$3,815	$4,718	$2,063	$36,029	$328	$30.51
500	30.5	21	12.2	9.0	109.7	5,851	0.60	53.3	$23,406	$3,511	$4,718	$2,063	$33,697	$307	$28.53
500	30.5	20	12.2	9.0	109.7	5,422	0.65	49.4	$21,690	$3,253	$4,718	$2,063	$31,723	$289	$26.86
500	30.5	18	12.2	9.0	109.7	5,055	0.70	46.1	$20,219	$3,033	$4,718	$2,063	$30,032	$274	$25.43
500	30.5	17	12.2	9.0	109.7	4,736	0.75	43.2	$18,944	$2,842	$4,718	$2,063	$28,566	$260	$24.19
500	30.5	16	12.2	9.0	109.7	4,457	0.80	40.6	$17,829	$2,674	$4,718	$2,063	$27,283	$249	$23.10

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	23.8	21	12.2	9.0	109.7	4,566	0.60	41.6	$18,264	$2,740	$4,718	$2,063	$27,784	$253	$23.53
600	23.8	20	12.2	9.0	109.7	4,231	0.65	38.6	$16,925	$2,539	$4,718	$2,063	$26,244	$239	$22.22
600	23.8	18	12.2	9.0	109.7	3,944	0.70	36.0	$15,777	$2,367	$4,718	$2,063	$24,924	$227	$21.11
600	23.8	17	12.2	9.0	109.7	3,696	0.75	33.7	$14,783	$2,217	$4,718	$2,063	$23,780	$217	$20.14
600	23.8	16	12.2	9.0	109.7	3,478	0.80	31.7	$13,912	$2,087	$4,718	$2,063	$22,779	$208	$19.29
600	23.8	15	12.2	9.0	109.7	3,286	0.85	30.0	$13,144	$1,972	$4,718	$2,063	$21,896	$200	$18.54
600	23.8	15	12.2	9.0	109.7	3,115	0.90	28.4	$12,462	$1,869	$4,718	$2,063	$21,111	$192	$17.88

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	21.6	18	12.2	9.0	109.7	3,580	0.70	32.6	$14,319	$2,148	$4,718	$2,063	$23,247	$212	$19.69
700	21.6	17	12.2	9.0	109.7	3,354	0.75	30.6	$13,416	$2,012	$4,718	$2,063	$22,209	$202	$18.81
700	21.6	16	12.2	9.0	109.7	3,157	0.80	28.8	$12,626	$1,894	$4,718	$2,063	$21,300	$194	$18.04
700	21.6	15	12.2	9.0	109.7	2,982	0.85	27.2	$11,929	$1,789	$4,718	$2,063	$20,499	$187	$17.36
700	21.6	15	12.2	9.0	109.7	2,827	0.90	25.8	$11,310	$1,696	$4,718	$2,063	$19,786	$180	$16.76
700	21.6	14	12.2	9.0	109.7	2,689	0.95	24.5	$10,755	$1,613	$4,718	$2,063	$19,149	$175	$16.22
700	21.6	13	12.2	9.0	109.7	2,564	1.00	23.4	$10,257	$1,538	$4,718	$2,063	$18,575	$169	$15.73

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 9m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
750	19.9	17	12.2	9.0	109.7	3,090	0.75	28.2	$12,360	$1,854	$4,718	$2,063	$20,994	$191	$17.78
750	19.9	16	12.2	9.0	109.7	2,908	0.80	26.5	$11,633	$1,745	$4,718	$2,063	$20,158	$184	$17.07
750	19.9	15	12.2	9.0	109.7	2,748	0.85	25.0	$10,990	$1,649	$4,718	$2,063	$19,419	$177	$16.44
750	19.9	15	12.2	9.0	109.7	2,605	0.90	23.7	$10,420	$1,563	$4,718	$2,063	$18,763	$171	$15.89
750	19.9	14	12.2	9.0	109.7	2,477	0.95	22.6	$9,909	$1,486	$4,718	$2,063	$18,175	$166	$15.39
750	19.9	13	12.2	9.0	109.7	2,362	1.00	21.5	$9,449	$1,417	$4,718	$2,063	$17,647	$161	$14.94
750	19.9	13	12.2	9.0	109.7	2,258	1.05	20.6	$9,033	$1,355	$4,718	$2,063	$17,169	$156	$14.54

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Hanscomb

TABLE 8 - GROUP 8 - OWSJ - BASED ON 18.0 KN/m

OCTOBER 2013

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	(count) OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
600	26.4	21	12.2	10.0	121.9	5,628	0.60	46.2	$22,510	$3,377	$5,242	$2,292	$33,420	$274	$25.47
600	26.4	20	12.2	10.0	121.9	5,215	0.65	42.8	$20,860	$3,129	$5,242	$2,292	$31,522	$259	$24.02
600	26.4	18	12.2	10.0	121.9	4,861	0.70	39.9	$19,445	$2,917	$5,242	$2,292	$29,896	$245	$22.78
600	26.4	17	12.2	10.0	121.9	4,555	0.75	37.4	$18,220	$2,733	$5,242	$2,292	$28,486	$234	$21.71
600	26.4	16	12.2	10.0	121.9	4,287	0.80	35.2	$17,147	$2,572	$5,242	$2,292	$27,252	$224	$20.77
600	26.4	15	12.2	10.0	121.9	4,050	0.85	33.2	$16,200	$2,430	$5,242	$2,292	$26,164	$215	$19.94
600	26.4	15	12.2	10.0	121.9	3,840	0.90	31.5	$15,359	$2,304	$5,242	$2,292	$25,196	$207	$19.20

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
700	24.8	18	12.2	10.0	121.9	4,567	0.70	37.5	$18,267	$2,740	$5,242	$2,292	$28,540	$234	$21.75
700	24.8	17	12.2	10.0	121.9	4,279	0.75	35.1	$17,115	$2,567	$5,242	$2,292	$27,216	$223	$20.74
700	24.8	16	12.2	10.0	121.9	4,027	0.80	33.0	$16,108	$2,416	$5,242	$2,292	$26,057	$214	$19.86
700	24.8	15	12.2	10.0	121.9	3,805	0.85	31.2	$15,218	$2,283	$5,242	$2,292	$25,035	$205	$19.08
700	24.8	15	12.2	10.0	121.9	3,607	0.90	29.6	$14,428	$2,164	$5,242	$2,292	$24,126	$198	$18.39
700	24.8	14	12.2	10.0	121.9	3,430	0.95	28.1	$13,721	$2,058	$5,242	$2,292	$23,312	$191	$17.77
700	24.8	13	12.2	10.0	121.9	3,271	1.00	26.8	$13,084	$1,963	$5,242	$2,292	$22,581	$185	$17.21

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
750	23.1	17	12.2	10.0	121.9	3,986	0.75	32.7	$15,942	$2,391	$5,242	$2,292	$25,867	$212	$19.71
750	23.1	16	12.2	10.0	121.9	3,751	0.80	30.8	$15,003	$2,251	$5,242	$2,292	$24,787	$203	$18.89
750	23.1	15	12.2	10.0	121.9	3,544	0.85	29.1	$14,175	$2,126	$5,242	$2,292	$23,835	$196	$18.17
750	23.1	15	12.2	10.0	121.9	3,360	0.90	27.6	$13,439	$2,016	$5,242	$2,292	$22,988	$189	$17.52
750	23.1	14	12.2	10.0	121.9	3,195	0.95	26.2	$12,780	$1,917	$5,242	$2,292	$22,231	$182	$16.94
750	23.1	13	12.2	10.0	121.9	3,047	1.00	25.0	$12,188	$1,828	$5,242	$2,292	$21,549	$177	$16.42
750	23.1	13	12.2	10.0	121.9	2,913	1.05	23.9	$11,651	$1,748	$5,242	$2,292	$20,932	$172	$15.95

OWSJ 800mm (32") - 38mm Metal Deck - 75mm Concrete Topping

Factored Load is Constant = Based on 18.0 KN/m - 10m Span - Spacing Varies

									$/Kg	%	$/m2	$/m2			
									4.00	15%	43.00	18.80			
Joist Depth mm	Mass of Joist kg/m	OWSJ No.	Bay Length m	Span or Width m	Bay Area m2	Total kg	Spacing	Kg / m2	OWSJ $	Misc & Weld $	Metal Deck $	Concrete Topping $	Total	$/m2	$/SF
800	22.9	16	12.2	10.0	121.9	3,718	0.80	30.5	$14,874	$2,231	$5,242	$2,292	$24,638	$202	$18.78
800	22.9	15	12.2	10.0	121.9	3,513	0.85	28.8	$14,053	$2,108	$5,242	$2,292	$23,694	$194	$18.06
800	22.9	15	12.2	10.0	121.9	3,331	0.90	27.3	$13,323	$1,998	$5,242	$2,292	$22,855	$187	$17.42
800	22.9	14	12.2	10.0	121.9	3,167	0.95	26.0	$12,670	$1,900	$5,242	$2,292	$22,104	$181	$16.85
800	22.9	13	12.2	10.0	121.9	3,021	1.00	24.8	$12,082	$1,812	$5,242	$2,292	$21,428	$176	$16.33
800	22.9	13	12.2	10.0	121.9	2,888	1.05	23.7	$11,550	$1,733	$5,242	$2,292	$20,816	$171	$15.86
800	22.9	12	12.2	10.0	121.9	2,767	1.10	22.7	$11,067	$1,660	$5,242	$2,292	$20,260	$166	$15.44

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 1 — OCTOBER 2013

OWSJ 200mm (8") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
200	8.2	0.20	$9,270	$253	$23.55
200	8.2	0.25	$7,891	$216	$20.05
200	8.2	0.30	$6,971	$191	$17.71
200	8.2	0.35	$6,314	$173	$16.04
200	8.2	0.40	$5,822	$159	$14.79
200	8.2	0.45	$5,439	$149	$13.82
200	8.2	0.50	$5,132	$140	$13.04

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
250	8.4	0.25	$8,028	$220	$20.40
250	8.4	0.30	$7,086	$194	$18.00
250	8.4	0.35	$6,413	$175	$16.29
250	8.4	0.40	$5,909	$162	$15.01
250	8.4	0.45	$5,516	$151	$14.01
250	8.4	0.50	$5,202	$142	$13.22
250	8.4	0.55	$4,945	$135	$12.56

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
300	10.0	0.30	$8,011	$219	$20.35
300	10.0	0.35	$7,209	$197	$18.31
300	10.0	0.40	$6,608	$181	$16.79
300	10.0	0.45	$6,140	$168	$15.60
300	10.0	0.50	$5,766	$158	$14.65
300	10.0	0.55	$5,460	$149	$13.87
300	10.0	0.60	$5,205	$142	$13.22

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 3m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
350	10.3	0.35	$7,353	$201	$18.68
350	10.3	0.40	$6,734	$184	$17.11
350	10.3	0.45	$6,253	$171	$15.88
350	10.3	0.50	$5,868	$160	$14.91
350	10.3	0.55	$5,553	$152	$14.11
350	10.3	0.60	$5,290	$145	$13.44
350	10.3	0.65	$5,068	$139	$12.87

TABLE 7 - Group 1 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
0.0%	$9,270	$253	$23.55
0.0%	$7,891	$216	$20.05
0.0%	$6,971	$191	$17.71
0.0%	$6,314	$173	$16.04
0.0%	$5,822	$159	$14.79
0.0%	$5,439	$149	$13.82
0.0%	$5,132	$140	$13.04

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
0.0%	$8,028	$220	$20.40
0.0%	$7,086	$194	$18.00
0.0%	$6,413	$175	$16.29
0.0%	$5,909	$162	$15.01
0.0%	$5,516	$151	$14.01
0.0%	$5,202	$142	$13.22
0.0%	$4,945	$135	$12.56

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
0.6%	$8,063	$220	$20.48
0.6%	$7,254	$198	$18.43
0.6%	$6,647	$182	$16.89
0.6%	$6,175	$169	$15.69
0.5%	$5,797	$159	$14.73
0.5%	$5,489	$150	$13.94
0.5%	$5,231	$143	$13.29

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
0.0%	$7,353	$201	$18.68
0.0%	$6,734	$184	$17.11
0.0%	$6,253	$171	$15.88
0.0%	$5,868	$160	$14.91
0.0%	$5,553	$152	$14.11
0.0%	$5,290	$145	$13.44
0.0%	$5,068	$139	$12.87

TABLE 8 - Group 1 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
12.9%	$10,638	$291	$27.03
12.2%	$8,990	$246	$22.84
11.7%	$7,891	$216	$20.05
11.1%	$7,105	$194	$18.05
10.7%	$6,517	$178	$16.56
10.2%	$6,059	$166	$15.39
9.8%	$5,692	$156	$14.46

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
1.7%	$8,166	$223	$20.74
1.6%	$7,201	$197	$18.29
1.5%	$6,512	$178	$16.54
1.4%	$5,995	$164	$15.23
1.4%	$5,594	$153	$14.21
1.3%	$5,272	$144	$13.39
1.3%	$5,009	$137	$12.73

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
0.0%	$8,063	$220	$20.48
0.0%	$7,254	$198	$18.43
0.0%	$6,647	$182	$16.89
0.0%	$6,175	$169	$15.69
0.0%	$5,797	$159	$14.73
0.0%	$5,489	$150	$13.94
0.0%	$5,231	$143	$13.29

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
0.0%	$7,353	$201	$18.68
0.0%	$6,734	$184	$17.11
0.0%	$6,253	$171	$15.88
0.0%	$5,868	$160	$14.91
0.0%	$5,553	$152	$14.11
0.0%	$5,290	$145	$13.44
0.0%	$5,068	$139	$12.87

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 2 — OCTOBER 2013

OWSJ 250mm (10") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
250	9.7	0.25	$11,895	$244	$22.66
250	9.7	0.30	$10,444	$214	$19.90
250	9.7	0.35	$9,408	$193	$17.93
250	9.7	0.40	$8,631	$177	$16.44
250	9.7	0.45	$8,027	$165	$15.29
250	9.7	0.50	$7,543	$155	$14.37
250	9.7	0.55	$7,148	$147	$13.62

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
300	9.6	0.30	$10,367	$213	$19.75
300	9.6	0.35	$9,342	$192	$17.80
300	9.6	0.40	$8,573	$176	$16.33
300	9.6	0.45	$7,975	$164	$15.19
300	9.6	0.50	$7,496	$154	$14.28
300	9.6	0.55	$7,105	$146	$13.54
300	9.6	0.60	$6,779	$139	$12.92

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
350	10.1	0.35	$9,672	$198	$18.43
350	10.1	0.40	$8,863	$182	$16.89
350	10.1	0.45	$8,233	$169	$15.69
350	10.1	0.50	$7,730	$159	$14.73
350	10.1	0.55	$7,318	$150	$13.94
350	10.1	0.60	$6,975	$143	$13.29
350	10.1	0.65	$6,684	$137	$12.74

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 4m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
400	10.3	0.40	$8,979	$184	$17.11
400	10.3	0.45	$8,337	$171	$15.88
400	10.3	0.50	$7,823	$160	$14.91
400	10.3	0.55	$7,403	$152	$14.11
400	10.3	0.60	$7,053	$145	$13.44
400	10.3	0.65	$6,757	$139	$12.87
400	10.3	0.70	$6,503	$133	$12.39

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 7 - Group 2 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-15.1%	$10,338	$212	$19.70
-14.2%	$9,142	$187	$17.42
-13.5%	$8,287	$170	$15.79
-12.9%	$7,646	$157	$14.57
-12.3%	$7,148	$147	$13.62
-11.8%	$6,749	$138	$12.86
-11.3%	$6,423	$132	$12.24

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
0.0%	$10,367	$213	$19.75
0.0%	$9,342	$192	$17.80
0.0%	$8,573	$176	$16.33
0.0%	$7,975	$164	$15.19
0.0%	$7,496	$154	$14.28
0.0%	$7,105	$146	$13.54
0.0%	$6,779	$139	$12.92

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-2.1%	$9,474	$194	$18.05
-2.0%	$8,689	$178	$16.56
-1.9%	$8,078	$166	$15.39
-1.8%	$7,590	$156	$14.46
-1.8%	$7,190	$147	$13.70
-1.7%	$6,857	$141	$13.07
-1.7%	$6,575	$135	$12.53

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-2.6%	$8,747	$179	$16.67
-2.5%	$8,130	$167	$15.49
-2.4%	$7,637	$157	$14.55
-2.4%	$7,233	$148	$13.78
-2.3%	$6,896	$141	$13.14
-2.2%	$6,612	$136	$12.60
-2.1%	$6,368	$131	$12.13

TABLE 8 - Group 2 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
28.9%	$14,550	$298	$27.72
27.8%	$12,666	$260	$24.13
26.8%	$11,320	$232	$21.57
25.8%	$10,311	$211	$19.64
25.0%	$9,525	$195	$18.15
24.1%	$8,897	$182	$16.95
23.4%	$8,384	$172	$15.97

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
17.1%	$12,512	$257	$23.84
16.5%	$11,188	$229	$21.32
15.9%	$10,195	$209	$19.42
15.4%	$9,422	$193	$17.95
14.9%	$8,804	$181	$16.77
14.4%	$8,298	$170	$15.81
13.9%	$7,877	$162	$15.01

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
4.6%	$9,935	$204	$18.93
4.5%	$9,094	$187	$17.33
4.3%	$8,440	$173	$16.08
4.1%	$7,917	$162	$15.08
4.0%	$7,489	$154	$14.27
3.8%	$7,132	$146	$13.59
3.7%	$6,830	$140	$13.01

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
3.2%	$9,036	$185	$17.22
3.1%	$8,388	$172	$15.98
3.0%	$7,870	$161	$14.99
2.9%	$7,446	$153	$14.19
2.8%	$7,093	$145	$13.51
2.7%	$6,793	$139	$12.94
2.6%	$6,537	$134	$12.46

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 3 — OCTOBER 2013

OWSJ 300mm (12") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
300	12.4	0.30	$15,641	$257	$23.84
300	12.4	0.35	$13,985	$229	$21.32
300	12.4	0.40	$12,743	$209	$19.42
300	12.4	0.45	$11,778	$193	$17.95
300	12.4	0.50	$11,005	$181	$16.77
300	12.4	0.55	$10,373	$170	$15.81
300	12.4	0.60	$9,846	$162	$15.01

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
350	12.0	0.35	$13,655	$224	$20.81
350	12.0	0.40	$12,454	$204	$18.98
350	12.0	0.45	$11,519	$189	$17.56
350	12.0	0.50	$10,772	$177	$16.42
350	12.0	0.55	$10,160	$167	$15.49
350	12.0	0.60	$9,650	$158	$14.71
350	12.0	0.65	$9,219	$151	$14.05

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
400	10.6	0.40	$11,440	$188	$17.44
400	10.6	0.45	$10,615	$174	$16.18
400	10.6	0.50	$9,954	$163	$15.17
400	10.6	0.55	$9,414	$154	$14.35
400	10.6	0.60	$8,964	$147	$13.66
400	10.6	0.65	$8,583	$141	$13.08
400	10.6	0.70	$8,256	$135	$12.58

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 5m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
450	10.9	0.45	$10,809	$177	$16.48
450	10.9	0.50	$10,129	$166	$15.44
450	10.9	0.55	$9,574	$157	$14.59
450	10.9	0.60	$9,111	$149	$13.89
450	10.9	0.65	$8,719	$143	$13.29
450	10.9	0.70	$8,383	$138	$12.78
450	10.9	0.80	$7,837	$129	$11.95

TABLE 7 - Group 3 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-18.1%	$13,247	$217	$20.19
-17.3%	$11,925	$196	$18.18
-16.6%	$10,934	$179	$16.67
-15.9%	$10,163	$167	$15.49
-15.3%	$9,546	$157	$14.55
-14.7%	$9,041	$148	$13.78
-14.2%	$8,621	$141	$13.14

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-15.3%	$11,842	$194	$18.05
-14.7%	$10,861	$178	$16.56
-14.1%	$10,098	$166	$15.39
-13.5%	$9,487	$156	$14.46
-13.0%	$8,988	$147	$13.70
-12.6%	$8,571	$141	$13.07
-12.2%	$8,219	$135	$12.53

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-3.9%	$11,006	$181	$16.78
-3.8%	$10,227	$168	$15.59
-3.6%	$9,604	$158	$14.64
-3.5%	$9,094	$149	$13.86
-3.4%	$8,670	$142	$13.21
-3.3%	$8,310	$136	$12.67
-3.2%	$8,002	$131	$12.20

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-4.4%	$10,356	$170	$15.79
-4.2%	$9,721	$159	$14.82
-4.1%	$9,201	$151	$14.02
-3.9%	$8,768	$144	$13.36
-3.8%	$8,401	$138	$12.81
-3.7%	$8,087	$133	$12.33
-3.5%	$7,576	$124	$11.55

TABLE 8 - Group 3 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
28.1%	$18,417	$302	$28.07
27.2%	$16,375	$269	$24.96
26.3%	$14,843	$244	$22.62
25.6%	$13,651	$224	$20.81
24.8%	$12,698	$208	$19.35
24.1%	$11,918	$196	$18.17
23.5%	$11,268	$185	$17.18

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
24.2%	$15,633	$256	$23.83
23.5%	$14,191	$233	$21.63
22.7%	$13,070	$214	$19.92
22.1%	$12,173	$200	$18.55
21.4%	$11,439	$188	$17.44
20.8%	$10,827	$178	$16.50
20.3%	$10,309	$169	$15.71

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
19.1%	$13,612	$223	$20.75
18.5%	$12,553	$206	$19.13
18.0%	$11,706	$192	$17.84
17.4%	$11,012	$181	$16.79
16.9%	$10,435	$171	$15.90
16.4%	$9,946	$163	$15.16
16.0%	$9,527	$156	$14.52

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
16.6%	$12,424	$204	$18.94
16.1%	$11,589	$190	$17.66
15.6%	$10,906	$179	$16.62
15.2%	$10,337	$170	$15.76
14.8%	$9,855	$162	$15.02
14.4%	$9,442	$155	$14.39
13.6%	$8,771	$144	$13.37

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 4 — OCTOBER 2013

OWSJ 350mm (14") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
350	14.9	0.35	$19,254	$263	$24.46
350	14.9	0.40	$17,464	$239	$22.18
350	14.9	0.45	$16,071	$220	$20.41
350	14.9	0.50	$14,957	$205	$19.00
350	14.9	0.55	$14,046	$192	$17.84
350	14.9	0.60	$13,286	$182	$16.88
350	14.9	0.65	$12,644	$173	$16.06

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
400	13.6	0.40	$16,335	$223	$20.75
400	13.6	0.45	$15,063	$206	$19.13
400	13.6	0.50	$14,047	$192	$17.84
400	13.6	0.55	$13,215	$181	$16.79
400	13.6	0.60	$12,521	$171	$15.90
400	13.6	0.65	$11,935	$163	$15.16
400	13.6	0.70	$11,432	$156	$14.52

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
450	13.5	0.45	$14,986	$205	$19.04
450	13.5	0.50	$13,977	$191	$17.75
450	13.5	0.55	$13,151	$180	$16.70
450	13.5	0.60	$12,463	$170	$15.83
450	13.5	0.65	$11,880	$162	$15.09
450	13.5	0.70	$11,381	$156	$14.46
450	13.5	0.75	$10,949	$150	$13.91

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 6m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
500	13.0	0.50	$13,626	$186	$17.31
500	13.0	0.55	$12,831	$175	$16.30
500	13.0	0.60	$12,168	$166	$15.46
500	13.0	0.65	$11,608	$159	$14.74
500	13.0	0.70	$11,127	$152	$14.13
500	13.0	0.75	$10,711	$146	$13.60
500	13.0	0.80	$10,346	$141	$13.14

TABLE 7 - Group 4 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-19.7%	$16,090	$220	$20.44
-18.9%	$14,684	$201	$18.65
-18.3%	$13,591	$186	$17.26
-17.6%	$12,716	$174	$16.15
-17.0%	$12,000	$164	$15.24
-16.5%	$11,404	$156	$14.49
-16.0%	$10,899	$149	$13.84

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-19.0%	$13,728	$188	$17.44
-18.3%	$12,738	$174	$16.18
-17.6%	$11,945	$163	$15.17
-17.0%	$11,297	$154	$14.35
-16.4%	$10,756	$147	$13.66
-15.9%	$10,299	$141	$13.08
-15.4%	$9,907	$135	$12.58

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-18.4%	$12,660	$173	$16.08
-17.7%	$11,875	$162	$15.08
-17.1%	$11,233	$154	$14.27
-16.5%	$10,698	$146	$13.59
-16.0%	$10,245	$140	$13.01
-15.5%	$9,857	$135	$12.52
-15.0%	$9,520	$130	$12.09

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-13.4%	$12,015	$164	$15.26
-12.9%	$11,361	$155	$14.43
-12.5%	$10,815	$148	$13.74
-12.1%	$10,354	$142	$13.15
-11.7%	$9,958	$136	$12.65
-11.4%	$9,615	$131	$12.21
-11.1%	$9,315	$127	$11.83

TABLE 8 - Group 4 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
31.0%	$23,309	$319	$29.61
30.2%	$21,026	$287	$26.71
29.4%	$19,250	$263	$24.45
28.7%	$17,829	$244	$22.65
28.0%	$16,667	$228	$21.17
27.4%	$15,699	$215	$19.94
26.7%	$14,879	$203	$18.90

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
28.5%	$19,201	$263	$24.39
27.7%	$17,622	$241	$22.38
27.0%	$16,358	$224	$20.78
26.3%	$15,324	$210	$19.47
25.6%	$14,463	$198	$18.37
25.0%	$13,734	$188	$17.45
24.4%	$13,109	$179	$16.65

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
26.5%	$17,234	$236	$21.89
25.8%	$16,008	$219	$20.33
25.1%	$15,005	$205	$19.06
24.5%	$14,169	$194	$18.00
23.9%	$13,461	$184	$17.10
23.3%	$12,855	$176	$16.33
22.8%	$12,330	$169	$15.66

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
22.6%	$15,518	$212	$19.71
22.0%	$14,557	$199	$18.49
21.4%	$13,757	$188	$17.47
20.8%	$13,080	$179	$16.61
20.3%	$12,499	$171	$15.88
19.8%	$11,996	$164	$15.24
19.4%	$11,556	$158	$14.68

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 5 — OCTOBER 2013

OWSJ 400mm (16") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
400	17.9	0.40	$23,415	$274	$25.49
400	17.9	0.45	$21,463	$252	$23.37
400	17.9	0.50	$19,902	$233	$21.67
400	17.9	0.55	$18,624	$218	$20.28
400	17.9	0.60	$17,560	$206	$19.12
400	17.9	0.65	$16,659	$195	$18.14
400	17.9	0.70	$15,887	$186	$17.30

TABLE 7 - Group 5 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-26.9%	$18,449	$216	$20.09
-26.0%	$17,031	$200	$18.54
-25.2%	$15,897	$186	$17.31
-24.4%	$14,970	$175	$16.30
-23.7%	$14,197	$166	$15.46
-23.0%	$13,542	$159	$14.74
-22.4%	$12,982	$152	$14.13

TABLE 8 - Group 5 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
34.5%	$28,178	$330	$30.68
33.8%	$25,714	$301	$28.00
33.0%	$23,743	$278	$25.85
32.4%	$22,130	$259	$24.09
31.7%	$20,786	$244	$22.63
31.1%	$19,649	$230	$21.39
30.5%	$18,674	$219	$20.33

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
450	16.5	0.45	$20,197	$237	$21.99
450	16.5	0.50	$18,758	$220	$20.42
450	16.5	0.55	$17,580	$206	$19.14
450	16.5	0.60	$16,599	$195	$18.07
450	16.5	0.65	$15,769	$185	$17.17
450	16.5	0.70	$15,057	$176	$16.39
450	16.5	0.75	$14,440	$169	$15.72

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-19.2%	$16,941	$199	$18.44
-18.6%	$15,816	$185	$17.22
-18.0%	$14,895	$175	$16.22
-17.5%	$14,128	$166	$15.38
-17.0%	$13,479	$158	$14.67
-16.5%	$12,922	$151	$14.07
-16.1%	$12,440	$146	$13.54

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
29.4%	$23,996	$281	$26.13
28.7%	$22,190	$260	$24.16
28.1%	$20,713	$243	$22.55
27.5%	$19,482	$228	$21.21
26.9%	$18,440	$216	$20.08
26.4%	$17,547	$206	$19.10
25.8%	$16,773	$197	$18.26

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
500	16.2	0.50	$18,513	$217	$20.16
500	16.2	0.55	$17,356	$203	$18.90
500	16.2	0.60	$16,393	$192	$17.85
500	16.2	0.65	$15,578	$183	$16.96
500	16.2	0.70	$14,879	$174	$16.20
500	16.2	0.75	$14,273	$167	$15.54
500	16.2	0.80	$13,744	$161	$14.96

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-18.9%	$15,571	$182	$16.95
-18.3%	$14,671	$172	$15.97
-17.7%	$13,922	$163	$15.16
-17.2%	$13,288	$156	$14.47
-16.7%	$12,744	$149	$13.88
-16.3%	$12,273	$144	$13.36
-15.9%	$11,861	$139	$12.91

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
24.3%	$20,556	$241	$22.38
23.7%	$19,221	$225	$20.93
23.1%	$18,109	$212	$19.72
22.6%	$17,168	$201	$18.69
22.1%	$16,361	$192	$17.81
21.6%	$15,662	$184	$17.05
21.2%	$15,051	$176	$16.39

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 7m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
600	15.2	0.60	$15,707	$184	$17.10
600	15.2	0.65	$14,942	$175	$16.27
600	15.2	0.70	$14,286	$167	$15.55
600	15.2	0.75	$13,718	$161	$14.94
600	15.2	0.80	$13,221	$155	$14.39
600	15.2	0.85	$12,782	$150	$13.92
600	15.2	0.90	$12,392	$145	$13.49

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-11.2%	$14,128	$166	$15.38
-10.9%	$13,479	$158	$14.67
-10.6%	$12,922	$151	$14.07
-10.3%	$12,440	$146	$13.54
-10.0%	$12,018	$141	$13.08
-9.8%	$11,646	$136	$12.68
-9.5%	$11,315	$133	$12.32

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
19.5%	$17,560	$206	$19.12
19.1%	$16,659	$195	$18.14
18.7%	$15,887	$186	$17.30
18.3%	$15,218	$178	$16.57
17.9%	$14,632	$171	$15.93
17.5%	$14,116	$165	$15.37
17.1%	$13,657	$160	$14.87

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 6 — OCTOBER 2013

OWSJ 450mm (18") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
450	20.2	0.45	$26,907	$276	$25.63
450	20.2	0.50	$24,893	$255	$23.71
450	20.2	0.55	$23,246	$238	$22.15
450	20.2	0.60	$21,873	$224	$20.84
450	20.2	0.65	$20,711	$212	$19.73
450	20.2	0.70	$19,715	$202	$18.78
450	20.2	0.75	$18,852	$193	$17.96

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
500	17.0	0.50	$21,904	$225	$20.87
500	17.0	0.55	$20,518	$210	$19.55
500	17.0	0.60	$19,362	$199	$18.45
500	17.0	0.65	$18,385	$189	$17.51
500	17.0	0.70	$17,547	$180	$16.72
500	17.0	0.75	$16,820	$172	$16.02
500	17.0	0.80	$16,185	$166	$15.42

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
600	15.6	0.60	$18,264	$187	$17.40
600	15.6	0.65	$17,367	$178	$16.54
600	15.6	0.70	$16,598	$170	$15.81
600	15.6	0.75	$15,932	$163	$15.18
600	15.6	0.80	$15,348	$157	$14.62
600	15.6	0.85	$14,834	$152	$14.13
600	15.6	0.90	$14,376	$147	$13.70

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 8m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
700	16.1	0.70	$16,937	$174	$16.13
700	16.1	0.75	$16,249	$167	$15.48
700	16.1	0.80	$15,647	$160	$14.91
700	16.1	0.85	$15,116	$155	$14.40
700	16.1	0.90	$14,644	$150	$13.95
700	16.1	0.95	$14,222	$146	$13.55
700	16.1	1.00	$13,842	$142	$13.19

TABLE 7 - Group 6 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-30.6%	$20,601	$211	$19.63
-29.7%	$19,196	$197	$18.29
-28.8%	$18,046	$185	$17.19
-28.0%	$17,088	$175	$16.28
-27.2%	$16,277	$167	$15.51
-26.5%	$15,582	$160	$14.84
-25.9%	$14,979	$154	$14.27

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-18.1%	$18,542	$190	$17.66
-17.6%	$17,449	$179	$16.62
-17.1%	$16,538	$170	$15.76
-16.6%	$15,768	$162	$15.02
-16.1%	$15,107	$155	$14.39
-15.7%	$14,535	$149	$13.85
-15.3%	$14,034	$144	$13.37

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-6.9%	$17,088	$175	$16.28
-6.7%	$16,277	$167	$15.51
-6.5%	$15,582	$160	$14.84
-6.4%	$14,979	$154	$14.27
-6.2%	$14,452	$148	$13.77
-6.1%	$13,987	$143	$13.32
-5.9%	$13,574	$139	$12.93

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-7.3%	$15,785	$162	$15.04
-7.1%	$15,170	$156	$14.45
-6.9%	$14,631	$150	$13.94
-6.8%	$14,156	$145	$13.49
-6.6%	$13,734	$141	$13.08
-6.5%	$13,356	$137	$12.72
-6.3%	$13,016	$133	$12.40

TABLE 8 - Group 6 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
37.2%	$32,799	$336	$31.25
36.5%	$30,217	$310	$28.79
35.8%	$28,104	$288	$26.77
35.1%	$26,344	$270	$25.10
34.5%	$24,855	$255	$23.68
33.9%	$23,578	$242	$22.46
33.3%	$22,471	$230	$21.41

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
26.3%	$25,173	$258	$23.98
25.8%	$23,501	$241	$22.39
25.2%	$22,108	$227	$21.06
24.7%	$20,929	$215	$19.94
24.2%	$19,918	$204	$18.98
23.7%	$19,043	$195	$18.14
23.2%	$18,276	$187	$17.41

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
15.5%	$20,225	$207	$19.27
15.2%	$19,184	$197	$18.28
14.8%	$18,292	$188	$17.43
14.5%	$17,519	$180	$16.69
14.2%	$16,842	$173	$16.04
13.9%	$16,245	$167	$15.48
13.6%	$15,714	$161	$14.97

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
13.4%	$18,224	$187	$17.36
13.1%	$17,455	$179	$16.63
12.8%	$16,782	$172	$15.99
12.6%	$16,189	$166	$15.42
12.3%	$15,661	$161	$14.92
12.1%	$15,189	$156	$14.47
11.8%	$14,764	$151	$14.06

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 7 — OCTOBER 2013

OWSJ 500mm (20") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
500	20.1	0.50	$27,900	$254	$23.63
500	20.1	0.55	$26,055	$237	$22.06
500	20.1	0.60	$24,519	$223	$20.76
500	20.1	0.65	$23,218	$212	$19.66
500	20.1	0.70	$22,103	$201	$18.72
500	20.1	0.75	$21,137	$193	$17.90
500	20.1	0.80	$20,292	$185	$17.18

TABLE 7 - Group 7 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-24.9%	$22,331	$204	$18.91
-24.2%	$20,973	$191	$17.76
-23.6%	$19,841	$181	$16.80
-23.0%	$18,884	$172	$15.99
-22.4%	$18,063	$165	$15.30
-21.8%	$17,352	$158	$14.69
-21.3%	$16,729	$152	$14.17

TABLE 8 - Group 7 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
42.5%	$38,827	$354	$32.88
41.8%	$36,029	$328	$30.51
41.1%	$33,697	$307	$28.53
40.5%	$31,723	$289	$26.86
39.9%	$30,032	$274	$25.43
39.3%	$28,566	$260	$24.19
38.7%	$27,283	$249	$23.10

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
600	18.3	0.60	$22,930	$209	$19.42
600	18.3	0.65	$21,746	$198	$18.41
600	18.3	0.70	$20,731	$189	$17.56
600	18.3	0.75	$19,852	$181	$16.81
600	18.3	0.80	$19,082	$174	$16.16
600	18.3	0.85	$18,403	$168	$15.58
600	18.3	0.90	$17,799	$162	$15.07

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-18.7%	$19,312	$176	$16.35
-18.2%	$18,393	$168	$15.58
-17.8%	$17,605	$160	$14.91
-17.3%	$16,923	$154	$14.33
-16.9%	$16,326	$149	$13.82
-16.5%	$15,799	$144	$13.38
-16.1%	$15,330	$140	$12.98

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
30.5%	$27,784	$253	$23.53
29.9%	$26,244	$239	$22.22
29.4%	$24,924	$227	$21.11
28.8%	$23,780	$217	$20.14
28.3%	$22,779	$208	$19.29
27.8%	$21,896	$200	$18.54
27.4%	$21,111	$192	$17.88

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
700	17.3	0.70	$19,969	$182	$16.91
700	17.3	0.75	$19,137	$174	$16.21
700	17.3	0.80	$18,410	$168	$15.59
700	17.3	0.85	$17,768	$162	$15.05
700	17.3	0.90	$17,197	$157	$14.56
700	17.3	0.95	$16,687	$152	$14.13
700	17.3	1.00	$16,227	$148	$13.74

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-11.0%	$17,987	$164	$15.23
-10.7%	$17,280	$158	$14.63
-10.5%	$16,662	$152	$14.11
-10.2%	$16,116	$147	$13.65
-10.0%	$15,632	$142	$13.24
-9.8%	$15,198	$139	$12.87
-9.6%	$14,807	$135	$12.54

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
22.6%	$23,247	$212	$19.69
22.2%	$22,209	$202	$18.81
21.8%	$21,300	$194	$18.04
21.4%	$20,499	$187	$17.36
21.0%	$19,786	$180	$16.76
20.6%	$19,149	$175	$16.22
20.3%	$18,575	$169	$15.73

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 9m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
750	17.6	0.75	$19,352	$176	$16.39
750	17.6	0.80	$18,611	$170	$15.76
750	17.6	0.85	$17,958	$164	$15.21
750	17.6	0.90	$17,378	$158	$14.72
750	17.6	0.95	$16,858	$154	$14.28
750	17.6	1.00	$16,391	$149	$13.88
750	17.6	1.05	$15,968	$146	$13.52

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-11.1%	$17,423	$159	$14.75
-10.8%	$16,796	$153	$14.22
-10.6%	$16,243	$148	$13.76
-10.3%	$15,752	$144	$13.34
-10.1%	$15,312	$140	$12.97
-9.9%	$14,916	$136	$12.63
-9.7%	$14,558	$133	$12.33

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
17.0%	$20,994	$191	$17.78
16.7%	$20,158	$184	$17.07
16.4%	$19,419	$177	$16.44
16.0%	$18,763	$171	$15.89
15.8%	$18,175	$166	$15.39
15.5%	$17,647	$161	$14.94
15.2%	$17,169	$156	$14.54

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

TABLE 9 - OWSJ - SUMMARY COST COMPARISON BASED ON THREE SCENARIOS OF VARYING THE FACTORED LOAD

Hanscomb

TABLE 6 - Group 8 — OCTOBER 2013

OWSJ 600mm (24") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
600	21.8	0.60	$28,910	$237	$22.03
600	21.8	0.65	$27,343	$224	$20.84
600	21.8	0.70	$25,999	$213	$19.81
600	21.8	0.75	$24,835	$204	$18.93
600	21.8	0.80	$23,816	$195	$18.15
600	21.8	0.85	$22,918	$188	$17.47
600	21.8	0.90	$22,119	$181	$16.86

OWSJ 700mm (28") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
700	19.9	0.70	$24,390	$200	$18.59
700	19.9	0.75	$23,327	$191	$17.78
700	19.9	0.80	$22,397	$184	$17.07
700	19.9	0.85	$21,577	$177	$16.44
700	19.9	0.90	$20,847	$171	$15.89
700	19.9	0.95	$20,195	$166	$15.39
700	19.9	1.00	$19,608	$161	$14.94

OWSJ 750mm (30") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
750	18.3	0.75	$22,057	$181	$16.81
750	18.3	0.80	$21,202	$174	$16.16
750	18.3	0.85	$20,448	$168	$15.58
750	18.3	0.90	$19,777	$162	$15.07
750	18.3	0.95	$19,177	$157	$14.62
750	18.3	1.00	$18,637	$153	$14.20
750	18.3	1.05	$18,148	$149	$13.83

OWSJ 800mm (32") - 38mm Metal Deck - 75mm Concrete Topping
Factored Load is Constant = Based on 13.5 KN/m - 10m Span - Spacing Varies

Joist Depth mm	Mass of Joist kg/m	Spacing	Total	$/m2	$/SF
800	19.3	0.80	$21,949	$180	$16.73
800	19.3	0.85	$21,153	$174	$16.12
800	19.3	0.90	$20,446	$168	$15.58
800	19.3	0.95	$19,813	$163	$15.10
800	19.3	1.00	$19,244	$158	$14.67
800	19.3	1.05	$18,728	$154	$14.27
800	19.3	1.10	$18,260	$150	$13.92

TABLE 7 - Group 8 — OCTOBER 2013

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-33.5%	$21,654	$178	$16.50
-32.6%	$20,618	$169	$15.71
-31.8%	$19,731	$162	$15.04
-31.0%	$18,962	$156	$14.45
-30.2%	$18,289	$150	$13.94
-29.5%	$17,695	$145	$13.49
-28.8%	$17,168	$141	$13.08

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-24.1%	$19,646	$161	$14.97
-23.5%	$18,883	$155	$14.39
-23.0%	$18,214	$149	$13.88
-22.4%	$17,625	$145	$13.43
-21.9%	$17,101	$140	$13.03
-21.4%	$16,632	$136	$12.68
-21.0%	$16,210	$133	$12.35

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-16.3%	$18,962	$156	$14.45
-15.9%	$18,289	$150	$13.94
-15.6%	$17,695	$145	$13.49
-15.2%	$17,168	$141	$13.08
-14.9%	$16,695	$137	$12.72
-14.5%	$16,270	$133	$12.40
-14.2%	$15,886	$130	$12.11

Factored Load = Based on 9.0 KN/m
Comparator if Factored Load is Reduced
(Mass of Joist Generally Decreases)

Delta Less	Total	$/m2	$/SF
-19.5%	$18,364	$151	$14.00
-19.1%	$17,766	$146	$13.54
-18.6%	$17,235	$141	$13.13
-18.2%	$16,759	$137	$12.77
-17.8%	$16,331	$134	$12.45
-17.5%	$15,944	$131	$12.15
-17.1%	$15,592	$128	$11.88

TABLE 8 - Group 8 — OCTOBER 2013

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
35.2%	$33,420	$274	$25.47
34.6%	$31,522	$259	$24.02
34.0%	$29,896	$245	$22.78
33.4%	$28,486	$234	$21.71
32.9%	$27,252	$224	$20.77
32.4%	$26,164	$215	$19.94
31.9%	$25,196	$207	$19.20

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
31.2%	$28,540	$234	$21.75
30.6%	$27,216	$223	$20.74
30.1%	$26,057	$214	$19.86
29.6%	$25,035	$205	$19.08
29.1%	$24,126	$198	$18.39
28.7%	$23,312	$191	$17.77
28.2%	$22,581	$185	$17.21

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
26.7%	$25,867	$212	$19.71
26.2%	$24,787	$203	$18.89
25.8%	$23,835	$196	$18.17
25.3%	$22,988	$189	$17.52
24.9%	$22,231	$182	$16.94
24.5%	$21,549	$177	$16.42
24.1%	$20,932	$172	$15.95

Factored Load = Based on 18.0 KN/m
Comparator if Factored Load is Increased
(Mass of Joist Generally Increases)

Delta More	Total	$/m2	$/SF
25.5%	$24,638	$202	$18.78
25.0%	$23,694	$194	$18.06
24.6%	$22,855	$187	$17.42
24.2%	$22,104	$181	$16.85
23.8%	$21,428	$176	$16.33
23.4%	$20,816	$171	$15.86
23.0%	$20,260	$166	$15.44

Source: Canam Steel Works - Joist Catalogue - 2002
Hanscomb Ltd.

Appendix

G – TABLE 10 – GLUELAM COLUMN / BEAM

Hanscomb

TABLE 10 - Group 1

OCTOBER 2013

Spruce Pine Glued Laminated Beam

Column 130mm (5 1/8") Wide Glulam

Vertical Install - 6.1m height

Glulam Depth		Width		Height	Finish Area m2	Crew	Total Labour Hours	Total Crane Hours	Supply Glulam $/m	Residential Glulam $	% 5% Shop Drawing Engineering $	% 10% Varies Connections $	% 5% Varies Delivery $	$/hour 75.00 Labour $	$/hour 250.00 Crane (1) $	Total	$/m	$/m3	$/FT
0.12	x	0.13	x	6.10	3.0	2	0.3	0.3	$30.27	$185	$9	$18	$9	$38	$63	$322	$53	$3,526	$16.07
0.15	x	0.13	x	6.10	3.4	2	0.3	0.3	$40.35	$246	$12	$25	$12	$38	$63	$395	$116	$3,324	$35.28
0.19	x	0.13	x	6.10	3.9	2	0.3	0.3	$50.44	$308	$15	$31	$15	$38	$63	$469	$120	$3,098	$36.52
0.23	x	0.13	x	6.10	4.4	2	0.3	0.3	$60.53	$369	$18	$37	$18	$38	$63	$543	$124	$2,991	$37.79
0.27	x	0.13	x	6.10	4.8	2	0.3	0.3	$67.58	$412	$21	$41	$21	$38	$63	$595	$123	$2,809	$37.42
0.31	x	0.13	x	6.10	5.3	2	0.3	0.3	$77.26	$471	$24	$47	$24	$38	$63	$666	$125	$2,752	$38.22
0.34	x	0.13	x	6.10	5.8	2	0.3	0.3	$86.91	$530	$27	$53	$27	$38	$63	$736	$128	$2,707	$38.89
0.38	x	0.13	x	6.10	6.2	2	0.3	0.3	$96.58	$589	$29	$59	$29	$38	$63	$807	$129	$2,671	$39.45
0.42	x	0.13	x	6.10	6.7	2	0.3	0.3	$106.22	$648	$32	$65	$32	$38	$63	$878	$131	$2,641	$39.93
0.46	x	0.13	x	6.10	7.2	2	0.3	0.3	$115.85	$707	$35	$71	$35	$38	$63	$948	$132	$2,616	$40.35
0.50	x	0.13	x	6.10	7.6	2	0.3	0.3	$125.53	$766	$38	$77	$38	$38	$63	$1,019	$134	$2,596	$40.73
0.53	x	0.13	x	6.10	8.1	2	0.3	0.3	$133.00	$811	$41	$81	$41	$38	$63	$1,074	$133	$2,540	$40.46
0.57	x	0.13	x	6.10	8.6	2	0.3	0.3	$142.47	$869	$43	$87	$43	$38	$63	$1,143	$133	$2,520	$40.67
0.61	x	0.13	x	6.10	9.0	2	0.3	0.3	$151.99	$927	$46	$93	$46	$38	$63	$1,213	$134	$2,507	$40.94
0.65	x	0.13	x	6.10	9.5	2	0.3	0.3	$161.50	$985	$49	$99	$49	$38	$63	$1,282	$135	$2,495	$41.17

Source: GoodFellow
Timmerman Timberworks
Structurlam
Hanscomb Ltd.

Hanscomb

TABLE 10 - Group 2

OCTOBER 2013

Spruce Pine Glued Laminated Beam

Column 177mm (6 7/8") Wide Glulam

Vertical Install - 6.1m height

Glulam Depth		Width		Height	Finish Area m2	Crew	Total Labour Hours	Total Crane Hours	Supply Glulam $/m	Standard Glulam $	% 5% Shop Drawing Engineering $	% 10% Varies Connections $	% 5% Varies Delivery $	$/hour 75.00 Labour $	$/hour 250.00 Crane (1) $	Total	$/m	$/m3	$/FT
0.12	x	0.18	x	6.10	3.6	2	0.3	0.3	$40.31	$246	$12	$25	$12	$45	$75	$415	$68	$3,343	$20.74
0.15	x	0.18	x	6.10	4.0	2	0.3	0.3	$53.76	$328	$16	$33	$16	$45	$75	$514	$129	$3,171	$39.23
0.19	x	0.18	x	6.10	4.5	2	0.3	0.3	$67.22	$410	$21	$41	$21	$45	$75	$612	$136	$2,968	$41.55
0.23	x	0.18	x	6.10	5.0	2	0.3	0.3	$80.67	$492	$25	$49	$25	$45	$75	$711	$143	$2,874	$43.72
0.27	x	0.18	x	6.10	5.4	2	0.3	0.3	$90.10	$550	$27	$55	$27	$45	$75	$780	$144	$2,704	$43.86
0.31	x	0.18	x	6.10	5.9	2	0.3	0.3	$102.98	$628	$31	$63	$31	$45	$75	$874	$149	$2,653	$45.29
0.34	x	0.18	x	6.10	6.3	2	0.3	0.3	$115.86	$707	$35	$71	$35	$45	$75	$968	$153	$2,614	$46.51
0.38	x	0.18	x	6.10	6.8	2	0.3	0.3	$128.73	$785	$39	$79	$39	$45	$75	$1,062	$156	$2,582	$47.56
0.42	x	0.18	x	6.10	7.3	2	0.3	0.3	$141.57	$864	$43	$86	$43	$45	$75	$1,156	$159	$2,556	$48.47
0.46	x	0.18	x	6.10	7.7	2	0.3	0.3	$154.44	$942	$47	$94	$47	$45	$75	$1,251	$162	$2,534	$49.28
0.50	x	0.18	x	6.10	8.2	2	0.3	0.3	$167.32	$1,021	$51	$102	$51	$45	$75	$1,345	$164	$2,516	$50.00
0.53	x	0.18	x	6.10	8.7	2	0.3	0.3	$177.29	$1,081	$54	$108	$54	$45	$75	$1,418	$164	$2,464	$49.89
0.57	x	0.18	x	6.10	9.1	2	0.3	0.3	$189.22	$1,154	$58	$115	$58	$45	$75	$1,505	$165	$2,437	$50.20
0.61	x	0.18	x	6.10	9.6	2	0.3	0.3	$202.59	$1,236	$62	$124	$62	$45	$75	$1,603	$167	$2,434	$50.89
0.65	x	0.18	x	6.10	10.1	2	0.3	0.3	$215.84	$1,317	$66	$132	$66	$45	$75	$1,700	$169	$2,430	$51.48

Source: GoodFellow
Timmerman Timberworks
Structurlam
Hanscomb Ltd.

Hanscomb

TABLE 10 - Group 3

OCTOBER 2013

Spruce Pine Glued Laminated Beam

Column 217mm (8 1/2") Wide Glulam

Vertical Install - 6.1m height

Glulam Depth		Width		Height	Finish Area m2	Crew	Total Labour Hours	Total Crane Hours	Supply Glulam $/m	Standard Glulam $	% 5% Shop Drawing Engineering $	% 10% Varies Connections $	% 5% Varies Delivery $	$/hour 75.00 Labour $	$/hour 250.00 Crane (1) $	Total	$/m	$/m3	$/FT
0.12	x	0.21	x	6.10	4.0	2	0.4	0.4	$53.64	$327	$16	$33	$16	$53	$88	$533	$87	$3,616	$26.62
0.15	x	0.21	x	6.10	4.4	2	0.4	0.4	$71.52	$436	$22	$44	$22	$53	$88	$664	$151	$3,453	$46.05
0.19	x	0.21	x	6.10	4.9	2	0.4	0.4	$89.40	$545	$27	$55	$27	$53	$88	$794	$162	$3,247	$49.49
0.23	x	0.21	x	6.10	5.4	2	0.4	0.4	$107.28	$654	$33	$65	$33	$53	$88	$925	$173	$3,154	$52.66
0.27	x	0.21	x	6.10	5.8	2	0.4	0.4	$120.24	$733	$37	$73	$37	$53	$88	$1,020	$175	$2,983	$53.43
0.31	x	0.21	x	6.10	6.3	2	0.4	0.4	$137.43	$838	$42	$84	$42	$53	$88	$1,146	$182	$2,933	$55.59
0.34	x	0.21	x	6.10	6.7	2	0.4	0.4	$154.61	$943	$47	$94	$47	$53	$88	$1,272	$189	$2,894	$57.46
0.38	x	0.21	x	6.10	7.2	2	0.4	0.4	$171.79	$1,048	$52	$105	$52	$53	$88	$1,398	$194	$2,863	$59.08
0.42	x	0.21	x	6.10	7.7	2	0.4	0.4	$188.98	$1,153	$58	$115	$58	$53	$88	$1,523	$199	$2,838	$60.51
0.46	x	0.21	x	6.10	8.1	2	0.4	0.4	$206.16	$1,258	$63	$126	$63	$53	$88	$1,649	$203	$2,817	$61.77
0.50	x	0.21	x	6.10	8.6	2	0.4	0.4	$223.67	$1,364	$68	$136	$68	$53	$88	$1,777	$207	$2,803	$62.98
0.53	x	0.21	x	6.10	9.1	2	0.4	0.4	$235.36	$1,436	$72	$144	$72	$53	$88	$1,863	$206	$2,728	$62.64
0.57	x	0.21	x	6.10	9.5	2	0.4	0.4	$252.17	$1,538	$77	$154	$77	$53	$88	$1,986	$208	$2,710	$63.45
0.61	x	0.21	x	6.10	10.0	2	0.4	0.4	$268.99	$1,641	$82	$164	$82	$53	$88	$2,109	$211	$2,699	$64.26
0.65	x	0.21	x	6.10	10.5	2	0.4	0.4	$285.81	$1,743	$87	$174	$87	$53	$88	$2,232	$213	$2,689	$65.00

Source: GoodFellow
Timmerman Timberworks
Structurlam
Hanscomb Ltd.

Hanscomb

TABLE 10 - Group 4

OCTOBER 2013

Western Fir - Larch Glued Laminated Beam

Column 130mm (5 1/8") Wide Glulam

Vertical Install - 6.1m height

Glulam Depth		Width		Height	Finish Area m2	Crew	Total Labour Hours	Total Crane Hours	Supply Glulam $/m	Residential Glulam $	% 5% Shop Drawing Engineering $	% 10% Varies Connections $	% 5% Varies Delivery $	$/hour 75.00 Labour $	$/hour 250.00 Crane (1) $	Total	$/m	$/m3	$/FT
0.12	x	0.13	x	6.10	3.0	2	0.3	0.3	$35.39	$216	$11	$22	$11	$38	$63	$359	$59	$3,937	$17.94
0.15	x	0.13	x	6.10	3.4	2	0.3	0.3	$47.16	$288	$14	$29	$14	$38	$63	$445	$130	$3,743	$39.73
0.19	x	0.13	x	6.10	3.9	2	0.3	0.3	$58.97	$360	$18	$36	$18	$38	$63	$532	$136	$3,510	$41.38
0.23	x	0.13	x	6.10	4.4	2	0.3	0.3	$70.78	$432	$22	$43	$22	$38	$63	$618	$141	$3,404	$43.02
0.27	x	0.13	x	6.10	4.8	2	0.3	0.3	$79.68	$486	$24	$49	$24	$38	$63	$683	$141	$3,227	$43.00
0.31	x	0.13	x	6.10	5.3	2	0.3	0.3	$91.04	$555	$28	$56	$28	$38	$63	$766	$144	$3,169	$44.02
0.34	x	0.13	x	6.10	5.8	2	0.3	0.3	$102.44	$625	$31	$62	$31	$38	$63	$850	$147	$3,124	$44.89
0.38	x	0.13	x	6.10	6.2	2	0.3	0.3	$113.80	$694	$35	$69	$35	$38	$63	$933	$150	$3,088	$45.62
0.42	x	0.13	x	6.10	6.7	2	0.3	0.3	$125.21	$764	$38	$76	$38	$38	$63	$1,017	$152	$3,059	$46.26
0.46	x	0.13	x	6.10	7.2	2	0.3	0.3	$136.56	$833	$42	$83	$42	$38	$63	$1,100	$154	$3,034	$46.80
0.50	x	0.13	x	6.10	7.6	2	0.3	0.3	$147.96	$903	$45	$90	$45	$38	$63	$1,183	$155	$3,014	$47.29
0.53	x	0.13	x	6.10	8.1	2	0.3	0.3	$155.72	$950	$47	$95	$47	$38	$63	$1,240	$153	$2,933	$46.72
0.57	x	0.13	x	6.10	8.6	2	0.3	0.3	$166.83	$1,018	$51	$102	$51	$38	$63	$1,321	$154	$2,913	$47.02
0.61	x	0.13	x	6.10	9.0	2	0.3	0.3	$177.94	$1,085	$54	$109	$54	$38	$63	$1,403	$155	$2,899	$47.35
0.65	x	0.13	x	6.10	9.5	2	0.3	0.3	$189.06	$1,153	$58	$115	$58	$38	$63	$1,484	$156	$2,888	$47.65

Source: GoodFellow
Timmerman Timberworks
Structurlam
Hanscomb Ltd.

Hanscomb

TABLE 10 - Group 5

OCTOBER 2013

Western Fir - Larch Glued Laminated Beam

Column 177mm (6 7/8") Wide Glulam

Vertical Install - 6.1m height

											%	%	%	$/hour	$/hour				
											5%	10%	5%	75.00	250.00				
Glulam Depth		Width		Height	Finish Area m2	Crew	Total Labour Hours	Total Crane Hours	Supply Glulam $/m	Standard Glulam $	Shop Drawing Engineering $	Varies Connections $	Varies Delivery $	Labour $	Crane (1) $	Total	$/m	$/m3	$/FT
0.12	x	0.18	x	6.10	3.6	2	0.3	0.3	$47.34	$289	$14	$29	$14	$45	$75	$467	$76	$3,757	$23.31
0.15	x	0.18	x	6.10	4.0	2	0.3	0.3	$63.12	$385	$19	$39	$19	$45	$75	$582	$146	$3,594	$44.47
0.19	x	0.18	x	6.10	4.5	2	0.3	0.3	$78.90	$481	$24	$48	$24	$45	$75	$698	$155	$3,382	$47.36
0.23	x	0.18	x	6.10	5.0	2	0.3	0.3	$94.69	$578	$29	$58	$29	$45	$75	$813	$164	$3,289	$50.04
0.27	x	0.18	x	6.10	5.4	2	0.3	0.3	$106.55	$650	$32	$65	$32	$45	$75	$900	$166	$3,122	$50.64
0.31	x	0.18	x	6.10	5.9	2	0.3	0.3	$121.76	$743	$37	$74	$37	$45	$75	$1,011	$172	$3,071	$52.42
0.34	x	0.18	x	6.10	6.3	2	0.3	0.3	$137.02	$836	$42	$84	$42	$45	$75	$1,123	$177	$3,032	$53.95
0.38	x	0.18	x	6.10	6.8	2	0.3	0.3	$152.23	$929	$46	$93	$46	$45	$75	$1,234	$181	$3,001	$55.27
0.42	x	0.18	x	6.10	7.3	2	0.3	0.3	$167.45	$1,021	$51	$102	$51	$45	$75	$1,346	$185	$2,975	$56.41
0.46	x	0.18	x	6.10	7.7	2	0.3	0.3	$182.66	$1,114	$56	$111	$56	$45	$75	$1,457	$188	$2,953	$57.42
0.50	x	0.18	x	6.10	8.2	2	0.3	0.3	$197.88	$1,207	$60	$121	$60	$45	$75	$1,568	$191	$2,935	$58.31
0.53	x	0.18	x	6.10	8.7	2	0.3	0.3	$205.83	$1,256	$63	$126	$63	$45	$75	$1,627	$188	$2,827	$57.24
0.57	x	0.18	x	6.10	9.1	2	0.3	0.3	$220.51	$1,345	$67	$135	$67	$45	$75	$1,734	$190	$2,808	$57.84
0.61	x	0.18	x	6.10	9.6	2	0.3	0.3	$235.24	$1,435	$72	$143	$72	$45	$75	$1,842	$192	$2,797	$58.47
0.65	x	0.18	x	6.10	10.1	2	0.3	0.3	$294.92	$1,799	$90	$180	$90	$45	$75	$2,279	$226	$3,257	$69.01

Source: GoodFellow
Timmerman Timberworks
Structurlam
Hanscomb Ltd.

Hanscomb

TABLE 10 - Group 6

OCTOBER 2013

Western Fir - Larch Glued Laminated Beam

Column 217mm (8 1/2") Wide Glulam

Vertical Install - 6.1m height

											%	%	%	$/hour	$/hour				
											5%	10%	5%	75.00	250.00				
Glulam Depth		Width		Height	Finish Area m2	Crew	Total Labour Hours	Total Crane Hours	Supply Glulam $/m	Standard Glulam $	Shop Drawing Engineering $	Varies Connections $	Varies Delivery $	Labour $	Crane (1) $	Total	$/m	$/m3	$/FT
0.12	x	0.21	x	6.10	4.0	2	0.4	0.4	$67.59	$412	$21	$41	$21	$53	$88	$635	$104	$4,309	$31.72
0.15	x	0.21	x	6.10	4.4	2	0.4	0.4	$90.10	$550	$27	$55	$27	$53	$88	$800	$182	$4,161	$55.49
0.19	x	0.21	x	6.10	4.9	2	0.4	0.4	$112.66	$687	$34	$69	$34	$53	$88	$965	$197	$3,943	$60.10
0.23	x	0.21	x	6.10	5.4	2	0.4	0.4	$135.47	$826	$41	$83	$41	$53	$88	$1,132	$211	$3,858	$64.40
0.27	x	0.21	x	6.10	5.8	2	0.4	0.4	$151.74	$926	$46	$93	$46	$53	$88	$1,251	$215	$3,657	$65.51
0.31	x	0.21	x	6.10	6.3	2	0.4	0.4	$173.39	$1,058	$53	$106	$53	$53	$88	$1,409	$224	$3,607	$68.36
0.34	x	0.21	x	6.10	6.7	2	0.4	0.4	$195.09	$1,190	$60	$119	$60	$53	$88	$1,568	$232	$3,569	$70.84
0.38	x	0.21	x	6.10	7.2	2	0.4	0.4	$216.74	$1,322	$66	$132	$66	$53	$88	$1,727	$239	$3,538	$72.99
0.42	x	0.21	x	6.10	7.7	2	0.4	0.4	$283.44	$1,729	$86	$173	$86	$53	$88	$2,215	$289	$4,126	$87.97
0.46	x	0.21	x	6.10	8.1	2	0.4	0.4	$260.09	$1,587	$79	$159	$79	$53	$88	$2,044	$251	$3,491	$76.56
0.50	x	0.21	x	6.10	8.6	2	0.4	0.4	$281.78	$1,719	$86	$172	$86	$53	$88	$2,203	$256	$3,474	$78.06
0.53	x	0.21	x	6.10	9.1	2	0.4	0.4	$295.97	$1,805	$90	$181	$90	$53	$88	$2,307	$254	$3,378	$77.56
0.57	x	0.21	x	6.10	9.5	2	0.4	0.4	$317.13	$1,934	$97	$193	$97	$53	$88	$2,461	$258	$3,359	$78.64
0.61	x	0.21	x	6.10	10.0	2	0.4	0.4	$338.25	$2,063	$103	$206	$103	$53	$88	$2,616	$261	$3,348	$79.70
0.65	x	0.21	x	6.10	10.5	2	0.4	0.4	$359.42	$2,192	$110	$219	$110	$53	$88	$2,771	$265	$3,338	$80.69

Source: GoodFellow
Timmerman Timberworks
Structurlam
Hanscomb Ltd.

Appendix

H – TABLE 11 – CONCRETE COLUMN

Hanscomb

Table 11 - GROUP 1 - CONCRETE COLUMN

OCTOBER 2013

150mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	62	20.3	903	13.63	$124	$13	$187	$324	$106	$4,726	$32.41
0.20	x	0.15	x	3.05	0.1	2.1	70	23.0	765	15.39	$140	$18	$218	$376	$123	$4,108	$37.57
0.25	x	0.15	x	3.05	0.1	2.4	78	25.6	682	17.15	$156	$22	$249	$427	$140	$3,738	$42.72
0.30	x	0.15	x	3.05	0.1	2.7	85	27.9	619	18.69	$170	$26	$281	$477	$156	$3,476	$47.68
0.40	x	0.15	x	3.05	0.2	3.4	101	33.1	552	22.21	$202	$35	$343	$580	$190	$3,171	$57.99
0.50	x	0.15	x	3.05	0.2	4.0	116	38.0	507	25.50	$232	$44	$405	$681	$223	$2,979	$68.10
0.60	x	0.15	x	3.05	0.3	4.6	132	43.3	481	29.02	$264	$53	$468	$785	$257	$2,858	$78.41
0.70	x	0.15	x	3.05	0.3	5.2	147	48.2	459	32.32	$294	$62	$530	$886	$290	$2,766	$88.52

150mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	62	20.3	903	13.63	$124	$14	$187	$325	$107	$4,736	$32.48
0.20	x	0.15	x	3.05	0.1	2.1	70	23.0	765	15.39	$140	$18	$218	$377	$124	$4,118	$37.66
0.25	x	0.15	x	3.05	0.1	2.4	78	25.6	682	17.15	$156	$23	$249	$429	$141	$3,747	$42.83
0.30	x	0.15	x	3.05	0.1	2.7	85	27.9	619	18.69	$170	$28	$281	$478	$157	$3,486	$47.81
0.40	x	0.15	x	3.05	0.2	3.4	101	33.1	552	22.21	$202	$37	$343	$582	$191	$3,181	$58.17
0.50	x	0.15	x	3.05	0.2	4.0	116	38.0	507	25.50	$232	$46	$405	$684	$224	$2,989	$68.32
0.60	x	0.15	x	3.05	0.3	4.6	132	43.3	481	29.02	$264	$55	$468	$787	$258	$2,868	$78.68
0.70	x	0.15	x	3.05	0.3	5.2	147	48.2	459	32.32	$294	$65	$530	$889	$291	$2,776	$88.83

150mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	62	20.3	903	13.63	$124	$15	$187	$326	$107	$4,749	$32.57
0.20	x	0.15	x	3.05	0.1	2.1	70	23.0	765	15.39	$140	$20	$218	$378	$124	$4,131	$37.77
0.25	x	0.15	x	3.05	0.1	2.4	78	25.6	682	17.15	$156	$25	$249	$430	$141	$3,760	$42.98
0.30	x	0.15	x	3.05	0.1	2.7	85	27.9	619	18.69	$170	$30	$281	$480	$157	$3,499	$47.99
0.40	x	0.15	x	3.05	0.2	3.4	101	33.1	552	22.21	$202	$39	$343	$584	$192	$3,194	$58.41
0.50	x	0.15	x	3.05	0.2	4.0	116	38.0	507	25.50	$232	$49	$405	$687	$225	$3,002	$68.62
0.60	x	0.15	x	3.05	0.3	4.6	132	43.3	481	29.02	$264	$59	$468	$791	$259	$2,881	$79.04
0.70	x	0.15	x	3.05	0.3	5.2	147	48.2	459	32.32	$294	$69	$530	$893	$293	$2,789	$89.25

150mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	62	20.3	903	13.63	$124	$16	$187	$327	$107	$4,762	$32.66
0.20	x	0.15	x	3.05	0.1	2.1	70	23.0	765	15.39	$140	$21	$218	$379	$124	$4,144	$37.89
0.25	x	0.15	x	3.05	0.1	2.4	78	25.6	682	17.15	$156	$26	$249	$432	$141	$3,773	$43.13
0.30	x	0.15	x	3.05	0.1	2.7	85	27.9	619	18.69	$170	$31	$281	$482	$158	$3,512	$48.17
0.40	x	0.15	x	3.05	0.2	3.4	101	33.1	552	22.21	$202	$42	$343	$587	$192	$3,206	$58.64
0.50	x	0.15	x	3.05	0.2	4.0	116	38.0	507	25.50	$232	$52	$405	$690	$226	$3,015	$68.91
0.60	x	0.15	x	3.05	0.3	4.6	132	43.3	481	29.02	$264	$63	$468	$794	$260	$2,894	$79.39
0.70	x	0.15	x	3.05	0.3	5.2	147	48.2	459	32.32	$294	$73	$530	$897	$294	$2,802	$89.66

150mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	62	20.3	903	13.63	$124	$17	$187	$328	$107	$4,775	$32.75
0.20	x	0.15	x	3.05	0.1	2.1	70	23.0	765	15.39	$140	$22	$218	$380	$125	$4,157	$38.01
0.25	x	0.15	x	3.05	0.1	2.4	78	25.6	682	17.15	$156	$28	$249	$433	$142	$3,787	$43.28
0.30	x	0.15	x	3.05	0.1	2.7	85	27.9	619	18.69	$170	$33	$281	$484	$159	$3,525	$48.35
0.40	x	0.15	x	3.05	0.2	3.4	101	33.1	552	22.21	$202	$44	$343	$589	$193	$3,220	$58.88
0.50	x	0.15	x	3.05	0.2	4.0	116	38.0	507	25.50	$232	$55	$405	$693	$227	$3,028	$69.22
0.60	x	0.15	x	3.05	0.3	4.6	132	43.3	481	29.02	$264	$66	$468	$798	$262	$2,907	$79.75
0.70	x	0.15	x	3.05	0.3	5.2	147	48.2	459	32.32	$294	$77	$530	$901	$296	$2,815	$90.09

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 2 - CONCRETE COLUMN

OCTOBER 2013

150mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	102	33.4	1,486	22.43	$204	$13	$187	$404	$133	$5,892	$40.41
0.20	x	0.15	x	3.05	0.1	2.1	114	37.4	1,246	25.06	$228	$18	$218	$464	$152	$5,070	$46.36
0.25	x	0.15	x	3.05	0.1	2.4	127	41.6	1,110	27.92	$254	$22	$249	$525	$172	$4,594	$52.51
0.30	x	0.15	x	3.05	0.1	2.7	139	45.6	1,013	30.56	$278	$26	$281	$585	$192	$4,263	$58.47
0.40	x	0.15	x	3.05	0.2	3.4	163	53.4	891	35.84	$326	$35	$343	$704	$231	$3,848	$70.38
0.50	x	0.15	x	3.05	0.2	4.0	188	61.6	822	41.33	$376	$44	$405	$825	$271	$3,608	$82.49
0.60	x	0.15	x	3.05	0.3	4.6	212	69.5	772	46.61	$424	$53	$468	$945	$310	$3,441	$94.40
0.70	x	0.15	x	3.05	0.3	5.2	236	77.4	737	51.89	$472	$62	$530	$1,064	$349	$3,322	$106.31

150mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	102	33.4	1,486	22.43	$204	$14	$187	$405	$133	$5,901	$40.47
0.20	x	0.15	x	3.05	0.1	2.1	114	37.4	1,246	25.06	$228	$18	$218	$465	$152	$5,080	$46.45
0.25	x	0.15	x	3.05	0.1	2.4	127	41.6	1,110	27.92	$254	$23	$249	$527	$173	$4,604	$52.63
0.30	x	0.15	x	3.05	0.1	2.7	139	45.6	1,013	30.56	$278	$28	$281	$586	$192	$4,273	$58.60
0.40	x	0.15	x	3.05	0.2	3.4	163	53.4	891	35.84	$326	$37	$343	$706	$231	$3,858	$70.56
0.50	x	0.15	x	3.05	0.2	4.0	188	61.6	822	41.33	$376	$46	$405	$828	$271	$3,618	$82.71
0.60	x	0.15	x	3.05	0.3	4.6	212	69.5	772	46.61	$424	$55	$468	$947	$311	$3,451	$94.67
0.70	x	0.15	x	3.05	0.3	5.2	236	77.4	737	51.89	$472	$65	$530	$1,067	$350	$3,331	$106.62

150mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	102	33.4	1,486	22.43	$204	$15	$187	$406	$133	$5,915	$40.56
0.20	x	0.15	x	3.05	0.1	2.1	114	37.4	1,246	25.06	$228	$20	$218	$466	$153	$5,093	$46.57
0.25	x	0.15	x	3.05	0.1	2.4	127	41.6	1,110	27.92	$254	$25	$249	$528	$173	$4,617	$52.78
0.30	x	0.15	x	3.05	0.1	2.7	139	45.6	1,013	30.56	$278	$30	$281	$588	$193	$4,286	$58.78
0.40	x	0.15	x	3.05	0.2	3.4	163	53.4	891	35.84	$326	$39	$343	$708	$232	$3,871	$70.80
0.50	x	0.15	x	3.05	0.2	4.0	188	61.6	822	41.33	$376	$49	$405	$831	$272	$3,631	$83.01
0.60	x	0.15	x	3.05	0.3	4.6	212	69.5	772	46.61	$424	$59	$468	$951	$312	$3,464	$95.02
0.70	x	0.15	x	3.05	0.3	5.2	236	77.4	737	51.89	$472	$69	$530	$1,071	$351	$3,345	$107.04

150mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	102	33.4	1,486	22.43	$204	$16	$187	$407	$133	$5,927	$40.65
0.20	x	0.15	x	3.05	0.1	2.1	114	37.4	1,246	25.06	$228	$21	$218	$467	$153	$5,106	$46.69
0.25	x	0.15	x	3.05	0.1	2.4	127	41.6	1,110	27.92	$254	$26	$249	$530	$174	$4,630	$52.92
0.30	x	0.15	x	3.05	0.1	2.7	139	45.6	1,013	30.56	$278	$31	$281	$590	$193	$4,299	$58.96
0.40	x	0.15	x	3.05	0.2	3.4	163	53.4	891	35.84	$326	$42	$343	$711	$233	$3,884	$71.03
0.50	x	0.15	x	3.05	0.2	4.0	188	61.6	822	41.33	$376	$52	$405	$834	$273	$3,644	$83.30
0.60	x	0.15	x	3.05	0.3	4.6	212	69.5	772	46.61	$424	$63	$468	$954	$313	$3,477	$95.38
0.70	x	0.15	x	3.05	0.3	5.2	236	77.4	737	51.89	$472	$73	$530	$1,075	$353	$3,357	$107.45

150mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.15	x	0.15	x	3.05	0.1	1.8	102	33.4	1,486	22.43	$204	$17	$187	$408	$134	$5,941	$40.74
0.20	x	0.15	x	3.05	0.1	2.1	114	37.4	1,246	25.06	$228	$22	$218	$468	$154	$5,119	$46.81
0.25	x	0.15	x	3.05	0.1	2.4	127	41.6	1,110	27.92	$254	$28	$249	$531	$174	$4,643	$53.08
0.30	x	0.15	x	3.05	0.1	2.7	139	45.6	1,013	30.56	$278	$33	$281	$592	$194	$4,312	$59.14
0.40	x	0.15	x	3.05	0.2	3.4	163	53.4	891	35.84	$326	$44	$343	$713	$234	$3,897	$71.28
0.50	x	0.15	x	3.05	0.2	4.0	188	61.6	822	41.33	$376	$55	$405	$837	$274	$3,657	$83.61
0.60	x	0.15	x	3.05	0.3	4.6	212	69.5	772	46.61	$424	$66	$468	$958	$314	$3,490	$95.74
0.70	x	0.15	x	3.05	0.3	5.2	236	77.4	737	51.89	$472	$77	$530	$1,079	$354	$3,371	$107.88

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 3 - CONCRETE COLUMN

OCTOBER 2013

200mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	78	25.6	639	17.15	$156	$23	$249	$429	$141	$3,516	$42.87
0.25	x	0.20	x	3.05	0.2	2.7	85	27.9	557	18.69	$170	$29	$281	$480	$157	$3,148	$47.97
0.30	x	0.20	x	3.05	0.2	3.1	93	30.5	508	20.45	$186	$35	$312	$533	$175	$2,913	$53.27
0.40	x	0.20	x	3.05	0.2	3.7	109	35.7	447	23.96	$218	$47	$374	$639	$210	$2,619	$63.87
0.50	x	0.20	x	3.05	0.3	4.3	124	40.7	407	27.26	$248	$59	$437	$743	$244	$2,437	$74.28
0.60	x	0.20	x	3.05	0.4	4.9	140	45.9	383	30.78	$280	$70	$499	$849	$278	$2,321	$84.88
0.70	x	0.20	x	3.05	0.4	5.5	155	50.8	363	34.08	$310	$82	$561	$953	$313	$2,233	$95.29
0.80	x	0.20	x	3.05	0.5	6.1	170	55.7	348	37.38	$340	$94	$624	$1,058	$347	$2,167	$105.69

200mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	78	25.6	639	17.15	$156	$25	$249	$430	$141	$3,526	$42.99
0.25	x	0.20	x	3.05	0.2	2.7	85	27.9	557	18.69	$170	$31	$281	$481	$158	$3,157	$48.12
0.30	x	0.20	x	3.05	0.2	3.1	93	30.5	508	20.45	$186	$37	$312	$535	$175	$2,923	$53.45
0.40	x	0.20	x	3.05	0.2	3.7	109	35.7	447	23.96	$218	$49	$374	$642	$210	$2,629	$64.11
0.50	x	0.20	x	3.05	0.3	4.3	124	40.7	407	27.26	$248	$62	$437	$746	$245	$2,447	$74.58
0.60	x	0.20	x	3.05	0.4	4.9	140	45.9	383	30.78	$280	$74	$499	$853	$280	$2,330	$85.24
0.70	x	0.20	x	3.05	0.4	5.5	155	50.8	363	34.08	$310	$86	$561	$958	$314	$2,243	$95.70
0.80	x	0.20	x	3.05	0.5	6.1	170	55.7	348	37.38	$340	$99	$624	$1,062	$348	$2,177	$106.17

200mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	78	25.6	639	17.15	$156	$26	$249	$432	$142	$3,539	$43.15
0.25	x	0.20	x	3.05	0.2	2.7	85	27.9	557	18.69	$170	$33	$281	$483	$159	$3,170	$48.32
0.30	x	0.20	x	3.05	0.2	3.1	93	30.5	508	20.45	$186	$39	$312	$537	$176	$2,936	$53.69
0.40	x	0.20	x	3.05	0.2	3.7	109	35.7	447	23.96	$218	$53	$374	$645	$211	$2,642	$64.43
0.50	x	0.20	x	3.05	0.3	4.3	124	40.7	407	27.26	$248	$66	$437	$750	$246	$2,460	$74.98
0.60	x	0.20	x	3.05	0.4	4.9	140	45.9	383	30.78	$280	$79	$499	$858	$281	$2,344	$85.72
0.70	x	0.20	x	3.05	0.4	5.5	155	50.8	363	34.08	$310	$92	$561	$963	$316	$2,256	$96.26
0.80	x	0.20	x	3.05	0.5	6.1	170	55.7	348	37.38	$340	$105	$624	$1,069	$350	$2,190	$106.80

200mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	78	25.6	639	17.15	$156	$28	$249	$433	$142	$3,552	$43.30
0.25	x	0.20	x	3.05	0.2	2.7	85	27.9	557	18.69	$170	$35	$281	$485	$159	$3,183	$48.51
0.30	x	0.20	x	3.05	0.2	3.1	93	30.5	508	20.45	$186	$42	$312	$540	$177	$2,949	$53.92
0.40	x	0.20	x	3.05	0.2	3.7	109	35.7	447	23.96	$218	$56	$374	$648	$212	$2,655	$64.75
0.50	x	0.20	x	3.05	0.3	4.3	124	40.7	407	27.26	$248	$70	$437	$754	$247	$2,473	$75.37
0.60	x	0.20	x	3.05	0.4	4.9	140	45.9	383	30.78	$280	$83	$499	$862	$283	$2,356	$86.19
0.70	x	0.20	x	3.05	0.4	5.5	155	50.8	363	34.08	$310	$97	$561	$969	$318	$2,269	$96.81
0.80	x	0.20	x	3.05	0.5	6.1	170	55.7	348	37.38	$340	$111	$624	$1,075	$352	$2,203	$107.43

200mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	78	25.6	639	17.15	$156	$29	$249	$435	$143	$3,565	$43.47
0.25	x	0.20	x	3.05	0.2	2.7	85	27.9	557	18.69	$170	$37	$281	$487	$160	$3,197	$48.72
0.30	x	0.20	x	3.05	0.2	3.1	93	30.5	508	20.45	$186	$44	$312	$542	$178	$2,962	$54.17
0.40	x	0.20	x	3.05	0.2	3.7	109	35.7	447	23.96	$218	$59	$374	$651	$213	$2,669	$65.07
0.50	x	0.20	x	3.05	0.3	4.3	124	40.7	407	27.26	$248	$74	$437	$758	$249	$2,486	$75.77
0.60	x	0.20	x	3.05	0.4	4.9	140	45.9	383	30.78	$280	$88	$499	$867	$284	$2,370	$86.68
0.70	x	0.20	x	3.05	0.4	5.5	155	50.8	363	34.08	$310	$103	$561	$974	$319	$2,282	$97.38
0.80	x	0.20	x	3.05	0.5	6.1	170	55.7	348	37.38	$340	$118	$624	$1,081	$355	$2,216	$108.08

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 4 - CONCRETE COLUMN

OCTOBER 2013

200mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	127	41.6	1,041	27.92	$254	$23	$249	$527	$173	$4,319	$52.66
0.25	x	0.20	x	3.05	0.2	2.7	139	45.6	911	30.56	$278	$29	$281	$588	$193	$3,856	$58.76
0.30	x	0.20	x	3.05	0.2	3.1	151	49.5	825	33.20	$302	$35	$312	$649	$213	$3,547	$64.86
0.40	x	0.20	x	3.05	0.2	3.7	175	57.4	717	38.48	$350	$47	$374	$771	$253	$3,160	$77.07
0.50	x	0.20	x	3.05	0.3	4.3	200	65.6	656	43.97	$400	$59	$437	$895	$294	$2,935	$89.47
0.60	x	0.20	x	3.05	0.4	4.9	224	73.4	612	49.25	$448	$70	$499	$1,017	$334	$2,780	$101.67
0.70	x	0.20	x	3.05	0.4	5.5	248	81.3	581	54.52	$496	$82	$561	$1,139	$374	$2,669	$113.87
0.80	x	0.20	x	3.05	0.5	6.1	273	89.5	559	60.02	$546	$94	$624	$1,264	$414	$2,589	$126.28

200mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	127	41.6	1,041	27.92	$254	$25	$249	$528	$173	$4,329	$52.78
0.25	x	0.20	x	3.05	0.2	2.7	139	45.6	911	30.56	$278	$31	$281	$589	$193	$3,866	$58.91
0.30	x	0.20	x	3.05	0.2	3.1	151	49.5	825	33.20	$302	$37	$312	$651	$213	$3,557	$65.04
0.40	x	0.20	x	3.05	0.2	3.7	175	57.4	717	38.48	$350	$49	$374	$774	$254	$3,170	$77.30
0.50	x	0.20	x	3.05	0.3	4.3	200	65.6	656	43.97	$400	$62	$437	$898	$295	$2,945	$89.77
0.60	x	0.20	x	3.05	0.4	4.9	224	73.4	612	49.25	$448	$74	$499	$1,021	$335	$2,789	$102.03
0.70	x	0.20	x	3.05	0.4	5.5	248	81.3	581	54.52	$496	$86	$561	$1,144	$375	$2,678	$114.29
0.80	x	0.20	x	3.05	0.5	6.1	273	89.5	559	60.02	$546	$99	$624	$1,268	$416	$2,599	$126.75

200mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	127	41.6	1,041	27.92	$254	$26	$249	$530	$174	$4,342	$52.94
0.25	x	0.20	x	3.05	0.2	2.7	139	45.6	911	30.56	$278	$33	$281	$591	$194	$3,879	$59.11
0.30	x	0.20	x	3.05	0.2	3.1	151	49.5	825	33.20	$302	$39	$312	$653	$214	$3,570	$65.28
0.40	x	0.20	x	3.05	0.2	3.7	175	57.4	717	38.48	$350	$53	$374	$777	$255	$3,183	$77.62
0.50	x	0.20	x	3.05	0.3	4.3	200	65.6	656	43.97	$400	$66	$437	$902	$296	$2,958	$90.17
0.60	x	0.20	x	3.05	0.4	4.9	224	73.4	612	49.25	$448	$79	$499	$1,026	$336	$2,803	$102.51
0.70	x	0.20	x	3.05	0.4	5.5	248	81.3	581	54.52	$496	$92	$561	$1,149	$377	$2,691	$114.85
0.80	x	0.20	x	3.05	0.5	6.1	273	89.5	559	60.02	$546	$105	$624	$1,275	$418	$2,612	$127.39

200mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	127	41.6	1,041	27.92	$254	$28	$249	$531	$174	$4,355	$53.10
0.25	x	0.20	x	3.05	0.2	2.7	139	45.6	911	30.56	$278	$35	$281	$593	$195	$3,891	$59.31
0.30	x	0.20	x	3.05	0.2	3.1	151	49.5	825	33.20	$302	$42	$312	$656	$215	$3,582	$65.52
0.40	x	0.20	x	3.05	0.2	3.7	175	57.4	717	38.48	$350	$56	$374	$780	$256	$3,196	$77.94
0.50	x	0.20	x	3.05	0.3	4.3	200	65.6	656	43.97	$400	$70	$437	$906	$297	$2,971	$90.56
0.60	x	0.20	x	3.05	0.4	4.9	224	73.4	612	49.25	$448	$83	$499	$1,030	$338	$2,815	$102.98
0.70	x	0.20	x	3.05	0.4	5.5	248	81.3	581	54.52	$496	$97	$561	$1,155	$379	$2,704	$115.40
0.80	x	0.20	x	3.05	0.5	6.1	273	89.5	559	60.02	$546	$111	$624	$1,281	$420	$2,625	$128.02

200mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.20	x	0.20	x	3.05	0.1	2.4	127	41.6	1,041	27.92	$254	$29	$249	$533	$175	$4,368	$53.26
0.25	x	0.20	x	3.05	0.2	2.7	139	45.6	911	30.56	$278	$37	$281	$595	$195	$3,905	$59.51
0.30	x	0.20	x	3.05	0.2	3.1	151	49.5	825	33.20	$302	$44	$312	$658	$216	$3,596	$65.76
0.40	x	0.20	x	3.05	0.2	3.7	175	57.4	717	38.48	$350	$59	$374	$783	$257	$3,210	$78.26
0.50	x	0.20	x	3.05	0.3	4.3	200	65.6	656	43.97	$400	$74	$437	$910	$298	$2,984	$90.96
0.60	x	0.20	x	3.05	0.4	4.9	224	73.4	612	49.25	$448	$88	$499	$1,035	$339	$2,829	$103.46
0.70	x	0.20	x	3.05	0.4	5.5	248	81.3	581	54.52	$496	$103	$561	$1,160	$380	$2,718	$115.97
0.80	x	0.20	x	3.05	0.5	6.1	273	89.5	559	60.02	$546	$118	$624	$1,287	$422	$2,638	$128.67

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 5 - CONCRETE COLUMN

OCTOBER 2013

300mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 20M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	109	35.7	397	23.96	$218	$53	$374	$645	$211	$2,350	$64.46
0.40	x	0.30	x	3.05	0.4	4.3	124	40.7	339	27.26	$248	$70	$437	$755	$248	$2,063	$75.45
0.45	x	0.30	x	3.05	0.4	4.6	132	43.3	321	29.02	$264	$79	$468	$811	$266	$1,970	$81.05
0.50	x	0.30	x	3.05	0.5	4.9	140	45.9	306	30.78	$280	$88	$499	$867	$284	$1,895	$86.64
0.60	x	0.30	x	3.05	0.5	5.5	155	50.8	282	34.08	$310	$106	$561	$977	$320	$1,779	$97.63
0.70	x	0.30	x	3.05	0.6	6.1	170	55.7	265	37.38	$340	$123	$624	$1,087	$356	$1,697	$108.62
0.80	x	0.30	x	3.05	0.7	6.7	186	61.0	254	40.89	$372	$141	$686	$1,199	$393	$1,638	$119.81
0.90	x	0.30	x	3.05	0.8	7.3	201	65.9	244	44.19	$402	$158	$748	$1,309	$429	$1,589	$130.80

300mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 20M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	109	35.7	397	23.96	$218	$55	$374	$648	$212	$2,360	$64.73
0.40	x	0.30	x	3.05	0.4	4.3	124	40.7	339	27.26	$248	$74	$437	$759	$249	$2,073	$75.81
0.45	x	0.30	x	3.05	0.4	4.6	132	43.3	321	29.02	$264	$83	$468	$815	$267	$1,979	$81.45
0.50	x	0.30	x	3.05	0.5	4.9	140	45.9	306	30.78	$280	$92	$499	$871	$286	$1,905	$87.09
0.60	x	0.30	x	3.05	0.5	5.5	155	50.8	282	34.08	$310	$111	$561	$982	$322	$1,789	$98.17
0.70	x	0.30	x	3.05	0.6	6.1	170	55.7	265	37.38	$340	$129	$624	$1,093	$358	$1,707	$109.25
0.80	x	0.30	x	3.05	0.7	6.7	186	61.0	254	40.89	$372	$148	$686	$1,206	$395	$1,648	$120.53
0.90	x	0.30	x	3.05	0.8	7.3	201	65.9	244	44.19	$402	$166	$748	$1,317	$432	$1,599	$131.61

300mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 20M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	109	35.7	397	23.96	$218	$59	$374	$651	$214	$2,373	$65.09
0.40	x	0.30	x	3.05	0.4	4.3	124	40.7	339	27.26	$248	$79	$437	$763	$250	$2,086	$76.29
0.45	x	0.30	x	3.05	0.4	4.6	132	43.3	321	29.02	$264	$89	$468	$820	$269	$1,992	$81.99
0.50	x	0.30	x	3.05	0.5	4.9	140	45.9	306	30.78	$280	$98	$499	$877	$288	$1,918	$87.69
0.60	x	0.30	x	3.05	0.5	5.5	155	50.8	282	34.08	$310	$118	$561	$989	$324	$1,802	$98.88
0.70	x	0.30	x	3.05	0.6	6.1	170	55.7	265	37.38	$340	$138	$624	$1,102	$361	$1,720	$110.08
0.80	x	0.30	x	3.05	0.7	6.7	186	61.0	254	40.89	$372	$158	$686	$1,216	$399	$1,661	$121.48
0.90	x	0.30	x	3.05	0.8	7.3	201	65.9	244	44.19	$402	$177	$748	$1,328	$435	$1,612	$132.68

300mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 20M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	109	35.7	397	23.96	$218	$63	$374	$655	$215	$2,386	$65.44
0.40	x	0.30	x	3.05	0.4	4.3	124	40.7	339	27.26	$248	$83	$437	$768	$252	$2,099	$76.76
0.45	x	0.30	x	3.05	0.4	4.6	132	43.3	321	29.02	$264	$94	$468	$826	$271	$2,005	$82.51
0.50	x	0.30	x	3.05	0.5	4.9	140	45.9	306	30.78	$280	$104	$499	$883	$290	$1,931	$88.27
0.60	x	0.30	x	3.05	0.5	5.5	155	50.8	282	34.08	$310	$125	$561	$997	$327	$1,815	$99.59
0.70	x	0.30	x	3.05	0.6	6.1	170	55.7	265	37.38	$340	$146	$624	$1,110	$364	$1,733	$110.90
0.80	x	0.30	x	3.05	0.7	6.7	186	61.0	254	40.89	$372	$167	$686	$1,225	$402	$1,673	$122.42
0.90	x	0.30	x	3.05	0.8	7.3	201	65.9	244	44.19	$402	$188	$748	$1,338	$439	$1,625	$133.74

300mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 20M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	109	35.7	397	23.96	$218	$66	$374	$658	$216	$2,399	$65.81
0.40	x	0.30	x	3.05	0.4	4.3	124	40.7	339	27.26	$248	$88	$437	$773	$253	$2,112	$77.24
0.45	x	0.30	x	3.05	0.4	4.6	132	43.3	321	29.02	$264	$99	$468	$831	$273	$2,019	$83.06
0.50	x	0.30	x	3.05	0.5	4.9	140	45.9	306	30.78	$280	$110	$499	$889	$292	$1,944	$88.88
0.60	x	0.30	x	3.05	0.5	5.5	155	50.8	282	34.08	$310	$132	$561	$1,004	$329	$1,829	$100.32
0.70	x	0.30	x	3.05	0.6	6.1	170	55.7	265	37.38	$340	$155	$624	$1,118	$367	$1,746	$111.76
0.80	x	0.30	x	3.05	0.7	6.7	186	61.0	254	40.89	$372	$177	$686	$1,235	$405	$1,687	$123.40
0.90	x	0.30	x	3.05	0.8	7.3	201	65.9	244	44.19	$402	$199	$748	$1,349	$442	$1,638	$134.83

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 6 - CONCRETE COLUMN

OCTOBER 2013

300mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 25M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	175	57.4	638	38.48	$350	$53	$374	$777	$255	$2,831	$77.65
0.40	x	0.30	x	3.05	0.4	4.3	200	65.6	546	43.97	$400	$70	$437	$907	$297	$2,478	$90.64
0.45	x	0.30	x	3.05	0.4	4.6	212	69.5	515	46.61	$424	$79	$468	$971	$318	$2,358	$97.03
0.50	x	0.30	x	3.05	0.5	4.9	224	73.4	490	49.25	$448	$88	$499	$1,035	$339	$2,262	$103.43
0.60	x	0.30	x	3.05	0.5	5.5	248	81.3	452	54.52	$496	$106	$561	$1,163	$381	$2,118	$116.22
0.70	x	0.30	x	3.05	0.6	6.1	273	89.5	426	60.02	$546	$123	$624	$1,293	$424	$2,019	$129.21
0.80	x	0.30	x	3.05	0.7	6.7	297	97.4	406	65.30	$594	$141	$686	$1,421	$466	$1,941	$141.99
0.90	x	0.30	x	3.05	0.8	7.3	321	105.2	390	70.57	$642	$158	$748	$1,549	$508	$1,881	$154.78

300mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 25M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	175	57.4	638	38.48	$350	$55	$374	$780	$256	$2,840	$77.92
0.40	x	0.30	x	3.05	0.4	4.3	200	65.6	546	43.97	$400	$74	$437	$911	$299	$2,488	$91.00
0.45	x	0.30	x	3.05	0.4	4.6	212	69.5	515	46.61	$424	$83	$468	$975	$320	$2,368	$97.44
0.50	x	0.30	x	3.05	0.5	4.9	224	73.4	490	49.25	$448	$92	$499	$1,039	$341	$2,272	$103.88
0.60	x	0.30	x	3.05	0.5	5.5	248	81.3	452	54.52	$496	$111	$561	$1,168	$383	$2,128	$116.76
0.70	x	0.30	x	3.05	0.6	6.1	273	89.5	426	60.02	$546	$129	$624	$1,299	$426	$2,028	$129.83
0.80	x	0.30	x	3.05	0.7	6.7	297	97.4	406	65.30	$594	$148	$686	$1,428	$468	$1,951	$142.71
0.90	x	0.30	x	3.05	0.8	7.3	321	105.2	390	70.57	$642	$166	$748	$1,557	$510	$1,891	$155.59

300mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 25M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	175	57.4	638	38.48	$350	$59	$374	$783	$257	$2,854	$78.28
0.40	x	0.30	x	3.05	0.4	4.3	200	65.6	546	43.97	$400	$79	$437	$915	$300	$2,501	$91.48
0.45	x	0.30	x	3.05	0.4	4.6	212	69.5	515	46.61	$424	$89	$468	$980	$321	$2,381	$97.98
0.50	x	0.30	x	3.05	0.5	4.9	224	73.4	490	49.25	$448	$98	$499	$1,045	$343	$2,285	$104.48
0.60	x	0.30	x	3.05	0.5	5.5	248	81.3	452	54.52	$496	$118	$561	$1,175	$385	$2,141	$117.47
0.70	x	0.30	x	3.05	0.6	6.1	273	89.5	426	60.02	$546	$138	$624	$1,308	$429	$2,041	$130.67
0.80	x	0.30	x	3.05	0.7	6.7	297	97.4	406	65.30	$594	$158	$686	$1,438	$471	$1,964	$143.67
0.90	x	0.30	x	3.05	0.8	7.3	321	105.2	390	70.57	$642	$177	$748	$1,568	$514	$1,904	$156.67

300mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 25M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	175	57.4	638	38.48	$350	$63	$374	$787	$258	$2,866	$78.63
0.40	x	0.30	x	3.05	0.4	4.3	200	65.6	546	43.97	$400	$83	$437	$920	$302	$2,514	$91.95
0.45	x	0.30	x	3.05	0.4	4.6	212	69.5	515	46.61	$424	$94	$468	$986	$323	$2,394	$98.50
0.50	x	0.30	x	3.05	0.5	4.9	224	73.4	490	49.25	$448	$104	$499	$1,051	$345	$2,298	$105.06
0.60	x	0.30	x	3.05	0.5	5.5	248	81.3	452	54.52	$496	$125	$561	$1,183	$388	$2,154	$118.18
0.70	x	0.30	x	3.05	0.6	6.1	273	89.5	426	60.02	$546	$146	$624	$1,316	$431	$2,054	$131.49
0.80	x	0.30	x	3.05	0.7	6.7	297	97.4	406	65.30	$594	$167	$686	$1,447	$474	$1,977	$144.61
0.90	x	0.30	x	3.05	0.8	7.3	321	105.2	390	70.57	$642	$188	$748	$1,578	$517	$1,916	$157.72

300mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 25M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	175	57.4	638	38.48	$350	$66	$374	$790	$259	$2,880	$79.00
0.40	x	0.30	x	3.05	0.4	4.3	200	65.6	546	43.97	$400	$88	$437	$925	$303	$2,527	$92.43
0.45	x	0.30	x	3.05	0.4	4.6	212	69.5	515	46.61	$424	$99	$468	$991	$325	$2,407	$99.05
0.50	x	0.30	x	3.05	0.5	4.9	224	73.4	490	49.25	$448	$110	$499	$1,057	$347	$2,311	$105.67
0.60	x	0.30	x	3.05	0.5	5.5	248	81.3	452	54.52	$496	$132	$561	$1,190	$390	$2,167	$118.91
0.70	x	0.30	x	3.05	0.6	6.1	273	89.5	426	60.02	$546	$155	$624	$1,324	$434	$2,068	$132.35
0.80	x	0.30	x	3.05	0.7	6.7	297	97.4	406	65.30	$594	$177	$686	$1,457	$478	$1,990	$145.58
0.90	x	0.30	x	3.05	0.8	7.3	321	105.2	390	70.57	$642	$199	$748	$1,589	$521	$1,930	$158.82

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 7 - CONCRETE COLUMN

OCTOBER 2013

300mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	351	115.1	1,279	77.17	$702	$53	$374	$1,129	$370	$4,113	$112.83
0.40	x	0.30	x	3.05	0.4	4.3	399	130.8	1,090	87.72	$798	$70	$437	$1,305	$428	$3,566	$130.41
0.45	x	0.30	x	3.05	0.4	4.6	424	139.0	1,030	93.22	$848	$79	$468	$1,395	$457	$3,388	$139.41
0.50	x	0.30	x	3.05	0.5	4.9	448	146.9	979	98.50	$896	$88	$499	$1,483	$486	$3,241	$148.20
0.60	x	0.30	x	3.05	0.5	5.5	497	163.0	905	109.27	$994	$106	$561	$1,661	$545	$3,025	$165.99
0.70	x	0.30	x	3.05	0.6	6.1	545	178.7	851	119.82	$1,090	$123	$624	$1,837	$602	$2,868	$183.57
0.80	x	0.30	x	3.05	0.7	6.7	594	194.8	811	130.60	$1,188	$141	$686	$2,015	$661	$2,753	$201.36
0.90	x	0.30	x	3.05	0.8	7.3	643	210.8	781	141.37	$1,286	$158	$748	$2,193	$719	$2,663	$219.14

300mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	351	115.1	1,279	77.17	$702	$55	$374	$1,132	$371	$4,123	$113.10
0.40	x	0.30	x	3.05	0.4	4.3	399	130.8	1,090	87.72	$798	$74	$437	$1,309	$429	$3,575	$130.77
0.45	x	0.30	x	3.05	0.4	4.6	424	139.0	1,030	93.22	$848	$83	$468	$1,399	$459	$3,398	$139.81
0.50	x	0.30	x	3.05	0.5	4.9	448	146.9	979	98.50	$896	$92	$499	$1,487	$488	$3,251	$148.65
0.60	x	0.30	x	3.05	0.5	5.5	497	163.0	905	109.27	$994	$111	$561	$1,666	$546	$3,035	$166.52
0.70	x	0.30	x	3.05	0.6	6.1	545	178.7	851	119.82	$1,090	$129	$624	$1,843	$604	$2,878	$184.20
0.80	x	0.30	x	3.05	0.7	6.7	594	194.8	811	130.60	$1,188	$148	$686	$2,022	$663	$2,762	$202.07
0.90	x	0.30	x	3.05	0.8	7.3	643	210.8	781	141.37	$1,286	$166	$748	$2,201	$722	$2,673	$219.95

300mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	351	115.1	1,279	77.17	$702	$59	$374	$1,135	$372	$4,136	$113.46
0.40	x	0.30	x	3.05	0.4	4.3	399	130.8	1,090	87.72	$798	$79	$437	$1,313	$431	$3,588	$131.25
0.45	x	0.30	x	3.05	0.4	4.6	424	139.0	1,030	93.22	$848	$89	$468	$1,404	$460	$3,411	$140.35
0.50	x	0.30	x	3.05	0.5	4.9	448	146.9	979	98.50	$896	$98	$499	$1,493	$490	$3,264	$149.25
0.60	x	0.30	x	3.05	0.5	5.5	497	163.0	905	109.27	$994	$118	$561	$1,673	$549	$3,048	$167.24
0.70	x	0.30	x	3.05	0.6	6.1	545	178.7	851	119.82	$1,090	$138	$624	$1,852	$607	$2,891	$185.04
0.80	x	0.30	x	3.05	0.7	6.7	594	194.8	811	130.60	$1,188	$158	$686	$2,032	$666	$2,775	$203.03
0.90	x	0.30	x	3.05	0.8	7.3	643	210.8	781	141.37	$1,286	$177	$748	$2,212	$725	$2,686	$221.02

300mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	351	115.1	1,279	77.17	$702	$63	$374	$1,139	$373	$4,149	$113.81
0.40	x	0.30	x	3.05	0.4	4.3	399	130.8	1,090	87.72	$798	$83	$437	$1,318	$432	$3,601	$131.72
0.45	x	0.30	x	3.05	0.4	4.6	424	139.0	1,030	93.22	$848	$94	$468	$1,410	$462	$3,424	$140.88
0.50	x	0.30	x	3.05	0.5	4.9	448	146.9	979	98.50	$896	$104	$499	$1,499	$492	$3,277	$149.83
0.60	x	0.30	x	3.05	0.5	5.5	497	163.0	905	109.27	$994	$125	$561	$1,681	$551	$3,061	$167.94
0.70	x	0.30	x	3.05	0.6	6.1	545	178.7	851	119.82	$1,090	$146	$624	$1,860	$610	$2,904	$185.86
0.80	x	0.30	x	3.05	0.7	6.7	594	194.8	811	130.60	$1,188	$167	$686	$2,041	$669	$2,788	$203.97
0.90	x	0.30	x	3.05	0.8	7.3	643	210.8	781	141.37	$1,286	$188	$748	$2,222	$729	$2,699	$222.08

300mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.30	x	0.30	x	3.05	0.3	3.7	351	115.1	1,279	77.17	$702	$66	$374	$1,142	$375	$4,162	$114.17
0.40	x	0.30	x	3.05	0.4	4.3	399	130.8	1,090	87.72	$798	$88	$437	$1,323	$434	$3,615	$132.21
0.45	x	0.30	x	3.05	0.4	4.6	424	139.0	1,030	93.22	$848	$99	$468	$1,415	$464	$3,437	$141.43
0.50	x	0.30	x	3.05	0.5	4.9	448	146.9	979	98.50	$896	$110	$499	$1,505	$494	$3,290	$150.44
0.60	x	0.30	x	3.05	0.5	5.5	497	163.0	905	109.27	$994	$132	$561	$1,688	$553	$3,074	$168.68
0.70	x	0.30	x	3.05	0.6	6.1	545	178.7	851	119.82	$1,090	$155	$624	$1,868	$613	$2,917	$186.71
0.80	x	0.30	x	3.05	0.7	6.7	594	194.8	811	130.60	$1,188	$177	$686	$2,051	$672	$2,802	$204.94
0.90	x	0.30	x	3.05	0.8	7.3	643	210.8	781	141.37	$1,286	$199	$748	$2,233	$732	$2,712	$223.18

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 8 - CONCRETE COLUMN

OCTOBER 2013

450mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	155	50.8	251	34.08	$310	$119	$561	$990	$325	$1,603	$98.95
0.50	x	0.45	x	3.05	0.7	5.8	163	53.4	238	35.84	$326	$132	$593	$1,051	$344	$1,531	$104.98
0.60	x	0.45	x	3.05	0.8	6.4	178	58.4	216	39.13	$356	$158	$655	$1,169	$383	$1,420	$116.85
0.65	x	0.45	x	3.05	0.9	6.7	186	61.0	208	40.89	$372	$172	$686	$1,230	$403	$1,378	$122.89
0.70	x	0.45	x	3.05	1.0	7.0	194	63.6	202	42.65	$388	$185	$717	$1,290	$423	$1,343	$128.92
0.80	x	0.45	x	3.05	1.1	7.6	209	68.5	190	45.95	$418	$211	$780	$1,409	$462	$1,283	$140.79
0.90	x	0.45	x	3.05	1.2	8.2	224	73.4	181	49.25	$448	$238	$842	$1,528	$501	$1,237	$152.66
1.00	x	0.45	x	3.05	1.4	8.8	240	78.7	175	52.77	$480	$264	$904	$1,648	$540	$1,201	$164.73

450mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	155	50.8	251	34.08	$310	$125	$561	$996	$327	$1,613	$99.55
0.50	x	0.45	x	3.05	0.7	5.8	163	53.4	238	35.84	$326	$139	$593	$1,057	$347	$1,541	$105.65
0.60	x	0.45	x	3.05	0.8	6.4	178	58.4	216	39.13	$356	$166	$655	$1,177	$386	$1,430	$117.66
0.65	x	0.45	x	3.05	0.9	6.7	186	61.0	208	40.89	$372	$180	$686	$1,238	$406	$1,388	$123.76
0.70	x	0.45	x	3.05	1.0	7.0	194	63.6	202	42.65	$388	$194	$717	$1,299	$426	$1,353	$129.86
0.80	x	0.45	x	3.05	1.1	7.6	209	68.5	190	45.95	$418	$222	$780	$1,420	$465	$1,293	$141.86
0.90	x	0.45	x	3.05	1.2	8.2	224	73.4	181	49.25	$448	$250	$842	$1,540	$505	$1,246	$153.87
1.00	x	0.45	x	3.05	1.4	8.8	240	78.7	175	52.77	$480	$277	$904	$1,662	$545	$1,211	$166.07

450mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	155	50.8	251	34.08	$310	$133	$561	$1,004	$329	$1,626	$100.36
0.50	x	0.45	x	3.05	0.7	5.8	163	53.4	238	35.84	$326	$148	$593	$1,066	$350	$1,554	$106.55
0.60	x	0.45	x	3.05	0.8	6.4	178	58.4	216	39.13	$356	$177	$655	$1,188	$390	$1,443	$118.73
0.65	x	0.45	x	3.05	0.9	6.7	186	61.0	208	40.89	$372	$192	$686	$1,250	$410	$1,401	$124.93
0.70	x	0.45	x	3.05	1.0	7.0	194	63.6	202	42.65	$388	$207	$717	$1,312	$430	$1,366	$131.12
0.80	x	0.45	x	3.05	1.1	7.6	209	68.5	190	45.95	$418	$236	$780	$1,434	$470	$1,306	$143.30
0.90	x	0.45	x	3.05	1.2	8.2	224	73.4	181	49.25	$448	$266	$842	$1,556	$510	$1,260	$155.48
1.00	x	0.45	x	3.05	1.4	8.8	240	78.7	175	52.77	$480	$295	$904	$1,680	$551	$1,224	$167.87

450mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	155	50.8	251	34.08	$310	$141	$561	$1,012	$332	$1,639	$101.15
0.50	x	0.45	x	3.05	0.7	5.8	163	53.4	238	35.84	$326	$156	$593	$1,075	$352	$1,566	$107.43
0.60	x	0.45	x	3.05	0.8	6.4	178	58.4	216	39.13	$356	$188	$655	$1,199	$393	$1,456	$119.79
0.65	x	0.45	x	3.05	0.9	6.7	186	61.0	208	40.89	$372	$203	$686	$1,262	$414	$1,414	$126.07
0.70	x	0.45	x	3.05	1.0	7.0	194	63.6	202	42.65	$388	$219	$717	$1,324	$434	$1,378	$132.35
0.80	x	0.45	x	3.05	1.1	7.6	209	68.5	190	45.95	$418	$250	$780	$1,448	$475	$1,319	$144.71
0.90	x	0.45	x	3.05	1.2	8.2	224	73.4	181	49.25	$448	$282	$842	$1,572	$515	$1,272	$157.07
1.00	x	0.45	x	3.05	1.4	8.8	240	78.7	175	52.77	$480	$313	$904	$1,697	$557	$1,237	$169.62

450mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 20M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	20M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	155	50.8	251	34.08	$310	$149	$561	$1,020	$335	$1,652	$101.98
0.50	x	0.45	x	3.05	0.7	5.8	163	53.4	238	35.84	$326	$166	$593	$1,084	$355	$1,580	$108.35
0.60	x	0.45	x	3.05	0.8	6.4	178	58.4	216	39.13	$356	$199	$655	$1,210	$397	$1,469	$120.89
0.65	x	0.45	x	3.05	0.9	6.7	186	61.0	208	40.89	$372	$215	$686	$1,273	$418	$1,427	$127.26
0.70	x	0.45	x	3.05	1.0	7.0	194	63.6	202	42.65	$388	$232	$717	$1,337	$438	$1,392	$133.63
0.80	x	0.45	x	3.05	1.1	7.6	209	68.5	190	45.95	$418	$265	$780	$1,463	$480	$1,332	$146.17
0.90	x	0.45	x	3.05	1.2	8.2	224	73.4	181	49.25	$448	$298	$842	$1,588	$521	$1,286	$158.71
1.00	x	0.45	x	3.05	1.4	8.8	240	78.7	175	52.77	$480	$331	$904	$1,716	$563	$1,250	$171.45

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 9 - CONCRETE COLUMN

OCTOBER 2013

450mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	248	81.3	402	54.52	$496	$119	$561	$1,176	$386	$1,904	$117.54
0.50	x	0.45	x	3.05	0.7	5.8	261	85.6	380	57.38	$522	$132	$593	$1,247	$409	$1,816	$124.57
0.60	x	0.45	x	3.05	0.8	6.4	285	93.4	346	62.66	$570	$158	$655	$1,383	$454	$1,680	$138.24
0.65	x	0.45	x	3.05	0.9	6.7	297	97.4	333	65.30	$594	$172	$686	$1,452	$476	$1,627	$145.07
0.70	x	0.45	x	3.05	1.0	7.0	309	101.3	322	67.94	$618	$185	$717	$1,520	$498	$1,582	$151.91
0.80	x	0.45	x	3.05	1.1	7.6	334	109.5	304	73.43	$668	$211	$780	$1,659	$544	$1,511	$165.77
0.90	x	0.45	x	3.05	1.2	8.2	358	117.4	290	78.71	$716	$238	$842	$1,796	$589	$1,454	$179.44
1.00	x	0.45	x	3.05	1.4	8.8	382	125.2	278	83.99	$764	$264	$904	$1,932	$634	$1,408	$193.11

450mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	248	81.3	402	54.52	$496	$125	$561	$1,182	$388	$1,914	$118.14
0.50	x	0.45	x	3.05	0.7	5.8	261	85.6	380	57.38	$522	$139	$593	$1,253	$411	$1,826	$125.24
0.60	x	0.45	x	3.05	0.8	6.4	285	93.4	346	62.66	$570	$166	$655	$1,391	$456	$1,690	$139.04
0.65	x	0.45	x	3.05	0.9	6.7	297	97.4	333	65.30	$594	$180	$686	$1,460	$479	$1,637	$145.95
0.70	x	0.45	x	3.05	1.0	7.0	309	101.3	322	67.94	$618	$194	$717	$1,529	$501	$1,592	$152.85
0.80	x	0.45	x	3.05	1.1	7.6	334	109.5	304	73.43	$668	$222	$780	$1,670	$547	$1,521	$166.85
0.90	x	0.45	x	3.05	1.2	8.2	358	117.4	290	78.71	$716	$250	$842	$1,808	$593	$1,463	$180.65
1.00	x	0.45	x	3.05	1.4	8.8	382	125.2	278	83.99	$764	$277	$904	$1,946	$638	$1,418	$194.45

450mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	248	81.3	402	54.52	$496	$133	$561	$1,190	$390	$1,927	$118.95
0.50	x	0.45	x	3.05	0.7	5.8	261	85.6	380	57.38	$522	$148	$593	$1,262	$414	$1,839	$126.14
0.60	x	0.45	x	3.05	0.8	6.4	285	93.4	346	62.66	$570	$177	$655	$1,402	$460	$1,703	$140.12
0.65	x	0.45	x	3.05	0.9	6.7	297	97.4	333	65.30	$594	$192	$686	$1,472	$483	$1,650	$147.11
0.70	x	0.45	x	3.05	1.0	7.0	309	101.3	322	67.94	$618	$207	$717	$1,542	$506	$1,605	$154.10
0.80	x	0.45	x	3.05	1.1	7.6	334	109.5	304	73.43	$668	$236	$780	$1,684	$552	$1,534	$168.28
0.90	x	0.45	x	3.05	1.2	8.2	358	117.4	290	78.71	$716	$266	$842	$1,824	$598	$1,476	$182.27
1.00	x	0.45	x	3.05	1.4	8.8	382	125.2	278	83.99	$764	$295	$904	$1,964	$644	$1,431	$196.25

450mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	248	81.3	402	54.52	$496	$141	$561	$1,198	$393	$1,940	$119.74
0.50	x	0.45	x	3.05	0.7	5.8	261	85.6	380	57.38	$522	$156	$593	$1,271	$417	$1,852	$127.02
0.60	x	0.45	x	3.05	0.8	6.4	285	93.4	346	62.66	$570	$188	$655	$1,413	$463	$1,715	$141.18
0.65	x	0.45	x	3.05	0.9	6.7	297	97.4	333	65.30	$594	$203	$686	$1,484	$486	$1,663	$148.25
0.70	x	0.45	x	3.05	1.0	7.0	309	101.3	322	67.94	$618	$219	$717	$1,554	$510	$1,618	$155.33
0.80	x	0.45	x	3.05	1.1	7.6	334	109.5	304	73.43	$668	$250	$780	$1,698	$557	$1,546	$169.69
0.90	x	0.45	x	3.05	1.2	8.2	358	117.4	290	78.71	$716	$282	$842	$1,840	$603	$1,489	$183.85
1.00	x	0.45	x	3.05	1.4	8.8	382	125.2	278	83.99	$764	$313	$904	$1,981	$650	$1,444	$198.01

450mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 25M V ea 150mm - 10M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	25M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	248	81.3	402	54.52	$496	$149	$561	$1,206	$396	$1,953	$120.56
0.50	x	0.45	x	3.05	0.7	5.8	261	85.6	380	57.38	$522	$166	$593	$1,280	$420	$1,865	$127.93
0.60	x	0.45	x	3.05	0.8	6.4	285	93.4	346	62.66	$570	$199	$655	$1,424	$467	$1,729	$142.27
0.65	x	0.45	x	3.05	0.9	6.7	297	97.4	333	65.30	$594	$215	$686	$1,495	$490	$1,676	$149.44
0.70	x	0.45	x	3.05	1.0	7.0	309	101.3	322	67.94	$618	$232	$717	$1,567	$514	$1,631	$156.61
0.80	x	0.45	x	3.05	1.1	7.6	334	109.5	304	73.43	$668	$265	$780	$1,713	$562	$1,560	$171.15
0.90	x	0.45	x	3.05	1.2	8.2	358	117.4	290	78.71	$716	$298	$842	$1,856	$609	$1,503	$185.49
1.00	x	0.45	x	3.05	1.4	8.8	382	125.2	278	83.99	$764	$331	$904	$2,000	$656	$1,457	$199.84

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 10 - CONCRETE COLUMN

OCTOBER 2013

450mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	497	163.0	805	109.27	$994	$119	$561	$1,674	$549	$2,711	$167.30
0.50	x	0.45	x	3.05	0.7	5.8	521	170.8	759	114.55	$1,042	$132	$593	$1,767	$579	$2,574	$176.54
0.60	x	0.45	x	3.05	0.8	6.4	570	186.9	692	125.32	$1,140	$158	$655	$1,953	$640	$2,372	$195.20
0.65	x	0.45	x	3.05	0.9	6.7	594	194.8	666	130.60	$1,188	$172	$686	$2,046	$671	$2,293	$204.43
0.70	x	0.45	x	3.05	1.0	7.0	618	202.6	643	135.87	$1,236	$185	$717	$2,138	$701	$2,225	$213.67
0.80	x	0.45	x	3.05	1.1	7.6	667	218.7	607	146.65	$1,334	$211	$780	$2,325	$762	$2,117	$232.33
0.90	x	0.45	x	3.05	1.2	8.2	716	234.8	580	157.42	$1,432	$238	$842	$2,512	$823	$2,033	$251.00
1.00	x	0.45	x	3.05	1.4	8.8	764	250.5	557	167.97	$1,528	$264	$904	$2,696	$884	$1,965	$269.46

450mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	497	163.0	805	109.27	$994	$125	$561	$1,680	$551	$2,720	$167.91
0.50	x	0.45	x	3.05	0.7	5.8	521	170.8	759	114.55	$1,042	$139	$593	$1,773	$581	$2,584	$177.21
0.60	x	0.45	x	3.05	0.8	6.4	570	186.9	692	125.32	$1,140	$166	$655	$1,961	$643	$2,382	$196.01
0.65	x	0.45	x	3.05	0.9	6.7	594	194.8	666	130.60	$1,188	$180	$686	$2,054	$674	$2,303	$205.31
0.70	x	0.45	x	3.05	1.0	7.0	618	202.6	643	135.87	$1,236	$194	$717	$2,147	$704	$2,235	$214.61
0.80	x	0.45	x	3.05	1.1	7.6	667	218.7	607	146.65	$1,334	$222	$780	$2,336	$766	$2,127	$233.41
0.90	x	0.45	x	3.05	1.2	8.2	716	234.8	580	157.42	$1,432	$250	$842	$2,524	$827	$2,043	$252.20
1.00	x	0.45	x	3.05	1.4	8.8	764	250.5	557	167.97	$1,528	$277	$904	$2,710	$888	$1,974	$270.80

450mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	497	163.0	805	109.27	$994	$133	$561	$1,688	$554	$2,733	$168.72
0.50	x	0.45	x	3.05	0.7	5.8	521	170.8	759	114.55	$1,042	$148	$593	$1,782	$584	$2,597	$178.11
0.60	x	0.45	x	3.05	0.8	6.4	570	186.9	692	125.32	$1,140	$177	$655	$1,972	$647	$2,395	$197.08
0.65	x	0.45	x	3.05	0.9	6.7	594	194.8	666	130.60	$1,188	$192	$686	$2,066	$677	$2,316	$206.47
0.70	x	0.45	x	3.05	1.0	7.0	618	202.6	643	135.87	$1,236	$207	$717	$2,160	$708	$2,248	$215.86
0.80	x	0.45	x	3.05	1.1	7.6	667	218.7	607	146.65	$1,334	$236	$780	$2,350	$770	$2,140	$234.84
0.90	x	0.45	x	3.05	1.2	8.2	716	234.8	580	157.42	$1,432	$266	$842	$2,540	$833	$2,056	$253.82
1.00	x	0.45	x	3.05	1.4	8.8	764	250.5	557	167.97	$1,528	$295	$904	$2,728	$894	$1,987	$272.60

450mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	497	163.0	805	109.27	$994	$141	$561	$1,696	$556	$2,746	$169.51
0.50	x	0.45	x	3.05	0.7	5.8	521	170.8	759	114.55	$1,042	$156	$593	$1,791	$587	$2,610	$178.99
0.60	x	0.45	x	3.05	0.8	6.4	570	186.9	692	125.32	$1,140	$188	$655	$1,983	$650	$2,408	$198.14
0.65	x	0.45	x	3.05	0.9	6.7	594	194.8	666	130.60	$1,188	$203	$686	$2,078	$681	$2,329	$207.62
0.70	x	0.45	x	3.05	1.0	7.0	618	202.6	643	135.87	$1,236	$219	$717	$2,172	$712	$2,261	$217.09
0.80	x	0.45	x	3.05	1.1	7.6	667	218.7	607	146.65	$1,334	$250	$780	$2,364	$775	$2,153	$236.25
0.90	x	0.45	x	3.05	1.2	8.2	716	234.8	580	157.42	$1,432	$282	$842	$2,556	$838	$2,069	$255.40
1.00	x	0.45	x	3.05	1.4	8.8	764	250.5	557	167.97	$1,528	$313	$904	$2,745	$900	$2,000	$274.36

450mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 35M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	35M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	497	163.0	805	109.27	$994	$149	$561	$1,704	$559	$2,760	$170.33
0.50	x	0.45	x	3.05	0.7	5.8	521	170.8	759	114.55	$1,042	$166	$593	$1,800	$590	$2,623	$179.90
0.60	x	0.45	x	3.05	0.8	6.4	570	186.9	692	125.32	$1,140	$199	$655	$1,994	$654	$2,421	$199.24
0.65	x	0.45	x	3.05	0.9	6.7	594	194.8	666	130.60	$1,188	$215	$686	$2,089	$685	$2,342	$208.81
0.70	x	0.45	x	3.05	1.0	7.0	618	202.6	643	135.87	$1,236	$232	$717	$2,185	$716	$2,274	$218.37
0.80	x	0.45	x	3.05	1.1	7.6	667	218.7	607	146.65	$1,334	$265	$780	$2,379	$780	$2,166	$237.71
0.90	x	0.45	x	3.05	1.2	8.2	716	234.8	580	157.42	$1,432	$298	$842	$2,572	$843	$2,082	$257.05
1.00	x	0.45	x	3.05	1.4	8.8	764	250.5	557	167.97	$1,528	$331	$904	$2,764	$906	$2,014	$276.19

Source: Hanscomb Ltd

Hanscomb

Table 11 - GROUP 11 - CONCRETE COLUMN

OCTOBER 2013

450mm Wide Concrete Column - 25 Mpa

Rebar Weight Based on 45M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	192.30	102.25

Length		Width		Height	Concrete m3	Form m2	45M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 25 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	730	239.3	1,182	160.50	$1,460	$119	$561	$2,140	$702	$3,465	$213.87
0.50	x	0.45	x	3.05	0.7	5.8	766	251.1	1,116	168.41	$1,532	$132	$593	$2,257	$740	$3,288	$225.51
0.60	x	0.45	x	3.05	0.8	6.4	837	274.4	1,016	184.02	$1,674	$158	$655	$2,487	$815	$3,020	$248.57
0.65	x	0.45	x	3.05	0.9	6.7	872	285.9	977	191.72	$1,744	$172	$686	$2,602	$853	$2,916	$260.00
0.70	x	0.45	x	3.05	1.0	7.0	907	297.4	944	199.41	$1,814	$185	$717	$2,716	$891	$2,827	$271.43
0.80	x	0.45	x	3.05	1.1	7.6	978	320.7	891	215.02	$1,956	$211	$780	$2,947	$966	$2,684	$294.49
0.90	x	0.45	x	3.05	1.2	8.2	1,049	343.9	849	230.63	$2,098	$238	$842	$3,178	$1,042	$2,572	$317.55
1.00	x	0.45	x	3.05	1.4	8.8	1,120	367.2	816	246.24	$2,240	$264	$904	$3,408	$1,117	$2,483	$340.61

450mm Wide Concrete Column - 30 Mpa

Rebar Weight Based on 45M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	202.10	102.25

Length		Width		Height	Concrete m3	Form m2	45M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 30 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	730	239.3	1,182	160.50	$1,460	$125	$561	$2,146	$704	$3,475	$214.48
0.50	x	0.45	x	3.05	0.7	5.8	766	251.1	1,116	168.41	$1,532	$139	$593	$2,263	$742	$3,298	$226.18
0.60	x	0.45	x	3.05	0.8	6.4	837	274.4	1,016	184.02	$1,674	$166	$655	$2,495	$818	$3,030	$249.37
0.65	x	0.45	x	3.05	0.9	6.7	872	285.9	977	191.72	$1,744	$180	$686	$2,610	$856	$2,926	$260.87
0.70	x	0.45	x	3.05	1.0	7.0	907	297.4	944	199.41	$1,814	$194	$717	$2,725	$894	$2,837	$272.37
0.80	x	0.45	x	3.05	1.1	7.6	978	320.7	891	215.02	$1,956	$222	$780	$2,958	$970	$2,694	$295.57
0.90	x	0.45	x	3.05	1.2	8.2	1,049	343.9	849	230.63	$2,098	$250	$842	$3,190	$1,046	$2,582	$318.76
1.00	x	0.45	x	3.05	1.4	8.8	1,120	367.2	816	246.24	$2,240	$277	$904	$3,422	$1,122	$2,493	$341.96

450mm Wide Concrete Column - 35 Mpa

Rebar Weight Based on 45M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	215.18	102.25

Length		Width		Height	Concrete m3	Form m2	45M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 35 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	730	239.3	1,182	160.50	$1,460	$133	$561	$2,154	$706	$3,488	$215.29
0.50	x	0.45	x	3.05	0.7	5.8	766	251.1	1,116	168.41	$1,532	$148	$593	$2,272	$745	$3,311	$227.07
0.60	x	0.45	x	3.05	0.8	6.4	837	274.4	1,016	184.02	$1,674	$177	$655	$2,506	$822	$3,043	$250.45
0.65	x	0.45	x	3.05	0.9	6.7	872	285.9	977	191.72	$1,744	$192	$686	$2,622	$860	$2,939	$262.04
0.70	x	0.45	x	3.05	1.0	7.0	907	297.4	944	199.41	$1,814	$207	$717	$2,738	$898	$2,850	$273.63
0.80	x	0.45	x	3.05	1.1	7.6	978	320.7	891	215.02	$1,956	$236	$780	$2,972	$974	$2,707	$297.00
0.90	x	0.45	x	3.05	1.2	8.2	1,049	343.9	849	230.63	$2,098	$266	$842	$3,206	$1,051	$2,595	$320.38
1.00	x	0.45	x	3.05	1.4	8.8	1,120	367.2	816	246.24	$2,240	$295	$904	$3,440	$1,128	$2,506	$343.75

450mm Wide Concrete Column - 40 Mpa

Rebar Weight Based on 45M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	228.00	102.25

Length		Width		Height	Concrete m3	Form m2	45M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 40 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	730	239.3	1,182	160.50	$1,460	$141	$561	$2,162	$709	$3,501	$216.08
0.50	x	0.45	x	3.05	0.7	5.8	766	251.1	1,116	168.41	$1,532	$156	$593	$2,281	$748	$3,324	$227.95
0.60	x	0.45	x	3.05	0.8	6.4	837	274.4	1,016	184.02	$1,674	$188	$655	$2,517	$825	$3,056	$251.50
0.65	x	0.45	x	3.05	0.9	6.7	872	285.9	977	191.72	$1,744	$203	$686	$2,634	$863	$2,952	$263.18
0.70	x	0.45	x	3.05	1.0	7.0	907	297.4	944	199.41	$1,814	$219	$717	$2,750	$902	$2,863	$274.86
0.80	x	0.45	x	3.05	1.1	7.6	978	320.7	891	215.02	$1,956	$250	$780	$2,986	$979	$2,719	$298.41
0.90	x	0.45	x	3.05	1.2	8.2	1,049	343.9	849	230.63	$2,098	$282	$842	$3,222	$1,056	$2,608	$321.96
1.00	x	0.45	x	3.05	1.4	8.8	1,120	367.2	816	246.24	$2,240	$313	$904	$3,457	$1,134	$2,519	$345.51

450mm Wide Concrete Column - 45 Mpa

Rebar Weight Based on 45M V ea 150mm - 15M Stirrup ea 300mm - allow splice

$/Kg	$/m3	$/m2
2.00	241.34	102.25

Length		Width		Height	Concrete m3	Form m2	45M Kg	Kg/m Kg	Kg/m3 Kg	Lbs/FT	Rebar $	Conc 45 Mpa	Form m2	Total	$/m	$/m3	$/FT
0.45	x	0.45	x	3.05	0.6	5.5	730	239.3	1,182	160.50	$1,460	$149	$561	$2,170	$712	$3,514	$216.90
0.50	x	0.45	x	3.05	0.7	5.8	766	251.1	1,116	168.41	$1,532	$166	$593	$2,290	$751	$3,337	$228.87
0.60	x	0.45	x	3.05	0.8	6.4	837	274.4	1,016	184.02	$1,674	$199	$655	$2,528	$829	$3,069	$252.60
0.65	x	0.45	x	3.05	0.9	6.7	872	285.9	977	191.72	$1,744	$215	$686	$2,645	$867	$2,965	$264.37
0.70	x	0.45	x	3.05	1.0	7.0	907	297.4	944	199.41	$1,814	$232	$717	$2,763	$906	$2,876	$276.14
0.80	x	0.45	x	3.05	1.1	7.6	978	320.7	891	215.02	$1,956	$265	$780	$3,001	$984	$2,733	$299.87
0.90	x	0.45	x	3.05	1.2	8.2	1,049	343.9	849	230.63	$2,098	$298	$842	$3,238	$1,062	$2,621	$323.61
1.00	x	0.45	x	3.05	1.4	8.8	1,120	367.2	816	246.24	$2,240	$331	$904	$3,476	$1,140	$2,532	$347.34

Source: Hanscomb Ltd

Appendix

J – TABLE 12 – STRUCTURAL STEEL BEAMS – W- SHAPED

Hanscomb

TABLE 12 - GROUP 1 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W1100x433	1100	433	$1,732	$173	$1,905	$580.71
W1100x390	1100	390	$1,560	$156	$1,716	$523.04
W1100x343	1100	343	$1,372	$137	$1,509	$460.01
W1000x883	1000	883	$3,532	$353	$3,885	$1,184.22
W1000x748	1000	748	$2,992	$299	$3,291	$1,003.17
W1000x642	1000	642	$2,568	$257	$2,825	$861.01
W1000x591	1000	591	$2,364	$236	$2,600	$792.61
W1000x554	1000	554	$2,216	$222	$2,438	$742.99
W1000x539	1000	539	$2,156	$216	$2,372	$722.87
W1000x483	1000	483	$1,932	$193	$2,125	$647.77
W1000x443	1000	443	$1,772	$177	$1,949	$594.12
W1000x412	1000	412	$1,648	$165	$1,813	$552.55
W1000x371	1000	371	$1,484	$148	$1,632	$497.56
W1000x321	1000	321	$1,284	$128	$1,412	$430.50
W1000x296	1000	296	$1,184	$118	$1,302	$396.98
W1000x584	1000	584	$2,336	$234	$2,570	$783.22
W1000x494	1000	494	$1,976	$198	$2,174	$662.52
W1000x486	1000	486	$1,944	$194	$2,138	$651.79
W1000x438	1000	438	$1,752	$175	$1,927	$587.42
W1000x415	1000	415	$1,660	$166	$1,826	$556.57
W1000x393	1000	393	$1,572	$157	$1,729	$527.07
W1000x350	1000	350	$1,400	$140	$1,540	$469.40
W1000x314	1000	314	$1,256	$126	$1,382	$421.12
W1000x272	1000	272	$1,088	$109	$1,197	$364.79
W1000x249	1000	249	$996	$100	$1,096	$333.94
W1000x222	1000	222	$888	$89	$977	$297.73

Hanscomb

TABLE 12 - GROUP 2 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W920x1191	920	1191	$4,764	$476	$5,240	$1,597.29
W920x970	920	970	$3,880	$388	$4,268	$1,300.90
W920x787	920	787	$3,148	$315	$3,463	$1,055.47
W920x725	920	725	$2,900	$290	$3,190	$972.32
W920x656	920	656	$2,624	$262	$2,886	$879.79
W920x588	920	588	$2,352	$235	$2,587	$788.59
W920x537	920	537	$2,148	$215	$2,363	$720.19
W920x491	920	491	$1,964	$196	$2,160	$658.50
W920x449	920	449	$1,796	$180	$1,976	$602.17
W920x420	920	420	$1,680	$168	$1,848	$563.28
W920x390	920	390	$1,560	$156	$1,716	$523.04
W920x368	920	368	$1,472	$147	$1,619	$493.54
W920x344	920	344	$1,376	$138	$1,514	$461.35
W920x381	920	381	$1,524	$152	$1,676	$510.97
W920x345	920	345	$1,380	$138	$1,518	$462.69
W920x313	920	313	$1,252	$125	$1,377	$419.78
W920x289	920	289	$1,156	$116	$1,272	$387.59
W920x271	920	271	$1,084	$108	$1,192	$363.45
W920x253	920	253	$1,012	$101	$1,113	$339.31
W920x238	920	238	$952	$95	$1,047	$319.19
W920x223	920	223	$892	$89	$981	$299.07
W920x201	920	201	$804	$80	$884	$269.57

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

Hanscomb

TABLE 12 - GROUP 3 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W840x576	840	576	$2,304	$230	$2,534	$772.49
W840x527	840	527	$2,108	$211	$2,319	$706.78
W840x473	840	473	$1,892	$189	$2,081	$634.36
W840x433	840	433	$1,732	$173	$1,905	$580.71
W840x392	840	392	$1,568	$157	$1,725	$525.73
W840x359	840	359	$1,436	$144	$1,580	$481.47
W840x329	840	329	$1,316	$132	$1,448	$441.23
W840x299	840	299	$1,196	$120	$1,316	$401.00
W840x251	840	251	$1,004	$100	$1,104	$336.63
W840x226	840	226	$904	$90	$994	$303.10
W840x210	840	210	$840	$84	$924	$281.64
W840x193	840	193	$772	$77	$849	$258.84
W840x176	840	176	$704	$70	$774	$236.04

Hanscomb

TABLE 12 - GROUP 4 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W760x582	760	582	$2,328	$233	$2,561	$780.54
W760x531	760	531	$2,124	$212	$2,336	$712.14
W760x484	760	484	$1,936	$194	$2,130	$649.11
W760x434	760	434	$1,736	$174	$1,910	$582.05
W760x389	760	389	$1,556	$156	$1,712	$521.70
W760x350	760	350	$1,400	$140	$1,540	$469.40
W760x314	760	314	$1,256	$126	$1,382	$421.12
W760x284	760	284	$1,136	$114	$1,250	$380.88
W760x257	760	257	$1,028	$103	$1,131	$344.67
W760x220	760	220	$880	$88	$968	$295.05
W760x196	760	196	$784	$78	$862	$262.86
W760x185	760	185	$740	$74	$814	$248.11
W760x173	760	173	$692	$69	$761	$232.02
W760x161	760	161	$644	$64	$708	$215.92
W760x147	760	147	$588	$59	$647	$197.15
W760x134	760	134	$536	$54	$590	$179.71

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

Hanscomb

TABLE 12 - GROUP 5 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W690x802	690	802	$3,208	$321	$3,529	$1,075.59
W690x548	690	548	$2,192	$219	$2,411	$734.94
W690x500	690	500	$2,000	$200	$2,200	$670.57
W690x457	690	457	$1,828	$183	$2,011	$612.90
W690x419	690	419	$1,676	$168	$1,844	$561.94
W690x384	690	384	$1,536	$154	$1,690	$515.00
W690x350	690	350	$1,400	$140	$1,540	$469.40
W690x323	690	323	$1,292	$129	$1,421	$433.19
W690x289	690	289	$1,156	$116	$1,272	$387.59
W690x265	690	265	$1,060	$106	$1,166	$355.40
W690x240	690	240	$960	$96	$1,056	$321.87
W690x217	690	217	$868	$87	$955	$291.03
W690x192	690	192	$768	$77	$845	$257.50
W690x170	690	170	$680	$68	$748	$227.99
W690x152	690	152	$608	$61	$669	$203.85
W690x140	690	140	$560	$56	$616	$187.76
W690x125	690	125	$500	$50	$550	$167.64

Hanscomb

TABLE 12 - GROUP 6 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W610x551	610	551	$2,204	$220	$2,424	$738.97
W610x498	610	498	$1,992	$199	$2,191	$667.89
W610x455	610	455	$1,820	$182	$2,002	$610.22
W610x415	610	415	$1,660	$166	$1,826	$556.57
W610x372	610	372	$1,488	$149	$1,637	$498.90
W610x341	610	341	$1,364	$136	$1,500	$457.33
W610x307	610	307	$1,228	$123	$1,351	$411.73
W610x285	610	285	$1,140	$114	$1,254	$382.22
W610x262	610	262	$1,048	$105	$1,153	$351.38
W610x241	610	241	$964	$96	$1,060	$323.21
W610x217	610	217	$868	$87	$955	$291.03
W610x195	610	195	$780	$78	$858	$261.52
W610x174	610	174	$696	$70	$766	$233.36
W610x155	610	155	$620	$62	$682	$207.88
W610x153	610	153	$612	$61	$673	$205.19
W610x140	610	140	$560	$56	$616	$187.76
W610x125	610	125	$500	$50	$550	$167.64
W610x113	610	113	$452	$45	$497	$151.55
W610x101	610	101	$404	$40	$444	$135.45
W610x91	610	91	$364	$36	$400	$122.04
W610x84	610	84	$336	$34	$370	$112.66
W610x92	610	92	$368	$37	$405	$123.38
W610x82	610	82	$328	$33	$361	$109.97

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

Hanscomb

TABLE 12 - GROUP 7 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W530x300	530	300	$1,200	$120	$1,320	$402.34
W530x272	530	272	$1,088	$109	$1,197	$364.79
W530x248	530	248	$992	$99	$1,091	$332.60
W530x219	530	219	$876	$88	$964	$293.71
W530x196	530	196	$784	$78	$862	$262.86
W530x182	530	182	$728	$73	$801	$244.09
W530x165	530	165	$660	$66	$726	$221.29
W530x150	530	150	$600	$60	$660	$201.17
W530x138	530	138	$552	$55	$607	$185.08
W530x123	530	123	$492	$49	$541	$164.96
W530x109	530	109	$436	$44	$480	$146.18
W530x101	530	101	$404	$40	$444	$135.45
W530x92	530	92	$368	$37	$405	$123.38
W530x82	530	82	$328	$33	$361	$109.97
W530x72	530	72	$288	$29	$317	$96.56
W530x85	530	85	$340	$34	$374	$114.00
W530x74	530	74	$296	$30	$326	$99.24
W530x66	530	66	$264	$26	$290	$88.51

Hanscomb

TABLE 12 - GROUP 8 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W460x464	460	464	$1,856	$186	$2,042	$622.29
W460x421	460	421	$1,684	$168	$1,852	$564.62
W460x384	460	384	$1,536	$154	$1,690	$515.00
W460x349	460	349	$1,396	$140	$1,536	$468.06
W460x315	460	315	$1,260	$126	$1,386	$422.46
W460x286	460	286	$1,144	$114	$1,258	$383.56
W460x260	460	260	$1,040	$104	$1,144	$348.70
W460x235	460	235	$940	$94	$1,034	$315.17
W460x213	460	213	$852	$85	$937	$285.66
W460x193	460	193	$772	$77	$849	$258.84
W460x177	460	177	$708	$71	$779	$237.38
W460x158	460	158	$632	$63	$695	$211.90
W460x144	460	144	$576	$58	$634	$193.12
W460x128	460	128	$512	$51	$563	$171.67
W460x113	460	113	$452	$45	$497	$151.55
W460x106	460	106	$424	$42	$466	$142.16
W460x97	460	97	$388	$39	$427	$130.09
W460x89	460	89	$356	$36	$392	$119.36
W460x82	460	82	$328	$33	$361	$109.97
W460x74	460	74	$296	$30	$326	$99.24
W460x67	460	67	$268	$27	$295	$89.86
W460x61	460	61	$244	$24	$268	$81.81
W460x68	460	68	$272	$27	$299	$91.20
W460x60	460	60	$240	$24	$264	$80.47
W460x52	460	52	$208	$21	$229	$69.74
W410x149	410	149	$596	$60	$656	$199.83
W410x132	410	132	$528	$53	$581	$177.03
W410x114	410	114	$456	$46	$502	$152.89
W410x100	410	100	$400	$40	$440	$134.11
W410x85	410	85	$340	$34	$374	$114.00
W410x74	410	74	$296	$30	$326	$99.24
W410x67	410	67	$268	$27	$295	$89.86
W410x60	410	60	$240	$24	$264	$80.47
W410x54	410	54	$216	$22	$238	$72.42
W410x46	410	46	$184	$18	$202	$61.69
W410x39	410	39	$156	$16	$172	$52.30

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

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TABLE 12 - GROUP 9 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W360x1086	360	1086	$4,344	$434	$4,778	$1,456.47
W360x990	360	990	$3,960	$396	$4,356	$1,327.72
W360x900	360	900	$3,600	$360	$3,960	$1,207.02
W360x818	360	818	$3,272	$327	$3,599	$1,097.05
W360x744	360	744	$2,976	$298	$3,274	$997.81
W360x677	360	677	$2,708	$271	$2,979	$907.95
W360x634	360	634	$2,536	$254	$2,790	$850.28
W360x592	360	592	$2,368	$237	$2,605	$793.95
W360x551	360	551	$2,204	$220	$2,424	$738.97
W360x509	360	509	$2,036	$204	$2,240	$682.64
W360x463	360	463	$1,852	$185	$2,037	$620.95
W360x421	360	421	$1,684	$168	$1,852	$564.62
W360x382	360	382	$1,528	$153	$1,681	$512.31
W360x347	360	347	$1,388	$139	$1,527	$465.37
W360x314	360	314	$1,256	$126	$1,382	$421.12
W360x287	360	287	$1,148	$115	$1,263	$384.91
W360x262	360	262	$1,048	$105	$1,153	$351.38
W360x237	360	237	$948	$95	$1,043	$317.85
W360x216	360	216	$864	$86	$950	$289.69
W360x196	360	196	$784	$78	$862	$262.86
W360x179	360	179	$716	$72	$788	$240.06
W360x162	360	162	$648	$65	$713	$217.26
W360x147	360	147	$588	$59	$647	$197.15
W360x134	360	134	$536	$54	$590	$179.71
W360x122	360	122	$488	$49	$537	$163.62
W360x110	360	110	$440	$44	$484	$147.52
W360x101	360	101	$404	$40	$444	$135.45
W360x91	360	91	$364	$36	$400	$122.04
W360x79	360	79	$316	$32	$348	$105.95
W360x72	360	72	$288	$29	$317	$96.56
W360x64	360	64	$256	$26	$282	$85.83
W360x57	360	57	$228	$23	$251	$76.44
W360x51	360	51	$204	$20	$224	$68.40
W360x45	360	45	$180	$18	$198	$60.35
W360x39	360	39	$156	$16	$172	$52.30
W360x33	360	33	$132	$13	$145	$44.26

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TABLE 12 - GROUP 10 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W310x283	310	283	$1,132	$113	$1,245	$379.54
W310x253	310	253	$1,012	$101	$1,113	$339.31
W310x226	310	226	$904	$90	$994	$303.10
W310x202	310	202	$808	$81	$889	$270.91
W310x179	310	179	$716	$72	$788	$240.06
W310x158	310	158	$632	$63	$695	$211.90
W310x143	310	143	$572	$57	$629	$191.78
W310x129	310	129	$516	$52	$568	$173.01
W310x118	310	118	$472	$47	$519	$158.25
W310x107	310	107	$428	$43	$471	$143.50
W310x97	310	97	$388	$39	$427	$130.09
W310x86	310	86	$344	$34	$378	$115.34
W310x79	310	79	$316	$32	$348	$105.95
W310x74	310	74	$296	$30	$326	$99.24
W310x67	310	67	$268	$27	$295	$89.86
W310x60	310	60	$240	$24	$264	$80.47
W310x52	310	52	$208	$21	$229	$69.74
W310x45	310	45	$180	$18	$198	$60.35
W310x39	310	39	$156	$16	$172	$52.30
W310x31	310	31	$124	$12	$136	$41.58
W310x33	310	33	$132	$13	$145	$44.26
W310x28	310	28	$112	$11	$123	$37.55
W310x24	310	24	$96	$10	$106	$32.19
W310x21	310	21	$84	$8	$92	$28.16

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

Hanscomb

TABLE 12 - GROUP 11 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W250x167	250	167	$668	$67	$735	$223.97
W250x149	250	149	$596	$60	$656	$199.83
W250x131	250	131	$524	$52	$576	$175.69
W250x115	250	115	$460	$46	$506	$154.23
W250x101	250	101	$404	$40	$444	$135.45
W250x89	250	89	$356	$36	$392	$119.36
W250x80	250	80	$320	$32	$352	$107.29
W250x73	250	73	$292	$29	$321	$97.90
W250x67	250	67	$268	$27	$295	$89.86
W250x58	250	58	$232	$23	$255	$77.79
W250x49	250	49	$196	$20	$216	$65.72
W250x45	250	45	$180	$18	$198	$60.35
W250x39	250	39	$156	$16	$172	$52.30
W250x33	250	33	$132	$13	$145	$44.26
W250x24	250	24	$96	$10	$106	$32.19
W250x28	250	28	$112	$11	$123	$37.55
W250x25	250	25	$100	$10	$110	$33.53
W250x22	250	22	$88	$9	$97	$29.50
W250x18	250	18	$72	$7	$79	$24.14

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TABLE 12 - GROUP 12 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W200x100	200	100	$400	$40	$440	$134.11
W200x86	200	86	$344	$34	$378	$115.34
W200x71	200	71	$284	$28	$312	$95.22
W200x59	200	59	$236	$24	$260	$79.13
W200x52	200	52	$208	$21	$229	$69.74
W200x46	200	46	$184	$18	$202	$61.69
W200x42	200	42	$168	$17	$185	$56.33
W200x36	200	36	$144	$14	$158	$48.28
W200x31	200	31	$124	$12	$136	$41.58
W200x27	200	27	$108	$11	$119	$36.21
W200x21	200	21	$84	$8	$92	$28.16
W200x22	200	22	$88	$9	$97	$29.50
W200x19	200	19	$76	$8	$84	$25.48
W200x15	200	15	$60	$6	$66	$20.12

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TABLE 12 - GROUP 13 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W150x37	150	37	$148	$15	$163	$49.62
W150x30	150	30	$120	$12	$132	$40.23
W150x22	150	22	$88	$9	$97	$29.50
W150x24	150	24	$96	$10	$106	$32.19
W150x18	150	18	$72	$7	$79	$24.14
W150x14	150	14	$56	$6	$62	$18.78
W150x13	150	13	$52	$5	$57	$17.43
W130x28	130	28	$112	$11	$123	$37.55
W130x24	130	24	$96	$10	$106	$32.19
W100x19	100	19	$76	$8	$84	$25.48

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

Appendix

K – TABLE 13 – HOLLOW STRUCTURAL STEEL (HSS)

Hanscomb

TABLE 13 - GROUP 1 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W1100x433	1100	433	$1,732	$173	$1,905	$580.71
W1100x390	1100	390	$1,560	$156	$1,716	$523.04
W1100x343	1100	343	$1,372	$137	$1,509	$460.01
W1000x883	1000	883	$3,532	$353	$3,885	$1,184.22
W1000x748	1000	748	$2,992	$299	$3,291	$1,003.17
W1000x642	1000	642	$2,568	$257	$2,825	$861.01
W1000x591	1000	591	$2,364	$236	$2,600	$792.61
W1000x554	1000	554	$2,216	$222	$2,438	$742.99
W1000x539	1000	539	$2,156	$216	$2,372	$722.87
W1000x483	1000	483	$1,932	$193	$2,125	$647.77
W1000x443	1000	443	$1,772	$177	$1,949	$594.12
W1000x412	1000	412	$1,648	$165	$1,813	$552.55
W1000x371	1000	371	$1,484	$148	$1,632	$497.56
W1000x321	1000	321	$1,284	$128	$1,412	$430.50
W1000x296	1000	296	$1,184	$118	$1,302	$396.98
W1000x584	1000	584	$2,336	$234	$2,570	$783.22
W1000x494	1000	494	$1,976	$198	$2,174	$662.52
W1000x486	1000	486	$1,944	$194	$2,138	$651.79
W1000x438	1000	438	$1,752	$175	$1,927	$587.42
W1000x415	1000	415	$1,660	$166	$1,826	$556.57
W1000x393	1000	393	$1,572	$157	$1,729	$527.07
W1000x350	1000	350	$1,400	$140	$1,540	$469.40
W1000x314	1000	314	$1,256	$126	$1,382	$421.12
W1000x272	1000	272	$1,088	$109	$1,197	$364.79
W1000x249	1000	249	$996	$100	$1,096	$333.94
W1000x222	1000	222	$888	$89	$977	$297.73

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TABLE 13 - GROUP 2 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W920x1191	920	1191	$4,764	$476	$5,240	$1,597.29
W920x970	920	970	$3,880	$388	$4,268	$1,300.90
W920x787	920	787	$3,148	$315	$3,463	$1,055.47
W920x725	920	725	$2,900	$290	$3,190	$972.32
W920x656	920	656	$2,624	$262	$2,886	$879.79
W920x588	920	588	$2,352	$235	$2,587	$788.59
W920x537	920	537	$2,148	$215	$2,363	$720.19
W920x491	920	491	$1,964	$196	$2,160	$658.50
W920x449	920	449	$1,796	$180	$1,976	$602.17
W920x420	920	420	$1,680	$168	$1,848	$563.28
W920x390	920	390	$1,560	$156	$1,716	$523.04
W920x368	920	368	$1,472	$147	$1,619	$493.54
W920x344	920	344	$1,376	$138	$1,514	$461.35
W920x381	920	381	$1,524	$152	$1,676	$510.97
W920x345	920	345	$1,380	$138	$1,518	$462.69
W920x313	920	313	$1,252	$125	$1,377	$419.78
W920x289	920	289	$1,156	$116	$1,272	$387.59
W920x271	920	271	$1,084	$108	$1,192	$363.45
W920x253	920	253	$1,012	$101	$1,113	$339.31
W920x238	920	238	$952	$95	$1,047	$319.19
W920x223	920	223	$892	$89	$981	$299.07
W920x201	920	201	$804	$80	$884	$269.57

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

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TABLE 13 - GROUP 3 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W840x576	840	576	$2,304	$230	$2,534	$772.49
W840x527	840	527	$2,108	$211	$2,319	$706.78
W840x473	840	473	$1,892	$189	$2,081	$634.36
W840x433	840	433	$1,732	$173	$1,905	$580.71
W840x392	840	392	$1,568	$157	$1,725	$525.73
W840x359	840	359	$1,436	$144	$1,580	$481.47
W840x329	840	329	$1,316	$132	$1,448	$441.23
W840x299	840	299	$1,196	$120	$1,316	$401.00
W840x251	840	251	$1,004	$100	$1,104	$336.63
W840x226	840	226	$904	$90	$994	$303.10
W840x210	840	210	$840	$84	$924	$281.64
W840x193	840	193	$772	$77	$849	$258.84
W840x176	840	176	$704	$70	$774	$236.04

Hanscomb

TABLE 13 - GROUP 4 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W760x582	760	582	$2,328	$233	$2,561	$780.54
W760x531	760	531	$2,124	$212	$2,336	$712.14
W760x484	760	484	$1,936	$194	$2,130	$649.11
W760x434	760	434	$1,736	$174	$1,910	$582.05
W760x389	760	389	$1,556	$156	$1,712	$521.70
W760x350	760	350	$1,400	$140	$1,540	$469.40
W760x314	760	314	$1,256	$126	$1,382	$421.12
W760x284	760	284	$1,136	$114	$1,250	$380.88
W760x257	760	257	$1,028	$103	$1,131	$344.67
W760x220	760	220	$880	$88	$968	$295.05
W760x196	760	196	$784	$78	$862	$262.86
W760x185	760	185	$740	$74	$814	$248.11
W760x173	760	173	$692	$69	$761	$232.02
W760x161	760	161	$644	$64	$708	$215.92
W760x147	760	147	$588	$59	$647	$197.15
W760x134	760	134	$536	$54	$590	$179.71

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

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TABLE 13 - GROUP 5 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W690x802	690	802	$3,208	$321	$3,529	$1,075.59
W690x548	690	548	$2,192	$219	$2,411	$734.94
W690x500	690	500	$2,000	$200	$2,200	$670.57
W690x457	690	457	$1,828	$183	$2,011	$612.90
W690x419	690	419	$1,676	$168	$1,844	$561.94
W690x384	690	384	$1,536	$154	$1,690	$515.00
W690x350	690	350	$1,400	$140	$1,540	$469.40
W690x323	690	323	$1,292	$129	$1,421	$433.19
W690x289	690	289	$1,156	$116	$1,272	$387.59
W690x265	690	265	$1,060	$106	$1,166	$355.40
W690x240	690	240	$960	$96	$1,056	$321.87
W690x217	690	217	$868	$87	$955	$291.03
W690x192	690	192	$768	$77	$845	$257.50
W690x170	690	170	$680	$68	$748	$227.99
W690x152	690	152	$608	$61	$669	$203.85
W690x140	690	140	$560	$56	$616	$187.76
W690x125	690	125	$500	$50	$550	$167.64

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TABLE 13 - GROUP 6 - STRUCTURAL STEEL COLUMNS

OCTOBER 2013

Wide Flange Shapes

Description	Beam Depth mm	Mass kg/m	$/Kg $4.00 $ / m	Misc Metals / Connections 10% % / m	Total $/m	Cost / Ft
W610x551	610	551	$2,204	$220	$2,424	$738.97
W610x498	610	498	$1,992	$199	$2,191	$667.89
W610x455	610	455	$1,820	$182	$2,002	$610.22
W610x415	610	415	$1,660	$166	$1,826	$556.57
W610x372	610	372	$1,488	$149	$1,637	$498.90
W610x341	610	341	$1,364	$136	$1,500	$457.33
W610x307	610	307	$1,228	$123	$1,351	$411.73
W610x285	610	285	$1,140	$114	$1,254	$382.22
W610x262	610	262	$1,048	$105	$1,153	$351.38
W610x241	610	241	$964	$96	$1,060	$323.21
W610x217	610	217	$868	$87	$955	$291.03
W610x195	610	195	$780	$78	$858	$261.52
W610x174	610	174	$696	$70	$766	$233.36
W610x155	610	155	$620	$62	$682	$207.88
W610x153	610	153	$612	$61	$673	$205.19
W610x140	610	140	$560	$56	$616	$187.76
W610x125	610	125	$500	$50	$550	$167.64
W610x113	610	113	$452	$45	$497	$151.55
W610x101	610	101	$404	$40	$444	$135.45
W610x91	610	91	$364	$36	$400	$122.04
W610x84	610	84	$336	$34	$370	$112.66
W610x92	610	92	$368	$37	$405	$123.38
W610x82	610	82	$328	$33	$361	$109.97

Source: Canadian Institute of Steel Construction
Hanscomb Ltd

Appendix
L – TABLE 14 – WOOD DECKING

Hanscomb

TABLE 14 - WOOD DECK

OCTOBER 2013

25mm dp x 150mm wide (1" x 6") Wood Decking

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $1.25, $1.50, $2.00, & $2.50 / SF

								$/m2	%	%	$/hour				
								12.92	10%	5%	75.00				
Length		Width		Height	Deck m2	Crew	Total Labour Hours	Decking $	(material) Connections $	(material) Delivery $	Labour $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.10	73.1	7.0	1.9	$945	$94	$47	$987	$2,074	$28	$284	$2.63
12.19	x	6.00	x	0.10	73.1	7.0	2.2	$945	$94	$47	$1,176	$2,263	$31	$309	$2.87
12.19	x	6.00	x	0.10	73.1	7.0	3.0	$945	$94	$47	$1,575	$2,662	$36	$364	$3.38
12.19	x	6.00	x	0.10	73.1	7.0	3.8	$945	$94	$47	$1,969	$3,055	$42	$418	$3.88

50mm dp x 150mm wide (2" x 6") Wood Decking

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $1.25, $1.50, $2.00, & $2.50 / SF

								$/m2	%	%	$/hour				
								25.83	10%	5%	75.00				
Length		Width		Height	Deck m2	Crew	Total Labour Hours	Decking $	(material) Connections $	(material) Delivery $	Labour $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.17	73.1	7.0	1.9	$1,889	$189	$94	$987	$3,160	$43	$254	$4.01
12.19	x	6.00	x	0.17	73.1	7.0	2.2	$1,889	$189	$94	$1,176	$3,349	$46	$269	$4.25
12.19	x	6.00	x	0.17	73.1	7.0	3.0	$1,889	$189	$94	$1,575	$3,748	$51	$301	$4.76
12.19	x	6.00	x	0.17	73.1	7.0	3.8	$1,889	$189	$94	$1,969	$4,141	$57	$333	$5.26

75mm dp x 150mm wide (3" x 6") Wood Decking

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $1.25, $1.50, $2.00, & $2.50 / SF

								$/m2	%	%	$/hour				
								38.75	10%	5%	75.00				
Length		Width		Height	Deck m2	Crew	Total Labour Hours	Decking $	(material) Connections $	(material) Delivery $	Labour $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.24	73.1	7.0	1.9	$2,834	$283	$142	$987	$4,246	$58	$242	$5.39
12.19	x	6.00	x	0.24	73.1	7.0	2.2	$2,834	$283	$142	$1,176	$4,435	$61	$253	$5.63
12.19	x	6.00	x	0.24	73.1	7.0	3.0	$2,834	$283	$142	$1,575	$4,834	$66	$275	$6.14
12.19	x	6.00	x	0.24	73.1	7.0	3.8	$2,834	$283	$142	$1,969	$5,228	$71	$298	$6.64

100mm dp x 150mm wide (4" x 6") Wood Decking

Horizontal Install - 20' x 40' Bay
Labour & Equip. Rate Ranging - $1.25, $1.50, $2.00, & $2.50 / SF

								$/m2	%	%	$/hour				
								51.67	10%	5%	75.00				
Length		Width		Height	Deck m2	Crew	Total Labour Hours	Decking $	(material) Connections $	(material) Delivery $	Labour $	Total	$/m2	$/m3	$/SF
12.19	x	6.00	x	0.31	73.1	6.0	1.9	$3,779	$378	$189	$846	$5,192	$71	$229	$6.59
12.19	x	6.00	x	0.31	73.1	6.0	2.2	$3,779	$378	$189	$1,008	$5,354	$73	$236	$6.80
12.19	x	6.00	x	0.31	73.1	6.0	3.0	$3,779	$378	$189	$1,350	$5,696	$78	$251	$7.24
12.19	x	6.00	x	0.31	73.1	6.0	3.8	$3,779	$378	$189	$1,688	$6,034	$82	$266	$7.66

Source: Timmerman Timberworks
Hanscomb Ltd.

Appendix
M – TABLE 15 – METAL DECKING

Hanscomb

TABLE 15 - GROUP 1 - ROOF AND FLOOR METAL DECK

OCTOBER 2013

Roof Deck Depth	Gauge	$/m2	Connections 10% % / m2	Accessories 5% % / m	Labour / Equip $ / m2	Total $/m2	Cost / SF
38mm	22	$14.53	$1.45	$0.73	$15.60	$32.31	$3.00
38mm	20	$16.68	$1.67	$0.83	$15.75	$34.94	$3.25
38mm	18	$21.53	$2.15	$1.08	$15.60	$40.36	$3.75
38mm	16	$26.37	$2.64	$1.32	$16.00	$46.33	$4.30

For 38mm Acoustic Deck & Insulation add $6.99 /m2 ($0.65 /SF) supply + $2.79 /m2 ($0.26 /SF) for insulation install = $9.79 /m2 ($0.91 /SF)

Roof Deck Depth	Gauge	$/m2	Connections 10% % / m2	Accessories 5% % / m	Labour / Equip $ / m2	Total $/m2	Cost / SF
76mm	22	$21.53	$2.15	$1.08	$27.30	$52.06	$4.84
76mm	20	$24.22	$2.42	$1.21	$27.56	$55.41	$5.15
76mm	18	$31.22	$3.12	$1.56	$27.30	$63.20	$5.87
76mm	16	$38.21	$3.82	$1.91	$28.00	$71.94	$6.68

For 76mm Acoustic Deck & Insulation add $9.69 /m2 ($0.90 /SF) supply + $3.23 /m2 ($0.30 /SF) for insulation install = $12.92 /m2 ($1.20 /SF)

Composite Floor Deck Depth	Gauge	$/m2	Connections 10% % / m2	Accessories 5% % / m	Labour / Equip $ / m2	Total $/m2	Cost / SF
51mm	22	$14.53	$1.45	$0.73	$17.16	$33.87	$3.15
51mm	20	$16.68	$1.67	$0.83	$17.16	$36.35	$3.38
51mm	18	$21.53	$2.15	$1.08	$17.16	$41.92	$3.89

Composite Floor Deck Depth	Gauge	$/m2	Connections 10% % / m2	Accessories 5% % / m	Labour / Equip $ / m2	Total $/m2	Cost / SF
76mm	22	$17.22	$1.72	$0.86	$27.30	$47.11	$4.38
76mm	20	$19.91	$1.99	$1.00	$27.56	$50.46	$4.69
76mm	18	$25.30	$2.53	$1.26	$27.30	$56.39	$5.24

Source: Canam Steel Works
Hanscomb Ltd

Appendix

N – TABLE 16 – DIMENSIONED WOOD FLOOR FRAMING

Hanscomb

TABLE 16 GROUP 1 - DIMENSIONED WOOD - 2" X 6" SPF - FLOOR FRAMING

(SPF #2 or Better - c/w Various Floor Decking)

OCT 2013

2" x 6" (35 x 138mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									11.55	6.13	0.90	6.16	0.44	11.37	10.70	703.42	47.26	342.46	4.39
4.88	x	3.05	x	0.14	14.9	150	4.0	5.0	$246.84	$91.24	$13.42	$111.33	$8.32	$221.65	$208.25	$901.05	$60.54	$438.68	$5.62
4.88	x	3.05	x	0.14	14.9	200	4.0	4.2	$198.97	$91.24	$13.42	$98.26	$6.95	$181.98	$171.19	$762.01	$51.20	$370.99	$4.76
4.88	x	3.05	x	0.14	14.9	250	4.0	3.8	$170.24	$91.24	$13.42	$91.13	$6.34	$164.36	$154.73	$691.46	$46.46	$336.64	$4.32
4.88	x	3.05	x	0.14	14.9	300	4.0	3.6	$151.09	$91.24	$13.42	$86.37	$6.00	$154.63	$145.62	$648.37	$43.56	$315.66	$4.05
4.88	x	3.05	x	0.14	14.9	350	4.0	3.5	$137.41	$91.24	$13.42	$82.97	$5.80	$148.59	$139.99	$619.42	$41.62	$301.57	$3.87
4.88	x	3.05	x	0.14	14.9	400	4.0	3.4	$127.15	$91.24	$13.42	$80.43	$5.65	$144.33	$135.99	$598.21	$40.19	$291.24	$3.73

2" x 6" (35 x 138mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									11.55	7.48	1.10	6.15	0.45	11.37	11.48	738.04	49.59	359.32	4.61
4.88	x	3.05	x	0.14	14.9	150	4.0	5.2	$246.84	$111.33	$16.37	$110.17	$8.61	$221.65	$223.29	$938.26	$63.04	$456.80	$5.86
4.88	x	3.05	x	0.14	14.9	200	4.0	4.3	$198.97	$111.33	$16.37	$98.27	$7.19	$181.98	$183.58	$797.69	$53.59	$388.36	$4.98
4.88	x	3.05	x	0.14	14.9	250	4.0	4.0	$170.24	$111.33	$16.37	$91.14	$6.56	$164.36	$165.94	$725.94	$48.77	$353.43	$4.53
4.88	x	3.05	x	0.14	14.9	300	4.0	3.7	$151.09	$111.33	$16.37	$86.38	$6.21	$154.63	$156.19	$682.20	$45.83	$332.13	$4.26
4.88	x	3.05	x	0.14	14.9	350	4.0	3.6	$137.41	$111.33	$16.37	$82.98	$6.00	$148.59	$150.15	$652.83	$43.86	$317.83	$4.07
4.88	x	3.05	x	0.14	14.9	400	4.0	3.5	$127.15	$111.33	$16.37	$80.43	$5.84	$144.33	$145.87	$631.32	$42.42	$307.36	$3.94

2" x 6" (35 x 138mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									11.55	8.59	1.26	6.15	0.47	11.37	12.27	768.94	51.66	374.36	4.80
4.88	x	3.05	x	0.14	14.9	150	4.0	5.4	$246.84	$127.85	$18.80	$110.17	$8.88	$221.65	$239.07	$973.26	$65.39	$473.84	$6.07
4.88	x	3.05	x	0.14	14.9	200	4.0	4.5	$198.97	$127.85	$18.80	$98.27	$7.41	$181.98	$196.31	$829.59	$55.74	$403.89	$5.18
4.88	x	3.05	x	0.14	14.9	250	4.0	4.1	$170.24	$127.85	$18.80	$91.14	$6.76	$164.36	$177.31	$756.46	$50.82	$368.29	$4.72
4.88	x	3.05	x	0.14	14.9	300	4.0	3.9	$151.09	$127.85	$18.80	$86.38	$6.40	$154.63	$166.81	$711.96	$47.83	$346.62	$4.44
4.88	x	3.05	x	0.14	14.9	350	4.0	3.7	$137.41	$127.85	$18.80	$82.98	$6.17	$148.59	$160.31	$682.11	$45.83	$332.09	$4.26
4.88	x	3.05	x	0.14	14.9	400	4.0	3.6	$127.15	$127.85	$18.80	$80.43	$6.01	$144.33	$155.69	$660.26	$44.36	$321.45	$4.12

2" x 6" (35 x 138mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									11.55	11.61	1.71	6.15	0.44	11.37	10.70	796.78	53.53	387.92	4.97
4.88	x	3.05	x	0.14	14.9	150	4.0	5.0	$246.84	$172.80	$25.41	$110.17	$8.32	$221.65	$208.25	$993.44	$66.75	$483.66	$6.20
4.88	x	3.05	x	0.14	14.9	200	4.0	4.2	$198.97	$172.80	$25.41	$98.27	$6.95	$181.98	$171.19	$855.57	$57.48	$416.54	$5.34
4.88	x	3.05	x	0.14	14.9	250	4.0	3.8	$170.24	$172.80	$25.41	$91.14	$6.34	$164.36	$154.73	$785.02	$52.74	$382.19	$4.90
4.88	x	3.05	x	0.14	14.9	300	4.0	3.6	$151.09	$172.80	$25.41	$86.38	$6.00	$154.63	$145.62	$741.93	$49.85	$361.21	$4.63
4.88	x	3.05	x	0.14	14.9	350	4.0	3.5	$137.41	$172.80	$25.41	$82.98	$5.80	$148.59	$139.99	$712.98	$47.90	$347.12	$4.45
4.88	x	3.05	x	0.14	14.9	400	4.0	3.4	$127.15	$172.80	$25.41	$80.43	$5.65	$144.33	$135.99	$691.76	$46.48	$336.79	$4.32

2" x 6" (35 x 138mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									11.55	13.44	1.98	6.15	0.45	11.37	11.48	839.80	56.42	408.86	5.24
4.88	x	3.05	x	0.14	14.9	150	4.0	5.2	$246.84	$200.04	$29.42	$110.17	$8.61	$221.65	$223.29	$1,040.02	$69.88	$506.34	$6.49
4.88	x	3.05	x	0.14	14.9	200	4.0	4.3	$198.97	$200.04	$29.42	$98.26	$7.19	$181.98	$183.58	$899.44	$60.43	$437.90	$5.61
4.88	x	3.05	x	0.14	14.9	250	4.0	4.0	$170.24	$200.04	$29.42	$91.13	$6.56	$164.36	$165.94	$827.69	$55.61	$402.97	$5.17
4.88	x	3.05	x	0.14	14.9	300	4.0	3.7	$151.09	$200.04	$29.42	$86.37	$6.21	$154.63	$156.19	$783.95	$52.67	$381.67	$4.89
4.88	x	3.05	x	0.14	14.9	350	4.0	3.6	$137.41	$200.04	$29.42	$82.98	$6.00	$148.59	$150.15	$754.59	$50.70	$367.38	$4.71
4.88	x	3.05	x	0.14	14.9	400	4.0	3.5	$127.15	$200.04	$29.42	$80.43	$5.84	$144.33	$145.87	$733.08	$49.25	$356.90	$4.58

Source: Simpson Strong Tie
Kent Building Supplies
Hanscomb Ltd

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TABLE 16 GROUP 2 - DIMENSIONED WOOD - 2" X 8" SPF - FLOOR FRAMING

(SPF #2 or Better - c/w Various Floor Decking)

OCT 2013

2" x 8" (35 x 191mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									16.42	6.13	1.25	6.48	0.45	12.07	10.70	796.28	53.50	280.10	4.97
					Floor	Joist		Total	(material)	(material)	(Same as Deck)	(material)		Total Labour					
					Area	Spacing		Man	SPF	Decking	Rim Board	Connections	Equipment	SPF	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.19	14.9	150	4.0	5.2	$357.76	$91.24	$18.57	$115.00	$8.57	$235.59	$208.26	$1,034.99	$69.54	$364.07	$6.46
4.88	x	3.05	x	0.19	14.9	200	4.0	4.3	$285.32	$91.24	$18.57	$103.11	$7.15	$193.24	$171.19	$869.82	$58.44	$305.97	$5.43
4.88	x	3.05	x	0.19	14.9	250	4.0	3.9	$241.86	$91.24	$18.57	$95.97	$6.52	$174.42	$154.72	$783.30	$52.63	$275.53	$4.89
4.88	x	3.05	x	0.19	14.9	300	4.0	3.7	$212.89	$91.24	$18.57	$91.20	$6.17	$164.02	$145.62	$729.71	$49.03	$256.68	$4.55
4.88	x	3.05	x	0.19	14.9	350	4.0	3.6	$192.19	$91.24	$18.57	$87.81	$5.95	$157.58	$139.98	$693.32	$46.58	$243.88	$4.33
4.88	x	3.05	x	0.19	14.9	400	4.0	3.5	$176.67	$91.24	$18.57	$85.26	$5.80	$153.01	$136.00	$666.55	$44.78	$234.47	$4.16

2" x 8" (35 x 191mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									16.42	7.48	1.52	6.48	0.46	12.07	11.48	832.23	55.91	292.74	5.19
					Floor	Joist		Total	(material)	(material)	(Same as Deck)	(material)		Total Labour					
					Area	Spacing		Man	SPF	Decking	Rim Board	Connections	Equipment	SPF	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.19	14.9	150	4.0	5.3	$357.76	$111.33	$22.66	$115.00	$8.85	$235.59	$223.30	$1,074.49	$72.19	$377.96	$6.71
4.88	x	3.05	x	0.19	14.9	200	4.0	4.5	$285.32	$111.33	$22.66	$103.11	$7.39	$193.24	$183.58	$906.63	$60.91	$318.92	$5.66
4.88	x	3.05	x	0.19	14.9	250	4.0	4.1	$241.86	$111.33	$22.66	$95.97	$6.74	$174.42	$165.93	$818.91	$55.02	$288.06	$5.11
4.88	x	3.05	x	0.19	14.9	300	4.0	3.8	$212.89	$111.33	$22.66	$91.21	$6.38	$164.02	$156.18	$764.67	$51.38	$268.98	$4.77
4.88	x	3.05	x	0.19	14.9	350	4.0	3.7	$192.19	$111.33	$22.66	$87.81	$6.15	$157.58	$150.14	$727.86	$48.90	$256.03	$4.54
4.88	x	3.05	x	0.19	14.9	400	4.0	3.6	$176.67	$111.33	$22.66	$85.26	$6.00	$153.01	$145.87	$700.80	$47.08	$246.51	$4.37

2" x 8" (35 x 191mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									16.42	8.59	1.75	6.48	0.48	12.07	12.27	864.06	58.05	303.94	5.39
					Floor	Joist		Total	(material)	(material)	(Same as Deck)	(material)		Total Labour					
					Area	Spacing		Man	SPF	Decking	Rim Board	Connections	Equipment	SPF	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.19	14.9	150	4.0	5.5	$357.76	$127.85	$26.02	$115.00	$9.12	$235.59	$239.08	$1,110.42	$74.60	$390.60	$6.93
4.88	x	3.05	x	0.19	14.9	200	4.0	4.6	$285.32	$127.85	$26.02	$103.11	$7.61	$193.24	$196.30	$939.45	$63.12	$330.46	$5.86
4.88	x	3.05	x	0.19	14.9	250	4.0	4.2	$241.86	$127.85	$26.02	$95.97	$6.93	$174.42	$177.30	$850.35	$57.13	$299.12	$5.31
4.88	x	3.05	x	0.19	14.9	300	4.0	4.0	$212.89	$127.85	$26.02	$91.21	$6.56	$164.02	$166.81	$795.36	$53.44	$279.78	$4.96
4.88	x	3.05	x	0.19	14.9	350	4.0	3.8	$192.19	$127.85	$26.02	$87.82	$6.33	$157.58	$160.29	$758.08	$50.93	$266.66	$4.73
4.88	x	3.05	x	0.19	14.9	400	4.0	3.7	$176.67	$127.85	$26.02	$85.27	$6.17	$153.01	$155.70	$730.69	$49.09	$257.03	$4.56

2" x 8" (35 x 191mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									16.42	11.61	2.36	6.48	0.45	12.07	10.70	894.44	60.09	314.63	5.58
					Floor	Joist		Total	(material)	(material)	(Same as Deck)	(material)		Total Labour					
					Area	Spacing		Man	SPF	Decking	Rim Board	Connections	Equipment	SPF	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.19	14.9	150	4.0	5.2	$357.76	$172.80	$35.17	$115.00	$8.57	$235.59	$208.26	$1,133.15	$76.13	$398.60	$7.07
4.88	x	3.05	x	0.19	14.9	200	4.0	4.3	$285.32	$172.80	$35.17	$103.11	$7.15	$193.24	$171.19	$967.98	$65.03	$340.50	$6.04
4.88	x	3.05	x	0.19	14.9	250	4.0	3.9	$241.86	$172.80	$35.17	$95.97	$6.52	$174.42	$154.72	$881.46	$59.22	$310.06	$5.50
4.88	x	3.05	x	0.19	14.9	300	4.0	3.7	$212.89	$172.80	$35.17	$91.21	$6.17	$164.02	$145.62	$827.88	$55.62	$291.22	$5.17
4.88	x	3.05	x	0.19	14.9	350	4.0	3.6	$192.19	$172.80	$35.17	$87.81	$5.95	$157.58	$139.98	$791.48	$53.18	$278.41	$4.94
4.88	x	3.05	x	0.19	14.9	400	4.0	3.5	$176.67	$172.80	$35.17	$85.26	$5.80	$153.01	$136.00	$764.71	$51.38	$268.99	$4.77

2" x 8" (35 x 191mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									16.42	13.44	2.74	6.48	0.46	12.07	11.48	938.99	63.09	330.30	5.86
					Floor	Joist		Total	(material)	(material)	(Same as Deck)	(material)		Total Labour					
					Area	Spacing		Man	SPF	Decking	Rim Board	Connections	Equipment	SPF	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.19	14.9	150	4.0	5.3	$357.76	$200.04	$40.71	$115.00	$8.85	$235.59	$223.30	$1,181.25	$79.36	$415.52	$7.37
4.88	x	3.05	x	0.19	14.9	200	4.0	4.5	$285.32	$200.04	$40.71	$103.11	$7.39	$193.24	$183.58	$1,013.39	$68.09	$356.47	$6.33
4.88	x	3.05	x	0.19	14.9	250	4.0	4.1	$241.86	$200.04	$40.71	$95.97	$6.74	$174.42	$165.93	$925.67	$62.19	$325.61	$5.78
4.88	x	3.05	x	0.19	14.9	300	4.0	3.8	$212.89	$200.04	$40.71	$91.21	$6.38	$164.02	$156.18	$871.43	$58.55	$306.53	$5.44
4.88	x	3.05	x	0.19	14.9	350	4.0	3.7	$192.19	$200.04	$40.71	$87.82	$6.15	$157.58	$150.14	$834.63	$56.08	$293.59	$5.21
4.88	x	3.05	x	0.19	14.9	400	4.0	3.6	$176.67	$200.04	$40.71	$85.27	$6.00	$153.01	$145.87	$807.57	$54.26	$284.07	$5.04

Source: Simpson Strong Tie
Kent Building Supplies
Hanscomb Ltd

Hanscomb

TABLE 16 GROUP 3 - DIMENSIONED WOOD - 2" X 10" SPF - FLOOR FRAMING

(SPF #2 or Better - c/w Various Floor Decking)

OCT 2013

2" x 10" (35 x 241mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 22.52	$/m2 6.13	$/m2 1.60	$/m2 6.86	$/m2 0.48	$/m2 13.84	$/m2 10.70	Total 924.83	$/m2 62.14	$/m3 257.82	$/SF 5.77
4.88	x	3.05	x	0.24	14.9	150	4.0	5.5	$496.68	$91.24	$23.83	$120.65	$9.20	$271.01	$208.25	$1,220.86	$82.02	$340.35	$7.62
4.88	x	3.05	x	0.24	14.9	200	4.0	4.6	$393.49	$91.24	$23.83	$108.75	$7.66	$221.80	$171.19	$1,017.96	$68.39	$283.79	$6.35
4.88	x	3.05	x	0.24	14.9	250	4.0	4.2	$331.57	$91.24	$23.83	$101.62	$6.97	$199.93	$154.72	$909.88	$61.13	$253.66	$5.68
4.88	x	3.05	x	0.24	14.9	300	4.0	4.0	$290.29	$91.24	$23.83	$96.86	$6.60	$187.85	$145.62	$842.29	$56.59	$234.81	$5.26
4.88	x	3.05	x	0.24	14.9	350	4.0	3.8	$260.80	$91.24	$23.83	$93.47	$6.36	$180.36	$139.99	$796.05	$53.48	$221.92	$4.97
4.88	x	3.05	x	0.24	14.9	400	4.0	3.7	$238.69	$91.24	$23.83	$90.92	$6.19	$175.06	$136.00	$761.93	$51.19	$212.41	$4.76

AVERAGE CALCULATIONS-Summary

2" x 10" (35 x 241mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 22.52	$/m2 7.48	$/m2 1.92	$/m2 6.88	$/m2 0.50	$/m2 13.84	$/m2 11.48	Total 961.85	$/m2 64.62	$/m3 268.15	$/SF 6.00
4.88	x	3.05	x	0.24	14.9	150	4.0	5.7	$496.68	$111.33	$28.59	$121.06	$9.49	$271.01	$223.29	$1,261.45	$84.75	$351.67	$7.87
4.88	x	3.05	x	0.24	14.9	200	4.0	4.8	$393.49	$111.33	$28.59	$109.16	$7.90	$221.80	$183.57	$1,055.84	$70.94	$294.35	$6.59
4.88	x	3.05	x	0.24	14.9	250	4.0	4.3	$331.57	$111.33	$28.59	$102.02	$7.19	$199.93	$165.94	$946.57	$63.60	$263.89	$5.91
4.88	x	3.05	x	0.24	14.9	300	4.0	4.1	$290.29	$111.33	$28.59	$97.27	$6.80	$187.85	$156.19	$878.32	$59.01	$244.86	$5.48
4.88	x	3.05	x	0.24	14.9	350	4.0	4.0	$260.80	$111.33	$28.59	$93.87	$6.56	$180.36	$150.15	$831.66	$55.88	$231.85	$5.19
4.88	x	3.05	x	0.24	14.9	400	4.0	3.9	$238.69	$111.33	$28.59	$91.32	$6.39	$175.06	$145.87	$797.25	$53.56	$222.26	$4.98

AVERAGE CALCULATIONS-Summary

2" x 10" (35 x 241mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 22.52	$/m2 8.59	$/m2 2.21	$/m2 6.88	$/m2 0.51	$/m2 13.84	$/m2 12.27	Total 994.57	$/m2 66.82	$/m3 277.27	$/SF 6.21
4.88	x	3.05	x	0.24	14.9	150	4.0	5.9	$496.68	$127.85	$32.83	$121.06	$9.76	$271.01	$239.08	$1,298.27	$87.23	$361.93	$8.10
4.88	x	3.05	x	0.24	14.9	200	4.0	4.9	$393.49	$127.85	$32.83	$109.16	$8.12	$221.80	$196.30	$1,089.55	$73.20	$303.75	$6.80
4.88	x	3.05	x	0.24	14.9	250	4.0	4.5	$331.57	$127.85	$32.83	$102.03	$7.39	$199.93	$177.31	$978.91	$65.77	$272.90	$6.11
4.88	x	3.05	x	0.24	14.9	300	4.0	4.2	$290.29	$127.85	$32.83	$97.27	$6.99	$187.85	$166.81	$909.89	$61.13	$253.66	$5.68
4.88	x	3.05	x	0.24	14.9	350	4.0	4.1	$260.80	$127.85	$32.83	$93.88	$6.74	$180.36	$160.30	$862.76	$57.97	$240.52	$5.39
4.88	x	3.05	x	0.24	14.9	400	4.0	4.0	$238.69	$127.85	$32.83	$91.32	$6.56	$175.06	$155.70	$828.01	$55.63	$230.83	$5.17

AVERAGE CALCULATIONS-Summary

2" x 10" (35 x 241mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 22.52	$/m2 11.61	$/m2 2.98	$/m2 6.88	$/m2 0.48	$/m2 13.84	$/m2 10.70	Total 1027.34	$/m2 69.02	$/m3 286.40	$/SF 6.41
4.88	x	3.05	x	0.24	14.9	150	4.0	5.5	$496.68	$172.80	$44.38	$121.05	$9.20	$271.01	$208.25	$1,323.37	$88.91	$368.93	$8.26
4.88	x	3.05	x	0.24	14.9	200	4.0	4.6	$393.49	$172.80	$44.38	$109.15	$7.66	$221.80	$171.19	$1,120.47	$75.28	$312.37	$6.99
4.88	x	3.05	x	0.24	14.9	250	4.0	4.2	$331.57	$172.80	$44.38	$102.02	$6.97	$199.93	$154.72	$1,012.39	$68.02	$282.24	$6.32
4.88	x	3.05	x	0.24	14.9	300	4.0	4.0	$290.29	$172.80	$44.38	$97.26	$6.60	$187.85	$145.62	$944.80	$63.48	$263.39	$5.90
4.88	x	3.05	x	0.24	14.9	350	4.0	3.8	$260.80	$172.80	$44.38	$93.87	$6.36	$180.36	$139.99	$898.56	$60.37	$250.50	$5.61
4.88	x	3.05	x	0.24	14.9	400	4.0	3.7	$238.69	$172.80	$44.38	$91.32	$6.19	$175.06	$136.00	$864.44	$58.08	$240.99	$5.40

AVERAGE CALCULATIONS-Summary

2" x 10" (35 x 241mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 22.52	$/m2 13.44	$/m2 3.45	$/m2 6.88	$/m2 0.50	$/m2 13.84	$/m2 11.48	Total 1073.34	$/m2 72.11	$/m3 299.23	$/SF 6.70
4.88	x	3.05	x	0.24	14.9	150	4.0	5.7	$496.68	$200.04	$51.37	$121.06	$9.49	$271.01	$223.29	$1,372.94	$92.24	$382.75	$8.57
4.88	x	3.05	x	0.24	14.9	200	4.0	4.8	$393.49	$200.04	$51.37	$109.16	$7.90	$221.80	$183.57	$1,167.33	$78.43	$325.43	$7.29
4.88	x	3.05	x	0.24	14.9	250	4.0	4.3	$331.57	$200.04	$51.37	$102.02	$7.19	$199.93	$165.94	$1,058.06	$71.09	$294.97	$6.60
4.88	x	3.05	x	0.24	14.9	300	4.0	4.1	$290.29	$200.04	$51.37	$97.26	$6.80	$187.85	$156.19	$989.80	$66.50	$275.94	$6.18
4.88	x	3.05	x	0.24	14.9	350	4.0	4.0	$260.80	$200.04	$51.37	$93.87	$6.56	$180.36	$150.15	$943.15	$63.37	$262.93	$5.89
4.88	x	3.05	x	0.24	14.9	400	4.0	3.9	$238.69	$200.04	$51.37	$91.32	$6.39	$175.06	$145.87	$908.74	$61.05	$253.34	$5.67

AVERAGE CALCULATIONS-Summary

Source: Simpson Strong Tie
Kent Building Supplies
Hanscomb Ltd

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TABLE 16 GROUP 4 - DIMENSIONED WOOD - 2" X 12" SPF - FLOOR FRAMING

(SPF #2 or Better - c/w Various Floor Decking)

OCT 2013

2" x 12" (35 x 292mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 33.55	$/m2 6.13	$/m2 1.91	$/m2 7.62	$/m2 0.53	$/m2 16.33	$/m2 10.70	Total 1142.45	$/m2 76.76	$/m3 262.87	$/SF 7.13
4.88	x	3.05	x	0.29	14.9	150	4.0	6.1	$747.64	$91.24	$28.39	$131.98	$10.09	$320.74	$208.26	$1,538.34	$103.36	$353.96	$9.60
4.88	x	3.05	x	0.29	14.9	200	4.0	5.1	$588.88	$91.24	$28.39	$120.09	$8.38	$261.90	$171.20	$1,270.08	$85.33	$292.23	$7.93
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$493.62	$91.24	$28.39	$112.95	$7.62	$235.77	$154.72	$1,124.31	$75.54	$258.69	$7.02
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$430.12	$91.24	$28.39	$108.19	$7.20	$221.32	$145.62	$1,032.08	$69.34	$237.47	$6.44
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$384.75	$91.24	$28.39	$104.80	$6.94	$212.37	$139.98	$968.47	$65.07	$222.84	$6.05
4.88	x	3.05	x	0.29	14.9	400	4.0	4.1	$350.73	$91.24	$28.39	$102.25	$6.75	$206.03	$136.00	$921.39	$61.90	$212.00	$5.75

2" x 12" (35 x 292mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 33.55	$/m2 7.48	$/m2 2.33	$/m2 7.62	$/m2 0.54	$/m2 16.33	$/m2 11.48	Total 1180.56	$/m2 79.32	$/m3 271.63	$/SF 7.37
4.88	x	3.05	x	0.29	14.9	150	4.0	6.3	$747.64	$111.33	$34.64	$131.99	$10.38	$320.74	$223.30	$1,580.02	$106.16	$363.55	$9.86
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$588.88	$111.33	$34.64	$120.09	$8.62	$261.90	$183.59	$1,309.05	$87.95	$301.20	$8.17
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$493.62	$111.33	$34.64	$112.96	$7.84	$235.77	$165.93	$1,162.09	$78.08	$267.39	$7.25
4.88	x	3.05	x	0.29	14.9	300	4.0	4.5	$430.12	$111.33	$34.64	$108.19	$7.40	$221.32	$156.19	$1,069.19	$71.83	$246.01	$6.67
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$384.75	$111.33	$34.64	$104.81	$7.14	$212.37	$150.14	$1,005.18	$67.53	$231.28	$6.27
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$350.73	$111.33	$34.64	$102.26	$6.95	$206.03	$145.87	$957.81	$64.35	$220.38	$5.98

2" x 12" (35 x 292mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 33.55	$/m2 8.59	$/m2 2.67	$/m2 7.62	$/m2 0.55	$/m2 16.33	$/m2 12.27	Total 1214.17	$/m2 81.58	$/m3 279.37	$/SF 7.58
4.88	x	3.05	x	0.29	14.9	150	4.0	6.4	$747.64	$127.85	$39.78	$131.99	$10.65	$320.74	$239.08	$1,617.73	$108.69	$372.22	$10.10
4.88	x	3.05	x	0.29	14.9	200	4.0	5.3	$588.88	$127.85	$39.78	$120.09	$8.84	$261.90	$196.31	$1,343.65	$90.27	$309.16	$8.39
4.88	x	3.05	x	0.29	14.9	250	4.0	4.8	$493.62	$127.85	$39.78	$112.96	$8.03	$235.77	$177.30	$1,195.31	$80.31	$275.03	$7.46
4.88	x	3.05	x	0.29	14.9	300	4.0	4.6	$430.12	$127.85	$39.78	$108.20	$7.59	$221.32	$166.81	$1,101.67	$74.02	$253.48	$6.88
4.88	x	3.05	x	0.29	14.9	350	4.0	4.4	$384.75	$127.85	$39.78	$104.81	$7.31	$212.37	$160.30	$1,037.17	$69.68	$238.64	$6.47
4.88	x	3.05	x	0.29	14.9	400	4.0	4.3	$350.73	$127.85	$39.78	$102.26	$7.12	$206.03	$155.70	$989.47	$66.48	$227.67	$6.18

2" x 12" (35 x 292mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 33.55	$/m2 11.61	$/m2 3.61	$/m2 7.62	$/m2 0.53	$/m2 16.33	$/m2 10.70	Total 1249.39	$/m2 83.94	$/m3 287.47	$/SF 7.80
4.88	x	3.05	x	0.29	14.9	150	4.0	6.1	$747.64	$172.80	$53.77	$131.99	$10.09	$320.74	$208.26	$1,645.29	$110.54	$378.56	$10.27
4.88	x	3.05	x	0.29	14.9	200	4.0	5.1	$588.88	$172.80	$53.77	$120.09	$8.38	$261.90	$171.20	$1,377.02	$92.52	$316.84	$8.60
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$493.62	$172.80	$53.77	$112.96	$7.62	$235.77	$154.72	$1,231.26	$82.72	$283.30	$7.69
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$430.12	$172.80	$53.77	$108.19	$7.20	$221.32	$145.62	$1,139.02	$76.53	$262.08	$7.11
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$384.75	$172.80	$53.77	$104.80	$6.94	$212.37	$139.98	$1,075.41	$72.25	$247.44	$6.71
4.88	x	3.05	x	0.29	14.9	400	4.0	4.1	$350.73	$172.80	$53.77	$102.25	$6.75	$206.03	$136.00	$1,028.33	$69.09	$236.61	$6.42

2" x 12" (35 x 292mm) SPF - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Decking $	(Same as Deck) Rim Board $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 33.55	$/m2 13.44	$/m2 4.18	$/m2 7.62	$/m2 0.54	$/m2 16.33	$/m2 11.48	Total 1296.87	$/m2 87.13	$/m3 298.40	$/SF 8.09
4.88	x	3.05	x	0.29	14.9	150	4.0	6.3	$747.64	$200.04	$62.24	$131.99	$10.38	$320.74	$223.30	$1,696.33	$113.97	$390.31	$10.59
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$588.88	$200.04	$62.24	$120.09	$8.62	$261.90	$183.59	$1,425.36	$95.76	$327.96	$8.90
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$493.62	$200.04	$62.24	$112.96	$7.84	$235.77	$165.93	$1,278.40	$85.89	$294.15	$7.98
4.88	x	3.05	x	0.29	14.9	300	4.0	4.5	$430.12	$200.04	$62.24	$108.20	$7.40	$221.32	$156.19	$1,185.51	$79.65	$272.77	$7.40
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$384.75	$200.04	$62.24	$104.81	$7.14	$212.37	$150.14	$1,121.49	$75.35	$258.04	$7.00
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$350.73	$200.04	$62.24	$102.26	$6.95	$206.03	$145.87	$1,074.12	$72.17	$247.14	$6.70

Source: Simpson Strong Tie
Kent Building Supplies
Hanscomb Ltd

Appendix

O – TABLE 17 – TRUSS JOIST (TJI s31) FLOOR FRAMING

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TABLE 17 GROUP 1 - TRUSS JOIST (s31) 3" X 10" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

TRUSS JOIST (s31)

3" x 10" (64 x 241mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									28.71	6.13	5.47	7.94	0.48	13.84	10.70	1090.57	73.27	304.03	6.81
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.24	14.9	150	4.0	5.5	$678.02	$91.24	$81.45	$131.64	$9.20	$271.01	$208.25	$1,470.81	$98.82	$410.03	$9.18
4.88	x	3.05	x	0.24	14.9	200	4.0	4.6	$520.92	$91.24	$81.45	$119.82	$7.66	$221.80	$171.19	$1,214.08	$81.57	$338.46	$7.58
4.88	x	3.05	x	0.24	14.9	250	4.0	4.2	$426.78	$91.24	$81.45	$112.61	$6.97	$199.93	$154.72	$1,073.70	$72.14	$299.33	$6.70
4.88	x	3.05	x	0.24	14.9	300	4.0	4.0	$363.97	$91.24	$81.45	$107.85	$6.60	$187.85	$145.62	$984.58	$66.15	$274.48	$6.15
4.88	x	3.05	x	0.24	14.9	350	4.0	3.8	$319.10	$91.24	$81.45	$104.46	$6.36	$180.36	$139.99	$922.96	$62.01	$257.30	$5.76
4.88	x	3.05	x	0.24	14.9	400	4.0	3.7	$254.85	$91.24	$81.45	$132.51	$6.19	$175.06	$136.00	$877.30	$58.94	$244.57	$5.48

3" x 10" (64 x 241mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									28.71	7.48	5.47	7.94	0.50	13.84	11.48	1122.43	75.41	312.91	7.01
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.24	14.9	150	4.0	5.7	$678.02	$111.33	$81.45	$131.65	$9.49	$271.01	$223.29	$1,506.24	$101.20	$419.91	$9.40
4.88	x	3.05	x	0.24	14.9	200	4.0	4.8	$520.92	$111.33	$81.45	$119.83	$7.90	$221.80	$183.57	$1,246.80	$83.77	$347.58	$7.78
4.88	x	3.05	x	0.24	14.9	250	4.0	4.3	$426.78	$111.33	$81.45	$112.61	$7.19	$199.93	$165.94	$1,105.23	$74.26	$308.12	$6.90
4.88	x	3.05	x	0.24	14.9	300	4.0	4.1	$363.97	$111.33	$81.45	$107.85	$6.80	$187.85	$156.19	$1,015.44	$68.22	$283.09	$6.34
4.88	x	3.05	x	0.24	14.9	350	4.0	4.0	$319.10	$111.33	$81.45	$104.46	$6.56	$180.36	$150.15	$953.41	$64.06	$265.79	$5.95
4.88	x	3.05	x	0.24	14.9	400	4.0	3.9	$254.85	$111.33	$81.45	$132.51	$6.39	$175.06	$145.87	$907.46	$60.97	$252.98	$5.66

3" x 10" (64 x 241mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									28.71	8.59	5.47	7.94	0.51	13.84	12.27	1150.91	77.33	320.85	7.18
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.24	14.9	150	4.0	5.9	$678.02	$127.85	$81.45	$131.65	$9.76	$271.01	$239.08	$1,538.82	$103.39	$428.99	$9.61
4.88	x	3.05	x	0.24	14.9	200	4.0	4.9	$520.92	$127.85	$81.45	$119.83	$8.12	$221.80	$196.30	$1,276.27	$85.75	$355.80	$7.97
4.88	x	3.05	x	0.24	14.9	250	4.0	4.5	$426.78	$127.85	$81.45	$112.61	$7.39	$199.93	$177.31	$1,133.32	$76.14	$315.95	$7.07
4.88	x	3.05	x	0.24	14.9	300	4.0	4.2	$363.97	$127.85	$81.45	$107.86	$6.99	$187.85	$166.81	$1,042.78	$70.06	$290.71	$6.51
4.88	x	3.05	x	0.24	14.9	350	4.0	4.1	$319.10	$127.85	$81.45	$104.46	$6.74	$180.36	$160.30	$980.26	$65.86	$273.28	$6.12
4.88	x	3.05	x	0.24	14.9	400	4.0	4.0	$254.85	$127.85	$81.45	$132.52	$6.56	$175.06	$155.70	$933.99	$62.75	$260.38	$5.83

3" x 10" (64 x 241mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									28.71	11.61	5.47	7.94	0.48	13.84	10.70	1172.14	78.75	326.77	7.32
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.24	14.9	150	4.0	5.5	$678.02	$172.80	$81.45	$131.65	$9.20	$271.01	$208.25	$1,552.38	$104.30	$432.77	$9.69
4.88	x	3.05	x	0.24	14.9	200	4.0	4.6	$520.92	$172.80	$81.45	$119.83	$7.66	$221.80	$171.19	$1,295.65	$87.05	$361.20	$8.09
4.88	x	3.05	x	0.24	14.9	250	4.0	4.2	$426.78	$172.80	$81.45	$112.61	$6.97	$199.93	$154.72	$1,155.26	$77.62	$322.06	$7.21
4.88	x	3.05	x	0.24	14.9	300	4.0	4.0	$363.97	$172.80	$81.45	$107.86	$6.60	$187.85	$145.62	$1,066.15	$71.63	$297.22	$6.65
4.88	x	3.05	x	0.24	14.9	350	4.0	3.8	$319.10	$172.80	$81.45	$104.46	$6.36	$180.36	$139.99	$1,004.52	$67.49	$280.04	$6.27
4.88	x	3.05	x	0.24	14.9	400	4.0	3.7	$254.85	$172.80	$81.45	$132.51	$6.19	$175.06	$136.00	$958.86	$64.42	$267.31	$5.99

3" x 10" (64 x 241mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									28.71	13.44	5.47	7.94	0.50	13.84	11.48	1211.14	81.37	337.64	7.56
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.24	14.9	150	4.0	5.7	$678.02	$200.04	$81.45	$131.65	$9.49	$271.01	$223.29	$1,594.95	$107.16	$444.64	$9.96
4.88	x	3.05	x	0.24	14.9	200	4.0	4.8	$520.92	$200.04	$81.45	$119.82	$7.90	$221.80	$183.57	$1,335.50	$89.73	$372.31	$8.34
4.88	x	3.05	x	0.24	14.9	250	4.0	4.3	$426.78	$200.04	$81.45	$112.61	$7.19	$199.93	$165.94	$1,193.94	$80.22	$332.85	$7.45
4.88	x	3.05	x	0.24	14.9	300	4.0	4.1	$363.97	$200.04	$81.45	$107.85	$6.80	$187.85	$156.19	$1,104.15	$74.18	$307.82	$6.89
4.88	x	3.05	x	0.24	14.9	350	4.0	4.0	$319.10	$200.04	$81.45	$104.46	$6.56	$180.36	$150.15	$1,042.12	$70.02	$290.52	$6.50
4.88	x	3.05	x	0.24	14.9	400	4.0	3.9	$254.85	$200.04	$81.45	$132.51	$6.39	$175.06	$145.87	$996.17	$66.93	$277.71	$6.22

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 17 GROUP 2 - TRUSS JOIST (s31) 3" X 12" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

3" x 12" (64 x 292mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	Total $	$/m2	$/m3	$/SF
									30.46	6.13	6.63	7.70	0.52	16.23	10.70	1166.62	78.38	268.43	7.28
4.88	x	3.05	x	0.29	14.9	150	4.0	6.0	$711.77	$91.24	$98.69	$133.25	$10.02	$318.88	$208.26	$1,572.11	$105.62	$361.73	$9.81
4.88	x	3.05	x	0.29	14.9	200	4.0	5.0	$546.56	$91.24	$98.69	$121.35	$8.32	$260.40	$171.20	$1,297.76	$87.19	$298.60	$8.10
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$447.43	$91.24	$98.69	$114.22	$7.57	$234.43	$154.72	$1,148.30	$77.15	$264.21	$7.17
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$381.35	$91.24	$98.69	$109.46	$7.15	$220.07	$145.62	$1,053.58	$70.79	$242.42	$6.58
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$334.14	$91.24	$98.69	$106.07	$6.89	$211.17	$139.98	$988.18	$66.39	$227.37	$6.17
4.88	x	3.05	x	0.29	14.9	400	4.0	4.0	$298.74	$91.24	$98.69	$103.51	$6.71	$204.87	$136.00	$939.76	$63.14	$216.23	$5.87

3" x 12" (64 x 292mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	Total $	$/m2	$/m3	$/SF
									30.46	7.48	6.63	7.70	0.54	16.23	11.48	1198.47	80.52	275.76	7.48
4.88	x	3.05	x	0.29	14.9	150	4.0	6.2	$711.77	$111.33	$98.69	$133.26	$10.31	$318.88	$223.30	$1,607.54	$108.00	$369.88	$10.03
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$546.56	$111.33	$98.69	$121.36	$8.56	$260.40	$183.59	$1,330.49	$89.39	$306.13	$8.30
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$447.43	$111.33	$98.69	$114.22	$7.79	$234.43	$165.93	$1,179.82	$79.27	$271.46	$7.36
4.88	x	3.05	x	0.29	14.9	300	4.0	4.4	$381.35	$111.33	$98.69	$109.46	$7.36	$220.07	$156.18	$1,084.44	$72.86	$249.52	$6.77
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$334.14	$111.33	$98.69	$106.07	$7.09	$211.17	$150.14	$1,018.63	$68.44	$234.38	$6.36
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$298.74	$111.33	$98.69	$103.52	$6.90	$204.87	$145.87	$969.92	$65.17	$223.17	$6.05

3" x 12" (64 x 292mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	Total $	$/m2	$/m3	$/SF
									30.46	8.59	6.63	7.70	0.55	16.23	12.27	1226.94	82.43	282.31	7.66
4.88	x	3.05	x	0.29	14.9	150	4.0	6.4	$711.77	$127.85	$98.69	$133.26	$10.58	$318.88	$239.08	$1,640.11	$110.19	$377.37	$10.24
4.88	x	3.05	x	0.29	14.9	200	4.0	5.3	$546.56	$127.85	$98.69	$121.36	$8.78	$260.40	$196.31	$1,359.95	$91.37	$312.91	$8.49
4.88	x	3.05	x	0.29	14.9	250	4.0	4.8	$447.43	$127.85	$98.69	$114.22	$7.98	$234.43	$177.30	$1,207.90	$81.15	$277.93	$7.54
4.88	x	3.05	x	0.29	14.9	300	4.0	4.5	$381.35	$127.85	$98.69	$109.46	$7.54	$220.07	$166.81	$1,111.77	$74.70	$255.81	$6.94
4.88	x	3.05	x	0.29	14.9	350	4.0	4.4	$334.14	$127.85	$98.69	$106.07	$7.27	$211.17	$160.30	$1,045.49	$70.24	$240.56	$6.53
4.88	x	3.05	x	0.29	14.9	400	4.0	4.3	$298.74	$127.85	$98.69	$103.52	$7.07	$204.87	$155.70	$996.44	$66.95	$229.27	$6.22

3" x 12" (64 x 292mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	Total $	$/m2	$/m3	$/SF
									30.46	11.61	6.63	7.70	0.52	16.23	10.70	1248.18	83.86	287.19	7.79
4.88	x	3.05	x	0.29	14.9	150	4.0	6.0	$711.77	$172.80	$98.69	$133.26	$10.02	$318.88	$208.26	$1,653.68	$111.10	$380.50	$10.32
4.88	x	3.05	x	0.29	14.9	200	4.0	5.0	$546.56	$172.80	$98.69	$121.36	$8.32	$260.40	$171.20	$1,379.33	$92.67	$317.37	$8.61
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$447.43	$172.80	$98.69	$114.22	$7.57	$234.43	$154.72	$1,229.86	$82.63	$282.98	$7.68
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$381.35	$172.80	$98.69	$109.46	$7.15	$220.07	$145.62	$1,135.14	$76.27	$261.18	$7.09
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$334.14	$172.80	$98.69	$106.07	$6.89	$211.17	$139.98	$1,069.74	$71.87	$246.14	$6.68
4.88	x	3.05	x	0.29	14.9	400	4.0	4.0	$298.74	$172.80	$98.69	$103.52	$6.71	$204.87	$136.00	$1,021.33	$68.62	$235.00	$6.37

3" x 12" (64 x 292mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	Total $	$/m2	$/m3	$/SF
									30.46	13.44	6.63	7.70	0.54	16.23	11.48	1287.18	86.48	296.17	8.03
4.88	x	3.05	x	0.29	14.9	150	4.0	6.2	$711.77	$200.04	$98.69	$133.25	$10.31	$318.88	$223.30	$1,696.24	$113.96	$390.29	$10.59
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$546.56	$200.04	$98.69	$121.36	$8.56	$260.40	$183.59	$1,419.20	$95.35	$326.54	$8.86
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$447.43	$200.04	$98.69	$114.22	$7.79	$234.43	$165.93	$1,268.53	$85.23	$291.88	$7.92
4.88	x	3.05	x	0.29	14.9	300	4.0	4.4	$381.35	$200.04	$98.69	$109.46	$7.36	$220.07	$156.18	$1,173.15	$78.82	$269.93	$7.32
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$334.14	$200.04	$98.69	$106.07	$7.09	$211.17	$150.14	$1,107.34	$74.40	$254.79	$6.91
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$298.74	$200.04	$98.69	$103.52	$6.90	$204.87	$145.87	$1,058.63	$71.13	$243.58	$6.61

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 17 GROUP 3 - TRUSS JOIST (s31) 3" X 14" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

3" x 14" (64 x 356mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									39.97	6.13	8.08	8.43	0.55	17.83	10.70	1364.84	91.70	257.58	8.52
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.36	14.9	150	4.0	6.4	$939.85	$91.24	$120.32	$144.13	$10.57	$350.80	$208.26	$1,865.17	$125.31	$352.00	$11.64
4.88	x	3.05	x	0.36	14.9	200	4.0	5.3	$719.32	$91.24	$120.32	$132.24	$8.77	$286.14	$171.20	$1,529.23	$102.74	$288.60	$9.55
4.88	x	3.05	x	0.36	14.9	250	4.0	4.8	$587.00	$91.24	$120.32	$125.10	$7.96	$257.42	$154.72	$1,343.76	$90.28	$253.60	$8.39
4.88	x	3.05	x	0.36	14.9	300	4.0	4.5	$498.79	$91.24	$120.32	$120.34	$7.52	$241.55	$145.62	$1,225.38	$82.33	$231.26	$7.65
4.88	x	3.05	x	0.36	14.9	350	4.0	4.4	$435.78	$91.24	$120.32	$116.94	$7.24	$231.71	$139.98	$1,143.21	$76.81	$215.75	$7.14
4.88	x	3.05	x	0.36	14.9	400	4.0	4.3	$388.52	$91.24	$120.32	$114.40	$7.05	$224.76	$135.98	$1,082.27	$72.71	$204.25	$6.76

3" x 14" (64 x 356mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									39.97	7.48	8.08	8.43	0.57	17.83	11.48	1396.70	93.84	263.59	8.72
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.36	14.9	150	4.0	6.5	$939.85	$111.33	$120.32	$144.14	$10.86	$350.80	$223.30	$1,900.60	$127.69	$358.69	$11.86
4.88	x	3.05	x	0.36	14.9	200	4.0	5.4	$719.32	$111.33	$120.32	$132.24	$9.01	$286.14	$183.59	$1,561.95	$104.94	$294.78	$9.75
4.88	x	3.05	x	0.36	14.9	250	4.0	4.9	$587.00	$111.33	$120.32	$125.10	$8.18	$257.42	$165.94	$1,375.29	$92.40	$259.55	$8.58
4.88	x	3.05	x	0.36	14.9	300	4.0	4.7	$498.79	$111.33	$120.32	$120.34	$7.73	$241.55	$156.18	$1,256.24	$84.40	$237.08	$7.84
4.88	x	3.05	x	0.36	14.9	350	4.0	4.5	$435.78	$111.33	$120.32	$116.95	$7.45	$231.71	$150.14	$1,173.68	$78.86	$221.50	$7.33
4.88	x	3.05	x	0.36	14.9	400	4.0	4.4	$388.52	$111.33	$120.32	$114.40	$7.25	$224.76	$145.86	$1,112.44	$74.74	$209.95	$6.94

3" x 14" (64 x 356mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									39.97	8.59	8.08	8.43	0.58	17.83	12.27	1425.17	95.75	268.97	8.90
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.36	14.9	150	4.0	6.7	$939.85	$127.85	$120.32	$144.14	$11.13	$350.80	$239.08	$1,933.17	$129.88	$364.84	$12.07
4.88	x	3.05	x	0.36	14.9	200	4.0	5.6	$719.32	$127.85	$120.32	$132.24	$9.22	$286.14	$196.31	$1,591.40	$106.92	$300.34	$9.93
4.88	x	3.05	x	0.36	14.9	250	4.0	5.1	$587.00	$127.85	$120.32	$125.10	$8.38	$257.42	$177.31	$1,403.38	$94.29	$264.85	$8.76
4.88	x	3.05	x	0.36	14.9	300	4.0	4.8	$498.79	$127.85	$120.32	$120.34	$7.91	$241.55	$166.80	$1,283.56	$86.24	$242.24	$8.01
4.88	x	3.05	x	0.36	14.9	350	4.0	4.6	$435.78	$127.85	$120.32	$116.95	$7.62	$231.71	$160.30	$1,200.53	$80.66	$226.57	$7.49
4.88	x	3.05	x	0.36	14.9	400	4.0	4.5	$388.52	$127.85	$120.32	$114.40	$7.42	$224.76	$155.69	$1,138.96	$76.52	$214.95	$7.11

3" x 14" (64 x 356mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									39.97	11.61	8.08	8.43	0.55	17.83	10.70	1446.40	97.18	272.97	9.03
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.36	14.9	150	4.0	6.4	$939.85	$172.80	$120.32	$144.14	$10.57	$350.80	$208.26	$1,946.74	$130.79	$367.40	$12.15
4.88	x	3.05	x	0.36	14.9	200	4.0	5.3	$719.32	$172.80	$120.32	$132.24	$8.77	$286.14	$171.20	$1,610.79	$108.22	$304.00	$10.05
4.88	x	3.05	x	0.36	14.9	250	4.0	4.8	$587.00	$172.80	$120.32	$125.10	$7.96	$257.42	$154.72	$1,425.32	$95.76	$268.99	$8.90
4.88	x	3.05	x	0.36	14.9	300	4.0	4.5	$498.79	$172.80	$120.32	$120.34	$7.52	$241.55	$145.62	$1,306.94	$87.81	$246.65	$8.16
4.88	x	3.05	x	0.36	14.9	350	4.0	4.4	$435.78	$172.80	$120.32	$116.95	$7.24	$231.71	$139.98	$1,224.78	$82.29	$231.15	$7.64
4.88	x	3.05	x	0.36	14.9	400	4.0	4.3	$388.52	$172.80	$120.32	$114.40	$7.05	$224.76	$135.98	$1,163.83	$78.19	$219.64	$7.26

3" x 14" (64 x 356mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									39.97	13.44	8.08	8.43	0.57	17.83	11.48	1485.41	99.80	280.33	9.27
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.36	14.9	150	4.0	6.5	$939.85	$200.04	$120.32	$144.13	$10.86	$350.80	$223.30	$1,989.30	$133.65	$375.43	$12.42
4.88	x	3.05	x	0.36	14.9	200	4.0	5.4	$719.32	$200.04	$120.32	$132.24	$9.01	$286.14	$183.59	$1,650.66	$110.90	$311.52	$10.30
4.88	x	3.05	x	0.36	14.9	250	4.0	4.9	$587.00	$200.04	$120.32	$125.10	$8.18	$257.42	$165.94	$1,464.00	$98.36	$276.29	$9.14
4.88	x	3.05	x	0.36	14.9	300	4.0	4.7	$498.79	$200.04	$120.32	$120.34	$7.73	$241.55	$156.18	$1,344.95	$90.36	$253.83	$8.39
4.88	x	3.05	x	0.36	14.9	350	4.0	4.5	$435.78	$200.04	$120.32	$116.94	$7.45	$231.71	$150.14	$1,262.38	$84.81	$238.24	$7.88
4.88	x	3.05	x	0.36	14.9	400	4.0	4.4	$388.52	$200.04	$120.32	$114.40	$7.25	$224.76	$145.86	$1,201.15	$80.70	$226.69	$7.50

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 17 GROUP 4 - TRUSS JOIST (s31) 3" X 16" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

3" x 16" (64 x 406mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									46.28	6.13	9.22	8.92	0.58	19.83	10.70	1513.11	101.66	250.39	9.44
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.41	14.9	150	4.0	6.8	$1,091.22	$91.24	$137.22	$151.35	$11.26	$390.70	$208.26	$2,081.25	$139.83	$344.41	$12.99
4.88	x	3.05	x	0.41	14.9	200	4.0	5.6	$833.97	$91.24	$137.22	$139.46	$9.32	$318.31	$171.20	$1,700.72	$114.26	$281.44	$10.62
4.88	x	3.05	x	0.41	14.9	250	4.0	5.1	$679.63	$91.24	$137.22	$132.32	$8.46	$286.16	$154.73	$1,489.76	$100.09	$246.53	$9.30
4.88	x	3.05	x	0.41	14.9	300	4.0	4.8	$576.73	$91.24	$137.22	$127.56	$7.98	$268.40	$145.62	$1,354.75	$91.02	$224.19	$8.46
4.88	x	3.05	x	0.41	14.9	350	4.0	4.6	$503.23	$91.24	$137.22	$124.17	$7.69	$257.39	$139.98	$1,260.92	$84.72	$208.66	$7.87
4.88	x	3.05	x	0.41	14.9	400	4.0	4.5	$448.11	$91.24	$137.22	$121.61	$7.48	$249.59	$136.00	$1,191.25	$80.04	$197.13	$7.44

3" x 16" (64 x 406mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									46.28	7.48	9.22	8.92	0.60	19.83	11.48	1544.97	103.80	255.67	9.64
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.41	14.9	150	4.0	7.0	$1,091.22	$111.33	$137.22	$151.36	$11.55	$390.70	$223.29	$2,116.67	$142.21	$350.27	$13.21
4.88	x	3.05	x	0.41	14.9	200	4.0	5.8	$833.97	$111.33	$137.22	$139.47	$9.56	$318.31	$183.59	$1,733.45	$116.46	$286.86	$10.82
4.88	x	3.05	x	0.41	14.9	250	4.0	5.2	$679.63	$111.33	$137.22	$132.32	$8.68	$286.16	$165.94	$1,521.28	$102.21	$251.75	$9.50
4.88	x	3.05	x	0.41	14.9	300	4.0	4.9	$576.73	$111.33	$137.22	$127.57	$8.19	$268.40	$156.18	$1,385.62	$93.09	$229.30	$8.65
4.88	x	3.05	x	0.41	14.9	350	4.0	4.8	$503.23	$111.33	$137.22	$124.17	$7.89	$257.39	$150.14	$1,291.37	$86.76	$213.70	$8.06
4.88	x	3.05	x	0.41	14.9	400	4.0	4.6	$448.11	$111.33	$137.22	$121.62	$7.67	$249.59	$145.87	$1,221.41	$82.06	$202.12	$7.62

3" x 16" (64 x 406mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									46.28	8.59	9.22	8.92	0.61	19.83	12.27	1573.44	105.71	260.38	9.82
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.41	14.9	150	4.0	7.1	$1,091.22	$127.85	$137.22	$151.36	$11.82	$390.70	$239.08	$2,149.25	$144.40	$355.67	$13.42
4.88	x	3.05	x	0.41	14.9	200	4.0	5.9	$833.97	$127.85	$137.22	$139.47	$9.78	$318.31	$196.32	$1,762.92	$118.44	$291.73	$11.00
4.88	x	3.05	x	0.41	14.9	250	4.0	5.3	$679.63	$127.85	$137.22	$132.32	$8.87	$286.16	$177.31	$1,549.36	$104.10	$256.39	$9.67
4.88	x	3.05	x	0.41	14.9	300	4.0	5.0	$576.73	$127.85	$137.22	$127.57	$8.37	$268.40	$166.80	$1,412.94	$94.93	$233.82	$8.82
4.88	x	3.05	x	0.41	14.9	350	4.0	4.9	$503.23	$127.85	$137.22	$124.17	$8.06	$257.39	$160.29	$1,318.21	$88.57	$218.14	$8.23
4.88	x	3.05	x	0.41	14.9	400	4.0	4.7	$448.11	$127.85	$137.22	$121.62	$7.84	$249.59	$155.70	$1,247.93	$83.84	$206.51	$7.79

3" x 16" (64 x 406mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									46.28	11.61	9.22	8.92	0.58	19.83	10.70	1594.68	107.14	263.89	9.95
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.41	14.9	150	4.0	6.8	$1,091.22	$172.80	$137.22	$151.36	$11.26	$390.70	$208.26	$2,162.82	$145.31	$357.91	$13.50
4.88	x	3.05	x	0.41	14.9	200	4.0	5.6	$833.97	$172.80	$137.22	$139.47	$9.32	$318.31	$171.20	$1,782.29	$119.75	$294.94	$11.12
4.88	x	3.05	x	0.41	14.9	250	4.0	5.1	$679.63	$172.80	$137.22	$132.32	$8.46	$286.16	$154.73	$1,571.32	$105.57	$260.03	$9.81
4.88	x	3.05	x	0.41	14.9	300	4.0	4.8	$576.73	$172.80	$137.22	$127.57	$7.98	$268.40	$145.62	$1,436.32	$96.50	$237.69	$8.97
4.88	x	3.05	x	0.41	14.9	350	4.0	4.6	$503.23	$172.80	$137.22	$124.17	$7.69	$257.39	$139.98	$1,342.48	$90.20	$222.16	$8.38
4.88	x	3.05	x	0.41	14.9	400	4.0	4.5	$448.11	$172.80	$137.22	$121.62	$7.48	$249.59	$136.00	$1,272.82	$85.52	$210.63	$7.94

3" x 16" (64 x 406mm) TJI s31 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

									AVERAGE CALCULATIONS							AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									46.28	13.44	9.22	8.92	0.60	19.83	11.48	1633.67	109.76	270.35	10.20
					Floor	Joist		Total	(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
					Area	Spacing		Man	TJI	Decking	Rim Board	Connections	Equipment	TJI	Deck				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	$	$	$	$	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.41	14.9	150	4.0	7.0	$1,091.22	$200.04	$137.22	$151.35	$11.55	$390.70	$223.29	$2,205.37	$148.17	$364.95	$13.77
4.88	x	3.05	x	0.41	14.9	200	4.0	5.8	$833.97	$200.04	$137.22	$139.46	$9.56	$318.31	$183.59	$1,822.15	$122.42	$301.54	$11.37
4.88	x	3.05	x	0.41	14.9	250	4.0	5.2	$679.63	$200.04	$137.22	$132.32	$8.68	$286.16	$165.94	$1,609.99	$108.17	$266.43	$10.05
4.88	x	3.05	x	0.41	14.9	300	4.0	4.9	$576.73	$200.04	$137.22	$127.56	$8.19	$268.40	$156.18	$1,474.32	$99.05	$243.98	$9.20
4.88	x	3.05	x	0.41	14.9	350	4.0	4.8	$503.23	$200.04	$137.22	$124.17	$7.89	$257.39	$150.14	$1,380.08	$92.72	$228.38	$8.61
4.88	x	3.05	x	0.41	14.9	400	4.0	4.6	$448.11	$200.04	$137.22	$121.61	$7.67	$249.59	$145.87	$1,310.11	$88.02	$216.80	$8.18

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix

P – TABLE 18 – TRUSS JOIST (TJI s33) FLOOR FRAMING

Hanscomb

TABLE 18 GROUP 1 - TRUSS JOIST (s33) 3" X 10" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

3" x 10" (64 x 241mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.27	6.13	5.47	7.92	0.48	13.84	10.70	1158.24	77.82	322.90	7.23
4.88	x	3.05	x	0.24	14.9	150	4.0	5.5	$779.28	$91.24	$81.45	$136.47	$9.20	$271.01	$208.25	$1,576.90	$105.95	$439.61	$9.84
4.88	x	3.05	x	0.24	14.9	200	4.0	4.6	$597.69	$91.24	$81.45	$124.58	$7.66	$221.80	$171.19	$1,295.61	$87.05	$361.19	$8.09
4.88	x	3.05	x	0.24	14.9	250	4.0	4.2	$488.74	$91.24	$81.45	$117.44	$6.97	$199.93	$154.72	$1,140.49	$76.63	$317.95	$7.12
4.88	x	3.05	x	0.24	14.9	300	4.0	4.0	$416.11	$91.24	$81.45	$112.68	$6.60	$187.85	$145.62	$1,041.55	$69.98	$290.36	$6.50
4.88	x	3.05	x	0.24	14.9	350	4.0	3.8	$364.22	$91.24	$81.45	$109.29	$6.36	$180.36	$139.99	$972.91	$65.37	$271.23	$6.07
4.88	x	3.05	x	0.24	14.9	400	4.0	3.7	$325.31	$91.24	$81.45	$106.74	$6.19	$175.06	$136.00	$921.99	$61.95	$257.03	$5.75

3" x 10" (64 x 241mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.27	7.48	5.47	7.92	0.50	13.84	11.48	1190.10	79.96	331.78	7.43
4.88	x	3.05	x	0.24	14.9	150	4.0	5.7	$779.28	$111.33	$81.45	$136.47	$9.49	$271.01	$223.29	$1,612.32	$108.33	$449.48	$10.06
4.88	x	3.05	x	0.24	14.9	200	4.0	4.8	$597.69	$111.33	$81.45	$124.58	$7.90	$221.80	$183.57	$1,328.32	$89.24	$370.31	$8.29
4.88	x	3.05	x	0.24	14.9	250	4.0	4.3	$488.74	$111.33	$81.45	$117.44	$7.19	$199.93	$165.94	$1,172.02	$78.74	$326.74	$7.32
4.88	x	3.05	x	0.24	14.9	300	4.0	4.1	$416.11	$111.33	$81.45	$112.68	$6.80	$187.85	$156.19	$1,072.41	$72.05	$298.97	$6.69
4.88	x	3.05	x	0.24	14.9	350	4.0	4.0	$364.22	$111.33	$81.45	$109.29	$6.56	$180.36	$150.15	$1,003.36	$67.41	$279.72	$6.26
4.88	x	3.05	x	0.24	14.9	400	4.0	3.9	$325.31	$111.33	$81.45	$106.74	$6.39	$175.06	$145.87	$952.15	$63.97	$265.44	$5.94

3" x 10" (64 x 241mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.27	8.59	5.47	7.92	0.51	13.84	12.27	1218.57	81.87	339.71	7.61
4.88	x	3.05	x	0.24	14.9	150	4.0	5.9	$779.28	$127.85	$81.45	$136.47	$9.76	$271.01	$239.08	$1,644.90	$110.51	$458.57	$10.27
4.88	x	3.05	x	0.24	14.9	200	4.0	4.9	$597.69	$127.85	$81.45	$124.58	$8.12	$221.80	$196.30	$1,357.79	$91.22	$378.53	$8.48
4.88	x	3.05	x	0.24	14.9	250	4.0	4.5	$488.74	$127.85	$81.45	$117.45	$7.39	$199.93	$177.31	$1,200.12	$80.63	$334.57	$7.49
4.88	x	3.05	x	0.24	14.9	300	4.0	4.2	$416.11	$127.85	$81.45	$112.68	$6.99	$187.85	$166.81	$1,099.74	$73.89	$306.59	$6.86
4.88	x	3.05	x	0.24	14.9	350	4.0	4.1	$364.22	$127.85	$81.45	$109.29	$6.74	$180.36	$160.30	$1,030.21	$69.22	$287.20	$6.43
4.88	x	3.05	x	0.24	14.9	400	4.0	4.0	$325.31	$127.85	$81.45	$106.74	$6.56	$175.06	$155.70	$978.67	$65.75	$272.83	$6.11

3" x 10" (64 x 241mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.27	11.61	5.47	7.92	0.48	13.84	10.70	1239.80	83.30	345.63	7.74
4.88	x	3.05	x	0.24	14.9	150	4.0	5.5	$779.28	$172.80	$81.45	$136.47	$9.20	$271.01	$208.25	$1,658.46	$111.43	$462.35	$10.35
4.88	x	3.05	x	0.24	14.9	200	4.0	4.6	$597.69	$172.80	$81.45	$124.58	$7.66	$221.80	$171.19	$1,377.17	$92.53	$383.93	$8.60
4.88	x	3.05	x	0.24	14.9	250	4.0	4.2	$488.74	$172.80	$81.45	$117.45	$6.97	$199.93	$154.72	$1,222.06	$82.11	$340.69	$7.63
4.88	x	3.05	x	0.24	14.9	300	4.0	4.0	$416.11	$172.80	$81.45	$112.68	$6.60	$187.85	$145.62	$1,123.11	$75.46	$313.10	$7.01
4.88	x	3.05	x	0.24	14.9	350	4.0	3.8	$364.22	$172.80	$81.45	$109.29	$6.36	$180.36	$139.99	$1,054.47	$70.85	$293.97	$6.58
4.88	x	3.05	x	0.24	14.9	400	4.0	3.7	$325.31	$172.80	$81.45	$106.74	$6.19	$175.06	$136.00	$1,003.55	$67.42	$279.77	$6.26

3" x 10" (64 x 241mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.27	13.44	5.47	7.92	0.50	13.84	11.48	1278.81	85.92	356.51	7.98
4.88	x	3.05	x	0.24	14.9	150	4.0	5.7	$779.28	$200.04	$81.45	$136.47	$9.49	$271.01	$223.29	$1,701.03	$114.29	$474.21	$10.62
4.88	x	3.05	x	0.24	14.9	200	4.0	4.8	$597.69	$200.04	$81.45	$124.58	$7.90	$221.80	$183.57	$1,417.03	$95.20	$395.04	$8.84
4.88	x	3.05	x	0.24	14.9	250	4.0	4.3	$488.74	$200.04	$81.45	$117.44	$7.19	$199.93	$165.94	$1,260.73	$84.70	$351.47	$7.87
4.88	x	3.05	x	0.24	14.9	300	4.0	4.1	$416.11	$200.04	$81.45	$112.68	$6.80	$187.85	$156.19	$1,161.12	$78.01	$323.70	$7.25
4.88	x	3.05	x	0.24	14.9	350	4.0	4.0	$364.22	$200.04	$81.45	$109.29	$6.56	$180.36	$150.15	$1,092.07	$73.37	$304.45	$6.82
4.88	x	3.05	x	0.24	14.9	400	4.0	3.9	$325.31	$200.04	$81.45	$106.74	$6.39	$175.06	$145.87	$1,040.86	$69.93	$290.17	$6.50

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 18 GROUP 2 - TRUSS JOIST (s33) 3" X 12" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

3" x 12" (64 x 292mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									35.92	6.13	6.63	8.12	0.52	16.23	10.70	1254.11	84.26	288.56	7.83
4.88	x	3.05	x	0.29	14.9	150	4.0	6.0	$842.69	$91.24	$98.69	$139.49	$10.02	$318.88	$208.26	$1,709.27	$114.84	$393.29	$10.67
4.88	x	3.05	x	0.29	14.9	200	4.0	5.0	$645.72	$91.24	$98.69	$127.60	$8.32	$260.40	$171.20	$1,403.17	$94.27	$322.86	$8.76
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$527.54	$91.24	$98.69	$120.47	$7.57	$234.43	$154.72	$1,234.66	$82.95	$284.08	$7.71
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$448.76	$91.24	$98.69	$115.70	$7.15	$220.07	$145.62	$1,127.23	$75.73	$259.36	$7.04
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$392.48	$91.24	$98.69	$112.31	$6.89	$211.17	$139.98	$1,052.76	$70.73	$242.23	$6.57
4.88	x	3.05	x	0.29	14.9	400	4.0	4.0	$350.27	$91.24	$98.69	$109.76	$6.71	$204.87	$136.00	$997.54	$67.02	$229.52	$6.23

3" x 12" (64 x 292mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									35.92	7.48	6.63	8.12	0.54	16.23	11.48	1285.97	86.40	295.89	8.03
4.88	x	3.05	x	0.29	14.9	150	4.0	6.2	$842.69	$111.33	$98.69	$139.50	$10.31	$318.88	$223.30	$1,744.70	$117.22	$401.44	$10.89
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$645.72	$111.33	$98.69	$127.61	$8.56	$260.40	$183.59	$1,435.90	$96.47	$330.39	$8.96
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$527.54	$111.33	$98.69	$120.47	$7.79	$234.43	$165.93	$1,266.18	$85.07	$291.34	$7.90
4.88	x	3.05	x	0.29	14.9	300	4.0	4.4	$448.76	$111.33	$98.69	$115.71	$7.36	$220.07	$156.18	$1,158.10	$77.81	$266.47	$7.23
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$392.48	$111.33	$98.69	$112.31	$7.09	$211.17	$150.14	$1,083.21	$72.78	$249.24	$6.76
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$350.27	$111.33	$98.69	$109.78	$6.90	$204.87	$145.87	$1,027.71	$69.05	$236.47	$6.41

3" x 12" (64 x 292mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									35.92	8.59	6.63	8.12	0.55	16.23	12.27	1314.44	88.31	302.44	8.20
4.88	x	3.05	x	0.29	14.9	150	4.0	6.4	$842.69	$127.85	$98.69	$139.50	$10.58	$318.88	$239.08	$1,777.27	$119.41	$408.93	$11.09
4.88	x	3.05	x	0.29	14.9	200	4.0	5.3	$645.72	$127.85	$98.69	$127.61	$8.78	$260.40	$196.31	$1,465.36	$98.45	$337.16	$9.15
4.88	x	3.05	x	0.29	14.9	250	4.0	4.8	$527.54	$127.85	$98.69	$120.47	$7.98	$234.43	$177.30	$1,294.26	$86.96	$297.80	$8.08
4.88	x	3.05	x	0.29	14.9	300	4.0	4.5	$448.76	$127.85	$98.69	$115.71	$7.54	$220.07	$166.81	$1,185.43	$79.64	$272.76	$7.40
4.88	x	3.05	x	0.29	14.9	350	4.0	4.4	$392.48	$127.85	$98.69	$112.31	$7.27	$211.17	$160.30	$1,110.07	$74.58	$255.42	$6.93
4.88	x	3.05	x	0.29	14.9	400	4.0	4.3	$350.27	$127.85	$98.69	$109.77	$7.07	$204.87	$155.70	$1,054.22	$70.83	$242.57	$6.58

3" x 12" (64 x 292mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									35.92	11.61	6.63	8.12	0.52	16.23	10.70	1335.67	89.74	307.32	8.34
4.88	x	3.05	x	0.29	14.9	150	4.0	6.0	$842.69	$172.80	$98.69	$139.50	$10.02	$318.88	$208.26	$1,790.84	$120.32	$412.05	$11.18
4.88	x	3.05	x	0.29	14.9	200	4.0	5.0	$645.72	$172.80	$98.69	$127.61	$8.32	$260.40	$171.20	$1,484.74	$99.75	$341.62	$9.27
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$527.54	$172.80	$98.69	$120.47	$7.57	$234.43	$154.72	$1,316.22	$88.43	$302.85	$8.22
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$448.76	$172.80	$98.69	$115.71	$7.15	$220.07	$145.62	$1,208.80	$81.21	$278.13	$7.55
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$392.48	$172.80	$98.69	$112.31	$6.89	$211.17	$139.98	$1,134.32	$76.21	$261.00	$7.08
4.88	x	3.05	x	0.29	14.9	400	4.0	4.0	$350.27	$172.80	$98.69	$109.77	$6.71	$204.87	$136.00	$1,079.11	$72.50	$248.29	$6.74

3" x 12" (64 x 292mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									35.92	13.44	6.63	8.12	0.54	16.23	11.48	1374.67	92.36	316.30	8.58
4.88	x	3.05	x	0.29	14.9	150	4.0	6.2	$842.69	$200.04	$98.69	$139.49	$10.31	$318.88	$223.30	$1,833.40	$123.18	$421.85	$11.44
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$645.72	$200.04	$98.69	$127.60	$8.56	$260.40	$183.59	$1,524.60	$102.43	$350.80	$9.52
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$527.54	$200.04	$98.69	$120.47	$7.79	$234.43	$165.93	$1,354.89	$91.03	$311.75	$8.46
4.88	x	3.05	x	0.29	14.9	300	4.0	4.4	$448.76	$200.04	$98.69	$115.70	$7.36	$220.07	$156.18	$1,246.80	$83.77	$286.88	$7.78
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$392.48	$200.04	$98.69	$112.31	$7.09	$211.17	$150.14	$1,171.92	$78.74	$269.65	$7.31
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$350.27	$200.04	$98.69	$109.76	$6.90	$204.87	$145.87	$1,116.40	$75.01	$256.87	$6.97

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 18 GROUP 3 - TRUSS JOIST (s33) 3" X 14" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

3" x 14" (64 x 356mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									44.32	6.13	8.08	8.77	0.55	17.83	10.70	1434.56	96.38	270.74	8.95
4.88	x	3.05	x	0.36	14.9	150	4.0	6.4	$1,044.17	$91.24	$120.32	$149.11	$10.57	$350.80	$208.26	$1,974.47	$132.66	$372.63	$12.32
4.88	x	3.05	x	0.36	14.9	200	4.0	5.3	$798.34	$91.24	$120.32	$137.21	$8.77	$286.14	$171.20	$1,613.22	$108.39	$304.46	$10.07
4.88	x	3.05	x	0.36	14.9	250	4.0	4.8	$650.84	$91.24	$120.32	$130.08	$7.96	$257.42	$154.72	$1,412.58	$94.91	$266.59	$8.82
4.88	x	3.05	x	0.36	14.9	300	4.0	4.5	$552.50	$91.24	$120.32	$125.32	$7.52	$241.55	$145.62	$1,284.07	$86.27	$242.34	$8.01
4.88	x	3.05	x	0.36	14.9	350	4.0	4.4	$482.27	$91.24	$120.32	$121.92	$7.24	$231.71	$139.98	$1,194.68	$80.27	$225.47	$7.46
4.88	x	3.05	x	0.36	14.9	400	4.0	4.3	$429.59	$91.24	$120.32	$119.37	$7.05	$224.76	$135.98	$1,128.31	$75.81	$212.94	$7.04

3" x 14" (64 x 356mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									44.32	7.48	8.08	8.77	0.57	17.83	11.48	1466.42	98.52	276.75	9.15
4.88	x	3.05	x	0.36	14.9	150	4.0	6.5	$1,044.17	$111.33	$120.32	$149.12	$10.86	$350.80	$223.30	$2,009.90	$135.04	$379.32	$12.55
4.88	x	3.05	x	0.36	14.9	200	4.0	5.4	$798.34	$111.33	$120.32	$137.22	$9.01	$286.14	$183.59	$1,645.95	$110.59	$310.63	$10.27
4.88	x	3.05	x	0.36	14.9	250	4.0	4.9	$650.84	$111.33	$120.32	$130.08	$8.18	$257.42	$165.94	$1,444.11	$97.02	$272.54	$9.01
4.88	x	3.05	x	0.36	14.9	300	4.0	4.7	$552.50	$111.33	$120.32	$125.33	$7.73	$241.55	$156.18	$1,314.94	$88.35	$248.16	$8.21
4.88	x	3.05	x	0.36	14.9	350	4.0	4.5	$482.27	$111.33	$120.32	$121.92	$7.45	$231.71	$150.14	$1,225.14	$82.31	$231.22	$7.65
4.88	x	3.05	x	0.36	14.9	400	4.0	4.4	$429.59	$111.33	$120.32	$119.37	$7.25	$224.76	$145.86	$1,158.48	$77.83	$218.63	$7.23

3" x 14" (64 x 356mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									44.32	8.59	8.08	8.77	0.58	17.83	12.27	1494.89	100.44	282.12	9.33
4.88	x	3.05	x	0.36	14.9	150	4.0	6.7	$1,044.17	$127.85	$120.32	$149.12	$11.13	$350.80	$239.08	$2,042.47	$137.23	$385.47	$12.75
4.88	x	3.05	x	0.36	14.9	200	4.0	5.6	$798.34	$127.85	$120.32	$137.22	$9.22	$286.14	$196.31	$1,675.40	$112.56	$316.19	$10.46
4.88	x	3.05	x	0.36	14.9	250	4.0	5.1	$650.84	$127.85	$120.32	$130.08	$8.38	$257.42	$177.31	$1,472.20	$98.91	$277.84	$9.19
4.88	x	3.05	x	0.36	14.9	300	4.0	4.8	$552.50	$127.85	$120.32	$125.33	$7.91	$241.55	$166.80	$1,342.26	$90.18	$253.32	$8.38
4.88	x	3.05	x	0.36	14.9	350	4.0	4.6	$482.27	$127.85	$120.32	$121.92	$7.62	$231.71	$160.30	$1,251.99	$84.12	$236.28	$7.81
4.88	x	3.05	x	0.36	14.9	400	4.0	4.5	$429.59	$127.85	$120.32	$119.37	$7.42	$224.76	$155.69	$1,185.00	$79.62	$223.64	$7.40

3" x 14" (64 x 356mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									44.32	11.61	8.08	8.77	0.55	17.83	10.70	1516.12	101.86	286.13	9.46
4.88	x	3.05	x	0.36	14.9	150	4.0	6.4	$1,044.17	$172.80	$120.32	$149.12	$10.57	$350.80	$208.26	$2,056.04	$138.14	$388.03	$12.83
4.88	x	3.05	x	0.36	14.9	200	4.0	5.3	$798.34	$172.80	$120.32	$137.22	$8.77	$286.14	$171.20	$1,694.79	$113.87	$319.85	$10.58
4.88	x	3.05	x	0.36	14.9	250	4.0	4.8	$650.84	$172.80	$120.32	$130.08	$7.96	$257.42	$154.72	$1,494.14	$100.39	$281.98	$9.33
4.88	x	3.05	x	0.36	14.9	300	4.0	4.5	$552.50	$172.80	$120.32	$125.33	$7.52	$241.55	$145.62	$1,365.64	$91.75	$257.73	$8.52
4.88	x	3.05	x	0.36	14.9	350	4.0	4.4	$482.27	$172.80	$120.32	$121.92	$7.24	$231.71	$139.98	$1,276.24	$85.75	$240.86	$7.97
4.88	x	3.05	x	0.36	14.9	400	4.0	4.3	$429.59	$172.80	$120.32	$119.37	$7.05	$224.76	$135.98	$1,209.87	$81.29	$228.33	$7.55

3" x 14" (64 x 356mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									44.32	13.44	8.08	8.77	0.57	17.83	11.48	1555.13	104.48	293.49	9.71
4.88	x	3.05	x	0.36	14.9	150	4.0	6.5	$1,044.17	$200.04	$120.32	$149.11	$10.86	$350.80	$223.30	$2,098.60	$141.00	$396.06	$13.10
4.88	x	3.05	x	0.36	14.9	200	4.0	5.4	$798.34	$200.04	$120.32	$137.21	$9.01	$286.14	$183.59	$1,734.65	$116.54	$327.37	$10.83
4.88	x	3.05	x	0.36	14.9	250	4.0	4.9	$650.84	$200.04	$120.32	$130.08	$8.18	$257.42	$165.94	$1,532.82	$102.98	$289.28	$9.57
4.88	x	3.05	x	0.36	14.9	300	4.0	4.7	$552.50	$200.04	$120.32	$125.33	$7.73	$241.55	$156.18	$1,403.65	$94.31	$264.90	$8.76
4.88	x	3.05	x	0.36	14.9	350	4.0	4.5	$482.27	$200.04	$120.32	$121.92	$7.45	$231.71	$150.14	$1,313.85	$88.27	$247.96	$8.20
4.88	x	3.05	x	0.36	14.9	400	4.0	4.4	$429.59	$200.04	$120.32	$119.37	$7.25	$224.76	$145.86	$1,247.19	$83.79	$235.38	$7.78

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 18 GROUP 4 - TRUSS JOIST (s33) 3" X 16" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

3" x 16" (64 x 406mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total $	$/m2	$/m3	$/SF
									49.22	6.13	9.22	9.14	0.58	19.39	11.14	1560.27	104.83	258.20	9.74
4.88	x	3.05	x	0.41	14.9	150	4.0	6.8	$1,161.79	$91.24	$137.22	$154.72	$11.26	$390.70	$208.26	$2,155.19	$144.80	$356.65	$13.45
4.88	x	3.05	x	0.41	14.9	200	4.0	5.6	$887.43	$91.24	$137.22	$142.82	$9.32	$318.31	$171.20	$1,757.54	$118.08	$290.84	$10.97
4.88	x	3.05	x	0.41	14.9	250	4.0	5.1	$722.81	$91.24	$137.22	$135.69	$8.46	$286.16	$154.73	$1,536.31	$103.22	$254.23	$9.59
4.88	x	3.05	x	0.41	14.9	300	4.0	4.8	$613.07	$91.24	$137.22	$130.93	$7.98	$268.40	$145.62	$1,394.46	$93.69	$230.76	$8.70
4.88	x	3.05	x	0.41	14.9	350	4.0	4.6	$534.68	$91.24	$137.22	$127.53	$7.69	$218.31	$179.06	$1,295.73	$87.06	$214.42	$8.09
4.88	x	3.05	x	0.41	14.9	400	4.0	4.5	$475.89	$91.24	$137.22	$124.98	$7.48	$249.59	$136.00	$1,222.40	$82.13	$202.29	$7.63

3" x 16" (64 x 406mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total $	$/m2	$/m3	$/SF
									49.22	7.48	9.22	9.60	0.60	19.39	11.92	1598.96	107.43	264.60	9.98
4.88	x	3.05	x	0.41	14.9	150	4.0	7.0	$1,161.79	$111.33	$137.22	$165.44	$11.55	$390.70	$223.29	$2,201.32	$147.90	$364.28	$13.74
4.88	x	3.05	x	0.41	14.9	200	4.0	5.8	$887.43	$111.33	$137.22	$151.06	$9.56	$318.31	$183.59	$1,798.50	$120.83	$297.62	$11.23
4.88	x	3.05	x	0.41	14.9	250	4.0	5.2	$722.81	$111.33	$137.22	$142.44	$8.68	$286.16	$165.94	$1,574.58	$105.79	$260.57	$9.83
4.88	x	3.05	x	0.41	14.9	300	4.0	4.9	$613.07	$111.33	$137.22	$136.68	$8.19	$268.40	$156.18	$1,431.07	$96.15	$236.82	$8.93
4.88	x	3.05	x	0.41	14.9	350	4.0	4.8	$534.68	$111.33	$137.22	$132.58	$7.89	$218.31	$189.22	$1,331.23	$89.44	$220.30	$8.31
4.88	x	3.05	x	0.41	14.9	400	4.0	4.6	$475.89	$111.33	$137.22	$129.50	$7.67	$249.59	$145.87	$1,257.07	$84.46	$208.02	$7.85

3" x 16" (64 x 406mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total $	$/m2	$/m3	$/SF
									49.22	8.59	9.22	9.60	0.61	19.39	12.70	1627.43	109.34	269.31	10.16
4.88	x	3.05	x	0.41	14.9	150	4.0	7.1	$1,161.79	$127.85	$137.22	$165.44	$11.82	$390.70	$239.08	$2,233.90	$150.09	$369.67	$13.94
4.88	x	3.05	x	0.41	14.9	200	4.0	5.9	$887.43	$127.85	$137.22	$151.06	$9.78	$318.31	$196.32	$1,827.97	$122.81	$302.50	$11.41
4.88	x	3.05	x	0.41	14.9	250	4.0	5.3	$722.81	$127.85	$137.22	$142.44	$8.87	$286.16	$177.31	$1,602.66	$107.68	$265.21	$10.00
4.88	x	3.05	x	0.41	14.9	300	4.0	5.0	$613.07	$127.85	$137.22	$136.69	$8.37	$268.40	$166.80	$1,458.40	$97.98	$241.34	$9.10
4.88	x	3.05	x	0.41	14.9	350	4.0	4.9	$534.68	$127.85	$137.22	$132.58	$8.06	$218.31	$199.37	$1,358.07	$91.24	$224.74	$8.48
4.88	x	3.05	x	0.41	14.9	400	4.0	4.7	$475.89	$127.85	$137.22	$129.50	$7.84	$249.59	$155.70	$1,283.59	$86.24	$212.41	$8.01

3" x 16" (64 x 406mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total $	$/m2	$/m3	$/SF
									49.22	11.61	9.22	9.60	0.58	19.39	11.14	1648.67	110.77	272.83	10.29
4.88	x	3.05	x	0.41	14.9	150	4.0	6.8	$1,161.79	$172.80	$137.22	$165.44	$11.26	$390.70	$208.26	$2,247.47	$151.00	$371.92	$14.03
4.88	x	3.05	x	0.41	14.9	200	4.0	5.6	$887.43	$172.80	$137.22	$151.06	$9.32	$318.31	$171.20	$1,847.34	$124.12	$305.70	$11.53
4.88	x	3.05	x	0.41	14.9	250	4.0	5.1	$722.81	$172.80	$137.22	$142.44	$8.46	$286.16	$154.73	$1,624.62	$109.15	$268.85	$10.14
4.88	x	3.05	x	0.41	14.9	300	4.0	4.8	$613.07	$172.80	$137.22	$136.69	$7.98	$268.40	$145.62	$1,481.78	$99.56	$245.21	$9.25
4.88	x	3.05	x	0.41	14.9	350	4.0	4.6	$534.68	$172.80	$137.22	$132.58	$7.69	$218.31	$179.06	$1,382.34	$92.87	$228.75	$8.63
4.88	x	3.05	x	0.41	14.9	400	4.0	4.5	$475.89	$172.80	$137.22	$129.50	$7.48	$249.59	$136.00	$1,308.48	$87.91	$216.53	$8.17

3" x 16" (64 x 406mm) TJI s33 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	AVERAGE CALCULATIONS $/m2 (material) TJI $	$/m2 (material) Decking $	$/m2 (1 1/8" OSB) Rim Board $	$/m2 (material) Connections $	$/m2 Equipment $	$/m2 Total Labour TJI $	$/m2 Total Labour Deck $	AVERAGE CALCULATIONS-Summary Total $	$/m2	$/m3	$/SF
									49.22	13.44	9.22	9.60	0.60	19.39	11.92	1687.67	113.39	279.28	10.53
4.88	x	3.05	x	0.41	14.9	150	4.0	7.0	$1,161.79	$200.04	$137.22	$165.44	$11.55	$390.70	$223.29	$2,290.03	$153.86	$378.96	$14.29
4.88	x	3.05	x	0.41	14.9	200	4.0	5.8	$887.43	$200.04	$137.22	$151.06	$9.56	$318.31	$183.59	$1,887.21	$126.79	$312.30	$11.78
4.88	x	3.05	x	0.41	14.9	250	4.0	5.2	$722.81	$200.04	$137.22	$142.44	$8.68	$286.16	$165.94	$1,663.29	$111.75	$275.25	$10.38
4.88	x	3.05	x	0.41	14.9	300	4.0	4.9	$613.07	$200.04	$137.22	$136.68	$8.19	$268.40	$156.18	$1,519.78	$102.11	$251.50	$9.49
4.88	x	3.05	x	0.41	14.9	350	4.0	4.8	$534.68	$200.04	$137.22	$132.58	$7.89	$218.31	$189.22	$1,419.94	$95.40	$234.98	$8.86
4.88	x	3.05	x	0.41	14.9	400	4.0	4.6	$475.89	$200.04	$137.22	$129.49	$7.67	$249.59	$145.87	$1,345.77	$90.42	$222.70	$8.40

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix

Q – TABLE 19 – TRUSS JOIST (TJI s47) FLOOR FRAMING

Hanscomb

TABLE 19 GROUP 1 - TRUSS JOIST (s47) 4" X 12" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

4" x 12" (89 x 292mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 60.14	$/m2 6.13	$/m2 6.63	$/m2 9.98	$/m2 0.52	$/m2 16.23	$/m2 10.70				
AVERAGE CALCULATIONS-Summary																Total 1642.35	$/m2 110.34	$/m3 377.89	$/SF 10.25
4.88	x	3.05	x	0.29	14.9	150	4.0	6.0	$1,423.62	$91.24	$98.69	$167.21	$10.02	$318.88	$208.26	$2,317.92	$155.73	$533.33	$14.47
4.88	x	3.05	x	0.29	14.9	200	4.0	5.0	$1,085.75	$91.24	$98.69	$155.32	$8.32	$260.40	$171.20	$1,870.92	$125.70	$430.48	$11.68
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$883.03	$91.24	$98.69	$148.18	$7.57	$234.43	$154.72	$1,617.86	$108.70	$372.25	$10.10
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$747.88	$91.24	$98.69	$143.43	$7.15	$220.07	$145.62	$1,454.08	$97.69	$334.57	$9.08
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$651.35	$91.24	$98.69	$140.03	$6.89	$211.17	$139.98	$1,339.35	$89.99	$308.17	$8.36
4.88	x	3.05	x	0.29	14.9	400	4.0	4.0	$578.95	$91.24	$98.69	$137.48	$6.71	$204.87	$136.00	$1,253.94	$84.25	$288.52	$7.83

4" x 12" (89 x 292mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 60.14	$/m2 7.48	$/m2 6.63	$/m2 9.98	$/m2 0.54	$/m2 16.23	$/m2 11.48				
AVERAGE CALCULATIONS-Summary																Total 1674.20	$/m2 112.48	$/m3 385.22	$/SF 10.45
4.88	x	3.05	x	0.29	14.9	150	4.0	6.2	$1,423.62	$111.33	$98.69	$167.22	$10.31	$318.88	$223.30	$2,353.35	$158.11	$541.48	$14.69
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$1,085.75	$111.33	$98.69	$155.32	$8.56	$260.40	$183.59	$1,903.64	$127.90	$438.01	$11.88
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$883.03	$111.33	$98.69	$148.19	$7.79	$234.43	$165.93	$1,649.39	$110.82	$379.51	$10.30
4.88	x	3.05	x	0.29	14.9	300	4.0	4.4	$747.88	$111.33	$98.69	$143.43	$7.36	$220.07	$156.18	$1,484.94	$99.77	$341.67	$9.27
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$651.35	$111.33	$98.69	$140.03	$7.09	$211.17	$150.14	$1,369.80	$92.03	$315.18	$8.55
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$578.95	$111.33	$98.69	$137.48	$6.90	$204.87	$145.87	$1,284.09	$86.27	$295.46	$8.02

4" x 12" (89 x 292mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 60.14	$/m2 8.59	$/m2 6.63	$/m2 9.98	$/m2 0.55	$/m2 16.23	$/m2 12.27				
AVERAGE CALCULATIONS-Summary																Total 1702.67	$/m2 114.40	$/m3 391.77	$/SF 10.63
4.88	x	3.05	x	0.29	14.9	150	4.0	6.4	$1,423.62	$127.85	$98.69	$167.22	$10.58	$318.88	$239.08	$2,385.92	$160.30	$548.98	$14.89
4.88	x	3.05	x	0.29	14.9	200	4.0	5.3	$1,085.75	$127.85	$98.69	$155.33	$8.78	$260.40	$196.31	$1,933.11	$129.88	$444.79	$12.07
4.88	x	3.05	x	0.29	14.9	250	4.0	4.8	$883.03	$127.85	$98.69	$148.19	$7.98	$234.43	$177.30	$1,677.47	$112.70	$385.97	$10.47
4.88	x	3.05	x	0.29	14.9	300	4.0	4.5	$747.88	$127.85	$98.69	$143.43	$7.54	$220.07	$166.81	$1,512.27	$101.60	$347.96	$9.44
4.88	x	3.05	x	0.29	14.9	350	4.0	4.4	$651.35	$127.85	$98.69	$140.03	$7.27	$211.17	$160.30	$1,396.66	$93.84	$321.36	$8.72
4.88	x	3.05	x	0.29	14.9	400	4.0	4.3	$578.95	$127.85	$98.69	$137.48	$7.07	$204.87	$155.70	$1,310.61	$88.05	$301.56	$8.18

4" x 12" (89 x 292mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 60.14	$/m2 11.61	$/m2 6.63	$/m2 9.98	$/m2 0.52	$/m2 16.23	$/m2 10.70				
AVERAGE CALCULATIONS-Summary																Total 1723.91	$/m2 115.82	$/m3 396.65	$/SF 10.76
4.88	x	3.05	x	0.29	14.9	150	4.0	6.0	$1,423.62	$172.80	$98.69	$167.22	$10.02	$318.88	$208.26	$2,399.49	$161.21	$552.10	$14.98
4.88	x	3.05	x	0.29	14.9	200	4.0	5.0	$1,085.75	$172.80	$98.69	$155.32	$8.32	$260.40	$171.20	$1,952.48	$131.18	$449.25	$12.19
4.88	x	3.05	x	0.29	14.9	250	4.0	4.6	$883.03	$172.80	$98.69	$148.19	$7.57	$234.43	$154.72	$1,699.43	$114.18	$391.02	$10.61
4.88	x	3.05	x	0.29	14.9	300	4.0	4.3	$747.88	$172.80	$98.69	$143.43	$7.15	$220.07	$145.62	$1,535.64	$103.17	$353.34	$9.59
4.88	x	3.05	x	0.29	14.9	350	4.0	4.2	$651.35	$172.80	$98.69	$140.03	$6.89	$211.17	$139.98	$1,420.91	$95.47	$326.94	$8.87
4.88	x	3.05	x	0.29	14.9	400	4.0	4.0	$578.95	$172.80	$98.69	$137.48	$6.71	$204.87	$136.00	$1,335.50	$89.73	$307.29	$8.34

4" x 12" (89 x 292mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2 60.14	$/m2 13.44	$/m2 6.63	$/m2 9.98	$/m2 0.54	$/m2 16.23	$/m2 11.48				
AVERAGE CALCULATIONS-Summary																Total 1762.91	$/m2 118.44	$/m3 405.63	$/SF 11.00
4.88	x	3.05	x	0.29	14.9	150	4.0	6.2	$1,423.62	$200.04	$98.69	$167.21	$10.31	$318.88	$223.30	$2,442.05	$164.07	$561.89	$15.24
4.88	x	3.05	x	0.29	14.9	200	4.0	5.2	$1,085.75	$200.04	$98.69	$155.32	$8.56	$260.40	$183.59	$1,992.35	$133.86	$458.42	$12.44
4.88	x	3.05	x	0.29	14.9	250	4.0	4.7	$883.03	$200.04	$98.69	$148.19	$7.79	$234.43	$165.93	$1,738.10	$116.78	$399.92	$10.85
4.88	x	3.05	x	0.29	14.9	300	4.0	4.4	$747.88	$200.04	$98.69	$143.43	$7.36	$220.07	$156.18	$1,573.65	$105.73	$362.08	$9.82
4.88	x	3.05	x	0.29	14.9	350	4.0	4.3	$651.35	$200.04	$98.69	$140.03	$7.09	$211.17	$150.14	$1,458.51	$97.99	$335.59	$9.10
4.88	x	3.05	x	0.29	14.9	400	4.0	4.2	$578.95	$200.04	$98.69	$137.48	$6.90	$204.87	$145.87	$1,372.80	$92.23	$315.87	$8.57

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 19 GROUP 2 - TRUSS JOIST (s47) 4" X 14" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

4" x 14" (89 x 356mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									66.71	6.13	8.08	10.49	0.55	17.83	10.70	1793.40	120.49	338.46	11.19
4.88	x	3.05	x	0.36	14.9	150	4.0	6.4	$1,581.12	$91.24	$120.32	$174.73	$10.57	$350.80	$208.26	$2,537.04	$170.45	$478.80	$15.84
4.88	x	3.05	x	0.36	14.9	200	4.0	5.3	$1,205.06	$91.24	$120.32	$162.83	$8.77	$286.14	$171.20	$2,045.56	$137.43	$386.05	$12.77
4.88	x	3.05	x	0.36	14.9	250	4.0	4.8	$979.41	$91.24	$120.32	$155.70	$7.96	$257.42	$154.72	$1,766.77	$118.70	$333.43	$11.03
4.88	x	3.05	x	0.36	14.9	300	4.0	4.5	$828.99	$91.24	$120.32	$150.94	$7.52	$241.55	$145.62	$1,586.18	$106.57	$299.35	$9.90
4.88	x	3.05	x	0.36	14.9	350	4.0	4.4	$721.54	$91.24	$120.32	$147.54	$7.24	$231.71	$139.98	$1,459.57	$98.06	$275.46	$9.11
4.88	x	3.05	x	0.36	14.9	400	4.0	4.3	$640.95	$91.24	$120.32	$144.99	$7.05	$224.76	$135.98	$1,365.29	$91.73	$257.66	$8.52

4" x 14" (89 x 356mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									66.71	7.48	8.08	10.49	0.57	17.83	11.48	1825.27	122.63	344.47	11.39
4.88	x	3.05	x	0.36	14.9	150	4.0	6.5	$1,581.12	$111.33	$120.32	$174.74	$10.86	$350.80	$223.30	$2,572.47	$172.83	$485.49	$16.06
4.88	x	3.05	x	0.36	14.9	200	4.0	5.4	$1,205.06	$111.33	$120.32	$162.83	$9.01	$286.14	$183.59	$2,078.28	$139.63	$392.22	$12.97
4.88	x	3.05	x	0.36	14.9	250	4.0	4.9	$979.41	$111.33	$120.32	$155.71	$8.18	$257.42	$165.94	$1,798.31	$120.82	$339.39	$11.22
4.88	x	3.05	x	0.36	14.9	300	4.0	4.7	$828.99	$111.33	$120.32	$150.94	$7.73	$241.55	$156.18	$1,617.04	$108.64	$305.18	$10.09
4.88	x	3.05	x	0.36	14.9	350	4.0	4.5	$721.54	$111.33	$120.32	$147.54	$7.45	$231.71	$150.14	$1,490.03	$100.11	$281.21	$9.30
4.88	x	3.05	x	0.36	14.9	400	4.0	4.4	$640.95	$111.33	$120.32	$145.00	$7.25	$224.76	$145.86	$1,395.47	$93.76	$263.36	$8.71

4" x 14" (89 x 356mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									66.71	8.59	8.08	10.49	0.58	17.83	12.27	1853.73	124.55	349.85	11.57
4.88	x	3.05	x	0.36	14.9	150	4.0	6.7	$1,581.12	$127.85	$120.32	$174.74	$11.13	$350.80	$239.08	$2,605.04	$175.02	$491.64	$16.26
4.88	x	3.05	x	0.36	14.9	200	4.0	5.6	$1,205.06	$127.85	$120.32	$162.83	$9.22	$286.14	$196.31	$2,107.73	$141.61	$397.78	$13.16
4.88	x	3.05	x	0.36	14.9	250	4.0	5.1	$979.41	$127.85	$120.32	$155.71	$8.38	$257.42	$177.31	$1,826.40	$122.71	$344.69	$11.40
4.88	x	3.05	x	0.36	14.9	300	4.0	4.8	$828.99	$127.85	$120.32	$150.94	$7.91	$241.55	$166.80	$1,644.36	$110.48	$310.33	$10.26
4.88	x	3.05	x	0.36	14.9	350	4.0	4.6	$721.54	$127.85	$120.32	$147.54	$7.62	$231.71	$160.30	$1,516.88	$101.91	$286.27	$9.47
4.88	x	3.05	x	0.36	14.9	400	4.0	4.5	$640.95	$127.85	$120.32	$145.00	$7.42	$224.76	$155.69	$1,421.99	$95.54	$268.37	$8.88

4" x 14" (89 x 356mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									66.71	11.61	8.08	10.49	0.55	17.83	10.70	1874.97	125.97	353.85	11.70
4.88	x	3.05	x	0.36	14.9	150	4.0	6.4	$1,581.12	$172.80	$120.32	$174.74	$10.57	$350.80	$208.26	$2,618.61	$175.93	$494.20	$16.34
4.88	x	3.05	x	0.36	14.9	200	4.0	5.3	$1,205.06	$172.80	$120.32	$162.83	$8.77	$286.14	$171.20	$2,127.12	$142.91	$401.44	$13.28
4.88	x	3.05	x	0.36	14.9	250	4.0	4.8	$979.41	$172.80	$120.32	$155.71	$7.96	$257.42	$154.72	$1,848.34	$124.18	$348.83	$11.54
4.88	x	3.05	x	0.36	14.9	300	4.0	4.5	$828.99	$172.80	$120.32	$150.94	$7.52	$241.55	$145.62	$1,667.74	$112.05	$314.74	$10.41
4.88	x	3.05	x	0.36	14.9	350	4.0	4.4	$721.54	$172.80	$120.32	$147.54	$7.24	$231.71	$139.98	$1,541.13	$103.54	$290.85	$9.62
4.88	x	3.05	x	0.36	14.9	400	4.0	4.3	$640.95	$172.80	$120.32	$145.00	$7.05	$224.76	$135.98	$1,446.86	$97.21	$273.06	$9.03

4" x 14" (89 x 356mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									66.71	13.44	8.08	10.49	0.57	17.83	11.48	1913.98	128.59	361.22	11.95
4.88	x	3.05	x	0.36	14.9	150	4.0	6.5	$1,581.12	$200.04	$120.32	$174.74	$10.86	$350.80	$223.30	$2,661.18	$178.79	$502.23	$16.61
4.88	x	3.05	x	0.36	14.9	200	4.0	5.4	$1,205.06	$200.04	$120.32	$162.83	$9.01	$286.14	$183.59	$2,166.99	$145.59	$408.97	$13.53
4.88	x	3.05	x	0.36	14.9	250	4.0	4.9	$979.41	$200.04	$120.32	$155.70	$8.18	$257.42	$165.94	$1,887.01	$126.78	$356.13	$11.78
4.88	x	3.05	x	0.36	14.9	300	4.0	4.7	$828.99	$200.04	$120.32	$150.94	$7.73	$241.55	$156.18	$1,705.75	$114.60	$321.92	$10.65
4.88	x	3.05	x	0.36	14.9	350	4.0	4.5	$721.54	$200.04	$120.32	$147.54	$7.45	$231.71	$150.14	$1,578.74	$106.07	$297.95	$9.85
4.88	x	3.05	x	0.36	14.9	400	4.0	4.4	$640.95	$200.04	$120.32	$145.00	$7.25	$224.76	$145.86	$1,484.18	$99.72	$280.10	$9.26

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 19 GROUP 3 - TRUSS JOIST (s47) 4" X 16" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

4" x 16" (89 x 406mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									70.88	6.13	9.22	10.81	0.58	19.83	10.70	1907.50	128.16	315.66	11.91
4.88	x	3.05	x	0.41	14.9	150	4.0	6.8	$1,681.36	$91.24	$137.22	$179.51	$11.26	$390.70	$208.26	$2,699.55	$181.37	$446.73	$16.85
4.88	x	3.05	x	0.41	14.9	200	4.0	5.6	$1,280.98	$91.24	$137.22	$167.61	$9.32	$318.31	$171.20	$2,175.88	$146.19	$360.07	$13.58
4.88	x	3.05	x	0.41	14.9	250	4.0	5.1	$1,040.75	$91.24	$137.22	$160.48	$8.46	$286.16	$154.73	$1,879.04	$126.25	$310.95	$11.73
4.88	x	3.05	x	0.41	14.9	300	4.0	4.8	$880.60	$91.24	$137.22	$155.72	$7.98	$268.40	$145.62	$1,686.78	$113.33	$279.13	$10.53
4.88	x	3.05	x	0.41	14.9	350	4.0	4.6	$766.20	$91.24	$137.22	$152.32	$7.69	$257.39	$139.98	$1,552.04	$104.28	$256.84	$9.69
4.88	x	3.05	x	0.41	14.9	400	4.0	4.5	$680.41	$91.24	$137.22	$149.77	$7.48	$249.59	$136.00	$1,451.71	$97.53	$240.23	$9.06

AVERAGE CALCULATIONS-Summary

Total	$/m2	$/m3	$/SF
1907.50	128.16	315.66	11.91

4" x 16" (89 x 406mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									70.88	7.48	9.22	10.81	0.60	19.83	11.48	1939.36	130.30	320.93	12.11
4.88	x	3.05	x	0.41	14.9	150	4.0	7.0	$1,681.36	$111.33	$137.22	$179.51	$11.55	$390.70	$223.29	$2,734.96	$183.75	$452.59	$17.07
4.88	x	3.05	x	0.41	14.9	200	4.0	5.8	$1,280.98	$111.33	$137.22	$167.62	$9.56	$318.31	$183.59	$2,208.61	$148.39	$365.49	$13.79
4.88	x	3.05	x	0.41	14.9	250	4.0	5.2	$1,040.75	$111.33	$137.22	$160.48	$8.68	$286.16	$165.94	$1,910.56	$128.36	$316.17	$11.93
4.88	x	3.05	x	0.41	14.9	300	4.0	4.9	$880.60	$111.33	$137.22	$155.72	$8.19	$268.40	$156.18	$1,717.64	$115.40	$284.24	$10.72
4.88	x	3.05	x	0.41	14.9	350	4.0	4.8	$766.20	$111.33	$137.22	$152.33	$7.89	$257.39	$150.14	$1,582.50	$106.32	$261.88	$9.88
4.88	x	3.05	x	0.41	14.9	400	4.0	4.6	$680.41	$111.33	$137.22	$149.77	$7.67	$249.59	$145.87	$1,481.86	$99.56	$245.22	$9.25

AVERAGE CALCULATIONS-Summary

Total	$/m2	$/m3	$/SF
1939.36	130.30	320.93	12.11

4" x 16" (89 x 406mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									70.88	8.59	9.22	10.81	0.61	19.83	12.27	1967.82	132.21	325.64	12.28
4.88	x	3.05	x	0.41	14.9	150	4.0	7.1	$1,681.36	$127.85	$137.22	$179.51	$11.82	$390.70	$239.08	$2,767.54	$185.94	$457.98	$17.27
4.88	x	3.05	x	0.41	14.9	200	4.0	5.9	$1,280.98	$127.85	$137.22	$167.62	$9.78	$318.31	$196.32	$2,238.08	$150.37	$370.36	$13.97
4.88	x	3.05	x	0.41	14.9	250	4.0	5.3	$1,040.75	$127.85	$137.22	$160.48	$8.87	$286.16	$177.31	$1,938.64	$130.25	$320.81	$12.10
4.88	x	3.05	x	0.41	14.9	300	4.0	5.0	$880.60	$127.85	$137.22	$155.72	$8.37	$268.40	$166.80	$1,744.96	$117.24	$288.76	$10.89
4.88	x	3.05	x	0.41	14.9	350	4.0	4.9	$766.20	$127.85	$137.22	$152.33	$8.06	$257.39	$160.29	$1,609.34	$108.13	$266.32	$10.05
4.88	x	3.05	x	0.41	14.9	400	4.0	4.7	$680.41	$127.85	$137.22	$149.77	$7.84	$249.59	$155.70	$1,508.38	$101.34	$249.61	$9.42

AVERAGE CALCULATIONS-Summary

Total	$/m2	$/m3	$/SF
1967.82	132.21	325.64	12.28

4" x 16" (89 x 406mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									70.88	11.61	9.22	10.81	0.58	19.83	10.70	1989.06	133.64	329.16	12.42
4.88	x	3.05	x	0.41	14.9	150	4.0	6.8	$1,681.36	$172.80	$137.22	$179.51	$11.26	$390.70	$208.26	$2,781.11	$186.85	$460.23	$17.36
4.88	x	3.05	x	0.41	14.9	200	4.0	5.6	$1,280.98	$172.80	$137.22	$167.62	$9.32	$318.31	$171.20	$2,257.45	$151.67	$373.57	$14.09
4.88	x	3.05	x	0.41	14.9	250	4.0	5.1	$1,040.75	$172.80	$137.22	$160.48	$8.46	$286.16	$154.73	$1,960.60	$131.73	$324.45	$12.24
4.88	x	3.05	x	0.41	14.9	300	4.0	4.8	$880.60	$172.80	$137.22	$155.72	$7.98	$268.40	$145.62	$1,768.34	$118.81	$292.63	$11.04
4.88	x	3.05	x	0.41	14.9	350	4.0	4.6	$766.20	$172.80	$137.22	$152.33	$7.69	$257.39	$139.98	$1,633.61	$109.76	$270.34	$10.20
4.88	x	3.05	x	0.41	14.9	400	4.0	4.5	$680.41	$172.80	$137.22	$149.77	$7.48	$249.59	$136.00	$1,533.27	$103.01	$253.73	$9.57

AVERAGE CALCULATIONS-Summary

Total	$/m2	$/m3	$/SF
1989.06	133.64	329.16	12.42

4" x 16" (89 x 406mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									70.88	13.44	9.22	10.81	0.60	19.83	11.48	2028.06	136.26	335.61	12.66
4.88	x	3.05	x	0.41	14.9	150	4.0	7.0	$1,681.36	$200.04	$137.22	$179.51	$11.55	$390.70	$223.29	$2,823.67	$189.71	$467.27	$17.62
4.88	x	3.05	x	0.41	14.9	200	4.0	5.8	$1,280.98	$200.04	$137.22	$167.61	$9.56	$318.31	$183.59	$2,297.31	$154.35	$380.17	$14.34
4.88	x	3.05	x	0.41	14.9	250	4.0	5.2	$1,040.75	$200.04	$137.22	$160.48	$8.68	$286.16	$165.94	$1,999.27	$134.32	$330.85	$12.48
4.88	x	3.05	x	0.41	14.9	300	4.0	4.9	$880.60	$200.04	$137.22	$155.72	$8.19	$268.40	$156.18	$1,806.35	$121.36	$298.92	$11.27
4.88	x	3.05	x	0.41	14.9	350	4.0	4.8	$766.20	$200.04	$137.22	$152.33	$7.89	$257.39	$150.14	$1,671.21	$112.28	$276.56	$10.43
4.88	x	3.05	x	0.41	14.9	400	4.0	4.6	$680.41	$200.04	$137.22	$149.77	$7.67	$249.59	$145.87	$1,570.57	$105.52	$259.90	$9.80

AVERAGE CALCULATIONS-Summary

Total	$/m2	$/m3	$/SF
2028.06	136.26	335.61	12.66

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 19 GROUP 4 - TRUSS JOIST (s47) 4" X 18" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

4" x 18" (89 x 457mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

					Floor Area	Joist Spacing		Total Man	AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									80.56	6.13	10.38	11.55	0.63	22.39	10.70	2118.73	142.35	311.49	13.22
									(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	TJI $	Decking $	Rim Board $	Connections $	Equipment $	TJI $	Deck $	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.46	14.9	150	4.0	7.3	$1,913.52	$91.24	$154.46	$190.59	$12.14	$441.99	$208.26	$3,012.20	$202.38	$442.84	$18.80
4.88	x	3.05	x	0.46	14.9	200	4.0	6.0	$1,456.83	$91.24	$154.46	$178.69	$10.03	$359.69	$171.19	$2,422.13	$162.73	$356.09	$15.12
4.88	x	3.05	x	0.46	14.9	250	4.0	5.5	$1,182.82	$91.24	$154.46	$171.55	$9.09	$323.12	$154.72	$2,087.00	$140.22	$306.82	$13.03
4.88	x	3.05	x	0.46	14.9	300	4.0	5.2	$1,000.14	$91.24	$154.46	$166.80	$8.58	$302.92	$145.62	$1,869.76	$125.62	$274.88	$11.67
4.88	x	3.05	x	0.46	14.9	350	4.0	5.0	$869.66	$91.24	$154.46	$163.40	$8.25	$290.40	$139.98	$1,717.39	$115.38	$252.48	$10.72
4.88	x	3.05	x	0.46	14.9	400	4.0	4.8	$771.80	$91.24	$154.46	$160.84	$8.03	$281.54	$135.99	$1,603.90	$107.76	$235.80	$10.01

4" x 18" (89 x 457mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

					Floor Area	Joist Spacing		Total Man	AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									80.56	7.48	10.38	11.55	0.64	22.39	11.48	2150.59	144.49	316.17	13.42
									(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	TJI $	Decking $	Rim Board $	Connections $	Equipment $	TJI $	Deck $	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.46	14.9	150	4.0	7.5	$1,913.52	$111.33	$154.46	$190.59	$12.43	$441.99	$223.30	$3,047.62	$204.76	$448.05	$19.02
4.88	x	3.05	x	0.46	14.9	200	4.0	6.2	$1,456.83	$111.33	$154.46	$178.70	$10.27	$359.69	$183.58	$2,454.86	$164.93	$360.90	$15.32
4.88	x	3.05	x	0.46	14.9	250	4.0	5.6	$1,182.82	$111.33	$154.46	$171.56	$9.31	$323.12	$165.94	$2,118.54	$142.34	$311.46	$13.22
4.88	x	3.05	x	0.46	14.9	300	4.0	5.3	$1,000.14	$111.33	$154.46	$166.80	$8.78	$302.92	$156.18	$1,900.61	$127.69	$279.42	$11.86
4.88	x	3.05	x	0.46	14.9	350	4.0	5.1	$869.66	$111.33	$154.46	$163.40	$8.46	$290.40	$150.14	$1,747.85	$117.43	$256.96	$10.91
4.88	x	3.05	x	0.46	14.9	400	4.0	5.0	$771.80	$111.33	$154.46	$160.85	$8.22	$281.54	$145.86	$1,634.06	$109.79	$240.23	$10.20

4" x 18" (89 x 457mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

					Floor Area	Joist Spacing		Total Man	AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									80.56	8.59	10.38	11.55	0.66	22.39	12.27	2179.06	146.40	320.36	13.60
									(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	TJI $	Decking $	Rim Board $	Connections $	Equipment $	TJI $	Deck $	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.46	14.9	150	4.0	7.7	$1,913.52	$127.85	$154.46	$190.59	$12.70	$441.99	$239.08	$3,080.19	$206.95	$452.84	$19.23
4.88	x	3.05	x	0.46	14.9	200	4.0	6.3	$1,456.83	$127.85	$154.46	$178.70	$10.49	$359.69	$196.31	$2,484.33	$166.91	$365.24	$15.51
4.88	x	3.05	x	0.46	14.9	250	4.0	5.7	$1,182.82	$127.85	$154.46	$171.56	$9.51	$323.12	$177.31	$2,146.63	$144.22	$315.59	$13.40
4.88	x	3.05	x	0.46	14.9	300	4.0	5.4	$1,000.14	$127.85	$154.46	$166.80	$8.97	$302.92	$166.80	$1,927.94	$129.53	$283.44	$12.03
4.88	x	3.05	x	0.46	14.9	350	4.0	5.2	$869.66	$127.85	$154.46	$163.40	$8.63	$290.40	$160.29	$1,774.69	$119.23	$260.91	$11.08
4.88	x	3.05	x	0.46	14.9	400	4.0	5.1	$771.80	$127.85	$154.46	$160.85	$8.39	$281.54	$155.69	$1,660.58	$111.57	$244.13	$10.37

4" x 18" (89 x 457mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

					Floor Area	Joist Spacing		Total Man	AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									80.56	11.61	10.38	11.55	0.63	22.39	10.70	2200.30	147.83	323.48	13.73
									(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	TJI $	Decking $	Rim Board $	Connections $	Equipment $	TJI $	Deck $	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.46	14.9	150	4.0		$1,913.52	$172.80	$154.46	$190.59	$12.14	$441.99	$208.26	$3,093.76	$207.86	$454.83	$19.31
4.88	x	3.05	x	0.46	14.9	200	4.0		$1,456.83	$172.80	$154.46	$178.70	$10.03	$359.69	$171.19	$2,503.70	$168.21	$368.08	$15.63
4.88	x	3.05	x	0.46	14.9	250	4.0		$1,182.82	$172.80	$154.46	$171.56	$9.09	$323.12	$154.72	$2,168.57	$145.70	$318.81	$13.54
4.88	x	3.05	x	0.46	14.9	300	4.0		$1,000.14	$172.80	$154.46	$166.80	$8.58	$302.92	$145.62	$1,951.32	$131.10	$286.87	$12.18
4.88	x	3.05	x	0.46	14.9	350	4.0		$869.66	$172.80	$154.46	$163.40	$8.25	$290.40	$139.98	$1,798.95	$120.86	$264.47	$11.23
4.88	x	3.05	x	0.46	14.9	400	4.0		$771.80	$172.80	$154.46	$160.85	$8.03	$281.54	$135.99	$1,685.47	$113.24	$247.79	$10.52

4" x 18" (89 x 457mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

					Floor Area	Joist Spacing		Total Man	AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
									80.56	13.44	10.38	11.55	0.64	22.39	11.48	2239.30	150.45	329.21	13.98
									(material)	(material)	(1 1/8" OSB)	(material)		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	TJI $	Decking $	Rim Board $	Connections $	Equipment $	TJI $	Deck $	Total	$/m2	$/m3	$/SF
4.88	x	3.05	x	0.46	14.9	150	4.0		$1,913.52	$200.04	$154.46	$190.59	$12.43	$441.99	$223.30	$3,136.33	$210.72	$461.09	$19.58
4.88	x	3.05	x	0.46	14.9	200	4.0		$1,456.83	$200.04	$154.46	$178.70	$10.27	$359.69	$183.58	$2,543.57	$170.89	$373.95	$15.88
4.88	x	3.05	x	0.46	14.9	250	4.0		$1,182.82	$200.04	$154.46	$171.55	$9.31	$323.12	$165.94	$2,207.24	$148.30	$324.50	$13.78
4.88	x	3.05	x	0.46	14.9	300	4.0		$1,000.14	$200.04	$154.46	$166.80	$8.78	$302.92	$156.18	$1,989.32	$133.65	$292.46	$12.42
4.88	x	3.05	x	0.46	14.9	350	4.0		$869.66	$200.04	$154.46	$163.40	$8.46	$290.40	$150.14	$1,836.56	$123.39	$270.00	$11.46
4.88	x	3.05	x	0.46	14.9	400	4.0		$771.80	$200.04	$154.46	$160.85	$8.22	$281.54	$145.86	$1,722.77	$115.75	$253.27	$10.75

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 19 GROUP 5 - TRUSS JOIST (s47) 4" X 20" - ENGINEERED WOOD - FLOOR FRAMING

OCT 2013

(Truss Joist (TJI) - c/w Various Floor Decking)

4" x 20" (89 x 508mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									85.85	6.13	11.54	11.96	0.69	25.81	10.70	2272.51	152.68	300.55	14.18
4.88	x	3.05	x	0.51	14.9	150	4.0	8.0	$2,040.35	$91.24	$171.69	$196.64	$13.32	$510.39	$208.26	$3,231.89	$217.14	$427.44	$20.17
4.88	x	3.05	x	0.51	14.9	200	4.0	6.6	$1,552.90	$91.24	$171.69	$184.74	$10.98	$414.84	$171.20	$2,597.59	$174.52	$343.55	$16.21
4.88	x	3.05	x	0.51	14.9	250	4.0	6.0	$1,260.42	$91.24	$171.69	$177.62	$9.94	$372.40	$154.72	$2,238.03	$150.36	$295.99	$13.97
4.88	x	3.05	x	0.51	14.9	300	4.0	5.6	$1,065.44	$91.24	$171.69	$172.86	$9.37	$348.94	$145.63	$2,005.17	$134.72	$265.20	$12.52
4.88	x	3.05	x	0.51	14.9	350	4.0	5.4	$926.17	$91.24	$171.69	$169.46	$9.01	$334.41	$139.98	$1,841.96	$123.75	$243.61	$11.50
4.88	x	3.05	x	0.51	14.9	400	4.0	5.3	$821.72	$91.24	$171.69	$166.91	$8.76	$324.12	$135.99	$1,720.43	$115.59	$227.54	$10.74

4" x 20" (89 x 508mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 23/32" (19mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									85.85	7.48	11.54	11.96	0.70	25.81	11.48	2304.37	154.82	304.77	14.38
4.88	x	3.05	x	0.51	14.9	150	4.0	8.2	$2,040.35	$111.33	$171.69	$196.64	$13.60	$510.39	$223.30	$3,267.30	$219.52	$432.12	$20.39
4.88	x	3.05	x	0.51	14.9	200	4.0	6.8	$1,552.90	$111.33	$171.69	$184.75	$11.22	$414.84	$183.59	$2,630.32	$176.72	$347.88	$16.42
4.88	x	3.05	x	0.51	14.9	250	4.0	6.1	$1,260.42	$111.33	$171.69	$177.62	$10.16	$372.40	$165.93	$2,269.55	$152.48	$300.16	$14.17
4.88	x	3.05	x	0.51	14.9	300	4.0	5.8	$1,065.44	$111.33	$171.69	$172.86	$9.58	$348.94	$156.19	$2,036.03	$136.79	$269.28	$12.71
4.88	x	3.05	x	0.51	14.9	350	4.0	5.6	$926.17	$111.33	$171.69	$169.46	$9.21	$334.41	$150.14	$1,872.41	$125.80	$247.64	$11.69
4.88	x	3.05	x	0.51	14.9	400	4.0	5.4	$821.72	$111.33	$171.69	$166.91	$8.96	$324.12	$145.87	$1,750.60	$117.62	$231.53	$10.93

4" x 20" (89 x 508mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 7/8" (23mm) T & G - OSB

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									85.85	8.59	11.54	11.96	0.72	25.81	12.27	2332.84	156.73	308.53	14.56
4.88	x	3.05	x	0.51	14.9	150	4.0	8.4	$2,040.35	$127.85	$171.69	$196.64	$13.88	$510.39	$239.08	$3,299.88	$221.71	$436.43	$20.60
4.88	x	3.05	x	0.51	14.9	200	4.0	6.9	$1,552.90	$127.85	$171.69	$184.75	$11.44	$414.84	$196.32	$2,659.79	$178.70	$351.77	$16.60
4.88	x	3.05	x	0.51	14.9	250	4.0	6.2	$1,260.42	$127.85	$171.69	$177.62	$10.36	$372.40	$177.30	$2,297.64	$154.37	$303.88	$14.34
4.88	x	3.05	x	0.51	14.9	300	4.0	5.9	$1,065.44	$127.85	$171.69	$172.86	$9.76	$348.94	$166.81	$2,063.35	$138.63	$272.89	$12.88
4.88	x	3.05	x	0.51	14.9	350	4.0	5.7	$926.17	$127.85	$171.69	$169.46	$9.39	$334.41	$160.30	$1,899.27	$127.60	$251.19	$11.85
4.88	x	3.05	x	0.51	14.9	400	4.0	5.5	$821.72	$127.85	$171.69	$166.91	$9.13	$324.12	$155.70	$1,777.12	$119.40	$235.04	$11.09

4" x 20" (89 x 508mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 5/8" (16mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									85.85	11.61	11.54	11.96	0.69	25.81	10.70	2354.07	158.16	311.34	14.69
4.88	x	3.05	x	0.51	14.9	150	4.0	8.0	$2,040.35	$172.80	$171.69	$196.64	$13.32	$510.39	$208.26	$3,313.45	$222.62	$438.22	$20.68
4.88	x	3.05	x	0.51	14.9	200	4.0	6.6	$1,552.90	$172.80	$171.69	$184.75	$10.98	$414.84	$171.20	$2,679.16	$180.00	$354.34	$16.72
4.88	x	3.05	x	0.51	14.9	250	4.0	6.0	$1,260.42	$172.80	$171.69	$177.62	$9.94	$372.40	$154.72	$2,319.59	$155.84	$306.78	$14.48
4.88	x	3.05	x	0.51	14.9	300	4.0	5.6	$1,065.44	$172.80	$171.69	$172.86	$9.37	$348.94	$145.63	$2,086.73	$140.20	$275.98	$13.02
4.88	x	3.05	x	0.51	14.9	350	4.0	5.4	$926.17	$172.80	$171.69	$169.46	$9.01	$334.41	$139.98	$1,923.52	$129.23	$254.40	$12.01
4.88	x	3.05	x	0.51	14.9	400	4.0	5.3	$821.72	$172.80	$171.69	$166.91	$8.76	$324.12	$135.99	$1,801.99	$121.07	$238.32	$11.25

4" x 20" (89 x 508mm) TJI s47 - Wood Framed Floor

Horizontal Install - 16' x 10' (4.88 x 3.05m) On Basement Foundation
Labour & Equip. Rate Varies
Floor Decking - 3/4" (20mm) T & G - Select Ply (not Standard)

Length		Width		Height	Floor Area m2	Joist Spacing mm	Crew	Total Man Hours	(material) TJI $	(material) Decking $	(1 1/8" OSB) Rim Board $	(material) Connections $	Equipment $	Total Labour TJI $	Total Labour Deck $	Total	$/m2	$/m3	$/SF
AVERAGE CALCULATIONS									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									85.85	13.44	11.54	11.96	0.70	25.81	11.48	2393.08	160.78	316.50	14.94
4.88	x	3.05	x	0.51	14.9	150	4.0	8.2	$2,040.35	$200.04	$171.69	$196.64	$13.60	$510.39	$223.30	$3,356.01	$225.48	$443.85	$20.95
4.88	x	3.05	x	0.51	14.9	200	4.0	6.8	$1,552.90	$200.04	$171.69	$184.75	$11.22	$414.84	$183.59	$2,719.03	$182.68	$359.61	$16.97
4.88	x	3.05	x	0.51	14.9	250	4.0	6.1	$1,260.42	$200.04	$171.69	$177.62	$10.16	$372.40	$165.93	$2,358.26	$158.44	$311.89	$14.72
4.88	x	3.05	x	0.51	14.9	300	4.0	5.8	$1,065.44	$200.04	$171.69	$172.86	$9.58	$348.94	$156.19	$2,124.74	$142.75	$281.01	$13.26
4.88	x	3.05	x	0.51	14.9	350	4.0	5.6	$926.17	$200.04	$171.69	$169.46	$9.21	$334.41	$150.14	$1,961.12	$131.76	$259.37	$12.24
4.88	x	3.05	x	0.51	14.9	400	4.0	5.4	$821.72	$200.04	$171.69	$166.91	$8.96	$324.12	$145.87	$1,839.31	$123.58	$243.26	$11.48

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix

R – TABLE 20 – DIMENSIONED WOOD EXTERIOR WALL FRAMING

Hanscomb

TABLE 20 GROUP 1 - DIMENSIONED WOOD - 2" X 4" SPF EXTERIOR WALL FRAMING

OCT 2013

(SPF #2 or Better - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 4" (38 x 89mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
7.29	4.54	1.54	0.26	7.98	7.18	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
428.61	28.80	323.56	2.68

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	3.1	$158.57	$67.57	$37.69	$5.22	$159.59	$143.63	$572.27	$38.45	$432.01	$3.57
4.88	x	0.09	x	3.05	14.9	200	4.0	2.5	$127.06	$67.57	$27.80	$4.20	$128.49	$115.65	$470.77	$31.63	$355.39	$2.94
4.88	x	0.09	x	3.05	14.9	250	4.0	2.3	$107.56	$67.57	$22.46	$3.76	$114.98	$103.48	$419.81	$28.21	$316.92	$2.62
4.88	x	0.09	x	3.05	14.9	300	4.0	2.1	$94.56	$67.57	$18.90	$3.51	$107.47	$96.72	$388.73	$26.12	$293.45	$2.43
4.88	x	0.09	x	3.05	14.9	350	4.0	2.0	$85.27	$67.57	$16.36	$3.36	$102.69	$92.43	$367.68	$24.70	$277.56	$2.29
4.88	x	0.09	x	3.05	14.9	400	4.0	2.0	$78.31	$67.57	$14.45	$3.25	$99.37	$89.43	$352.38	$23.68	$266.01	$2.20

2" x 4" (38 x 89mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
7.29	6.25	1.54	0.26	7.98	7.18	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
454.06	30.51	342.77	2.83

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	3.1	$158.57	$93.00	$37.71	$5.22	$159.59	$143.63	$597.72	$40.16	$451.22	$3.73
4.88	x	0.09	x	3.05	14.9	200	4.0	2.5	$127.06	$93.00	$27.82	$4.20	$128.49	$115.65	$496.22	$33.34	$374.60	$3.10
4.88	x	0.09	x	3.05	14.9	250	4.0	2.3	$107.56	$93.00	$22.48	$3.76	$114.98	$103.48	$445.26	$29.92	$336.13	$2.78
4.88	x	0.09	x	3.05	14.9	300	4.0	2.1	$94.56	$93.00	$18.92	$3.51	$107.47	$96.72	$414.18	$27.83	$312.67	$2.59
4.88	x	0.09	x	3.05	14.9	350	4.0	2.0	$85.27	$93.00	$16.38	$3.36	$102.69	$92.43	$393.13	$26.41	$296.77	$2.45
4.88	x	0.09	x	3.05	14.9	400	4.0	2.0	$78.31	$93.00	$14.47	$3.25	$99.37	$89.43	$377.83	$25.38	$285.22	$2.36

2" x 4" (38 x 89mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
7.29	8.06	1.54	0.26	7.98	7.18	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
481.00	32.32	363.11	3.00

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	3.1	$158.57	$119.97	$37.68	$5.22	$159.59	$143.63	$624.66	$41.97	$471.56	$3.90
4.88	x	0.09	x	3.05	14.9	200	4.0	2.5	$127.06	$119.97	$27.79	$4.20	$128.49	$115.65	$523.16	$35.15	$394.93	$3.27
4.88	x	0.09	x	3.05	14.9	250	4.0	2.3	$107.56	$119.97	$22.45	$3.76	$114.98	$103.48	$472.20	$31.73	$356.46	$2.95
4.88	x	0.09	x	3.05	14.9	300	4.0	2.1	$94.56	$119.97	$18.89	$3.51	$107.47	$96.72	$441.12	$29.64	$333.00	$2.75
4.88	x	0.09	x	3.05	14.9	350	4.0	2.0	$85.27	$119.97	$16.35	$3.36	$102.69	$92.43	$420.07	$28.22	$317.11	$2.62
4.88	x	0.09	x	3.05	14.9	400	4.0	2.0	$78.31	$119.97	$14.44	$3.25	$99.37	$89.43	$404.77	$27.19	$305.56	$2.53

2" x 4" (38 x 89mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
7.29	7.38	1.54	0.27	7.98	7.97	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
482.81	32.44	364.47	3.01

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	3.3	$158.57	$109.84	$37.69	$5.49	$159.59	$159.59	$630.77	$42.38	$476.17	$3.94
4.88	x	0.09	x	3.05	14.9	200	4.0	2.7	$127.06	$109.84	$27.80	$4.42	$128.49	$127.60	$525.21	$35.29	$396.48	$3.28
4.88	x	0.09	x	3.05	14.9	250	4.0	2.4	$107.56	$109.84	$22.46	$3.96	$114.98	$114.98	$473.78	$31.83	$357.66	$2.96
4.88	x	0.09	x	3.05	14.9	300	4.0	2.2	$94.56	$109.84	$18.90	$3.70	$107.47	$107.47	$441.94	$29.69	$333.62	$2.76
4.88	x	0.09	x	3.05	14.9	350	4.0	2.1	$85.27	$109.84	$16.36	$3.53	$102.69	$102.70	$420.39	$28.24	$317.35	$2.62
4.88	x	0.09	x	3.05	14.9	400	4.0	2.1	$78.31	$109.84	$14.45	$3.42	$99.37	$99.37	$404.76	$27.19	$305.55	$2.53

2" x 4" (38 x 89mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
7.29	10.07	1.54	0.27	7.98	7.97	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
522.85	35.13	394.70	3.26

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	3.3	$158.57	$149.88	$37.68	$5.49	$159.59	$159.59	$670.80	$45.07	$506.39	$4.19
4.88	x	0.09	x	3.05	14.9	200	4.0	2.7	$127.06	$149.88	$27.80	$4.42	$128.49	$127.60	$565.25	$37.98	$426.71	$3.53
4.88	x	0.09	x	3.05	14.9	250	4.0	2.4	$107.56	$149.88	$22.46	$3.96	$114.98	$114.98	$513.82	$34.52	$387.88	$3.21
4.88	x	0.09	x	3.05	14.9	300	4.0	2.2	$94.56	$149.88	$18.90	$3.70	$107.47	$107.47	$481.98	$32.38	$363.85	$3.01
4.88	x	0.09	x	3.05	14.9	350	4.0	2.1	$85.27	$149.88	$16.36	$3.53	$102.69	$102.70	$460.43	$30.93	$347.58	$2.87
4.88	x	0.09	x	3.05	14.9	400	4.0	2.1	$78.31	$149.88	$14.45	$3.42	$99.37	$99.37	$444.80	$29.88	$335.78	$2.78

2" x 4" (38 x 89mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
7.29	10.41	1.54	0.29	7.98	8.98	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
543.16	36.49	410.03	3.39

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	3.5	$158.57	$154.94	$37.68	$5.84	$159.59	$179.54	$696.16	$46.77	$525.53	$4.35
4.88	x	0.09	x	3.05	14.9	200	4.0	2.8	$127.06	$154.94	$27.80	$4.70	$128.49	$144.56	$587.55	$39.48	$443.54	$3.67
4.88	x	0.09	x	3.05	14.9	250	4.0	2.5	$107.56	$154.94	$22.46	$4.20	$114.98	$129.35	$533.49	$35.84	$402.73	$3.33
4.88	x	0.09	x	3.05	14.9	300	4.0	2.4	$94.56	$154.94	$18.90	$3.93	$107.47	$120.90	$500.70	$33.64	$377.98	$3.13
4.88	x	0.09	x	3.05	14.9	350	4.0	2.3	$85.27	$154.94	$16.36	$3.76	$102.69	$115.54	$478.56	$32.15	$361.27	$2.99
4.88	x	0.09	x	3.05	14.9	400	4.0	2.2	$78.31	$154.94	$14.45	$3.63	$99.37	$111.79	$462.49	$31.07	$349.13	$2.89

2" x 4" (38 x 89mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
7.29	12.09	1.54	0.29	7.98	8.98	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
568.16	38.17	428.91	3.55

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	3.5	$158.57	$179.95	$37.68	$5.84	$159.59	$179.54	$721.17	$48.45	$544.41	$4.50
4.88	x	0.09	x	3.05	14.9	200	4.0	2.8	$127.06	$179.95	$27.79	$4.70	$128.49	$144.56	$612.55	$41.15	$462.41	$3.82
4.88	x	0.09	x	3.05	14.9	250	4.0	2.5	$107.56	$179.95	$22.45	$4.20	$114.98	$129.35	$558.49	$37.52	$421.60	$3.49
4.88	x	0.09	x	3.05	14.9	300	4.0	2.4	$94.56	$179.95	$18.89	$3.93	$107.47	$120.90	$525.70	$35.32	$396.85	$3.28
4.88	x	0.09	x	3.05	14.9	350	4.0	2.3	$85.27	$179.95	$16.36	$3.76	$102.69	$115.54	$503.57	$33.83	$380.15	$3.14
4.88	x	0.09	x	3.05	14.9	400	4.0	2.2	$78.31	$179.95	$14.45	$3.63	$99.37	$111.79	$487.50	$32.75	$368.01	$3.04

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 20 GROUP 2 - DIMENSIONED WOOD - 2" X 6" SPF EXTERIOR WALL FRAMING

OCT 2013

(SPF #2 or Better - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 6" (38 x 140mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
10.82	4.54	1.53	0.27	8.45	7.18	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
488.00	32.79	234.19	3.05

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.14	x	3.05	14.9	150	4.0	3.2	$236.29	$67.57	$36.70	$5.38	$168.98	$143.63	$658.55	$44.25	$316.04	$4.11
4.88	x	0.14	x	3.05	14.9	200	4.0	2.6	$188.16	$67.57	$27.80	$4.33	$136.06	$115.64	$539.56	$36.25	$258.94	$3.37
4.88	x	0.14	x	3.05	14.9	250	4.0	2.3	$159.29	$67.57	$22.46	$3.88	$121.75	$103.47	$478.42	$32.14	$229.59	$2.99
4.88	x	0.14	x	3.05	14.9	300	4.0	2.2	$140.04	$67.57	$18.90	$3.62	$113.79	$96.72	$440.64	$29.60	$211.46	$2.75
4.88	x	0.14	x	3.05	14.9	350	4.0	2.1	$126.29	$67.57	$16.35	$3.46	$108.74	$92.42	$414.83	$27.87	$199.08	$2.59
4.88	x	0.14	x	3.05	14.9	400	4.0	2.0	$115.97	$67.57	$14.45	$3.35	$105.22	$89.43	$395.99	$26.61	$190.04	$2.47

2" x 6" (38 x 140mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
10.82	6.25	1.53	0.27	8.45	7.18	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
513.45	34.50	246.40	3.20

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.14	x	3.05	14.9	150	4.0	3.2	$236.29	$93.00	$36.72	$5.38	$168.98	$143.63	$684.00	$45.96	$328.25	$4.27
4.88	x	0.14	x	3.05	14.9	200	4.0	2.6	$188.16	$93.00	$27.82	$4.33	$136.06	$115.64	$565.01	$37.96	$271.15	$3.53
4.88	x	0.14	x	3.05	14.9	250	4.0	2.3	$159.29	$93.00	$22.48	$3.88	$121.75	$103.47	$503.87	$33.85	$241.81	$3.15
4.88	x	0.14	x	3.05	14.9	300	4.0	2.2	$140.04	$93.00	$18.92	$3.62	$113.79	$96.72	$466.09	$31.31	$223.68	$2.91
4.88	x	0.14	x	3.05	14.9	350	4.0	2.1	$126.29	$93.00	$16.37	$3.46	$108.74	$92.42	$440.28	$29.58	$211.29	$2.75
4.88	x	0.14	x	3.05	14.9	400	4.0	2.0	$115.97	$93.00	$14.47	$3.35	$105.22	$89.43	$421.44	$28.31	$202.25	$2.63

2" x 6" (38 x 140mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
10.82	8.06	1.53	0.27	8.45	7.18	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
540.39	36.31	259.33	3.37

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.14	x	3.05	14.9	150	4.0	3.2	$236.29	$119.97	$36.69	$5.38	$168.98	$143.63	$710.94	$47.77	$341.18	$4.44
4.88	x	0.14	x	3.05	14.9	200	4.0	2.6	$188.16	$119.97	$27.79	$4.33	$136.06	$115.64	$591.95	$39.77	$284.08	$3.69
4.88	x	0.14	x	3.05	14.9	250	4.0	2.3	$159.29	$119.97	$22.45	$3.88	$121.75	$103.47	$530.81	$35.66	$254.74	$3.31
4.88	x	0.14	x	3.05	14.9	300	4.0	2.2	$140.04	$119.97	$18.89	$3.62	$113.79	$96.72	$493.03	$33.12	$236.61	$3.08
4.88	x	0.14	x	3.05	14.9	350	4.0	2.1	$126.29	$119.97	$16.34	$3.46	$108.74	$92.42	$467.22	$31.39	$224.22	$2.92
4.88	x	0.14	x	3.05	14.9	400	4.0	2.0	$115.97	$119.97	$14.44	$3.35	$105.22	$89.43	$448.38	$30.12	$215.18	$2.80

2" x 6" (38 x 140mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
10.82	7.38	1.53	0.28	8.45	7.98	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
542.35	36.44	260.27	3.39

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.14	x	3.05	14.9	150	4.0	3.4	$236.29	$109.84	$36.70	$5.65	$168.98	$159.59	$717.05	$48.18	$344.11	$4.48
4.88	x	0.14	x	3.05	14.9	200	4.0	2.7	$188.16	$109.84	$27.80	$4.55	$136.06	$128.49	$594.90	$39.97	$285.49	$3.71
4.88	x	0.14	x	3.05	14.9	250	4.0	2.5	$159.29	$109.84	$22.46	$4.07	$121.75	$114.97	$532.38	$35.77	$255.49	$3.32
4.88	x	0.14	x	3.05	14.9	300	4.0	2.3	$140.04	$109.84	$18.90	$3.81	$113.79	$107.47	$493.85	$33.18	$237.00	$3.08
4.88	x	0.14	x	3.05	14.9	350	4.0	2.2	$126.29	$109.84	$16.35	$3.64	$108.74	$102.69	$467.55	$31.41	$224.38	$2.92
4.88	x	0.14	x	3.05	14.9	400	4.0	2.1	$115.97	$109.84	$14.45	$3.52	$105.22	$99.37	$448.37	$30.12	$215.17	$2.80

2" x 6" (38 x 140mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
10.82	10.07	1.53	0.28	8.45	7.98	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
582.39	39.13	279.49	3.64

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.14	x	3.05	14.9	150	4.0	3.4	$236.29	$149.88	$36.70	$5.65	$168.98	$159.59	$757.09	$50.87	$363.33	$4.73
4.88	x	0.14	x	3.05	14.9	200	4.0	2.7	$188.16	$149.88	$27.80	$4.55	$136.06	$128.49	$634.94	$42.66	$304.71	$3.96
4.88	x	0.14	x	3.05	14.9	250	4.0	2.5	$159.29	$149.88	$22.45	$4.07	$121.75	$114.97	$572.41	$38.46	$274.70	$3.57
4.88	x	0.14	x	3.05	14.9	300	4.0	2.3	$140.04	$149.88	$18.89	$3.81	$113.79	$107.47	$533.88	$35.87	$256.21	$3.33
4.88	x	0.14	x	3.05	14.9	350	4.0	2.2	$126.29	$149.88	$16.35	$3.64	$108.74	$102.69	$507.59	$34.10	$243.59	$3.17
4.88	x	0.14	x	3.05	14.9	400	4.0	2.1	$115.97	$149.88	$14.45	$3.52	$105.22	$99.37	$488.41	$32.81	$234.39	$3.05

2" x 6" (38 x 140mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
10.82	10.41	1.53	0.30	8.45	8.98	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
602.55	40.48	289.16	3.76

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.14	x	3.05	14.9	150	4.0	3.6	$236.29	$154.94	$36.70	$6.00	$168.98	$179.54	$782.45	$52.57	$375.50	$4.88
4.88	x	0.14	x	3.05	14.9	200	4.0	2.9	$188.16	$154.94	$27.80	$4.83	$136.06	$144.55	$656.34	$44.10	$314.98	$4.10
4.88	x	0.14	x	3.05	14.9	250	4.0	2.6	$159.29	$154.94	$22.45	$4.32	$121.75	$129.34	$592.09	$39.78	$284.15	$3.70
4.88	x	0.14	x	3.05	14.9	300	4.0	2.4	$140.04	$154.94	$18.89	$4.04	$113.79	$120.90	$552.60	$37.13	$265.19	$3.45
4.88	x	0.14	x	3.05	14.9	350	4.0	2.3	$126.29	$154.94	$16.35	$3.86	$108.74	$115.53	$525.71	$35.32	$252.29	$3.28
4.88	x	0.14	x	3.05	14.9	400	4.0	2.3	$115.97	$154.94	$14.45	$3.73	$105.22	$111.79	$506.10	$34.00	$242.88	$3.16

2" x 6" (38 x 140mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
10.82	12.09	1.53	0.30	8.45	8.98	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
627.56	42.16	301.17	3.92

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.14	x	3.05	14.9	150	4.0	3.6	$236.29	$179.95	$36.69	$6.00	$168.98	$179.54	$807.45	$54.25	$387.50	$5.04
4.88	x	0.14	x	3.05	14.9	200	4.0	2.9	$188.16	$179.95	$27.80	$4.83	$136.06	$144.55	$681.35	$45.78	$326.98	$4.25
4.88	x	0.14	x	3.05	14.9	250	4.0	2.6	$159.29	$179.95	$22.45	$4.32	$121.75	$129.34	$617.10	$41.46	$296.15	$3.85
4.88	x	0.14	x	3.05	14.9	300	4.0	2.4	$140.04	$179.95	$18.89	$4.04	$113.79	$120.90	$577.61	$38.81	$277.20	$3.61
4.88	x	0.14	x	3.05	14.9	350	4.0	2.3	$126.29	$179.95	$16.35	$3.86	$108.74	$115.53	$550.72	$37.00	$264.29	$3.44
4.88	x	0.14	x	3.05	14.9	400	4.0	2.3	$115.97	$179.95	$14.45	$3.73	$105.22	$111.79	$531.11	$35.68	$254.88	$3.32

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 20 GROUP 3 - DIMENSIONED WOOD - 2" X 8" SPF EXTERIOR WALL FRAMING

OCT 2013

(SPF #2 or Better - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 8" (38 x 191mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
16.28	4.54	1.53	0.28	8.98	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
577.33	38.79	203.08	3.60

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.19	x	3.05	14.9	150	4.0	3.4	$355.65	$67.57	$36.70	$5.56	$179.53	$143.64	$788.65	$52.99	$277.42	$4.92
4.88	x	0.19	x	3.05	14.9	200	4.0	2.7	$283.21	$67.57	$27.80	$4.48	$144.55	$115.65	$643.26	$43.22	$226.27	$4.02
4.88	x	0.19	x	3.05	14.9	250	4.0	2.4	$239.75	$67.57	$22.46	$4.01	$129.35	$103.48	$566.62	$38.07	$199.31	$3.54
4.88	x	0.19	x	3.05	14.9	300	4.0	2.3	$210.78	$67.57	$18.89	$3.74	$120.90	$96.72	$518.60	$34.84	$182.42	$3.24
4.88	x	0.19	x	3.05	14.9	350	4.0	2.2	$190.08	$67.57	$16.36	$3.58	$115.53	$92.43	$485.55	$32.62	$170.80	$3.03
4.88	x	0.19	x	3.05	14.9	400	4.0	2.1	$174.56	$67.57	$14.45	$3.46	$111.80	$89.43	$461.27	$30.99	$162.26	$2.88

2" x 8" (38 x 191mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
16.28	6.25	1.53	0.28	8.98	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
602.78	40.50	212.03	3.76

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.19	x	3.05	14.9	150	4.0	3.4	$355.65	$93.00	$36.72	$5.56	$179.53	$143.64	$814.10	$54.70	$286.37	$5.08
4.88	x	0.19	x	3.05	14.9	200	4.0	2.7	$283.21	$93.00	$27.82	$4.48	$144.55	$115.65	$668.71	$44.93	$235.23	$4.17
4.88	x	0.19	x	3.05	14.9	250	4.0	2.4	$239.75	$93.00	$22.48	$4.01	$129.35	$103.48	$592.07	$39.78	$208.27	$3.70
4.88	x	0.19	x	3.05	14.9	300	4.0	2.3	$210.78	$93.00	$18.92	$3.74	$120.90	$96.72	$544.06	$36.55	$191.38	$3.40
4.88	x	0.19	x	3.05	14.9	350	4.0	2.2	$190.08	$93.00	$16.38	$3.58	$115.53	$92.43	$511.00	$34.33	$179.75	$3.19
4.88	x	0.19	x	3.05	14.9	400	4.0	2.1	$174.56	$93.00	$14.47	$3.46	$111.80	$89.43	$486.72	$32.70	$171.21	$3.04

2" x 8" (38 x 191mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
16.28	8.06	1.53	0.28	8.98	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
629.72	42.31	221.51	3.93

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.19	x	3.05	14.9	150	4.0	3.4	$355.65	$119.97	$36.69	$5.56	$179.53	$143.64	$841.04	$56.51	$295.84	$5.25
4.88	x	0.19	x	3.05	14.9	200	4.0	2.7	$283.21	$119.97	$27.79	$4.48	$144.55	$115.65	$695.65	$46.74	$244.70	$4.34
4.88	x	0.19	x	3.05	14.9	250	4.0	2.4	$239.75	$119.97	$22.45	$4.01	$129.35	$103.48	$619.01	$41.59	$217.74	$3.86
4.88	x	0.19	x	3.05	14.9	300	4.0	2.3	$210.78	$119.97	$18.89	$3.74	$120.90	$96.72	$571.00	$38.36	$200.86	$3.56
4.88	x	0.19	x	3.05	14.9	350	4.0	2.2	$190.08	$119.97	$16.35	$3.58	$115.53	$92.43	$537.94	$36.14	$189.23	$3.36
4.88	x	0.19	x	3.05	14.9	400	4.0	2.1	$174.56	$119.97	$14.44	$3.46	$111.80	$89.43	$513.66	$34.51	$180.69	$3.21

2" x 8" (38 x 191mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
16.28	7.38	1.53	0.29	8.98	7.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
631.69	42.44	222.20	3.94

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.19	x	3.05	14.9	150	4.0	3.5	$355.65	$109.84	$36.70	$5.84	$179.53	$159.60	$847.16	$56.92	$298.00	$5.29
4.88	x	0.19	x	3.05	14.9	200	4.0	2.8	$283.21	$109.84	$27.80	$4.70	$144.55	$128.50	$698.60	$46.94	$245.74	$4.36
4.88	x	0.19	x	3.05	14.9	250	4.0	2.5	$239.75	$109.84	$22.46	$4.20	$129.35	$114.98	$620.58	$41.69	$218.30	$3.87
4.88	x	0.19	x	3.05	14.9	300	4.0	2.4	$210.78	$109.84	$18.90	$3.93	$120.90	$107.54	$571.89	$38.42	$201.17	$3.57
4.88	x	0.19	x	3.05	14.9	350	4.0	2.3	$190.08	$109.84	$16.36	$3.76	$115.53	$102.70	$538.27	$36.16	$189.34	$3.36
4.88	x	0.19	x	3.05	14.9	400	4.0	2.2	$174.56	$109.84	$14.45	$3.63	$111.80	$99.36	$513.64	$34.51	$180.68	$3.21

2" x 8" (38 x 191mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
16.28	10.07	1.53	0.29	8.98	7.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
671.73	45.13	236.29	4.19

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.19	x	3.05	14.9	150	4.0	3.5	$355.65	$149.88	$36.70	$5.84	$179.53	$159.60	$887.20	$59.61	$312.08	$5.54
4.88	x	0.19	x	3.05	14.9	200	4.0	2.8	$283.21	$149.88	$27.80	$4.70	$144.55	$128.50	$738.64	$49.63	$259.82	$4.61
4.88	x	0.19	x	3.05	14.9	250	4.0	2.5	$239.75	$149.88	$22.46	$4.20	$129.35	$114.98	$660.62	$44.38	$232.38	$4.12
4.88	x	0.19	x	3.05	14.9	300	4.0	2.4	$210.78	$149.88	$18.89	$3.93	$120.90	$107.54	$611.92	$41.11	$215.25	$3.82
4.88	x	0.19	x	3.05	14.9	350	4.0	2.3	$190.08	$149.88	$16.35	$3.76	$115.53	$102.70	$578.30	$38.85	$203.42	$3.61
4.88	x	0.19	x	3.05	14.9	400	4.0	2.2	$174.56	$149.88	$14.45	$3.63	$111.80	$99.36	$553.68	$37.20	$194.76	$3.46

2" x 8" (38 x 191mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
16.28	10.41	1.53	0.31	8.98	8.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
691.88	46.48	243.38	4.32

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.19	x	3.05	14.9	150	4.0	3.7	$355.65	$154.94	$36.70	$6.18	$179.53	$179.55	$912.55	$61.31	$321.00	$5.70
4.88	x	0.19	x	3.05	14.9	200	4.0	3.0	$283.21	$154.94	$27.80	$4.98	$144.55	$144.56	$760.04	$51.06	$267.35	$4.74
4.88	x	0.19	x	3.05	14.9	250	4.0	2.7	$239.75	$154.94	$22.46	$4.45	$129.35	$129.35	$680.30	$45.71	$239.30	$4.25
4.88	x	0.19	x	3.05	14.9	300	4.0	2.5	$210.78	$154.94	$18.89	$4.16	$120.90	$120.90	$630.57	$42.37	$221.81	$3.94
4.88	x	0.19	x	3.05	14.9	350	4.0	2.4	$190.08	$154.94	$16.36	$3.98	$115.53	$115.54	$596.43	$40.07	$209.80	$3.72
4.88	x	0.19	x	3.05	14.9	400	4.0	2.3	$174.56	$154.94	$14.45	$3.85	$111.80	$111.78	$571.38	$38.39	$200.99	$3.57

2" x 8" (38 x 191mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
16.28	12.09	1.53	0.31	8.98	8.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
716.88	48.16	252.17	4.47

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.19	x	3.05	14.9	150	4.0	3.7	$355.65	$179.95	$36.69	$6.18	$179.53	$179.55	$937.55	$62.99	$329.79	$5.85
4.88	x	0.19	x	3.05	14.9	200	4.0	3.0	$283.21	$179.95	$27.80	$4.98	$144.55	$144.56	$785.05	$52.74	$276.15	$4.90
4.88	x	0.19	x	3.05	14.9	250	4.0	2.7	$239.75	$179.95	$22.45	$4.45	$129.35	$129.35	$705.30	$47.39	$248.10	$4.40
4.88	x	0.19	x	3.05	14.9	300	4.0	2.5	$210.78	$179.95	$18.89	$4.16	$120.90	$120.90	$655.58	$44.05	$230.61	$4.09
4.88	x	0.19	x	3.05	14.9	350	4.0	2.4	$190.08	$179.95	$16.35	$3.98	$115.53	$115.54	$621.43	$41.75	$218.59	$3.88
4.88	x	0.19	x	3.05	14.9	400	4.0	2.3	$174.56	$179.95	$14.44	$3.85	$111.80	$111.78	$596.38	$40.07	$209.78	$3.72

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 20 GROUP 4 - DIMENSIONED WOOD - 2" X 10" SPF EXTERIOR WALL FRAMING

OCT 2013

(SPF #2 or Better - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 10" (38 x 241mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
23.25	4.54	1.53	0.29	9.58	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
690.12	46.37	192.39	4.31

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.24	x	3.05	14.9	150	4.0	3.5	$507.89	$67.57	$36.70	$5.77	$191.51	$143.63	$953.07	$64.03	$265.70	$5.95
4.88	x	0.24	x	3.05	14.9	200	4.0	2.8	$404.45	$67.57	$27.80	$4.64	$154.20	$115.64	$774.30	$52.02	$215.86	$4.83
4.88	x	0.24	x	3.05	14.9	250	4.0	2.5	$342.38	$67.57	$22.46	$4.15	$137.97	$103.48	$678.01	$45.55	$189.02	$4.23
4.88	x	0.24	x	3.05	14.9	300	4.0	2.3	$301.01	$67.57	$18.89	$3.88	$128.97	$96.71	$617.03	$41.46	$172.02	$3.85
4.88	x	0.24	x	3.05	14.9	350	4.0	2.2	$271.45	$67.57	$16.36	$3.71	$123.23	$92.43	$574.75	$38.62	$160.23	$3.59
4.88	x	0.24	x	3.05	14.9	400	4.0	2.2	$249.28	$67.57	$14.45	$3.59	$119.25	$89.43	$543.57	$36.52	$151.54	$3.39

2" x 10" (38 x 241mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
23.25	6.25	1.53	0.29	9.58	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
715.58	48.08	199.49	4.47

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.24	x	3.05	14.9	150	4.0	3.5	$507.89	$93.00	$36.73	$5.77	$191.51	$143.63	$978.53	$65.74	$272.80	$6.11
4.88	x	0.24	x	3.05	14.9	200	4.0	2.8	$404.45	$93.00	$27.82	$4.64	$154.20	$115.64	$799.75	$53.73	$222.96	$4.99
4.88	x	0.24	x	3.05	14.9	250	4.0	2.5	$342.38	$93.00	$22.48	$4.15	$137.97	$103.48	$703.46	$47.26	$196.11	$4.39
4.88	x	0.24	x	3.05	14.9	300	4.0	2.3	$301.01	$93.00	$18.92	$3.88	$128.97	$96.71	$642.49	$43.17	$179.11	$4.01
4.88	x	0.24	x	3.05	14.9	350	4.0	2.2	$271.45	$93.00	$16.38	$3.71	$123.23	$92.43	$600.20	$40.33	$167.32	$3.75
4.88	x	0.24	x	3.05	14.9	400	4.0	2.2	$249.28	$93.00	$14.47	$3.59	$119.25	$89.43	$569.02	$38.23	$158.63	$3.55

2" x 10" (38 x 241mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
23.25	8.06	1.53	0.29	9.58	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
742.52	49.89	207.00	4.63

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.24	x	3.05	14.9	150	4.0	3.5	$507.89	$119.97	$36.70	$5.77	$191.51	$143.63	$1,005.47	$67.55	$280.31	$6.28
4.88	x	0.24	x	3.05	14.9	200	4.0	2.8	$404.45	$119.97	$27.79	$4.64	$154.20	$115.64	$826.69	$55.54	$230.47	$5.16
4.88	x	0.24	x	3.05	14.9	250	4.0	2.5	$342.38	$119.97	$22.45	$4.15	$137.97	$103.48	$730.40	$49.07	$203.62	$4.56
4.88	x	0.24	x	3.05	14.9	300	4.0	2.3	$301.01	$119.97	$18.89	$3.88	$128.97	$96.71	$669.43	$44.98	$186.62	$4.18
4.88	x	0.24	x	3.05	14.9	350	4.0	2.2	$271.45	$119.97	$16.35	$3.71	$123.23	$92.43	$627.14	$42.14	$174.83	$3.91
4.88	x	0.24	x	3.05	14.9	400	4.0	2.2	$249.28	$119.97	$14.44	$3.59	$119.25	$89.43	$595.96	$40.04	$166.14	$3.72

2" x 10" (38 x 241mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
23.25	7.38	1.53	0.30	9.58	7.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
744.48	50.02	207.55	4.65

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.24	x	3.05	14.9	150	4.0	3.6	$507.89	$109.84	$36.70	$6.04	$191.51	$159.59	$1,011.57	$67.96	$282.01	$6.31
4.88	x	0.24	x	3.05	14.9	200	4.0	2.9	$404.45	$109.84	$27.80	$4.86	$154.20	$128.49	$829.64	$55.74	$231.29	$5.18
4.88	x	0.24	x	3.05	14.9	250	4.0	2.6	$342.38	$109.84	$22.46	$4.35	$137.97	$114.98	$731.98	$49.18	$204.06	$4.57
4.88	x	0.24	x	3.05	14.9	300	4.0	2.5	$301.01	$109.84	$18.89	$4.07	$128.97	$107.46	$670.24	$45.03	$186.85	$4.18
4.88	x	0.24	x	3.05	14.9	350	4.0	2.3	$271.45	$109.84	$16.36	$3.89	$123.23	$102.70	$627.47	$42.16	$174.93	$3.92
4.88	x	0.24	x	3.05	14.9	400	4.0	2.3	$249.28	$109.84	$14.45	$3.76	$119.25	$99.37	$595.95	$40.04	$166.14	$3.72

2" x 10" (38 x 241mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
23.25	10.07	1.53	0.30	9.58	7.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
784.51	52.71	218.71	4.90

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.24	x	3.05	14.9	150	4.0	3.6	$507.89	$149.88	$36.70	$6.04	$191.51	$159.59	$1,051.61	$70.65	$293.17	$6.56
4.88	x	0.24	x	3.05	14.9	200	4.0	2.9	$404.45	$149.88	$27.80	$4.86	$154.20	$128.49	$869.68	$58.43	$242.45	$5.43
4.88	x	0.24	x	3.05	14.9	250	4.0	2.6	$342.38	$149.88	$22.46	$4.35	$137.97	$114.98	$772.02	$51.87	$215.22	$4.82
4.88	x	0.24	x	3.05	14.9	300	4.0	2.5	$301.01	$149.88	$18.89	$4.07	$128.97	$107.46	$710.28	$47.72	$198.01	$4.43
4.88	x	0.24	x	3.05	14.9	350	4.0	2.3	$271.45	$149.88	$16.35	$3.89	$123.23	$102.70	$667.50	$44.85	$186.09	$4.17
4.88	x	0.24	x	3.05	14.9	400	4.0	2.3	$249.28	$149.88	$14.45	$3.76	$119.25	$99.37	$635.99	$42.73	$177.30	$3.97

2" x 10" (38 x 241mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
23.25	10.41	1.53	0.32	9.58	8.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
804.68	54.06	224.33	5.02

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.24	x	3.05	14.9	150	4.0	3.9	$507.89	$154.94	$36.70	$6.38	$191.51	$179.54	$1,076.96	$72.36	$300.24	$6.72
4.88	x	0.24	x	3.05	14.9	200	4.0	3.1	$404.45	$154.94	$27.80	$5.14	$154.20	$144.55	$891.08	$59.87	$248.42	$5.56
4.88	x	0.24	x	3.05	14.9	250	4.0	2.8	$342.38	$154.94	$22.46	$4.60	$137.97	$129.35	$791.70	$53.19	$220.71	$4.94
4.88	x	0.24	x	3.05	14.9	300	4.0	2.6	$301.01	$154.94	$18.89	$4.30	$128.97	$120.89	$729.00	$48.98	$203.23	$4.55
4.88	x	0.24	x	3.05	14.9	350	4.0	2.5	$271.45	$154.94	$16.35	$4.11	$123.23	$115.54	$685.62	$46.06	$191.14	$4.28
4.88	x	0.24	x	3.05	14.9	400	4.0	2.4	$249.28	$154.94	$14.45	$3.98	$119.25	$111.79	$653.69	$43.92	$182.24	$4.08

2" x 10" (38 x 241mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
23.25	12.09	1.53	0.32	9.58	8.98

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
829.68	55.74	231.30	5.18

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.24	x	3.05	14.9	150	4.0	3.9	$507.89	$179.95	$36.70	$6.38	$191.51	$179.54	$1,101.97	$74.04	$307.21	$6.88
4.88	x	0.24	x	3.05	14.9	200	4.0	3.1	$404.45	$179.95	$27.79	$5.14	$154.20	$144.55	$916.08	$61.55	$255.39	$5.72
4.88	x	0.24	x	3.05	14.9	250	4.0	2.8	$342.38	$179.95	$22.46	$4.60	$137.97	$129.35	$816.71	$54.87	$227.68	$5.10
4.88	x	0.24	x	3.05	14.9	300	4.0	2.6	$301.01	$179.95	$18.89	$4.30	$128.97	$120.89	$754.01	$50.66	$210.20	$4.71
4.88	x	0.24	x	3.05	14.9	350	4.0	2.5	$271.45	$179.95	$16.35	$4.11	$123.23	$115.54	$710.63	$47.74	$198.11	$4.44
4.88	x	0.24	x	3.05	14.9	400	4.0	2.4	$249.28	$179.95	$14.45	$3.98	$119.25	$111.79	$678.70	$45.60	$189.21	$4.24

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 20 GROUP 5 - DIMENSIONED WOOD - 2" X 12" SPF EXTERIOR WALL FRAMING

OCT 2013

(SPF #2 or Better - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 12" (38 x 292mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
35.69	4.54	1.53	0.30	10.26	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
885.55	59.50	203.76	5.53

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.29	x	3.05	14.9	150	4.0	3.6	$779.50	$67.57	$36.70	$6.00	$205.38	$143.44	$1,238.59	$83.22	$284.99	$7.73
4.88	x	0.29	x	3.05	14.9	200	4.0	2.9	$620.74	$67.57	$27.80	$4.83	$165.21	$115.64	$1,001.79	$67.31	$230.50	$6.25
4.88	x	0.29	x	3.05	14.9	250	4.0	2.6	$525.48	$67.57	$22.46	$4.32	$147.83	$103.48	$871.14	$58.53	$200.44	$5.44
4.88	x	0.29	x	3.05	14.9	300	4.0	2.4	$461.98	$67.57	$18.89	$4.04	$138.17	$96.72	$787.37	$52.90	$181.17	$4.91
4.88	x	0.29	x	3.05	14.9	350	4.0	2.3	$416.61	$67.57	$16.36	$3.86	$132.04	$92.42	$728.86	$48.97	$167.70	$4.55
4.88	x	0.29	x	3.05	14.9	400	4.0	2.3	$382.59	$67.57	$14.45	$3.74	$128.06	$89.14	$685.55	$46.06	$157.74	$4.28

2" x 12" (38 x 292mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
35.69	6.25	1.53	0.30	10.26	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
911.00	61.21	209.61	5.69

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.29	x	3.05	14.9	150	4.0	3.6	$779.50	$93.00	$36.72	$6.00	$205.38	$143.44	$1,264.04	$84.93	$290.84	$7.89
4.88	x	0.29	x	3.05	14.9	200	4.0	2.9	$620.74	$93.00	$27.82	$4.83	$165.21	$115.64	$1,027.24	$69.02	$236.36	$6.41
4.88	x	0.29	x	3.05	14.9	250	4.0	2.6	$525.48	$93.00	$22.48	$4.32	$147.83	$103.48	$896.59	$60.24	$206.30	$5.60
4.88	x	0.29	x	3.05	14.9	300	4.0	2.4	$461.98	$93.00	$18.91	$4.04	$138.17	$96.72	$812.82	$54.61	$187.02	$5.07
4.88	x	0.29	x	3.05	14.9	350	4.0	2.3	$416.61	$93.00	$16.38	$3.86	$132.04	$92.42	$754.31	$50.68	$173.56	$4.71
4.88	x	0.29	x	3.05	14.9	400	4.0	2.3	$382.59	$93.00	$14.47	$3.74	$128.06	$89.14	$711.00	$47.77	$163.59	$4.44

2" x 12" (38 x 292mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
35.69	8.06	1.53	0.30	10.26	7.18

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
937.94	63.02	215.81	5.85

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.29	x	3.05	14.9	150	4.0	3.6	$779.50	$119.97	$36.69	$6.00	$205.38	$143.44	$1,290.98	$86.74	$297.04	$8.06
4.88	x	0.29	x	3.05	14.9	200	4.0	2.9	$620.74	$119.97	$27.79	$4.83	$165.21	$115.64	$1,054.18	$70.83	$242.56	$6.58
4.88	x	0.29	x	3.05	14.9	250	4.0	2.6	$525.48	$119.97	$22.45	$4.32	$147.83	$103.48	$923.53	$62.05	$212.49	$5.76
4.88	x	0.29	x	3.05	14.9	300	4.0	2.4	$461.98	$119.97	$18.88	$4.04	$138.17	$96.72	$839.76	$56.42	$193.22	$5.24
4.88	x	0.29	x	3.05	14.9	350	4.0	2.3	$416.61	$119.97	$16.35	$3.86	$132.04	$92.42	$781.25	$52.49	$179.76	$4.88
4.88	x	0.29	x	3.05	14.9	400	4.0	2.3	$382.59	$119.97	$14.44	$3.74	$128.06	$89.14	$737.94	$49.58	$169.79	$4.61

2" x 12" (38 x 292mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
35.69	7.38	1.53	0.31	10.26	7.97

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
939.90	63.15	216.26	5.87

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.29	x	3.05	14.9	150	4.0	3.8	$779.50	$109.84	$36.70	$6.28	$205.38	$159.40	$1,297.10	$87.15	$298.45	$8.10
4.88	x	0.29	x	3.05	14.9	200	4.0	3.0	$620.74	$109.84	$27.80	$5.05	$165.21	$128.49	$1,057.13	$71.02	$243.23	$6.60
4.88	x	0.29	x	3.05	14.9	250	4.0	2.7	$525.48	$109.84	$22.46	$4.52	$147.83	$114.98	$925.11	$62.15	$212.86	$5.77
4.88	x	0.29	x	3.05	14.9	300	4.0	2.6	$461.98	$109.84	$18.89	$4.23	$138.17	$107.47	$840.58	$56.48	$193.41	$5.25
4.88	x	0.29	x	3.05	14.9	350	4.0	2.4	$416.61	$109.84	$16.36	$4.04	$132.04	$102.69	$781.58	$52.51	$179.83	$4.88
4.88	x	0.29	x	3.05	14.9	400	4.0	2.4	$382.59	$109.84	$14.45	$3.91	$128.06	$99.07	$737.92	$49.58	$169.79	$4.61

2" x 12" (38 x 292mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
35.69	10.07	1.53	0.31	10.26	7.97

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
979.94	65.84	225.48	6.12

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.29	x	3.05	14.9	150	4.0	3.8	$779.50	$149.88	$36.70	$6.28	$205.38	$159.40	$1,337.14	$89.84	$307.66	$8.35
4.88	x	0.29	x	3.05	14.9	200	4.0	3.0	$620.74	$149.88	$27.80	$5.05	$165.21	$128.49	$1,097.17	$73.71	$252.45	$6.85
4.88	x	0.29	x	3.05	14.9	250	4.0	2.7	$525.48	$149.88	$22.46	$4.52	$147.83	$114.98	$965.15	$64.84	$222.07	$6.02
4.88	x	0.29	x	3.05	14.9	300	4.0	2.6	$461.98	$149.88	$18.89	$4.23	$138.17	$107.47	$880.62	$59.17	$202.62	$5.50
4.88	x	0.29	x	3.05	14.9	350	4.0	2.4	$416.61	$149.88	$16.36	$4.04	$132.04	$102.69	$821.62	$55.20	$189.05	$5.13
4.88	x	0.29	x	3.05	14.9	400	4.0	2.4	$382.59	$149.88	$14.45	$3.91	$128.06	$99.07	$777.96	$52.27	$179.00	$4.86

2" x 12" (38 x 292mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
35.69	10.41	1.53	0.33	10.26	8.97

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1000.10	67.19	230.11	6.24

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.29	x	3.05	14.9	150	4.0	4.0	$779.50	$154.94	$36.70	$6.62	$205.38	$179.34	$1,362.48	$91.54	$313.49	$8.50
4.88	x	0.29	x	3.05	14.9	200	4.0	3.2	$620.74	$154.94	$27.80	$5.33	$165.21	$144.55	$1,118.57	$75.15	$257.37	$6.98
4.88	x	0.29	x	3.05	14.9	250	4.0	2.9	$525.48	$154.94	$22.46	$4.77	$147.83	$129.35	$984.83	$66.17	$226.60	$6.15
4.88	x	0.29	x	3.05	14.9	300	4.0	2.7	$461.98	$154.94	$18.89	$4.46	$138.17	$120.90	$899.34	$60.42	$206.93	$5.61
4.88	x	0.29	x	3.05	14.9	350	4.0	2.6	$416.61	$154.94	$16.36	$4.26	$132.04	$115.53	$839.74	$56.42	$193.22	$5.24
4.88	x	0.29	x	3.05	14.9	400	4.0	2.5	$382.59	$154.94	$14.45	$4.12	$128.06	$111.49	$795.65	$53.46	$183.07	$4.97

2" x 12" (38 x 292mm) SPF - Wood Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
35.69	12.09	1.53	0.33	10.26	8.97

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1025.11	68.87	235.87	6.40

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) SPF $	(material) Panel $	(material) Connections $	Equipment $	Total Labour SPF $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.29	x	3.05	14.9	150	4.0	4.0	$779.50	$179.95	$36.69	$6.62	$205.38	$179.34	$1,387.48	$93.22	$319.25	$8.66
4.88	x	0.29	x	3.05	14.9	200	4.0	3.2	$620.74	$179.95	$27.79	$5.33	$165.21	$144.55	$1,143.57	$76.83	$263.12	$7.14
4.88	x	0.29	x	3.05	14.9	250	4.0	2.9	$525.48	$179.95	$22.45	$4.77	$147.83	$129.35	$1,009.83	$67.85	$232.35	$6.30
4.88	x	0.29	x	3.05	14.9	300	4.0	2.7	$461.98	$179.95	$18.89	$4.46	$138.17	$120.90	$924.35	$62.10	$212.68	$5.77
4.88	x	0.29	x	3.05	14.9	350	4.0	2.6	$416.61	$179.95	$16.35	$4.26	$132.04	$115.53	$864.74	$58.10	$198.97	$5.40
4.88	x	0.29	x	3.05	14.9	400	4.0	2.5	$382.59	$179.95	$14.45	$4.12	$128.06	$111.49	$820.66	$55.14	$188.83	$5.12

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix

S – TABLE 21 – HEAVY METAL STUD – 20 GAUGE WALL FRAMING

Hanscomb

TABLE 21 GROUP 1 - HEAVY GAUGE METAL STUDS - 2" X 3 5/8" (20G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 3 5/8" (38 x 92mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS							
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/SF
21.07	4.54	0.82	0.30	10.49	12.52	740.53	49.75	540.80	4.62

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	4.8	$460.71	$67.57	$12.20	$6.09	$220.97	$239.38	$1,006.92	$67.65	$735.34	$6.29
4.88	x	0.09	x	3.05	14.9	200	4.0	3.8	$366.69	$67.57	$12.20	$4.90	$177.92	$192.74	$822.02	$55.23	$600.31	$5.13
4.88	x	0.09	x	3.05	14.9	250	4.0	3.4	$310.28	$67.57	$12.20	$4.39	$159.20	$172.47	$726.11	$48.78	$530.27	$4.53
4.88	x	0.09	x	3.05	14.9	300	4.0	3.2	$272.67	$67.57	$12.20	$4.10	$148.80	$161.20	$666.54	$44.78	$486.76	$4.16
4.88	x	0.09	x	3.05	14.9	350	4.0	3.1	$245.81	$67.57	$12.20	$3.92	$115.81	$180.43	$625.74	$42.04	$456.97	$3.91
4.88	x	0.09	x	3.05	14.9	400	4.0	3.0	$225.67	$67.57	$12.19	$3.79	$114.43	$172.22	$595.87	$40.03	$435.16	$3.72

2" x 3 5/8" (38 x 92mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS							
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/SF
21.07	6.25	0.82	0.30	10.49	12.52	765.99	51.46	559.39	4.78

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	4.8	$460.71	$93.00	$12.22	$6.09	$220.97	$239.38	$1,032.37	$69.36	$753.92	$6.44
4.88	x	0.09	x	3.05	14.9	200	4.0	3.8	$366.69	$93.00	$12.22	$4.90	$177.92	$192.74	$847.47	$56.94	$618.89	$5.29
4.88	x	0.09	x	3.05	14.9	250	4.0	3.4	$310.28	$93.00	$12.22	$4.39	$159.20	$172.47	$751.56	$50.49	$548.85	$4.69
4.88	x	0.09	x	3.05	14.9	300	4.0	3.2	$272.67	$93.00	$12.22	$4.10	$148.80	$161.20	$691.99	$46.49	$505.35	$4.32
4.88	x	0.09	x	3.05	14.9	350	4.0	3.1	$245.81	$93.00	$12.22	$3.92	$115.81	$180.43	$651.19	$43.75	$475.55	$4.06
4.88	x	0.09	x	3.05	14.9	400	4.0	3.0	$225.67	$93.00	$12.22	$3.79	$114.43	$172.22	$621.33	$41.74	$453.75	$3.88

2" x 3 5/8" (38 x 92mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS							
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/SF
21.07	8.06	0.82	0.30	10.49	12.52	792.93	53.27	579.06	4.95

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	4.8	$460.71	$119.97	$12.19	$6.09	$220.97	$239.38	$1,059.31	$71.17	$773.60	$6.61
4.88	x	0.09	x	3.05	14.9	200	4.0	3.8	$366.69	$119.97	$12.19	$4.90	$177.92	$192.74	$874.41	$58.75	$638.57	$5.46
4.88	x	0.09	x	3.05	14.9	250	4.0	3.4	$310.28	$119.97	$12.19	$4.39	$159.20	$172.47	$778.50	$52.30	$568.53	$4.86
4.88	x	0.09	x	3.05	14.9	300	4.0	3.2	$272.67	$119.97	$12.19	$4.10	$148.80	$161.20	$718.93	$48.30	$525.02	$4.49
4.88	x	0.09	x	3.05	14.9	350	4.0	3.1	$245.81	$119.97	$12.19	$3.92	$115.81	$180.43	$678.13	$45.56	$495.23	$4.23
4.88	x	0.09	x	3.05	14.9	400	4.0	3.0	$225.67	$119.97	$12.19	$3.79	$114.43	$172.22	$648.27	$43.55	$473.42	$4.05

2" x 3 5/8" (38 x 92mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS							
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/SF
21.07	7.38	0.81	0.32	10.49	13.61	799.11	53.69	583.58	4.99

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.0	$460.71	$109.84	$12.20	$6.37	$220.97	$261.15	$1,071.24	$71.97	$782.31	$6.69
4.88	x	0.09	x	3.05	14.9	200	4.0	4.0	$366.69	$109.84	$12.20	$5.13	$177.92	$210.26	$882.04	$59.26	$644.14	$5.51
4.88	x	0.09	x	3.05	14.9	250	4.0	3.6	$310.28	$109.84	$12.20	$4.59	$159.20	$188.15	$784.26	$52.69	$572.73	$4.90
4.88	x	0.09	x	3.05	14.9	300	4.0	3.4	$272.67	$109.84	$12.20	$4.29	$148.80	$175.86	$723.66	$48.62	$528.48	$4.52
4.88	x	0.09	x	3.05	14.9	350	4.0	3.2	$245.81	$109.84	$12.20	$4.10	$115.81	$194.43	$682.19	$45.83	$498.19	$4.26
4.88	x	0.09	x	3.05	14.9	400	4.0	3.1	$225.67	$109.84	$11.59	$3.97	$114.43	$185.77	$651.27	$43.76	$475.61	$4.07

2" x 3 5/8" (38 x 92mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS							
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/SF
21.07	10.07	0.82	0.32	10.49	13.61	839.25	56.39	612.89	5.24

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.0	$460.71	$149.88	$12.20	$6.37	$220.97	$261.15	$1,111.28	$74.66	$811.55	$6.94
4.88	x	0.09	x	3.05	14.9	200	4.0	4.0	$366.69	$149.88	$12.20	$5.13	$177.92	$210.26	$922.08	$61.95	$673.38	$5.76
4.88	x	0.09	x	3.05	14.9	250	4.0	3.6	$310.28	$149.88	$12.20	$4.59	$159.20	$188.15	$824.30	$55.38	$601.97	$5.15
4.88	x	0.09	x	3.05	14.9	300	4.0	3.4	$272.67	$149.88	$12.20	$4.29	$148.80	$175.86	$763.70	$51.31	$557.72	$4.77
4.88	x	0.09	x	3.05	14.9	350	4.0	3.2	$245.81	$149.88	$12.20	$4.10	$115.81	$194.43	$722.23	$48.52	$527.43	$4.51
4.88	x	0.09	x	3.05	14.9	400	4.0	3.1	$225.67	$149.88	$12.19	$3.97	$114.43	$185.77	$691.91	$46.49	$505.29	$4.32

2" x 3 5/8" (38 x 92mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS							
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/SF
21.07	10.41	0.82	0.34	10.49	14.92	864.00	58.05	630.97	5.39

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.3	$460.71	$154.94	$12.20	$6.72	$220.97	$287.26	$1,142.80	$76.78	$834.57	$7.13
4.88	x	0.09	x	3.05	14.9	200	4.0	4.2	$366.69	$154.94	$12.20	$5.41	$177.92	$231.28	$948.44	$63.72	$692.63	$5.92
4.88	x	0.09	x	3.05	14.9	250	4.0	3.8	$310.28	$154.94	$12.20	$4.84	$159.20	$206.96	$848.42	$57.00	$619.59	$5.30
4.88	x	0.09	x	3.05	14.9	300	4.0	3.6	$272.67	$154.94	$12.20	$4.53	$148.80	$193.44	$786.58	$52.85	$574.43	$4.91
4.88	x	0.09	x	3.05	14.9	350	4.0	3.4	$245.81	$154.94	$12.20	$4.32	$115.81	$211.24	$744.32	$50.01	$543.57	$4.65
4.88	x	0.09	x	3.05	14.9	400	4.0	3.3	$225.67	$154.94	$12.19	$4.18	$114.43	$202.03	$713.44	$47.93	$521.01	$4.45

2" x 3 5/8" (38 x 92mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS							
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	$/SF
21.07	12.09	0.82	0.34	10.49	14.92	889.00	59.73	649.23	5.55

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.3	$460.71	$179.95	$12.19	$6.72	$220.97	$287.26	$1,167.80	$78.46	$852.83	$7.29
4.88	x	0.09	x	3.05	14.9	200	4.0	4.2	$366.69	$179.95	$12.19	$5.41	$177.92	$231.28	$973.44	$65.40	$710.89	$6.08
4.88	x	0.09	x	3.05	14.9	250	4.0	3.8	$310.28	$179.95	$12.19	$4.84	$159.20	$206.96	$873.42	$58.68	$637.85	$5.45
4.88	x	0.09	x	3.05	14.9	300	4.0	3.6	$272.67	$179.95	$12.20	$4.53	$148.80	$193.44	$811.59	$54.53	$592.69	$5.07
4.88	x	0.09	x	3.05	14.9	350	4.0	3.4	$245.81	$179.95	$12.19	$4.32	$115.81	$211.24	$769.32	$51.69	$561.82	$4.80
4.88	x	0.09	x	3.05	14.9	400	4.0	3.3	$225.67	$179.95	$12.19	$4.18	$114.43	$202.03	$738.45	$49.61	$539.28	$4.61

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 21 GROUP 2 - HEAVY GAUGE METAL STUDS - 2" X 4" (20G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
22.18	4.54	0.82	0.30	11.05	11.97	757.08	50.87	498.68	4.73

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	4.8	$484.24	$67.57	$12.20	$6.09	$220.97	$239.38	$1,030.45	$69.23	$678.75	$6.43
4.88	x	0.10	x	3.05	14.9	200	4.0	3.8	$385.76	$67.57	$12.20	$4.90	$177.92	$192.74	$841.09	$56.51	$554.02	$5.25
4.88	x	0.10	x	3.05	14.9	250	4.0	3.4	$326.67	$67.57	$12.20	$4.39	$159.20	$172.47	$742.50	$49.89	$489.08	$4.63
4.88	x	0.10	x	3.05	14.9	300	4.0	3.2	$287.27	$67.57	$12.21	$4.10	$148.80	$161.20	$681.15	$45.76	$448.67	$4.25
4.88	x	0.10	x	3.05	14.9	350	4.0	3.1	$259.14	$67.57	$12.20	$3.92	$142.19	$154.05	$639.07	$42.94	$420.95	$3.99
4.88	x	0.10	x	3.05	14.9	400	4.0	3.0	$238.03	$67.57	$12.20	$3.79	$137.59	$149.06	$608.24	$40.87	$400.64	$3.80

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
22.18	6.25	0.82	0.30	11.05	11.97	782.54	52.58	515.45	4.88

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	4.8	$484.24	$93.00	$12.22	$6.09	$220.97	$239.38	$1,055.90	$70.94	$695.51	$6.59
4.88	x	0.10	x	3.05	14.9	200	4.0	3.8	$385.76	$93.00	$12.22	$4.90	$177.92	$192.74	$866.54	$58.22	$570.78	$5.41
4.88	x	0.10	x	3.05	14.9	250	4.0	3.4	$326.67	$93.00	$12.22	$4.39	$159.20	$172.47	$767.95	$51.60	$505.84	$4.79
4.88	x	0.10	x	3.05	14.9	300	4.0	3.2	$287.27	$93.00	$12.23	$4.10	$148.80	$161.20	$706.60	$47.47	$465.43	$4.41
4.88	x	0.10	x	3.05	14.9	350	4.0	3.1	$259.14	$93.00	$12.22	$3.92	$142.19	$154.05	$664.52	$44.65	$437.71	$4.15
4.88	x	0.10	x	3.05	14.9	400	4.0	3.0	$238.03	$93.00	$12.23	$3.79	$137.59	$149.06	$633.70	$42.58	$417.41	$3.96

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
22.18	8.06	0.82	0.30	11.05	11.97	809.48	54.39	533.19	5.05

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	4.8	$484.24	$119.97	$12.19	$6.09	$220.97	$239.38	$1,082.84	$72.75	$713.25	$6.76
4.88	x	0.10	x	3.05	14.9	200	4.0	3.8	$385.76	$119.97	$12.19	$4.90	$177.92	$192.74	$893.48	$60.03	$588.53	$5.58
4.88	x	0.10	x	3.05	14.9	250	4.0	3.4	$326.67	$119.97	$12.19	$4.39	$159.20	$172.47	$794.89	$53.41	$523.59	$4.96
4.88	x	0.10	x	3.05	14.9	300	4.0	3.2	$287.27	$119.97	$12.20	$4.10	$148.80	$161.20	$733.54	$49.28	$483.17	$4.58
4.88	x	0.10	x	3.05	14.9	350	4.0	3.1	$259.14	$119.97	$12.19	$3.92	$142.19	$154.05	$691.46	$46.46	$455.46	$4.32
4.88	x	0.10	x	3.05	14.9	400	4.0	3.0	$238.03	$119.97	$12.20	$3.79	$137.59	$149.06	$660.64	$44.39	$435.16	$4.12

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
22.18	7.38	0.82	0.32	11.05	13.06	815.76	54.81	537.33	5.09

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.0	$484.24	$109.84	$12.20	$6.37	$220.97	$261.15	$1,094.77	$73.55	$721.11	$6.83
4.88	x	0.10	x	3.05	14.9	200	4.0	4.0	$385.76	$109.84	$12.20	$5.13	$177.92	$210.26	$901.11	$60.54	$593.55	$5.62
4.88	x	0.10	x	3.05	14.9	250	4.0	3.6	$326.67	$109.84	$12.20	$4.59	$159.20	$188.15	$800.65	$53.79	$527.38	$5.00
4.88	x	0.10	x	3.05	14.9	300	4.0	3.4	$287.27	$109.84	$12.21	$4.29	$148.80	$175.86	$738.27	$49.60	$486.29	$4.61
4.88	x	0.10	x	3.05	14.9	350	4.0	3.2	$259.14	$109.84	$12.20	$4.10	$142.19	$168.05	$695.52	$46.73	$458.13	$4.34
4.88	x	0.10	x	3.05	14.9	400	4.0	3.1	$238.03	$109.84	$12.21	$3.97	$137.59	$162.61	$664.25	$44.63	$437.53	$4.15

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
22.18	10.07	0.82	0.32	11.05	13.06	855.80	57.50	563.70	5.34

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.0	$484.24	$149.88	$12.20	$6.37	$220.97	$261.15	$1,134.81	$76.24	$747.49	$7.08
4.88	x	0.10	x	3.05	14.9	200	4.0	4.0	$385.76	$149.88	$12.20	$5.13	$177.92	$210.26	$941.15	$63.23	$619.92	$5.87
4.88	x	0.10	x	3.05	14.9	250	4.0	3.6	$326.67	$149.88	$12.20	$4.59	$159.20	$188.15	$840.69	$56.48	$553.75	$5.25
4.88	x	0.10	x	3.05	14.9	300	4.0	3.4	$287.27	$149.88	$12.20	$4.29	$148.80	$175.86	$778.30	$52.29	$512.66	$4.86
4.88	x	0.10	x	3.05	14.9	350	4.0	3.2	$259.14	$149.88	$12.20	$4.10	$142.19	$168.05	$735.56	$49.42	$484.51	$4.59
4.88	x	0.10	x	3.05	14.9	400	4.0	3.1	$238.03	$149.88	$12.20	$3.97	$137.59	$162.61	$704.28	$47.32	$463.90	$4.40

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
22.18	10.41	0.82	0.34	11.05	14.36	880.55	59.16	580.01	5.50

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.3	$484.24	$154.94	$12.20	$6.72	$220.97	$287.26	$1,166.33	$78.36	$768.25	$7.28
4.88	x	0.10	x	3.05	14.9	200	4.0	4.2	$385.76	$154.94	$12.20	$5.41	$177.92	$231.28	$967.51	$65.00	$637.29	$6.04
4.88	x	0.10	x	3.05	14.9	250	4.0	3.8	$326.67	$154.94	$12.20	$4.84	$159.20	$206.96	$864.81	$58.10	$569.64	$5.40
4.88	x	0.10	x	3.05	14.9	300	4.0	3.6	$287.27	$154.94	$12.21	$4.53	$148.80	$193.44	$801.19	$53.83	$527.73	$5.00
4.88	x	0.10	x	3.05	14.9	350	4.0	3.4	$259.14	$154.94	$12.20	$4.32	$142.19	$184.86	$757.65	$50.90	$499.06	$4.73
4.88	x	0.10	x	3.05	14.9	400	4.0	3.3	$238.03	$154.94	$12.20	$4.18	$137.59	$178.87	$725.81	$48.76	$478.08	$4.53

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2	AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
22.18	12.09	0.82	0.34	11.05	14.36	905.55	60.84	596.48	5.65

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.3	$484.24	$179.95	$12.20	$6.72	$220.97	$287.26	$1,191.34	$80.04	$784.72	$7.44
4.88	x	0.10	x	3.05	14.9	200	4.0	4.2	$385.76	$179.95	$12.19	$5.41	$177.92	$231.28	$992.51	$66.68	$653.76	$6.20
4.88	x	0.10	x	3.05	14.9	250	4.0	3.8	$326.67	$179.95	$12.19	$4.84	$159.20	$206.96	$889.81	$59.78	$586.11	$5.55
4.88	x	0.10	x	3.05	14.9	300	4.0	3.6	$287.27	$179.95	$12.20	$4.53	$148.80	$193.44	$826.19	$55.51	$544.20	$5.16
4.88	x	0.10	x	3.05	14.9	350	4.0	3.4	$259.14	$179.95	$12.19	$4.32	$142.19	$184.86	$782.65	$52.58	$515.52	$4.89
4.88	x	0.10	x	3.05	14.9	400	4.0	3.3	$238.03	$179.95	$12.20	$4.18	$137.59	$178.87	$750.82	$50.44	$494.56	$4.69

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 21 GROUP 3 - HEAVY GAUGE METAL STUDS - 2" X 6" (20G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	26.60	4.54	0.82	0.30	11.05	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	822.75	55.28	363.67	5.14

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	4.8	$587.15	$67.57	$12.21	$6.09	$220.97	$239.38	$1,133.37	$76.15	$500.97	$7.07
4.88	x	0.15	x	3.05	14.9	200	4.0	3.8	$464.86	$67.57	$12.20	$4.90	$177.92	$192.74	$920.19	$61.82	$406.74	$5.74
4.88	x	0.15	x	3.05	14.9	250	4.0	3.4	$391.48	$67.57	$12.21	$4.39	$159.20	$172.47	$807.32	$54.24	$356.85	$5.04
4.88	x	0.15	x	3.05	14.9	300	4.0	3.2	$342.56	$67.57	$12.21	$4.10	$148.80	$161.20	$736.44	$49.48	$325.52	$4.60
4.88	x	0.15	x	3.05	14.9	350	4.0	3.1	$307.62	$67.57	$12.20	$3.92	$142.19	$154.05	$687.55	$46.19	$303.91	$4.29
4.88	x	0.15	x	3.05	14.9	400	4.0	3.0	$281.41	$67.57	$12.21	$3.79	$137.59	$149.06	$651.63	$43.78	$288.03	$4.07

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	26.60	6.25	0.82	0.30	11.05	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	848.20	56.99	374.92	5.29

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	4.8	$587.15	$93.00	$12.23	$6.09	$220.97	$239.38	$1,158.82	$77.86	$512.22	$7.23
4.88	x	0.15	x	3.05	14.9	200	4.0	3.8	$464.86	$93.00	$12.23	$4.90	$177.92	$192.74	$945.65	$63.53	$417.99	$5.90
4.88	x	0.15	x	3.05	14.9	250	4.0	3.4	$391.48	$93.00	$12.23	$4.39	$159.20	$172.47	$832.77	$55.95	$368.10	$5.20
4.88	x	0.15	x	3.05	14.9	300	4.0	3.2	$342.56	$93.00	$12.23	$4.10	$148.80	$161.20	$761.89	$51.19	$336.77	$4.76
4.88	x	0.15	x	3.05	14.9	350	4.0	3.1	$307.62	$93.00	$12.23	$3.92	$142.19	$154.05	$713.01	$47.90	$315.16	$4.45
4.88	x	0.15	x	3.05	14.9	400	4.0	3.0	$281.41	$93.00	$12.23	$3.79	$137.59	$149.06	$677.08	$45.49	$299.28	$4.23

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	26.60	8.06	0.82	0.30	11.05	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	875.14	58.80	386.83	5.46

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	4.8	$587.15	$119.97	$12.20	$6.09	$220.97	$239.38	$1,185.76	$79.67	$524.12	$7.40
4.88	x	0.15	x	3.05	14.9	200	4.0	3.8	$464.86	$119.97	$12.20	$4.90	$177.92	$192.74	$972.59	$65.34	$429.90	$6.07
4.88	x	0.15	x	3.05	14.9	250	4.0	3.4	$391.48	$119.97	$12.20	$4.39	$159.20	$172.47	$859.71	$57.76	$380.00	$5.37
4.88	x	0.15	x	3.05	14.9	300	4.0	3.2	$342.56	$119.97	$12.20	$4.10	$148.80	$161.20	$788.83	$53.00	$348.67	$4.92
4.88	x	0.15	x	3.05	14.9	350	4.0	3.1	$307.62	$119.97	$12.20	$3.92	$142.19	$154.05	$739.95	$49.71	$327.07	$4.62
4.88	x	0.15	x	3.05	14.9	400	4.0	3.0	$281.41	$119.97	$12.20	$3.79	$137.59	$149.06	$704.02	$47.30	$311.19	$4.39

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	26.60	7.38	0.82	0.32	11.05	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	881.43	59.22	389.60	5.50

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.0	$587.15	$109.84	$12.21	$6.37	$220.97	$261.15	$1,197.69	$80.47	$529.40	$7.48
4.88	x	0.15	x	3.05	14.9	200	4.0	4.0	$464.86	$109.84	$12.20	$5.13	$177.92	$210.26	$980.21	$65.86	$433.27	$6.12
4.88	x	0.15	x	3.05	14.9	250	4.0	3.6	$391.48	$109.84	$12.21	$4.59	$159.20	$188.15	$865.47	$58.15	$382.55	$5.40
4.88	x	0.15	x	3.05	14.9	300	4.0	3.4	$342.56	$109.84	$12.21	$4.29	$148.80	$175.86	$793.56	$53.32	$350.77	$4.95
4.88	x	0.15	x	3.05	14.9	350	4.0	3.2	$307.62	$109.84	$12.21	$4.10	$142.19	$168.05	$744.01	$49.99	$328.86	$4.64
4.88	x	0.15	x	3.05	14.9	400	4.0	3.1	$281.41	$109.84	$12.21	$3.97	$137.59	$162.61	$707.63	$47.54	$312.78	$4.42

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	26.60	10.07	0.82	0.32	11.05	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	921.46	61.91	407.30	5.75

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.0	$587.15	$149.88	$12.21	$6.37	$220.97	$261.15	$1,237.73	$83.16	$547.09	$7.73
4.88	x	0.15	x	3.05	14.9	200	4.0	4.0	$464.86	$149.88	$12.20	$5.13	$177.92	$210.26	$1,020.25	$68.55	$450.97	$6.37
4.88	x	0.15	x	3.05	14.9	250	4.0	3.6	$391.48	$149.88	$12.20	$4.59	$159.20	$188.15	$905.50	$60.84	$400.24	$5.65
4.88	x	0.15	x	3.05	14.9	300	4.0	3.4	$342.56	$149.88	$12.21	$4.29	$148.80	$175.86	$833.60	$56.01	$368.46	$5.20
4.88	x	0.15	x	3.05	14.9	350	4.0	3.2	$307.62	$149.88	$12.20	$4.10	$142.19	$168.05	$784.04	$52.68	$346.56	$4.89
4.88	x	0.15	x	3.05	14.9	400	4.0	3.1	$281.41	$149.88	$12.20	$3.97	$137.59	$162.61	$747.66	$50.23	$330.48	$4.67

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	26.60	10.41	0.82	0.34	11.05	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	946.22	63.57	418.24	5.91

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.3	$587.15	$154.94	$12.21	$6.72	$220.97	$287.26	$1,269.25	$85.28	$561.03	$7.92
4.88	x	0.15	x	3.05	14.9	200	4.0	4.2	$464.86	$154.94	$12.21	$5.41	$177.92	$231.28	$1,046.62	$70.32	$462.62	$6.53
4.88	x	0.15	x	3.05	14.9	250	4.0	3.8	$391.48	$154.94	$12.21	$4.84	$159.20	$206.96	$929.63	$62.46	$410.91	$5.80
4.88	x	0.15	x	3.05	14.9	300	4.0	3.6	$342.56	$154.94	$12.21	$4.53	$148.80	$193.44	$856.48	$57.54	$378.58	$5.35
4.88	x	0.15	x	3.05	14.9	350	4.0	3.4	$307.62	$154.94	$12.21	$4.32	$142.19	$184.86	$806.14	$54.16	$356.33	$5.03
4.88	x	0.15	x	3.05	14.9	400	4.0	3.3	$281.41	$154.94	$12.21	$4.18	$137.59	$178.87	$769.20	$51.68	$340.00	$4.80

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	26.60	12.09	0.82	0.34	11.05	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	971.22	65.25	429.29	6.06

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.3	$587.15	$179.95	$12.20	$6.72	$220.97	$287.26	$1,294.25	$86.96	$572.08	$8.08
4.88	x	0.15	x	3.05	14.9	200	4.0	4.2	$464.86	$179.95	$12.20	$5.41	$177.92	$231.28	$1,071.62	$72.00	$473.67	$6.69
4.88	x	0.15	x	3.05	14.9	250	4.0	3.8	$391.48	$179.95	$12.20	$4.84	$159.20	$206.96	$954.63	$64.14	$421.96	$5.96
4.88	x	0.15	x	3.05	14.9	300	4.0	3.6	$342.56	$179.95	$12.20	$4.53	$148.80	$193.44	$881.48	$59.22	$389.63	$5.50
4.88	x	0.15	x	3.05	14.9	350	4.0	3.4	$307.62	$179.95	$12.20	$4.32	$142.19	$184.86	$831.14	$55.84	$367.38	$5.19
4.88	x	0.15	x	3.05	14.9	400	4.0	3.3	$281.41	$179.95	$12.20	$4.18	$137.59	$178.87	$794.20	$53.36	$351.05	$4.96

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 21 GROUP 4 - HEAVY GAUGE METAL STUDS - 2" X 8" (20G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
31.57	4.54	0.82	0.30	11.05	11.97	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
896.76	60.25	296.80	5.60

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	4.8	$698.81	$67.57	$12.20	$6.09	$220.97	$239.38	$1,245.02	$83.65	$412.06	$7.77
4.88	x	0.20	x	3.05	14.9	200	4.0	3.8	$552.45	$67.57	$12.20	$4.90	$177.92	$192.74	$1,007.78	$67.71	$333.54	$6.29
4.88	x	0.20	x	3.05	14.9	250	4.0	3.4	$464.64	$67.57	$12.20	$4.39	$159.20	$172.47	$880.47	$59.16	$291.41	$5.50
4.88	x	0.20	x	3.05	14.9	300	4.0	3.2	$406.09	$67.57	$12.20	$4.10	$148.80	$161.20	$799.96	$53.75	$264.76	$4.99
4.88	x	0.20	x	3.05	14.9	350	4.0	3.1	$364.28	$67.57	$12.20	$3.92	$142.19	$154.05	$744.21	$50.00	$246.31	$4.65
4.88	x	0.20	x	3.05	14.9	400	4.0	3.0	$332.91	$67.57	$12.20	$3.79	$137.59	$149.06	$703.12	$47.24	$232.71	$4.39

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
31.57	6.25	0.82	0.30	11.05	11.97	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
922.19	61.96	305.21	5.76

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	4.8	$698.81	$93.00	$12.20	$6.09	$220.97	$239.38	$1,270.45	$85.36	$420.48	$7.93
4.88	x	0.20	x	3.05	14.9	200	4.0	3.8	$552.45	$93.00	$12.20	$4.90	$177.92	$192.74	$1,033.21	$69.42	$341.96	$6.45
4.88	x	0.20	x	3.05	14.9	250	4.0	3.4	$464.64	$93.00	$12.20	$4.39	$159.20	$172.47	$905.90	$60.86	$299.82	$5.65
4.88	x	0.20	x	3.05	14.9	300	4.0	3.2	$406.09	$93.00	$12.20	$4.10	$148.80	$161.20	$825.39	$55.45	$273.18	$5.15
4.88	x	0.20	x	3.05	14.9	350	4.0	3.1	$364.28	$93.00	$12.20	$3.92	$142.19	$154.05	$769.64	$51.71	$254.73	$4.80
4.88	x	0.20	x	3.05	14.9	400	4.0	3.0	$332.91	$93.00	$12.20	$3.79	$137.59	$149.06	$728.55	$48.95	$241.13	$4.55

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
31.57	8.06	0.82	0.30	11.05	11.97	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
949.16	63.77	314.14	5.92

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	4.8	$698.81	$119.97	$12.20	$6.09	$220.97	$239.38	$1,297.42	$87.17	$429.40	$8.10
4.88	x	0.20	x	3.05	14.9	200	4.0	3.8	$552.45	$119.97	$12.20	$4.90	$177.92	$192.74	$1,060.18	$71.23	$350.88	$6.62
4.88	x	0.20	x	3.05	14.9	250	4.0	3.4	$464.64	$119.97	$12.20	$4.39	$159.20	$172.47	$932.87	$62.68	$308.75	$5.82
4.88	x	0.20	x	3.05	14.9	300	4.0	3.2	$406.09	$119.97	$12.20	$4.10	$148.80	$161.20	$852.36	$57.27	$282.10	$5.32
4.88	x	0.20	x	3.05	14.9	350	4.0	3.1	$364.28	$119.97	$12.20	$3.92	$142.19	$154.05	$796.61	$53.52	$263.65	$4.97
4.88	x	0.20	x	3.05	14.9	400	4.0	3.0	$332.91	$119.97	$12.20	$3.79	$137.59	$149.06	$755.52	$50.76	$250.05	$4.72

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
31.57	7.38	0.82	0.32	11.05	13.06	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
955.44	64.19	316.22	5.96

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.0	$698.81	$109.84	$12.20	$6.37	$220.97	$261.15	$1,309.34	$87.97	$433.35	$8.17
4.88	x	0.20	x	3.05	14.9	200	4.0	4.0	$552.45	$109.84	$12.20	$5.13	$177.92	$210.26	$1,067.80	$71.74	$353.41	$6.67
4.88	x	0.20	x	3.05	14.9	250	4.0	3.6	$464.64	$109.84	$12.20	$4.59	$159.20	$188.15	$938.62	$63.06	$310.65	$5.86
4.88	x	0.20	x	3.05	14.9	300	4.0	3.4	$406.09	$109.84	$12.20	$4.29	$148.80	$175.86	$857.08	$57.58	$283.66	$5.35
4.88	x	0.20	x	3.05	14.9	350	4.0	3.2	$364.28	$109.84	$12.20	$4.10	$142.19	$168.05	$800.66	$53.79	$264.99	$5.00
4.88	x	0.20	x	3.05	14.9	400	4.0	3.1	$332.91	$109.84	$12.20	$3.97	$137.59	$162.61	$759.12	$51.00	$251.24	$4.74

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
31.57	10.07	0.82	0.32	11.05	13.06	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
995.48	66.88	329.47	6.21

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.0	$698.81	$149.88	$12.20	$6.37	$220.97	$261.15	$1,349.38	$90.66	$446.60	$8.42
4.88	x	0.20	x	3.05	14.9	200	4.0	4.0	$552.45	$149.88	$12.20	$5.13	$177.92	$210.26	$1,107.84	$74.43	$366.66	$6.91
4.88	x	0.20	x	3.05	14.9	250	4.0	3.6	$464.64	$149.88	$12.20	$4.59	$159.20	$188.15	$978.66	$65.75	$323.90	$6.11
4.88	x	0.20	x	3.05	14.9	300	4.0	3.4	$406.09	$149.88	$12.20	$4.29	$148.80	$175.86	$897.12	$60.27	$296.92	$5.60
4.88	x	0.20	x	3.05	14.9	350	4.0	3.2	$364.28	$149.88	$12.20	$4.10	$142.19	$168.05	$840.70	$56.48	$278.24	$5.25
4.88	x	0.20	x	3.05	14.9	400	4.0	3.1	$332.91	$149.88	$12.20	$3.97	$137.59	$162.61	$799.16	$53.69	$264.50	$4.99

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
31.57	10.41	0.82	0.34	11.05	14.36	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1020.23	68.55	337.66	6.37

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.3	$698.81	$154.94	$12.20	$6.72	$220.97	$287.26	$1,380.90	$92.78	$457.03	$8.62
4.88	x	0.20	x	3.05	14.9	200	4.0	4.2	$552.45	$154.94	$12.20	$5.41	$177.92	$231.28	$1,134.20	$76.20	$375.38	$7.08
4.88	x	0.20	x	3.05	14.9	250	4.0	3.8	$464.64	$154.94	$12.20	$4.84	$159.20	$206.96	$1,002.78	$67.37	$331.89	$6.26
4.88	x	0.20	x	3.05	14.9	300	4.0	3.6	$406.09	$154.94	$12.20	$4.53	$148.80	$193.44	$920.00	$61.81	$304.49	$5.74
4.88	x	0.20	x	3.05	14.9	350	4.0	3.4	$364.28	$154.94	$12.20	$4.32	$142.19	$184.86	$862.79	$57.97	$285.55	$5.39
4.88	x	0.20	x	3.05	14.9	400	4.0	3.3	$332.91	$154.94	$12.20	$4.18	$137.59	$178.87	$820.69	$55.14	$271.62	$5.12

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
31.57	12.09	0.82	0.34	11.05	14.36	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1045.24	70.23	345.94	6.52

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.3	$698.81	$179.95	$12.20	$6.72	$220.97	$287.26	$1,405.91	$94.46	$465.31	$8.78
4.88	x	0.20	x	3.05	14.9	200	4.0	4.2	$552.45	$179.95	$12.20	$5.41	$177.92	$231.28	$1,159.21	$77.88	$383.66	$7.24
4.88	x	0.20	x	3.05	14.9	250	4.0	3.8	$464.64	$179.95	$12.20	$4.84	$159.20	$206.96	$1,027.79	$69.05	$340.16	$6.42
4.88	x	0.20	x	3.05	14.9	300	4.0	3.6	$406.09	$179.95	$12.20	$4.53	$148.80	$193.44	$945.01	$63.49	$312.77	$5.90
4.88	x	0.20	x	3.05	14.9	350	4.0	3.4	$364.28	$179.95	$12.20	$4.32	$142.19	$184.86	$887.80	$59.65	$293.83	$5.54
4.88	x	0.20	x	3.05	14.9	400	4.0	3.3	$332.91	$179.95	$12.20	$4.18	$137.59	$178.87	$845.70	$56.82	$279.90	$5.28

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix

T – TABLE 22 – HEAVY METAL STUD – 18 GAUGE WALL FRAMING

Hanscomb

TABLE 22 GROUP 1 - HEAVY GAUGE METAL STUDS - 2" X 3 5/8" (18G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 3 5/8" (38 x 89mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
26.55	4.54	0.82	0.32	11.97	11.97	
				Total Labour		

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.0	$584.15	$67.57	$12.20	$6.33	$239.39	$239.38	$1,149.02	$77.20	$867.40	$7.17
4.88	x	0.09	x	3.05	14.9	200	4.0	4.0	$463.34	$67.57	$12.20	$5.10	$192.74	$192.74	$933.69	$62.73	$704.84	$5.83
4.88	x	0.09	x	3.05	14.9	250	4.0	3.6	$390.85	$67.57	$12.20	$4.56	$172.47	$172.46	$820.11	$55.10	$619.10	$5.12
4.88	x	0.09	x	3.05	14.9	300	4.0	3.3	$342.53	$67.57	$12.20	$4.26	$161.20	$161.20	$748.96	$50.32	$565.39	$4.67
4.88	x	0.09	x	3.05	14.9	350	4.0	3.2	$308.01	$67.57	$12.20	$4.07	$154.04	$154.05	$699.94	$47.03	$528.39	$4.37
4.88	x	0.09	x	3.05	14.9	400	4.0	3.1	$282.13	$67.57	$12.20	$3.94	$149.05	$149.06	$663.95	$44.61	$501.22	$4.14

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
835.95	56.16	631.06	5.22

2" x 3 5/8" (38 x 89mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
26.55	6.25	0.82	0.32	11.97	11.97	
				Total Labour		

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.0	$584.15	$93.00	$12.20	$6.33	$239.39	$239.38	$1,174.45	$78.91	$886.59	$7.33
4.88	x	0.09	x	3.05	14.9	200	4.0	4.0	$463.34	$93.00	$12.20	$5.10	$192.74	$192.74	$959.12	$64.44	$724.04	$5.99
4.88	x	0.09	x	3.05	14.9	250	4.0	3.6	$390.85	$93.00	$12.20	$4.56	$172.47	$172.46	$845.54	$56.81	$638.30	$5.28
4.88	x	0.09	x	3.05	14.9	300	4.0	3.3	$342.53	$93.00	$12.20	$4.26	$161.20	$161.20	$774.39	$52.03	$584.59	$4.83
4.88	x	0.09	x	3.05	14.9	350	4.0	3.2	$308.01	$93.00	$12.20	$4.07	$154.04	$154.05	$725.37	$48.73	$547.58	$4.53
4.88	x	0.09	x	3.05	14.9	400	4.0	3.1	$282.13	$93.00	$12.20	$3.94	$149.05	$149.06	$689.38	$46.32	$520.41	$4.30

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
861.38	57.87	650.25	5.38

2" x 3 5/8" (38 x 89mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
26.55	8.06	0.82	0.32	11.97	11.97	
				Total Labour		

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.0	$584.15	$119.97	$12.20	$6.33	$239.39	$239.38	$1,201.42	$80.72	$906.95	$7.50
4.88	x	0.09	x	3.05	14.9	200	4.0	4.0	$463.34	$119.97	$12.20	$5.10	$192.74	$192.74	$986.09	$66.25	$744.40	$6.15
4.88	x	0.09	x	3.05	14.9	250	4.0	3.6	$390.85	$119.97	$12.20	$4.56	$172.47	$172.46	$872.51	$58.62	$658.66	$5.45
4.88	x	0.09	x	3.05	14.9	300	4.0	3.3	$342.53	$119.97	$12.20	$4.26	$161.20	$161.20	$801.36	$53.84	$604.95	$5.00
4.88	x	0.09	x	3.05	14.9	350	4.0	3.2	$308.01	$119.97	$12.20	$4.07	$154.04	$154.05	$752.34	$50.55	$567.94	$4.70
4.88	x	0.09	x	3.05	14.9	400	4.0	3.1	$282.13	$119.97	$12.20	$3.94	$149.05	$149.06	$716.35	$48.13	$540.77	$4.47

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
888.35	59.68	670.61	5.54

2" x 3 5/8" (38 x 89mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
26.55	7.38	0.82	0.33	11.97	13.06	
				Total Labour		

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.2	$584.15	$109.84	$12.20	$6.62	$239.39	$261.14	$1,213.34	$81.52	$915.95	$7.57
4.88	x	0.09	x	3.05	14.9	200	4.0	4.2	$463.34	$109.84	$12.20	$5.33	$192.74	$210.26	$993.71	$66.76	$750.15	$6.20
4.88	x	0.09	x	3.05	14.9	250	4.0	3.7	$390.85	$109.84	$12.20	$4.77	$172.47	$188.14	$878.27	$59.01	$663.01	$5.48
4.88	x	0.09	x	3.05	14.9	300	4.0	3.5	$342.53	$109.84	$12.20	$4.46	$161.20	$175.86	$806.09	$54.16	$608.52	$5.03
4.88	x	0.09	x	3.05	14.9	350	4.0	3.3	$308.01	$109.84	$12.20	$4.26	$154.04	$168.05	$756.40	$50.82	$571.01	$4.72
4.88	x	0.09	x	3.05	14.9	400	4.0	3.2	$282.13	$109.84	$12.20	$4.12	$149.05	$162.61	$719.95	$48.37	$543.49	$4.49

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
894.63	60.11	675.36	5.58

2" x 3 5/8" (38 x 89mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
26.55	10.07	0.82	0.33	11.97	13.06	
				Total Labour		

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.2	$584.15	$149.88	$12.20	$6.62	$239.39	$261.14	$1,253.38	$84.21	$946.18	$7.82
4.88	x	0.09	x	3.05	14.9	200	4.0	4.2	$463.34	$149.88	$12.20	$5.33	$192.74	$210.26	$1,033.75	$69.45	$780.38	$6.45
4.88	x	0.09	x	3.05	14.9	250	4.0	3.7	$390.85	$149.88	$12.20	$4.77	$172.47	$188.14	$918.31	$61.70	$693.23	$5.73
4.88	x	0.09	x	3.05	14.9	300	4.0	3.5	$342.53	$149.88	$12.20	$4.46	$161.20	$175.86	$846.13	$56.85	$638.74	$5.28
4.88	x	0.09	x	3.05	14.9	350	4.0	3.3	$308.01	$149.88	$12.20	$4.26	$154.04	$168.05	$796.44	$53.51	$601.23	$4.97
4.88	x	0.09	x	3.05	14.9	400	4.0	3.2	$282.13	$149.88	$12.20	$4.12	$149.05	$162.61	$759.99	$51.06	$573.72	$4.74

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
934.67	62.80	705.58	5.83

2" x 3 5/8" (38 x 89mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
26.55	10.41	0.82	0.35	11.97	14.36	
				Total Labour		

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.5	$584.15	$154.94	$12.20	$6.96	$239.39	$287.26	$1,284.90	$86.33	$969.97	$8.02
4.88	x	0.09	x	3.05	14.9	200	4.0	4.4	$463.34	$154.94	$12.20	$5.61	$192.74	$231.29	$1,060.12	$71.23	$800.29	$6.62
4.88	x	0.09	x	3.05	14.9	250	4.0	3.9	$390.85	$154.94	$12.20	$5.02	$172.47	$206.96	$942.44	$63.32	$711.45	$5.88
4.88	x	0.09	x	3.05	14.9	300	4.0	3.7	$342.53	$154.94	$12.20	$4.69	$161.20	$193.44	$869.00	$58.38	$656.01	$5.42
4.88	x	0.09	x	3.05	14.9	350	4.0	3.5	$308.01	$154.94	$12.20	$4.48	$154.04	$184.86	$818.53	$54.99	$617.91	$5.11
4.88	x	0.09	x	3.05	14.9	400	4.0	3.4	$282.13	$154.94	$12.20	$4.34	$149.05	$178.87	$781.53	$52.51	$589.98	$4.88

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
959.42	64.46	724.27	5.99

2" x 3 5/8" (38 x 89mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
26.55	12.09	0.82	0.35	11.97	14.36	
				Total Labour		

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.5	$584.15	$179.95	$12.20	$6.96	$239.39	$287.26	$1,309.91	$88.01	$988.85	$8.18
4.88	x	0.09	x	3.05	14.9	200	4.0	4.4	$463.34	$179.95	$12.20	$5.61	$192.74	$231.29	$1,085.13	$72.91	$819.17	$6.77
4.88	x	0.09	x	3.05	14.9	250	4.0	3.9	$390.85	$179.95	$12.20	$5.02	$172.47	$206.96	$967.45	$65.00	$730.33	$6.04
4.88	x	0.09	x	3.05	14.9	300	4.0	3.7	$342.53	$179.95	$12.20	$4.69	$161.20	$193.44	$894.01	$60.07	$674.89	$5.58
4.88	x	0.09	x	3.05	14.9	350	4.0	3.5	$308.01	$179.95	$12.20	$4.48	$154.04	$184.86	$843.54	$56.67	$636.79	$5.27
4.88	x	0.09	x	3.05	14.9	400	4.0	3.4	$282.13	$179.95	$12.20	$4.34	$149.05	$178.87	$806.54	$54.19	$608.86	$5.03

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
984.43	66.14	743.15	6.14

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 22 GROUP 2 - HEAVY GAUGE METAL STUDS - 2" X 4" (18G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	27.90	4.54	0.82	0.32	11.97	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	856.11	57.52	563.91	5.34

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.0	$613.23	$67.57	$12.20	$6.33	$239.39	$239.38	$1,178.10	$79.15	$776.00	$7.35
4.88	x	0.10	x	3.05	14.9	200	4.0	4.0	$486.72	$67.57	$12.20	$5.10	$192.74	$192.74	$957.07	$64.30	$630.41	$5.97
4.88	x	0.10	x	3.05	14.9	250	4.0	3.6	$410.81	$67.57	$12.20	$4.56	$172.47	$172.46	$840.07	$56.44	$553.34	$5.24
4.88	x	0.10	x	3.05	14.9	300	4.0	3.3	$360.20	$67.57	$12.20	$4.26	$161.20	$161.20	$766.63	$51.51	$504.97	$4.79
4.88	x	0.10	x	3.05	14.9	350	4.0	3.2	$324.06	$67.57	$12.20	$4.07	$154.04	$154.05	$715.99	$48.10	$471.61	$4.47
4.88	x	0.10	x	3.05	14.9	400	4.0	3.1	$296.95	$67.57	$12.20	$3.94	$149.05	$149.06	$678.77	$45.60	$447.10	$4.24

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	27.90	6.25	0.82	0.32	11.97	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	881.54	59.23	580.66	5.50

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.0	$613.23	$93.00	$12.20	$6.33	$239.39	$239.38	$1,203.53	$80.86	$792.75	$7.51
4.88	x	0.10	x	3.05	14.9	200	4.0	4.0	$486.72	$93.00	$12.20	$5.10	$192.74	$192.74	$982.50	$66.01	$647.16	$6.13
4.88	x	0.10	x	3.05	14.9	250	4.0	3.6	$410.81	$93.00	$12.20	$4.56	$172.47	$172.46	$865.50	$58.15	$570.10	$5.40
4.88	x	0.10	x	3.05	14.9	300	4.0	3.3	$360.20	$93.00	$12.20	$4.26	$161.20	$161.20	$792.06	$53.22	$521.72	$4.94
4.88	x	0.10	x	3.05	14.9	350	4.0	3.2	$324.06	$93.00	$12.20	$4.07	$154.04	$154.05	$741.42	$49.81	$488.36	$4.63
4.88	x	0.10	x	3.05	14.9	400	4.0	3.1	$296.95	$93.00	$12.20	$3.94	$149.05	$149.06	$704.20	$47.31	$463.85	$4.40

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	27.90	8.06	0.82	0.32	11.97	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	908.51	61.04	598.42	5.67

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.0	$613.23	$119.97	$12.20	$6.33	$239.39	$239.38	$1,230.50	$82.67	$810.52	$7.68
4.88	x	0.10	x	3.05	14.9	200	4.0	4.0	$486.72	$119.97	$12.20	$5.10	$192.74	$192.74	$1,009.47	$67.82	$664.93	$6.30
4.88	x	0.10	x	3.05	14.9	250	4.0	3.6	$410.81	$119.97	$12.20	$4.56	$172.47	$172.46	$892.47	$59.96	$587.86	$5.57
4.88	x	0.10	x	3.05	14.9	300	4.0	3.3	$360.20	$119.97	$12.20	$4.26	$161.20	$161.20	$819.03	$55.03	$539.49	$5.11
4.88	x	0.10	x	3.05	14.9	350	4.0	3.2	$324.06	$119.97	$12.20	$4.07	$154.04	$154.05	$768.39	$51.63	$506.13	$4.80
4.88	x	0.10	x	3.05	14.9	400	4.0	3.1	$296.95	$119.97	$12.20	$3.94	$149.05	$149.06	$731.17	$49.12	$481.61	$4.56

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	27.90	7.38	0.82	0.33	11.97	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	914.79	61.46	602.56	5.71

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.2	$613.23	$109.84	$12.20	$6.62	$239.39	$261.14	$1,242.42	$83.47	$818.37	$7.75
4.88	x	0.10	x	3.05	14.9	200	4.0	4.2	$486.72	$109.84	$12.20	$5.33	$192.74	$210.26	$1,017.09	$68.33	$669.95	$6.35
4.88	x	0.10	x	3.05	14.9	250	4.0	3.7	$410.81	$109.84	$12.20	$4.77	$172.47	$188.14	$898.23	$60.35	$591.65	$5.61
4.88	x	0.10	x	3.05	14.9	300	4.0	3.5	$360.20	$109.84	$12.20	$4.46	$161.20	$175.86	$823.76	$55.35	$542.60	$5.14
4.88	x	0.10	x	3.05	14.9	350	4.0	3.3	$324.06	$109.84	$12.20	$4.26	$154.04	$168.05	$772.45	$51.90	$508.80	$4.82
4.88	x	0.10	x	3.05	14.9	400	4.0	3.2	$296.95	$109.84	$12.20	$4.12	$149.05	$162.61	$734.77	$49.37	$483.98	$4.59

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	27.90	10.07	0.82	0.33	11.97	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	954.83	64.15	628.93	5.96

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.2	$613.23	$149.88	$12.20	$6.62	$239.39	$261.14	$1,282.46	$86.16	$844.74	$8.00
4.88	x	0.10	x	3.05	14.9	200	4.0	4.2	$486.72	$149.88	$12.20	$5.33	$192.74	$210.26	$1,057.13	$71.02	$696.32	$6.60
4.88	x	0.10	x	3.05	14.9	250	4.0	3.7	$410.81	$149.88	$12.20	$4.77	$172.47	$188.14	$938.27	$63.04	$618.03	$5.86
4.88	x	0.10	x	3.05	14.9	300	4.0	3.5	$360.20	$149.88	$12.20	$4.46	$161.20	$175.86	$863.80	$58.04	$568.98	$5.39
4.88	x	0.10	x	3.05	14.9	350	4.0	3.3	$324.06	$149.88	$12.20	$4.26	$154.04	$168.05	$812.49	$54.59	$535.18	$5.07
4.88	x	0.10	x	3.05	14.9	400	4.0	3.2	$296.95	$149.88	$12.20	$4.12	$149.05	$162.61	$774.81	$52.06	$510.36	$4.84

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	27.90	10.41	0.82	0.35	11.97	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	979.58	65.81	645.24	6.11

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.5	$613.23	$154.94	$12.20	$6.96	$239.39	$287.26	$1,313.98	$88.28	$865.50	$8.20
4.88	x	0.10	x	3.05	14.9	200	4.0	4.4	$486.72	$154.94	$12.20	$5.61	$192.74	$231.29	$1,083.50	$72.80	$713.69	$6.76
4.88	x	0.10	x	3.05	14.9	250	4.0	3.9	$410.81	$154.94	$12.20	$5.02	$172.47	$206.96	$962.40	$64.66	$633.92	$6.01
4.88	x	0.10	x	3.05	14.9	300	4.0	3.7	$360.20	$154.94	$12.20	$4.69	$161.20	$193.44	$886.67	$59.57	$584.04	$5.53
4.88	x	0.10	x	3.05	14.9	350	4.0	3.5	$324.06	$154.94	$12.20	$4.48	$154.04	$184.86	$834.58	$56.07	$549.73	$5.21
4.88	x	0.10	x	3.05	14.9	400	4.0	3.4	$296.95	$154.94	$12.20	$4.34	$149.05	$178.87	$796.35	$53.50	$524.55	$4.97

2" x 4" (38 x 102mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	27.90	12.09	0.82	0.35	11.97	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1004.59	67.49	661.71	6.27

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.5	$613.23	$179.95	$12.20	$6.96	$239.39	$287.26	$1,338.99	$89.96	$881.98	$8.36
4.88	x	0.10	x	3.05	14.9	200	4.0	4.4	$486.72	$179.95	$12.20	$5.61	$192.74	$231.29	$1,108.51	$74.48	$730.16	$6.92
4.88	x	0.10	x	3.05	14.9	250	4.0	3.9	$410.81	$179.95	$12.20	$5.02	$172.47	$206.96	$987.41	$66.34	$650.40	$6.16
4.88	x	0.10	x	3.05	14.9	300	4.0	3.7	$360.20	$179.95	$12.20	$4.69	$161.20	$193.44	$911.68	$61.25	$600.51	$5.69
4.88	x	0.10	x	3.05	14.9	350	4.0	3.5	$324.06	$179.95	$12.20	$4.48	$154.04	$184.86	$859.59	$57.75	$566.20	$5.37
4.88	x	0.10	x	3.05	14.9	400	4.0	3.4	$296.95	$179.95	$12.20	$4.34	$149.05	$178.87	$821.36	$55.18	$541.02	$5.13

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 22 GROUP 3 - HEAVY GAUGE METAL STUDS - 2" X 6" (18G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.81	4.54	0.82	0.32	12.00	11.94	943.93	63.42	417.23	5.89
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.0	$749.57	$67.57	$12.20	$6.33	$239.39	$239.38	$1,314.44	$88.31	$581.00	$8.20
4.88	x	0.15	x	3.05	14.9	200	4.0	4.0	$592.04	$67.57	$12.20	$5.10	$192.74	$192.74	$1,062.39	$71.38	$469.59	$6.63
4.88	x	0.15	x	3.05	14.9	250	4.0	3.6	$497.53	$67.57	$12.20	$4.56	$172.47	$172.46	$926.79	$62.27	$409.65	$5.78
4.88	x	0.15	x	3.05	14.9	300	4.0	3.3	$434.52	$67.57	$12.20	$4.26	$161.20	$161.20	$840.95	$56.50	$371.71	$5.25
4.88	x	0.15	x	3.05	14.9	350	4.0	3.2	$389.52	$67.57	$12.20	$4.07	$157.04	$151.05	$781.45	$52.50	$345.41	$4.88
4.88	x	0.15	x	3.05	14.9	400	4.0	3.1	$355.76	$67.57	$12.20	$3.94	$149.05	$149.06	$737.58	$49.56	$326.02	$4.60

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.81	6.25	0.82	0.32	12.00	11.94	969.36	65.13	428.47	6.05
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.0	$749.57	$93.00	$12.20	$6.33	$239.39	$239.38	$1,339.87	$90.02	$592.24	$8.36
4.88	x	0.15	x	3.05	14.9	200	4.0	4.0	$592.04	$93.00	$12.20	$5.10	$192.74	$192.74	$1,087.82	$73.09	$480.83	$6.79
4.88	x	0.15	x	3.05	14.9	250	4.0	3.6	$497.53	$93.00	$12.20	$4.56	$172.47	$172.46	$952.22	$63.98	$420.90	$5.94
4.88	x	0.15	x	3.05	14.9	300	4.0	3.3	$434.52	$93.00	$12.20	$4.26	$161.20	$161.20	$866.38	$58.21	$382.95	$5.41
4.88	x	0.15	x	3.05	14.9	350	4.0	3.2	$389.52	$93.00	$12.20	$4.07	$157.04	$151.05	$806.88	$54.21	$356.65	$5.04
4.88	x	0.15	x	3.05	14.9	400	4.0	3.1	$355.76	$93.00	$12.20	$3.94	$149.05	$149.06	$763.01	$51.26	$337.26	$4.76

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.81	8.06	0.82	0.32	12.00	11.94	996.33	66.94	440.39	6.22
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.0	$749.57	$119.97	$12.20	$6.33	$239.39	$239.38	$1,366.84	$91.83	$604.16	$8.53
4.88	x	0.15	x	3.05	14.9	200	4.0	4.0	$592.04	$119.97	$12.20	$5.10	$192.74	$192.74	$1,114.79	$74.90	$492.75	$6.96
4.88	x	0.15	x	3.05	14.9	250	4.0	3.6	$497.53	$119.97	$12.20	$4.56	$172.47	$172.46	$979.19	$65.79	$432.82	$6.11
4.88	x	0.15	x	3.05	14.9	300	4.0	3.3	$434.52	$119.97	$12.20	$4.26	$161.20	$161.20	$893.35	$60.02	$394.87	$5.58
4.88	x	0.15	x	3.05	14.9	350	4.0	3.2	$389.52	$119.97	$12.20	$4.07	$157.04	$151.05	$833.85	$56.02	$368.57	$5.20
4.88	x	0.15	x	3.05	14.9	400	4.0	3.1	$355.76	$119.97	$12.20	$3.94	$149.05	$149.06	$789.98	$53.08	$349.18	$4.93

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.81	7.38	0.82	0.33	12.00	13.02	1002.62	67.36	443.17	6.26
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.2	$749.57	$109.84	$12.20	$6.62	$239.39	$261.14	$1,378.76	$92.63	$609.43	$8.61
4.88	x	0.15	x	3.05	14.9	200	4.0	4.2	$592.04	$109.84	$12.20	$5.33	$192.74	$210.26	$1,122.41	$75.41	$496.12	$7.01
4.88	x	0.15	x	3.05	14.9	250	4.0	3.7	$497.53	$109.84	$12.20	$4.77	$172.47	$188.14	$984.95	$66.18	$435.36	$6.15
4.88	x	0.15	x	3.05	14.9	300	4.0	3.5	$434.52	$109.84	$12.20	$4.46	$161.20	$175.86	$898.08	$60.34	$396.96	$5.61
4.88	x	0.15	x	3.05	14.9	350	4.0	3.3	$389.52	$109.84	$12.20	$4.26	$157.04	$165.05	$837.91	$56.30	$370.37	$5.23
4.88	x	0.15	x	3.05	14.9	400	4.0	3.2	$355.76	$109.84	$12.20	$4.12	$149.05	$162.61	$793.58	$53.32	$350.77	$4.95

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.81	10.07	0.82	0.33	12.00	13.02	1042.66	70.05	460.87	6.51
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.2	$749.57	$149.88	$12.20	$6.62	$239.39	$261.14	$1,418.80	$95.32	$627.13	$8.86
4.88	x	0.15	x	3.05	14.9	200	4.0	4.2	$592.04	$149.88	$12.20	$5.33	$192.74	$210.26	$1,162.45	$78.10	$513.82	$7.26
4.88	x	0.15	x	3.05	14.9	250	4.0	3.7	$497.53	$149.88	$12.20	$4.77	$172.47	$188.14	$1,024.99	$68.87	$453.06	$6.40
4.88	x	0.15	x	3.05	14.9	300	4.0	3.5	$434.52	$149.88	$12.20	$4.46	$161.20	$175.86	$938.12	$63.03	$414.66	$5.86
4.88	x	0.15	x	3.05	14.9	350	4.0	3.3	$389.52	$149.88	$12.20	$4.26	$157.04	$165.05	$877.95	$58.99	$388.07	$5.48
4.88	x	0.15	x	3.05	14.9	400	4.0	3.2	$355.76	$149.88	$12.20	$4.12	$149.05	$162.61	$833.62	$56.01	$368.47	$5.20

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.81	10.41	0.82	0.35	12.00	14.33	1067.41	71.72	471.81	6.66
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.5	$749.57	$154.94	$12.20	$6.96	$239.39	$287.26	$1,450.32	$97.44	$641.06	$9.05
4.88	x	0.15	x	3.05	14.9	200	4.0	4.4	$592.04	$154.94	$12.20	$5.61	$192.74	$231.29	$1,188.82	$79.87	$525.48	$7.42
4.88	x	0.15	x	3.05	14.9	250	4.0	3.9	$497.53	$154.94	$12.20	$5.02	$172.47	$206.96	$1,049.12	$70.49	$463.73	$6.55
4.88	x	0.15	x	3.05	14.9	300	4.0	3.7	$434.52	$154.94	$12.20	$4.69	$161.20	$193.44	$960.99	$64.57	$424.77	$6.00
4.88	x	0.15	x	3.05	14.9	350	4.0	3.5	$389.52	$154.94	$12.20	$4.48	$157.04	$181.86	$900.04	$60.47	$397.83	$5.62
4.88	x	0.15	x	3.05	14.9	400	4.0	3.4	$355.76	$154.94	$12.20	$4.34	$149.05	$178.87	$855.16	$57.45	$377.99	$5.34

2" x 6" (38 x 152mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.81	12.09	0.82	0.35	12.00	14.33	1092.42	73.40	482.87	6.82
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.5	$749.57	$179.95	$12.20	$6.96	$239.39	$287.26	$1,475.33	$99.12	$652.12	$9.21
4.88	x	0.15	x	3.05	14.9	200	4.0	4.4	$592.04	$179.95	$12.20	$5.61	$192.74	$231.29	$1,213.83	$81.55	$536.53	$7.58
4.88	x	0.15	x	3.05	14.9	250	4.0	3.9	$497.53	$179.95	$12.20	$5.02	$172.47	$206.96	$1,074.13	$72.17	$474.78	$6.70
4.88	x	0.15	x	3.05	14.9	300	4.0	3.7	$434.52	$179.95	$12.20	$4.69	$161.20	$193.44	$986.00	$66.25	$435.83	$6.15
4.88	x	0.15	x	3.05	14.9	350	4.0	3.5	$389.52	$179.95	$12.20	$4.48	$157.04	$181.86	$925.05	$62.15	$408.89	$5.77
4.88	x	0.15	x	3.05	14.9	400	4.0	3.4	$355.76	$179.95	$12.20	$4.34	$149.05	$178.87	$880.17	$59.14	$389.05	$5.49

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 22 GROUP 4 - HEAVY GAUGE METAL STUDS - 2" X 8" (18G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	40.12	4.54	0.82	0.32	11.97	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1037.87	69.73	343.50	6.48

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.0	$892.00	$67.57	$12.21	$6.33	$239.39	$239.38	$1,456.88	$97.88	$482.18	$9.09
4.88	x	0.20	x	3.05	14.9	200	4.0	4.0	$703.47	$67.57	$12.21	$5.10	$192.74	$192.74	$1,173.83	$78.87	$388.50	$7.33
4.88	x	0.20	x	3.05	14.9	250	4.0	3.6	$590.35	$67.57	$12.21	$4.56	$172.47	$172.46	$1,019.62	$68.50	$337.46	$6.36
4.88	x	0.20	x	3.05	14.9	300	4.0	3.3	$514.94	$67.57	$12.21	$4.26	$161.20	$161.20	$921.38	$61.90	$304.95	$5.75
4.88	x	0.20	x	3.05	14.9	350	4.0	3.2	$461.08	$67.57	$12.21	$4.07	$154.04	$154.05	$853.02	$57.31	$282.32	$5.32
4.88	x	0.20	x	3.05	14.9	400	4.0	3.1	$420.68	$67.57	$12.21	$3.94	$149.05	$149.06	$802.51	$53.92	$265.60	$5.01

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	40.12	6.25	0.82	0.32	11.97	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1063.30	71.44	351.92	6.64

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.0	$892.00	$93.00	$12.21	$6.33	$239.39	$239.38	$1,482.31	$99.59	$490.60	$9.25
4.88	x	0.20	x	3.05	14.9	200	4.0	4.0	$703.47	$93.00	$12.21	$5.10	$192.74	$192.74	$1,199.26	$80.57	$396.92	$7.49
4.88	x	0.20	x	3.05	14.9	250	4.0	3.6	$590.35	$93.00	$12.21	$4.56	$172.47	$172.46	$1,045.05	$70.21	$345.88	$6.52
4.88	x	0.20	x	3.05	14.9	300	4.0	3.3	$514.94	$93.00	$12.21	$4.26	$161.20	$161.20	$946.81	$63.61	$313.36	$5.91
4.88	x	0.20	x	3.05	14.9	350	4.0	3.2	$461.08	$93.00	$12.21	$4.07	$154.04	$154.05	$878.45	$59.02	$290.74	$5.48
4.88	x	0.20	x	3.05	14.9	400	4.0	3.1	$420.68	$93.00	$12.21	$3.94	$149.05	$149.06	$827.94	$55.63	$274.02	$5.17

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	40.12	8.06	0.82	0.32	11.97	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1090.27	73.25	360.84	6.81

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.0	$892.00	$119.97	$12.21	$6.33	$239.39	$239.38	$1,509.28	$101.40	$499.52	$9.42
4.88	x	0.20	x	3.05	14.9	200	4.0	4.0	$703.47	$119.97	$12.21	$5.10	$192.74	$192.74	$1,226.23	$82.39	$405.84	$7.65
4.88	x	0.20	x	3.05	14.9	250	4.0	3.6	$590.35	$119.97	$12.21	$4.56	$172.47	$172.46	$1,072.02	$72.02	$354.80	$6.69
4.88	x	0.20	x	3.05	14.9	300	4.0	3.3	$514.94	$119.97	$12.21	$4.26	$161.20	$161.20	$973.78	$65.42	$322.29	$6.08
4.88	x	0.20	x	3.05	14.9	350	4.0	3.2	$461.08	$119.97	$12.21	$4.07	$154.04	$154.05	$905.42	$60.83	$299.66	$5.65
4.88	x	0.20	x	3.05	14.9	400	4.0	3.1	$420.68	$119.97	$12.21	$3.94	$149.05	$149.06	$854.91	$57.44	$282.95	$5.34

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	40.12	7.38	0.82	0.33	11.97	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1096.56	73.67	362.92	6.84

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.2	$892.00	$109.84	$12.21	$6.62	$239.39	$261.14	$1,521.20	$102.20	$503.47	$9.50
4.88	x	0.20	x	3.05	14.9	200	4.0	4.2	$703.47	$109.84	$12.21	$5.33	$192.74	$210.26	$1,233.85	$82.90	$408.36	$7.70
4.88	x	0.20	x	3.05	14.9	250	4.0	3.7	$590.35	$109.84	$12.21	$4.77	$172.47	$188.14	$1,077.78	$72.41	$356.71	$6.73
4.88	x	0.20	x	3.05	14.9	300	4.0	3.5	$514.94	$109.84	$12.21	$4.46	$161.20	$175.86	$978.51	$65.74	$323.85	$6.11
4.88	x	0.20	x	3.05	14.9	350	4.0	3.3	$461.08	$109.84	$12.21	$4.26	$154.04	$168.05	$909.48	$61.10	$301.01	$5.68
4.88	x	0.20	x	3.05	14.9	400	4.0	3.2	$420.68	$109.84	$12.21	$4.12	$149.05	$162.61	$858.51	$57.68	$284.14	$5.36

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	40.12	10.07	0.82	0.33	11.97	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1136.60	76.36	376.18	7.09

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.2	$892.00	$149.88	$12.21	$6.62	$239.39	$261.14	$1,561.24	$104.89	$516.72	$9.74
4.88	x	0.20	x	3.05	14.9	200	4.0	4.2	$703.47	$149.88	$12.21	$5.33	$192.74	$210.26	$1,273.89	$85.59	$421.62	$7.95
4.88	x	0.20	x	3.05	14.9	250	4.0	3.7	$590.35	$149.88	$12.21	$4.77	$172.47	$188.14	$1,117.82	$75.10	$369.96	$6.98
4.88	x	0.20	x	3.05	14.9	300	4.0	3.5	$514.94	$149.88	$12.21	$4.46	$161.20	$175.86	$1,018.55	$68.43	$337.11	$6.36
4.88	x	0.20	x	3.05	14.9	350	4.0	3.3	$461.08	$149.88	$12.21	$4.26	$154.04	$168.05	$949.52	$63.79	$314.26	$5.93
4.88	x	0.20	x	3.05	14.9	400	4.0	3.2	$420.68	$149.88	$12.21	$4.12	$149.05	$162.61	$898.55	$60.37	$297.39	$5.61

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	40.12	10.41	0.82	0.35	11.97	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1161.35	78.03	384.37	7.25

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.5	$892.00	$154.94	$12.21	$6.96	$239.39	$287.26	$1,592.76	$107.01	$527.15	$9.94
4.88	x	0.20	x	3.05	14.9	200	4.0	4.4	$703.47	$154.94	$12.21	$5.61	$192.74	$231.29	$1,300.26	$87.36	$430.34	$8.12
4.88	x	0.20	x	3.05	14.9	250	4.0	3.9	$590.35	$154.94	$12.21	$5.02	$172.47	$206.96	$1,141.95	$76.72	$377.95	$7.13
4.88	x	0.20	x	3.05	14.9	300	4.0	3.7	$514.94	$154.94	$12.21	$4.69	$161.20	$193.44	$1,041.42	$69.97	$344.68	$6.50
4.88	x	0.20	x	3.05	14.9	350	4.0	3.5	$461.08	$154.94	$12.21	$4.48	$154.04	$184.86	$971.61	$65.28	$321.57	$6.06
4.88	x	0.20	x	3.05	14.9	400	4.0	3.4	$420.68	$154.94	$12.21	$4.34	$149.05	$178.87	$920.09	$61.82	$304.52	$5.74

2" x 8" (38 x 203mm) 20 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)

Labour & Equip. Rate Varies

Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	40.12	12.09	0.82	0.35	11.97	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1186.36	79.71	392.65	7.41

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.5	$892.00	$179.95	$12.21	$6.96	$239.39	$287.26	$1,617.77	$108.69	$535.43	$10.10
4.88	x	0.20	x	3.05	14.9	200	4.0	4.4	$703.47	$179.95	$12.21	$5.61	$192.74	$231.29	$1,325.27	$89.04	$438.62	$8.27
4.88	x	0.20	x	3.05	14.9	250	4.0	3.9	$590.35	$179.95	$12.21	$5.02	$172.47	$206.96	$1,166.96	$78.40	$386.22	$7.28
4.88	x	0.20	x	3.05	14.9	300	4.0	3.7	$514.94	$179.95	$12.21	$4.69	$161.20	$193.44	$1,066.43	$71.65	$352.95	$6.66
4.88	x	0.20	x	3.05	14.9	350	4.0	3.5	$461.08	$179.95	$12.21	$4.48	$154.04	$184.86	$996.62	$66.96	$329.85	$6.22
4.88	x	0.20	x	3.05	14.9	400	4.0	3.4	$420.68	$179.95	$12.21	$4.34	$149.05	$178.87	$945.10	$63.50	$312.80	$5.90

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix

U – TABLE 23 – HEAVY METAL STUD – 16 GAUGE WALL FRAMING

Hanscomb

TABLE 23 GROUP 1 - HEAVY GAUGE METAL STUDS - 2" X 3 5/8" (16G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 3 5/8" (38 x 92mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	32.40	4.54	0.82	0.33	13.06	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	939.48	63.12	686.09	5.86

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.2	$715.33	$67.57	$12.21	$6.62	$261.15	$239.38	$1,302.26	$87.49	$951.02	$8.13
4.88	x	0.09	x	3.05	14.9	200	4.0	4.2	$566.99	$67.57	$12.21	$5.33	$210.27	$192.73	$1,055.10	$70.89	$770.52	$6.59
4.88	x	0.09	x	3.05	14.9	250	4.0	3.7	$477.98	$67.57	$12.21	$4.77	$188.14	$172.47	$923.14	$62.02	$674.16	$5.76
4.88	x	0.09	x	3.05	14.9	300	4.0	3.5	$418.65	$67.57	$12.21	$4.46	$175.86	$161.20	$839.95	$56.43	$613.40	$5.24
4.88	x	0.09	x	3.05	14.9	350	4.0	3.3	$373.26	$67.57	$12.21	$4.26	$168.05	$154.04	$779.39	$52.36	$569.18	$4.86
4.88	x	0.09	x	3.05	14.9	400	4.0	3.2	$341.47	$67.57	$12.21	$4.12	$162.61	$149.05	$737.03	$49.52	$538.24	$4.60

2" x 3 5/8" (38 x 92mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	32.40	6.25	0.82	0.33	13.06	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	964.91	64.83	704.66	6.02

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.2	$715.33	$93.00	$12.21	$6.62	$261.15	$239.38	$1,327.69	$89.20	$969.59	$8.29
4.88	x	0.09	x	3.05	14.9	200	4.0	4.2	$566.99	$93.00	$12.21	$5.33	$210.27	$192.73	$1,080.53	$72.60	$789.10	$6.74
4.88	x	0.09	x	3.05	14.9	250	4.0	3.7	$477.98	$93.00	$12.21	$4.77	$188.14	$172.47	$948.57	$63.73	$692.73	$5.92
4.88	x	0.09	x	3.05	14.9	300	4.0	3.5	$418.65	$93.00	$12.21	$4.46	$175.86	$161.20	$865.38	$58.14	$631.97	$5.40
4.88	x	0.09	x	3.05	14.9	350	4.0	3.3	$373.26	$93.00	$12.21	$4.26	$168.05	$154.04	$804.82	$54.07	$587.75	$5.02
4.88	x	0.09	x	3.05	14.9	400	4.0	3.2	$341.47	$93.00	$12.21	$4.12	$162.61	$149.05	$762.46	$51.23	$556.81	$4.76

2" x 3 5/8" (38 x 92mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	32.40	8.06	0.82	0.33	13.06	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	991.88	66.64	724.35	6.19

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.2	$715.33	$119.97	$12.21	$6.62	$261.15	$239.38	$1,354.66	$91.01	$989.29	$8.46
4.88	x	0.09	x	3.05	14.9	200	4.0	4.2	$566.99	$119.97	$12.21	$5.33	$210.27	$192.73	$1,107.50	$74.41	$808.79	$6.91
4.88	x	0.09	x	3.05	14.9	250	4.0	3.7	$477.98	$119.97	$12.21	$4.77	$188.14	$172.47	$975.54	$65.54	$712.42	$6.09
4.88	x	0.09	x	3.05	14.9	300	4.0	3.5	$418.65	$119.97	$12.21	$4.46	$175.86	$161.20	$892.35	$59.95	$651.67	$5.57
4.88	x	0.09	x	3.05	14.9	350	4.0	3.3	$373.26	$119.97	$12.21	$4.26	$168.05	$154.04	$831.79	$55.88	$607.44	$5.19
4.88	x	0.09	x	3.05	14.9	400	4.0	3.2	$341.47	$119.97	$12.21	$4.12	$162.61	$149.05	$789.43	$53.04	$576.51	$4.93

2" x 3 5/8" (38 x 92mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	32.40	7.38	0.82	0.35	13.06	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	998.16	67.06	728.94	6.23

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.4	$715.33	$109.84	$12.21	$6.91	$261.15	$261.14	$1,366.58	$91.82	$997.99	$8.53
4.88	x	0.09	x	3.05	14.9	200	4.0	4.4	$566.99	$109.84	$12.21	$5.56	$210.27	$210.26	$1,115.13	$74.92	$814.36	$6.96
4.88	x	0.09	x	3.05	14.9	250	4.0	3.9	$477.98	$109.84	$12.21	$4.98	$188.14	$188.15	$981.30	$65.93	$716.63	$6.13
4.88	x	0.09	x	3.05	14.9	300	4.0	3.6	$418.65	$109.84	$12.21	$4.65	$175.86	$175.85	$897.06	$60.27	$655.11	$5.60
4.88	x	0.09	x	3.05	14.9	350	4.0	3.5	$373.26	$109.84	$12.21	$4.44	$168.05	$168.05	$835.85	$56.16	$610.41	$5.22
4.88	x	0.09	x	3.05	14.9	400	4.0	4.3	$341.47	$109.84	$12.21	$4.30	$162.61	$162.60	$793.03	$53.28	$579.14	$4.95

2" x 3 5/8" (38 x 92mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	32.40	10.07	0.82	0.35	13.06	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1038.20	69.75	758.18	6.48

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.4	$715.33	$149.88	$12.21	$6.91	$261.15	$261.14	$1,406.62	$94.51	$1,027.23	$8.78
4.88	x	0.09	x	3.05	14.9	200	4.0	4.4	$566.99	$149.88	$12.21	$5.56	$210.27	$210.26	$1,155.17	$77.61	$843.60	$7.21
4.88	x	0.09	x	3.05	14.9	250	4.0	3.9	$477.98	$149.88	$12.21	$4.98	$188.14	$188.15	$1,021.34	$68.62	$745.87	$6.38
4.88	x	0.09	x	3.05	14.9	300	4.0	3.6	$418.65	$149.88	$12.21	$4.65	$175.86	$175.85	$937.10	$62.96	$684.35	$5.85
4.88	x	0.09	x	3.05	14.9	350	4.0	3.5	$373.26	$149.88	$12.21	$4.44	$168.05	$168.05	$875.89	$58.85	$639.65	$5.47
4.88	x	0.09	x	3.05	14.9	400	4.0	4.3	$341.47	$149.88	$12.21	$4.30	$162.61	$162.60	$833.07	$55.97	$608.38	$5.20

2" x 3 5/8" (38 x 92mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	32.40	10.41	0.82	0.36	13.06	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1062.95	71.42	776.26	6.63

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.7	$715.33	$154.94	$12.21	$7.25	$261.15	$287.26	$1,438.14	$96.62	$1,050.25	$8.98
4.88	x	0.09	x	3.05	14.9	200	4.0	4.6	$566.99	$154.94	$12.21	$5.84	$210.27	$231.28	$1,181.53	$79.38	$862.85	$7.37
4.88	x	0.09	x	3.05	14.9	250	4.0	4.1	$477.98	$154.94	$12.21	$5.22	$188.14	$206.97	$1,045.46	$70.24	$763.48	$6.53
4.88	x	0.09	x	3.05	14.9	300	4.0	3.8	$418.65	$154.94	$12.21	$4.88	$175.86	$193.44	$959.98	$64.50	$701.06	$5.99
4.88	x	0.09	x	3.05	14.9	350	4.0	3.7	$373.26	$154.94	$12.21	$4.67	$168.05	$184.85	$897.98	$60.33	$655.78	$5.61
4.88	x	0.09	x	3.05	14.9	400	4.0	3.5	$341.47	$154.94	$12.21	$4.52	$162.61	$178.86	$854.61	$57.42	$624.11	$5.33

2" x 3 5/8" (38 x 92mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	32.40	12.09	0.82	0.36	13.06	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1087.96	73.10	794.52	6.79

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.09	x	3.05	14.9	150	4.0	5.7	$715.33	$179.95	$12.21	$7.25	$261.15	$287.26	$1,463.15	$98.30	$1,068.52	$9.13
4.88	x	0.09	x	3.05	14.9	200	4.0	4.6	$566.99	$179.95	$12.21	$5.84	$210.27	$231.28	$1,206.54	$81.06	$881.12	$7.53
4.88	x	0.09	x	3.05	14.9	250	4.0	4.1	$477.98	$179.95	$12.21	$5.22	$188.14	$206.97	$1,070.47	$71.92	$781.75	$6.68
4.88	x	0.09	x	3.05	14.9	300	4.0	3.8	$418.65	$179.95	$12.21	$4.88	$175.86	$193.44	$984.99	$66.18	$719.32	$6.15
4.88	x	0.09	x	3.05	14.9	350	4.0	3.7	$373.26	$179.95	$12.21	$4.67	$168.05	$184.85	$922.99	$62.01	$674.05	$5.76
4.88	x	0.09	x	3.05	14.9	400	4.0	3.5	$341.47	$179.95	$12.21	$4.52	$162.61	$178.86	$879.62	$59.10	$642.37	$5.49

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 23 GROUP 2 - HEAVY GAUGE METAL STUDS - 2" X 4" (16G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 4" (38 x 102mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.95	4.54	0.82	0.33	13.06	11.97	962.49	64.67	633.98	6.01
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.2	$749.00	$67.57	$12.20	$6.62	$261.15	$239.38	$1,335.92	$89.76	$879.96	$8.34
4.88	x	0.10	x	3.05	14.9	200	4.0	4.2	$593.21	$67.57	$12.20	$5.33	$210.27	$192.73	$1,081.31	$72.65	$712.25	$6.75
4.88	x	0.10	x	3.05	14.9	250	4.0	3.7	$499.74	$67.57	$12.20	$4.77	$188.14	$172.47	$944.89	$63.48	$622.39	$5.90
4.88	x	0.10	x	3.05	14.9	300	4.0	3.5	$437.43	$67.57	$12.20	$4.46	$175.86	$161.20	$858.72	$57.69	$565.63	$5.36
4.88	x	0.10	x	3.05	14.9	350	4.0	3.3	$392.92	$67.57	$12.20	$4.26	$168.05	$154.04	$799.04	$53.68	$526.32	$4.99
4.88	x	0.10	x	3.05	14.9	400	4.0	3.2	$359.53	$67.57	$12.20	$4.12	$162.61	$149.05	$755.08	$50.73	$497.36	$4.71

2" x 4" (38 x 102mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.95	6.25	0.82	0.33	13.06	11.97	987.92	66.37	650.73	6.17
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.2	$749.00	$93.00	$12.20	$6.62	$261.15	$239.38	$1,361.35	$91.46	$896.71	$8.50
4.88	x	0.10	x	3.05	14.9	200	4.0	4.2	$593.21	$93.00	$12.20	$5.33	$210.27	$192.73	$1,106.74	$74.36	$729.00	$6.91
4.88	x	0.10	x	3.05	14.9	250	4.0	3.7	$499.74	$93.00	$12.20	$4.77	$188.14	$172.47	$970.32	$65.19	$639.14	$6.06
4.88	x	0.10	x	3.05	14.9	300	4.0	3.5	$437.43	$93.00	$12.20	$4.46	$175.86	$161.20	$884.15	$59.40	$582.38	$5.52
4.88	x	0.10	x	3.05	14.9	350	4.0	3.3	$392.92	$93.00	$12.20	$4.26	$168.05	$154.04	$824.47	$55.39	$543.07	$5.15
4.88	x	0.10	x	3.05	14.9	400	4.0	3.2	$359.53	$93.00	$12.20	$4.12	$162.61	$149.05	$780.51	$52.44	$514.11	$4.87

2" x 4" (38 x 102mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.95	8.06	0.82	0.33	13.06	11.97	1014.89	68.19	668.50	6.33
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.2	$749.00	$119.97	$12.20	$6.62	$261.15	$239.38	$1,388.32	$93.28	$914.47	$8.67
4.88	x	0.10	x	3.05	14.9	200	4.0	4.2	$593.21	$119.97	$12.20	$5.33	$210.27	$192.73	$1,133.71	$76.17	$746.76	$7.08
4.88	x	0.10	x	3.05	14.9	250	4.0	3.7	$499.74	$119.97	$12.20	$4.77	$188.14	$172.47	$997.29	$67.00	$656.90	$6.22
4.88	x	0.10	x	3.05	14.9	300	4.0	3.5	$437.43	$119.97	$12.20	$4.46	$175.86	$161.20	$911.12	$61.21	$600.14	$5.69
4.88	x	0.10	x	3.05	14.9	350	4.0	3.3	$392.92	$119.97	$12.20	$4.26	$168.05	$154.04	$851.44	$57.21	$560.83	$5.31
4.88	x	0.10	x	3.05	14.9	400	4.0	3.2	$359.53	$119.97	$12.20	$4.12	$162.61	$149.05	$807.48	$54.25	$531.88	$5.04

2" x 4" (38 x 102mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.95	7.38	0.82	0.35	13.06	13.06	1021.17	68.61	672.64	6.37
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.4	$749.00	$109.84	$12.20	$6.91	$261.15	$261.14	$1,400.24	$94.08	$922.32	$8.74
4.88	x	0.10	x	3.05	14.9	200	4.0	4.4	$593.21	$109.84	$12.20	$5.56	$210.27	$210.26	$1,141.34	$76.68	$751.79	$7.12
4.88	x	0.10	x	3.05	14.9	250	4.0	3.9	$499.74	$109.84	$12.20	$4.98	$188.14	$188.15	$1,003.05	$67.39	$660.70	$6.26
4.88	x	0.10	x	3.05	14.9	300	4.0	3.6	$437.43	$109.84	$12.20	$4.65	$175.86	$175.85	$915.83	$61.53	$603.25	$5.72
4.88	x	0.10	x	3.05	14.9	350	4.0	3.5	$392.92	$109.84	$12.20	$4.44	$168.05	$168.05	$855.50	$57.48	$563.51	$5.34
4.88	x	0.10	x	3.05	14.9	400	4.0	3.4	$359.53	$109.84	$12.20	$4.30	$162.61	$162.60	$811.08	$54.49	$534.25	$5.06

2" x 4" (38 x 102mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.95	10.07	0.82	0.35	13.06	13.06	1061.21	71.30	699.01	6.62
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.4	$749.00	$149.88	$12.20	$6.91	$261.15	$261.14	$1,440.28	$96.77	$948.70	$8.99
4.88	x	0.10	x	3.05	14.9	200	4.0	4.4	$593.21	$149.88	$12.20	$5.56	$210.27	$210.26	$1,181.38	$79.37	$778.16	$7.37
4.88	x	0.10	x	3.05	14.9	250	4.0	3.9	$499.74	$149.88	$12.20	$4.98	$188.14	$188.15	$1,043.09	$70.08	$687.07	$6.51
4.88	x	0.10	x	3.05	14.9	300	4.0	3.6	$437.43	$149.88	$12.20	$4.65	$175.86	$175.85	$955.87	$64.22	$629.62	$5.97
4.88	x	0.10	x	3.05	14.9	350	4.0	3.5	$392.92	$149.88	$12.20	$4.44	$168.05	$168.05	$895.54	$60.17	$589.88	$5.59
4.88	x	0.10	x	3.05	14.9	400	4.0	3.4	$359.53	$149.88	$12.20	$4.30	$162.61	$162.60	$851.12	$57.18	$560.62	$5.31

2" x 4" (38 x 102mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.95	10.41	0.82	0.36	13.06	14.36	1085.97	72.96	715.31	6.78
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.7	$749.00	$154.94	$12.20	$7.25	$261.15	$287.26	$1,471.80	$98.88	$969.46	$9.19
4.88	x	0.10	x	3.05	14.9	200	4.0	4.6	$593.21	$154.94	$12.20	$5.84	$210.27	$231.28	$1,207.74	$81.14	$795.52	$7.54
4.88	x	0.10	x	3.05	14.9	250	4.0	4.1	$499.74	$154.94	$12.20	$5.22	$188.14	$206.97	$1,067.21	$71.70	$702.96	$6.66
4.88	x	0.10	x	3.05	14.9	300	4.0	3.8	$437.43	$154.94	$12.20	$4.88	$175.86	$193.44	$978.75	$65.76	$644.69	$6.11
4.88	x	0.10	x	3.05	14.9	350	4.0	3.7	$392.92	$154.94	$12.20	$4.67	$168.05	$184.85	$917.63	$61.65	$604.43	$5.73
4.88	x	0.10	x	3.05	14.9	400	4.0	3.5	$359.53	$154.94	$12.20	$4.52	$162.61	$178.86	$872.66	$58.63	$574.81	$5.45

2" x 4" (38 x 102mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									33.95	12.09	0.82	0.36	13.06	14.36	1110.98	74.64	731.79	6.93
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.7	$749.00	$179.95	$12.20	$7.25	$261.15	$287.26	$1,496.81	$100.57	$985.93	$9.34
4.88	x	0.10	x	3.05	14.9	200	4.0	4.6	$593.21	$179.95	$12.20	$5.84	$210.27	$231.28	$1,232.75	$82.82	$812.00	$7.69
4.88	x	0.10	x	3.05	14.9	250	4.0	4.1	$499.74	$179.95	$12.20	$5.22	$188.14	$206.97	$1,092.22	$73.38	$719.43	$6.82
4.88	x	0.10	x	3.05	14.9	300	4.0	3.8	$437.43	$179.95	$12.20	$4.88	$175.86	$193.44	$1,003.76	$67.44	$661.17	$6.27
4.88	x	0.10	x	3.05	14.9	350	4.0	3.7	$392.92	$179.95	$12.20	$4.67	$168.05	$184.85	$942.64	$63.33	$620.91	$5.88
4.88	x	0.10	x	3.05	14.9	400	4.0	3.5	$359.53	$179.95	$12.20	$4.52	$162.61	$178.86	$897.67	$60.31	$591.29	$5.60

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 23 GROUP 3 - HEAVY GAUGE METAL STUDS - 2" X 6" (16G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 6" (38 x 152mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									41.69	4.54	0.82	0.33	13.06	11.97	1077.66	72.40	476.34	6.73
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.2	$924.70	$67.57	$12.20	$6.62	$261.15	$239.38	$1,511.62	$101.56	$668.16	$9.44
4.88	x	0.15	x	3.05	14.9	200	4.0	4.2	$730.21	$67.57	$12.20	$5.33	$210.27	$192.73	$1,218.31	$81.85	$538.51	$7.60
4.88	x	0.15	x	3.05	14.9	250	4.0	3.7	$613.52	$67.57	$12.20	$4.77	$188.14	$172.47	$1,058.67	$71.13	$467.95	$6.61
4.88	x	0.15	x	3.05	14.9	300	4.0	3.5	$535.73	$67.57	$12.20	$4.46	$175.86	$161.20	$957.02	$64.30	$423.02	$5.97
4.88	x	0.15	x	3.05	14.9	350	4.0	3.3	$480.16	$67.57	$12.20	$4.26	$168.05	$154.04	$886.28	$59.55	$391.75	$5.53
4.88	x	0.15	x	3.05	14.9	400	4.0	3.2	$438.49	$67.57	$12.20	$4.12	$162.61	$149.05	$834.04	$56.04	$368.66	$5.21

2" x 6" (38 x 152mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									41.69	6.25	0.82	0.33	13.06	11.97	1103.09	74.11	487.58	6.89
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.2	$924.70	$93.00	$12.20	$6.62	$261.15	$239.38	$1,537.05	$103.27	$679.40	$9.59
4.88	x	0.15	x	3.05	14.9	200	4.0	4.2	$730.21	$93.00	$12.20	$5.33	$210.27	$192.73	$1,243.74	$83.56	$549.75	$7.76
4.88	x	0.15	x	3.05	14.9	250	4.0	3.7	$613.52	$93.00	$12.20	$4.77	$188.14	$172.47	$1,084.10	$72.84	$479.19	$6.77
4.88	x	0.15	x	3.05	14.9	300	4.0	3.5	$535.73	$93.00	$12.20	$4.46	$175.86	$161.20	$982.45	$66.01	$434.26	$6.13
4.88	x	0.15	x	3.05	14.9	350	4.0	3.3	$480.16	$93.00	$12.20	$4.26	$168.05	$154.04	$911.71	$61.25	$402.99	$5.69
4.88	x	0.15	x	3.05	14.9	400	4.0	3.2	$438.49	$93.00	$12.20	$4.12	$162.61	$149.05	$859.47	$57.74	$379.90	$5.36

2" x 6" (38 x 152mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									41.69	8.06	0.82	0.33	13.06	11.97	1130.06	75.92	499.50	7.05
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.2	$924.70	$119.97	$12.20	$6.62	$261.15	$239.38	$1,564.02	$105.08	$691.32	$9.76
4.88	x	0.15	x	3.05	14.9	200	4.0	4.2	$730.21	$119.97	$12.20	$5.33	$210.27	$192.73	$1,270.71	$85.37	$561.67	$7.93
4.88	x	0.15	x	3.05	14.9	250	4.0	3.7	$613.52	$119.97	$12.20	$4.77	$188.14	$172.47	$1,111.07	$74.65	$491.11	$6.94
4.88	x	0.15	x	3.05	14.9	300	4.0	3.5	$535.73	$119.97	$12.20	$4.46	$175.86	$161.20	$1,009.42	$67.82	$446.18	$6.30
4.88	x	0.15	x	3.05	14.9	350	4.0	3.3	$480.16	$119.97	$12.20	$4.26	$168.05	$154.04	$938.68	$63.07	$414.91	$5.86
4.88	x	0.15	x	3.05	14.9	400	4.0	3.2	$438.49	$119.97	$12.20	$4.12	$162.61	$149.05	$886.44	$59.56	$391.82	$5.53

2" x 6" (38 x 152mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									41.69	7.38	0.82	0.35	13.06	13.06	1136.34	76.35	502.28	7.09
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.4	$924.70	$109.84	$12.20	$6.91	$261.15	$261.14	$1,575.94	$105.88	$696.59	$9.84
4.88	x	0.15	x	3.05	14.9	200	4.0	4.4	$730.21	$109.84	$12.20	$5.56	$210.27	$210.26	$1,278.34	$85.89	$565.05	$7.98
4.88	x	0.15	x	3.05	14.9	250	4.0	3.9	$613.52	$109.84	$12.20	$4.98	$188.14	$188.15	$1,116.83	$75.04	$493.66	$6.97
4.88	x	0.15	x	3.05	14.9	300	4.0	3.6	$535.73	$109.84	$12.20	$4.65	$175.86	$175.85	$1,014.13	$68.14	$448.26	$6.33
4.88	x	0.15	x	3.05	14.9	350	4.0	3.5	$480.16	$109.84	$12.20	$4.44	$168.05	$168.05	$942.74	$63.34	$416.70	$5.88
4.88	x	0.15	x	3.05	14.9	400	4.0	3.4	$438.49	$109.84	$12.20	$4.30	$162.61	$162.60	$890.04	$59.80	$393.41	$5.56

2" x 6" (38 x 152mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									41.69	10.07	0.82	0.35	13.06	13.06	1176.38	79.04	519.98	7.34
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.4	$924.70	$149.88	$12.20	$6.91	$261.15	$261.14	$1,615.98	$108.57	$714.29	$10.09
4.88	x	0.15	x	3.05	14.9	200	4.0	4.4	$730.21	$149.88	$12.20	$5.56	$210.27	$210.26	$1,318.38	$88.58	$582.74	$8.23
4.88	x	0.15	x	3.05	14.9	250	4.0	3.9	$613.52	$149.88	$12.20	$4.98	$188.14	$188.15	$1,156.87	$77.73	$511.35	$7.22
4.88	x	0.15	x	3.05	14.9	300	4.0	3.6	$535.73	$149.88	$12.20	$4.65	$175.86	$175.85	$1,054.17	$70.83	$465.96	$6.58
4.88	x	0.15	x	3.05	14.9	350	4.0	3.5	$480.16	$149.88	$12.20	$4.44	$168.05	$168.05	$982.78	$66.03	$434.40	$6.13
4.88	x	0.15	x	3.05	14.9	400	4.0	3.4	$438.49	$149.88	$12.20	$4.30	$162.61	$162.60	$930.08	$62.49	$411.11	$5.81

2" x 6" (38 x 152mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									41.69	10.41	0.82	0.36	13.06	14.36	1201.13	80.70	530.92	7.50
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.7	$924.70	$154.94	$12.20	$7.25	$261.15	$287.26	$1,647.50	$110.69	$728.22	$10.28
4.88	x	0.15	x	3.05	14.9	200	4.0	4.6	$730.21	$154.94	$12.20	$5.84	$210.27	$231.28	$1,344.74	$90.35	$594.39	$8.39
4.88	x	0.15	x	3.05	14.9	250	4.0	4.1	$613.52	$154.94	$12.20	$5.22	$188.14	$206.97	$1,180.99	$79.35	$522.01	$7.37
4.88	x	0.15	x	3.05	14.9	300	4.0	3.8	$535.73	$154.94	$12.20	$4.88	$175.86	$193.44	$1,077.05	$72.36	$476.07	$6.72
4.88	x	0.15	x	3.05	14.9	350	4.0	3.7	$480.16	$154.94	$12.20	$4.67	$168.05	$184.85	$1,004.87	$67.51	$444.17	$6.27
4.88	x	0.15	x	3.05	14.9	400	4.0	3.5	$438.49	$154.94	$12.20	$4.52	$162.61	$178.86	$951.62	$63.94	$420.63	$5.94

2" x 6" (38 x 152mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

									AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
									$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
									41.69	12.09	0.82	0.36	13.06	14.36	1226.14	82.38	541.97	7.65
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour Metal Stud	Total Labour Panel				
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	$	$	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.7	$924.70	$179.95	$12.20	$7.25	$261.15	$287.26	$1,672.51	$112.37	$739.27	$10.44
4.88	x	0.15	x	3.05	14.9	200	4.0	4.6	$730.21	$179.95	$12.20	$5.84	$210.27	$231.28	$1,369.75	$92.03	$605.45	$8.55
4.88	x	0.15	x	3.05	14.9	250	4.0	4.1	$613.52	$179.95	$12.20	$5.22	$188.14	$206.97	$1,206.00	$81.03	$533.07	$7.53
4.88	x	0.15	x	3.05	14.9	300	4.0	3.8	$535.73	$179.95	$12.20	$4.88	$175.86	$193.44	$1,102.06	$74.04	$487.13	$6.88
4.88	x	0.15	x	3.05	14.9	350	4.0	3.7	$480.16	$179.95	$12.20	$4.67	$168.05	$184.85	$1,029.88	$69.19	$455.22	$6.43
4.88	x	0.15	x	3.05	14.9	400	4.0	3.5	$438.49	$179.95	$12.20	$4.52	$162.61	$178.86	$976.63	$65.62	$431.68	$6.10

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 23 GROUP 4 - HEAVY GAUGE METAL STUDS - 2" X 8" (16G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 8" (38 x 203mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	49.38	4.54	0.82	0.33	13.06	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1192.10	80.09	394.54	7.44

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.2	$1,100.06	$67.57	$12.20	$6.62	$261.15	$239.38	$1,686.98	$113.34	$558.33	$10.53
4.88	x	0.20	x	3.05	14.9	200	4.0	4.2	$866.63	$67.57	$12.20	$5.33	$210.27	$192.73	$1,354.73	$91.02	$448.37	$8.46
4.88	x	0.20	x	3.05	14.9	250	4.0	3.7	$726.57	$67.57	$12.20	$4.77	$188.14	$172.47	$1,171.72	$78.72	$387.80	$7.31
4.88	x	0.20	x	3.05	14.9	300	4.0	3.5	$633.20	$67.57	$12.20	$4.46	$175.86	$161.20	$1,054.49	$70.85	$349.00	$6.58
4.88	x	0.20	x	3.05	14.9	350	4.0	3.3	$566.51	$67.57	$12.20	$4.26	$168.05	$154.04	$972.63	$65.35	$321.91	$6.07
4.88	x	0.20	x	3.05	14.9	400	4.0	3.2	$516.49	$67.57	$12.20	$4.12	$162.61	$149.05	$912.04	$61.28	$301.85	$5.69

2" x 8" (38 x 203mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	49.38	6.25	0.82	0.33	13.06	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1217.53	81.80	402.96	7.60

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.2	$1,100.06	$93.00	$12.20	$6.62	$261.15	$239.38	$1,712.41	$115.05	$566.75	$10.69
4.88	x	0.20	x	3.05	14.9	200	4.0	4.2	$866.63	$93.00	$12.20	$5.33	$210.27	$192.73	$1,380.16	$92.73	$456.79	$8.61
4.88	x	0.20	x	3.05	14.9	250	4.0	3.7	$726.57	$93.00	$12.20	$4.77	$188.14	$172.47	$1,197.15	$80.43	$396.22	$7.47
4.88	x	0.20	x	3.05	14.9	300	4.0	3.5	$633.20	$93.00	$12.20	$4.46	$175.86	$161.20	$1,079.92	$72.56	$357.42	$6.74
4.88	x	0.20	x	3.05	14.9	350	4.0	3.3	$566.51	$93.00	$12.20	$4.26	$168.05	$154.04	$998.06	$67.06	$330.32	$6.23
4.88	x	0.20	x	3.05	14.9	400	4.0	3.2	$516.49	$93.00	$12.20	$4.12	$162.61	$149.05	$937.47	$62.99	$310.27	$5.85

2" x 8" (38 x 203mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	49.38	8.06	0.82	0.33	13.06	11.97

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1244.50	83.61	411.89	7.77

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.2	$1,100.06	$119.97	$12.20	$6.62	$261.15	$239.38	$1,739.38	$116.86	$575.68	$10.86
4.88	x	0.20	x	3.05	14.9	200	4.0	4.2	$866.63	$119.97	$12.20	$5.33	$210.27	$192.73	$1,407.13	$94.54	$465.71	$8.78
4.88	x	0.20	x	3.05	14.9	250	4.0	3.7	$726.57	$119.97	$12.20	$4.77	$188.14	$172.47	$1,224.12	$82.24	$405.14	$7.64
4.88	x	0.20	x	3.05	14.9	300	4.0	3.5	$633.20	$119.97	$12.20	$4.46	$175.86	$161.20	$1,106.89	$74.37	$366.34	$6.91
4.88	x	0.20	x	3.05	14.9	350	4.0	3.3	$566.51	$119.97	$12.20	$4.26	$168.05	$154.04	$1,025.03	$68.87	$339.25	$6.40
4.88	x	0.20	x	3.05	14.9	400	4.0	3.2	$516.49	$119.97	$12.20	$4.12	$162.61	$149.05	$964.44	$64.80	$319.20	$6.02

2" x 8" (38 x 203mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	49.38	7.38	0.82	0.35	13.06	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1250.78	84.04	413.97	7.81

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.4	$1,100.06	$109.84	$12.20	$6.91	$261.15	$261.14	$1,751.30	$117.66	$579.62	$10.93
4.88	x	0.20	x	3.05	14.9	200	4.0	4.4	$866.63	$109.84	$12.20	$5.56	$210.27	$210.26	$1,414.76	$95.05	$468.24	$8.83
4.88	x	0.20	x	3.05	14.9	250	4.0	3.9	$726.57	$109.84	$12.20	$4.98	$188.14	$188.15	$1,229.88	$82.63	$407.05	$7.68
4.88	x	0.20	x	3.05	14.9	300	4.0	3.6	$633.20	$109.84	$12.20	$4.65	$175.86	$175.85	$1,111.60	$74.68	$367.90	$6.94
4.88	x	0.20	x	3.05	14.9	350	4.0	3.5	$566.51	$109.84	$12.20	$4.44	$168.05	$168.05	$1,029.09	$69.14	$340.59	$6.42
4.88	x	0.20	x	3.05	14.9	400	4.0	3.4	$516.49	$109.84	$12.20	$4.30	$162.61	$162.60	$968.04	$65.04	$320.39	$6.04

2" x 8" (38 x 203mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	49.38	10.07	0.82	0.35	13.06	13.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1290.82	86.73	427.22	8.06

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.4	$1,100.06	$149.88	$12.20	$6.91	$261.15	$261.14	$1,791.34	$120.35	$592.87	$11.18
4.88	x	0.20	x	3.05	14.9	200	4.0	4.4	$866.63	$149.88	$12.20	$5.56	$210.27	$210.26	$1,454.80	$97.74	$481.49	$9.08
4.88	x	0.20	x	3.05	14.9	250	4.0	3.9	$726.57	$149.88	$12.20	$4.98	$188.14	$188.15	$1,269.92	$85.32	$420.30	$7.93
4.88	x	0.20	x	3.05	14.9	300	4.0	3.6	$633.20	$149.88	$12.20	$4.65	$175.86	$175.85	$1,151.64	$77.37	$381.15	$7.19
4.88	x	0.20	x	3.05	14.9	350	4.0	3.5	$566.51	$149.88	$12.20	$4.44	$168.05	$168.05	$1,069.13	$71.83	$353.85	$6.67
4.88	x	0.20	x	3.05	14.9	400	4.0	3.4	$516.49	$149.88	$12.20	$4.30	$162.61	$162.60	$1,008.08	$67.73	$333.64	$6.29

2" x 8" (38 x 203mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	49.38	10.41	0.82	0.36	13.06	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1315.57	88.39	435.41	8.21

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.7	$1,100.06	$154.94	$12.20	$7.25	$261.15	$287.26	$1,822.86	$122.47	$603.31	$11.38
4.88	x	0.20	x	3.05	14.9	200	4.0	4.6	$866.63	$154.94	$12.20	$5.84	$210.27	$231.28	$1,481.16	$99.51	$490.21	$9.25
4.88	x	0.20	x	3.05	14.9	250	4.0	4.1	$726.57	$154.94	$12.20	$5.22	$188.14	$206.97	$1,294.04	$86.94	$428.28	$8.08
4.88	x	0.20	x	3.05	14.9	300	4.0	3.8	$633.20	$154.94	$12.20	$4.88	$175.86	$193.44	$1,174.52	$78.91	$388.73	$7.33
4.88	x	0.20	x	3.05	14.9	350	4.0	3.7	$566.51	$154.94	$12.20	$4.67	$168.05	$184.85	$1,091.22	$73.31	$361.16	$6.81
4.88	x	0.20	x	3.05	14.9	400	4.0	3.5	$516.49	$154.94	$12.20	$4.52	$162.61	$178.86	$1,029.62	$69.18	$340.77	$6.43

2" x 8" (38 x 203mm) 16 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	49.38	12.09	0.82	0.36	13.06	14.36

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1340.58	90.07	443.69	8.37

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.20	x	3.05	14.9	150	4.0	5.7	$1,100.06	$179.95	$12.20	$7.25	$261.15	$287.26	$1,847.87	$124.15	$611.58	$11.53
4.88	x	0.20	x	3.05	14.9	200	4.0	4.6	$866.63	$179.95	$12.20	$5.84	$210.27	$231.28	$1,506.17	$101.19	$498.49	$9.40
4.88	x	0.20	x	3.05	14.9	250	4.0	4.1	$726.57	$179.95	$12.20	$5.22	$188.14	$206.97	$1,319.05	$88.62	$436.56	$8.23
4.88	x	0.20	x	3.05	14.9	300	4.0	3.8	$633.20	$179.95	$12.20	$4.88	$175.86	$193.44	$1,199.53	$80.59	$397.00	$7.49
4.88	x	0.20	x	3.05	14.9	350	4.0	3.7	$566.51	$179.95	$12.20	$4.67	$168.05	$184.85	$1,116.23	$75.00	$369.43	$6.97
4.88	x	0.20	x	3.05	14.9	400	4.0	3.5	$516.49	$179.95	$12.20	$4.52	$162.61	$178.86	$1,054.63	$70.86	$349.05	$6.58

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix

V – TABLE 24 – HEAVY METAL STUD – 14 GAUGE WALL FRAMING

Hanscomb

TABLE 24 GROUP 1 - HEAVY GAUGE METAL STUDS - 2" X 3 5/8" (14G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 3 5/8" (38 x 92mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	38.58	4.54	0.82	0.35	14.36	11.97
			(material)	(material)	(material)		Total Labour	
Length	Width	Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	Metal Stud $	Panel $	Connections $	Equipment $	Metal Stud $	Panel $
4.88	0.09	3.05	14.9	150	4.0	5.5	$854.75	$67.57	$12.20	$6.96	$287.26	$239.39
4.88	0.09	3.05	14.9	200	4.0	4.4	$675.40	$67.57	$12.20	$5.61	$231.29	$192.74
4.88	0.09	3.05	14.9	250	4.0	3.9	$567.79	$67.57	$12.20	$5.02	$206.97	$172.46
4.88	0.09	3.05	14.9	300	4.0	3.7	$496.05	$67.57	$12.20	$4.69	$193.44	$161.20
4.88	0.09	3.05	14.9	350	4.0	3.5	$444.80	$67.57	$12.20	$4.48	$184.85	$154.05
4.88	0.09	3.05	14.9	400	4.0	3.4	$406.37	$67.57	$12.20	$4.34	$178.86	$149.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1051.08	70.62	767.58	6.56
	Total	$/m2	$/m3	$/SF
	$1,468.13	$98.64	$1,072.15	$9.16
	$1,184.81	$79.60	$865.25	$7.40
	$1,032.01	$69.34	$753.66	$6.44
	$935.15	$62.83	$682.93	$5.84
	$867.95	$58.31	$633.85	$5.42
	$818.40	$54.99	$597.67	$5.11

2" x 3 5/8" (38 x 92mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	38.58	6.25	0.82	0.35	14.36	11.97
			(material)	(material)	(material)		Total Labour	
Length	Width	Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	Metal Stud $	Panel $	Connections $	Equipment $	Metal Stud $	Panel $
4.88	0.09	3.05	14.9	150	4.0	5.5	$854.75	$93.00	$12.20	$6.96	$287.26	$239.39
4.88	0.09	3.05	14.9	200	4.0	4.4	$675.40	$93.00	$12.20	$5.61	$231.29	$192.74
4.88	0.09	3.05	14.9	250	4.0	3.9	$567.79	$93.00	$12.20	$5.02	$206.97	$172.46
4.88	0.09	3.05	14.9	300	4.0	3.7	$496.05	$93.00	$12.20	$4.69	$193.44	$161.20
4.88	0.09	3.05	14.9	350	4.0	3.5	$444.80	$93.00	$12.20	$4.48	$184.85	$154.05
4.88	0.09	3.05	14.9	400	4.0	3.4	$406.37	$93.00	$12.20	$4.34	$178.86	$149.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1076.51	72.33	786.16	6.72
	Total	$/m2	$/m3	$/SF
	$1,493.56	$100.35	$1,090.72	$9.32
	$1,210.24	$81.31	$883.82	$7.55
	$1,057.44	$71.05	$772.23	$6.60
	$960.58	$64.54	$701.50	$6.00
	$893.38	$60.02	$652.42	$5.58
	$843.83	$56.69	$616.24	$5.27

2" x 3 5/8" (38 x 92mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	38.58	8.06	0.82	0.35	14.36	11.97
			(material)	(material)	(material)		Total Labour	
Length	Width	Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	Metal Stud $	Panel $	Connections $	Equipment $	Metal Stud $	Panel $
4.88	0.09	3.05	14.9	150	4.0	5.5	$854.75	$119.97	$12.20	$6.96	$287.26	$239.39
4.88	0.09	3.05	14.9	200	4.0	4.4	$675.40	$119.97	$12.20	$5.61	$231.29	$192.74
4.88	0.09	3.05	14.9	250	4.0	3.9	$567.79	$119.97	$12.20	$5.02	$206.97	$172.46
4.88	0.09	3.05	14.9	300	4.0	3.7	$496.05	$119.97	$12.20	$4.69	$193.44	$161.20
4.88	0.09	3.05	14.9	350	4.0	3.5	$444.80	$119.97	$12.20	$4.48	$184.85	$154.05
4.88	0.09	3.05	14.9	400	4.0	3.4	$406.37	$119.97	$12.20	$4.34	$178.86	$149.06

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1103.48	74.14	805.85	6.89
	Total	$/m2	$/m3	$/SF
	$1,520.53	$102.16	$1,110.42	$9.49
	$1,237.21	$83.12	$903.52	$7.72
	$1,084.41	$72.86	$791.93	$6.77
	$987.55	$66.35	$721.19	$6.16
	$920.35	$61.83	$672.12	$5.74
	$870.80	$58.51	$635.93	$5.44

2" x 3 5/8" (38 x 92mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	38.58	7.38	0.82	0.36	14.36	13.06
			(material)	(material)	(material)		Total Labour	
Length	Width	Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	Metal Stud $	Panel $	Connections $	Equipment $	Metal Stud $	Panel $
4.88	0.09	3.05	14.9	150	4.0	5.7	$854.75	$109.84	$12.20	$7.25	$287.26	$261.15
4.88	0.09	3.05	14.9	200	4.0	4.6	$675.40	$109.84	$12.20	$5.84	$231.29	$210.26
4.88	0.09	3.05	14.9	250	4.0	4.1	$567.79	$109.84	$12.20	$5.22	$206.97	$188.14
4.88	0.09	3.05	14.9	300	4.0	3.8	$496.05	$109.84	$12.20	$4.88	$193.44	$175.86
4.88	0.09	3.05	14.9	350	4.0	3.7	$444.80	$109.84	$12.20	$4.67	$184.85	$168.05
4.88	0.09	3.05	14.9	400	4.0	3.5	$406.37	$109.84	$12.20	$4.52	$178.86	$162.61

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1109.75	74.56	810.44	6.93
	Total	$/m2	$/m3	$/SF
	$1,532.45	$102.96	$1,119.13	$9.57
	$1,244.83	$83.64	$909.08	$7.77
	$1,090.16	$73.24	$796.13	$6.80
	$992.27	$66.67	$724.64	$6.19
	$924.41	$62.11	$675.08	$5.77
	$874.40	$58.75	$638.56	$5.46

2" x 3 5/8" (38 x 92mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	38.58	10.07	0.82	0.36	14.36	13.06
			(material)	(material)	(material)		Total Labour	
Length	Width	Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	Metal Stud $	Panel $	Connections $	Equipment $	Metal Stud $	Panel $
4.88	0.09	3.05	14.9	150	4.0	5.7	$854.75	$149.88	$12.20	$7.25	$287.26	$261.15
4.88	0.09	3.05	14.9	200	4.0	4.6	$675.40	$149.88	$12.20	$5.84	$231.29	$210.26
4.88	0.09	3.05	14.9	250	4.0	4.1	$567.79	$149.88	$12.20	$5.22	$206.97	$188.14
4.88	0.09	3.05	14.9	300	4.0	3.8	$496.05	$149.88	$12.20	$4.88	$193.44	$175.86
4.88	0.09	3.05	14.9	350	4.0	3.7	$444.80	$149.88	$12.20	$4.67	$184.85	$168.05
4.88	0.09	3.05	14.9	400	4.0	3.5	$406.37	$149.88	$12.20	$4.52	$178.86	$162.61

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1149.79	77.25	839.68	7.18
	Total	$/m2	$/m3	$/SF
	$1,572.49	$105.65	$1,148.37	$9.82
	$1,284.87	$86.33	$938.32	$8.02
	$1,130.20	$75.93	$825.37	$7.05
	$1,032.31	$69.36	$753.88	$6.44
	$964.45	$64.80	$704.32	$6.02
	$914.44	$61.44	$667.80	$5.71

2" x 3 5/8" (38 x 92mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	38.58	10.41	0.82	0.38	14.36	14.36
			(material)	(material)	(material)		Total Labour	
Length	Width	Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	Metal Stud $	Panel $	Connections $	Equipment $	Metal Stud $	Panel $
4.88	0.09	3.05	14.9	150	4.0	6.0	$854.75	$154.94	$12.20	$7.60	$287.26	$287.26
4.88	0.09	3.05	14.9	200	4.0	4.8	$675.40	$154.94	$12.20	$6.12	$231.29	$231.29
4.88	0.09	3.05	14.9	250	4.0	4.3	$567.79	$154.94	$12.20	$5.47	$206.97	$206.95
4.88	0.09	3.05	14.9	300	4.0	4.0	$496.05	$154.94	$12.20	$5.12	$193.44	$193.44
4.88	0.09	3.05	14.9	350	4.0	3.8	$444.80	$154.94	$12.20	$4.89	$184.85	$184.86
4.88	0.09	3.05	14.9	400	4.0	3.7	$406.37	$154.94	$12.20	$4.73	$178.86	$178.87

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1174.55	78.91	857.75	7.33
	Total	$/m2	$/m3	$/SF
	$1,604.01	$107.77	$1,171.38	$10.01
	$1,311.24	$88.10	$957.58	$8.18
	$1,154.32	$77.55	$842.98	$7.21
	$1,055.19	$70.89	$770.59	$6.59
	$986.54	$66.28	$720.46	$6.16
	$935.97	$62.88	$683.53	$5.84

2" x 3 5/8" (38 x 92mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS	$/m2	$/m2	$/m2	$/m2	$/m2	$/m2
	38.58	12.09	0.82	0.38	14.36	14.36
			(material)	(material)	(material)		Total Labour	
Length	Width	Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	Metal Stud $	Panel $	Connections $	Equipment $	Metal Stud $	Panel $
4.88	0.09	3.05	14.9	150	4.0	6.0	$854.75	$179.95	$12.20	$7.60	$287.26	$287.26
4.88	0.09	3.05	14.9	200	4.0	4.8	$675.40	$179.95	$12.20	$6.12	$231.29	$231.29
4.88	0.09	3.05	14.9	250	4.0	4.3	$567.79	$179.95	$12.20	$5.47	$206.97	$206.95
4.88	0.09	3.05	14.9	300	4.0	4.0	$496.05	$179.95	$12.20	$5.12	$193.44	$193.44
4.88	0.09	3.05	14.9	350	4.0	3.8	$444.80	$179.95	$12.20	$4.89	$184.85	$184.86
4.88	0.09	3.05	14.9	400	4.0	3.7	$406.37	$179.95	$12.20	$4.73	$178.86	$178.87

AVERAGE CALCULATIONS-Summary	Total	$/m2	$/m3	$/SF
	1199.56	80.59	876.02	7.49
	Total	$/m2	$/m3	$/SF
	$1,629.02	$109.45	$1,189.65	$10.17
	$1,336.25	$89.78	$975.84	$8.34
	$1,179.33	$79.23	$861.25	$7.36
	$1,080.20	$72.57	$788.85	$6.74
	$1,011.55	$67.96	$738.72	$6.31
	$960.98	$64.56	$701.79	$6.00

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 24 GROUP 2 - HEAVY GAUGE METAL STUDS - 2" X 4" (14G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 4" (38 x 102mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

								AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
								$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
								39.84	4.54	0.82	0.35	14.36	11.97	1069.87	71.88	704.71	6.68
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.5	$882.86	$67.57	$12.20	$6.96	$287.26	$239.39	$1,496.24	$100.53	$985.56	$9.34
4.88	x	0.10	x	3.05	14.9	200	4.0	4.4	$697.55	$67.57	$12.20	$5.61	$231.29	$192.74	$1,206.96	$81.09	$795.01	$7.53
4.88	x	0.10	x	3.05	14.9	250	4.0	3.9	$586.37	$67.57	$12.20	$5.02	$206.97	$172.46	$1,050.59	$70.59	$692.01	$6.56
4.88	x	0.10	x	3.05	14.9	300	4.0	3.7	$512.25	$67.57	$12.20	$4.69	$193.44	$161.20	$951.35	$63.92	$626.64	$5.94
4.88	x	0.10	x	3.05	14.9	350	4.0	3.5	$459.30	$67.57	$12.20	$4.48	$184.85	$154.05	$882.45	$59.29	$581.26	$5.51
4.88	x	0.10	x	3.05	14.9	400	4.0	3.4	$419.59	$67.57	$12.20	$4.34	$178.86	$149.06	$831.62	$55.87	$547.78	$5.19

2" x 4" (38 x 102mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

								AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
								$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
								39.84	6.25	0.82	0.35	14.36	11.97	1095.30	73.59	721.46	6.84
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.5	$882.86	$93.00	$12.20	$6.96	$287.26	$239.39	$1,521.67	$102.24	$1,002.31	$9.50
4.88	x	0.10	x	3.05	14.9	200	4.0	4.4	$697.55	$93.00	$12.20	$5.61	$231.29	$192.74	$1,232.39	$82.80	$811.76	$7.69
4.88	x	0.10	x	3.05	14.9	250	4.0	3.9	$586.37	$93.00	$12.20	$5.02	$206.97	$172.46	$1,076.02	$72.29	$708.76	$6.72
4.88	x	0.10	x	3.05	14.9	300	4.0	3.7	$512.25	$93.00	$12.20	$4.69	$193.44	$161.20	$976.78	$65.63	$643.39	$6.10
4.88	x	0.10	x	3.05	14.9	350	4.0	3.5	$459.30	$93.00	$12.20	$4.48	$184.85	$154.05	$907.88	$61.00	$598.01	$5.67
4.88	x	0.10	x	3.05	14.9	400	4.0	3.4	$419.59	$93.00	$12.20	$4.34	$178.86	$149.06	$857.05	$57.58	$564.53	$5.35

2" x 4" (38 x 102mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

								AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
								$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
								39.84	8.06	0.82	0.35	14.36	11.97	1122.27	75.40	739.23	7.00
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.5	$882.86	$119.97	$12.20	$6.96	$287.26	$239.39	$1,548.64	$104.05	$1,020.07	$9.67
4.88	x	0.10	x	3.05	14.9	200	4.0	4.4	$697.55	$119.97	$12.20	$5.61	$231.29	$192.74	$1,259.36	$84.61	$829.53	$7.86
4.88	x	0.10	x	3.05	14.9	250	4.0	3.9	$586.37	$119.97	$12.20	$5.02	$206.97	$172.46	$1,102.99	$74.11	$726.53	$6.88
4.88	x	0.10	x	3.05	14.9	300	4.0	3.7	$512.25	$119.97	$12.20	$4.69	$193.44	$161.20	$1,003.75	$67.44	$661.16	$6.27
4.88	x	0.10	x	3.05	14.9	350	4.0	3.5	$459.30	$119.97	$12.20	$4.48	$184.85	$154.05	$934.85	$62.81	$615.78	$5.84
4.88	x	0.10	x	3.05	14.9	400	4.0	3.4	$419.59	$119.97	$12.20	$4.34	$178.86	$149.06	$884.02	$59.39	$582.29	$5.52

2" x 4" (38 x 102mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

								AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
								$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
								39.84	7.38	0.82	0.36	14.36	13.06	1128.55	75.82	743.36	7.04
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.7	$882.86	$109.84	$12.20	$7.25	$287.26	$261.15	$1,560.56	$104.85	$1,027.92	$9.74
4.88	x	0.10	x	3.05	14.9	200	4.0	4.6	$697.55	$109.84	$12.20	$5.84	$231.29	$210.26	$1,266.98	$85.12	$834.55	$7.91
4.88	x	0.10	x	3.05	14.9	250	4.0	4.1	$586.37	$109.84	$12.20	$5.22	$206.97	$188.14	$1,108.74	$74.49	$730.31	$6.92
4.88	x	0.10	x	3.05	14.9	300	4.0	3.8	$512.25	$109.84	$12.20	$4.88	$193.44	$175.86	$1,008.47	$67.76	$664.27	$6.29
4.88	x	0.10	x	3.05	14.9	350	4.0	3.7	$459.30	$109.84	$12.20	$4.67	$184.85	$168.05	$938.91	$63.08	$618.45	$5.86
4.88	x	0.10	x	3.05	14.9	400	4.0	3.5	$419.59	$109.84	$12.20	$4.52	$178.86	$162.61	$887.62	$59.64	$584.67	$5.54

2" x 4" (38 x 102mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

								AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
								$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
								39.84	10.07	0.82	0.36	14.36	13.06	1168.59	78.51	769.73	7.29
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	5.7	$882.86	$149.88	$12.20	$7.25	$287.26	$261.15	$1,600.60	$107.54	$1,054.30	$9.99
4.88	x	0.10	x	3.05	14.9	200	4.0	4.6	$697.55	$149.88	$12.20	$5.84	$231.29	$210.26	$1,307.02	$87.81	$860.92	$8.16
4.88	x	0.10	x	3.05	14.9	250	4.0	4.1	$586.37	$149.88	$12.20	$5.22	$206.97	$188.14	$1,148.78	$77.18	$756.69	$7.17
4.88	x	0.10	x	3.05	14.9	300	4.0	3.8	$512.25	$149.88	$12.20	$4.88	$193.44	$175.86	$1,048.51	$70.45	$690.64	$6.54
4.88	x	0.10	x	3.05	14.9	350	4.0	3.7	$459.30	$149.88	$12.20	$4.67	$184.85	$168.05	$978.95	$65.77	$644.82	$6.11
4.88	x	0.10	x	3.05	14.9	400	4.0	3.5	$419.59	$149.88	$12.20	$4.52	$178.86	$162.61	$927.66	$62.33	$611.04	$5.79

2" x 4" (38 x 102mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

								AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
								$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
								39.84	10.41	0.82	0.38	14.36	14.36	1193.34	80.18	786.04	7.45
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	6.0	$882.86	$154.94	$12.20	$7.60	$287.26	$287.26	$1,632.12	$109.66	$1,075.06	$10.19
4.88	x	0.10	x	3.05	14.9	200	4.0	4.8	$697.55	$154.94	$12.20	$6.12	$231.29	$231.29	$1,333.39	$89.59	$878.29	$8.32
4.88	x	0.10	x	3.05	14.9	250	4.0	4.3	$586.37	$154.94	$12.20	$5.47	$206.97	$206.95	$1,172.90	$78.80	$772.58	$7.32
4.88	x	0.10	x	3.05	14.9	300	4.0	4.0	$512.25	$154.94	$12.20	$5.12	$193.44	$193.44	$1,071.39	$71.98	$705.71	$6.69
4.88	x	0.10	x	3.05	14.9	350	4.0	3.8	$459.30	$154.94	$12.20	$4.89	$184.85	$184.86	$1,001.04	$67.26	$659.37	$6.25
4.88	x	0.10	x	3.05	14.9	400	4.0	3.7	$419.59	$154.94	$12.20	$4.73	$178.86	$178.87	$949.19	$63.77	$625.22	$5.92

2" x 4" (38 x 102mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

								AVERAGE CALCULATIONS						AVERAGE CALCULATIONS-Summary			
								$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	Total	$/m2	$/m3	$/SF
								39.84	12.09	0.82	0.38	14.36	14.36	1218.35	81.86	802.51	7.60
					Wall Area	Stud Spacing		Total Man	(material) Metal Stud	(material) Panel	(material) Connections		Total Labour					
Length		Width		Height	m2	mm	Crew	Hours	$	$	$	Equipment $	Metal Stud $	Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.10	x	3.05	14.9	150	4.0	6.0	$882.86	$179.95	$12.20	$7.60	$287.26	$287.26	$1,657.13	$111.34	$1,091.53	$10.34
4.88	x	0.10	x	3.05	14.9	200	4.0	4.8	$697.55	$179.95	$12.20	$6.12	$231.29	$231.29	$1,358.40	$91.27	$894.76	$8.48
4.88	x	0.10	x	3.05	14.9	250	4.0	4.3	$586.37	$179.95	$12.20	$5.47	$206.97	$206.95	$1,197.91	$80.48	$789.05	$7.48
4.88	x	0.10	x	3.05	14.9	300	4.0	4.0	$512.25	$179.95	$12.20	$5.12	$193.44	$193.44	$1,096.40	$73.66	$722.19	$6.84
4.88	x	0.10	x	3.05	14.9	350	4.0	3.8	$459.30	$179.95	$12.20	$4.89	$184.85	$184.86	$1,026.05	$68.94	$675.85	$6.40
4.88	x	0.10	x	3.05	14.9	400	4.0	3.7	$419.59	$179.95	$12.20	$4.73	$178.86	$178.87	$974.20	$65.45	$641.69	$6.08

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 24 GROUP 3 - HEAVY GAUGE METAL STUDS - 2" X 6" (14G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 6" (38 x 152mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
49.26	4.54	0.82	0.35	14.36	11.97

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1210.03	81.30	534.85	7.55

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.5	$1,097.14	$67.57	$12.20	$6.96	$287.26	$239.39	$1,710.52	$114.92	$756.08	$10.68
4.88	x	0.15	x	3.05	14.9	200	4.0	4.4	$864.45	$67.57	$12.20	$5.61	$231.29	$192.74	$1,373.86	$92.30	$607.27	$8.58
4.88	x	0.15	x	3.05	14.9	250	4.0	3.9	$724.84	$67.57	$12.20	$5.02	$206.97	$172.46	$1,189.06	$79.89	$525.58	$7.42
4.88	x	0.15	x	3.05	14.9	300	4.0	3.7	$631.76	$67.57	$12.20	$4.69	$193.44	$161.20	$1,070.86	$71.95	$473.34	$6.68
4.88	x	0.15	x	3.05	14.9	350	4.0	3.5	$565.28	$67.57	$12.20	$4.48	$184.85	$154.05	$988.43	$66.41	$436.90	$6.17
4.88	x	0.15	x	3.05	14.9	400	4.0	3.4	$515.42	$67.57	$12.20	$4.34	$178.86	$149.06	$927.45	$62.31	$409.95	$5.79

2" x 6" (38 x 152mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
49.26	6.25	0.82	0.35	14.36	11.97

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1235.46	83.01	546.09	7.71

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.5	$1,097.14	$93.00	$12.20	$6.96	$287.26	$239.39	$1,735.95	$116.63	$767.32	$10.84
4.88	x	0.15	x	3.05	14.9	200	4.0	4.4	$864.45	$93.00	$12.20	$5.61	$231.29	$192.74	$1,399.29	$94.01	$618.51	$8.73
4.88	x	0.15	x	3.05	14.9	250	4.0	3.9	$724.84	$93.00	$12.20	$5.02	$206.97	$172.46	$1,214.49	$81.60	$536.82	$7.58
4.88	x	0.15	x	3.05	14.9	300	4.0	3.7	$631.76	$93.00	$12.20	$4.69	$193.44	$161.20	$1,096.29	$73.66	$484.58	$6.84
4.88	x	0.15	x	3.05	14.9	350	4.0	3.5	$565.28	$93.00	$12.20	$4.48	$184.85	$154.05	$1,013.86	$68.12	$448.14	$6.33
4.88	x	0.15	x	3.05	14.9	400	4.0	3.4	$515.42	$93.00	$12.20	$4.34	$178.86	$149.06	$952.88	$64.02	$421.19	$5.95

2" x 6" (38 x 152mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
49.26	8.06	0.82	0.35	14.36	11.97

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1262.43	84.82	558.01	7.88

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.5	$1,097.14	$119.97	$12.20	$6.96	$287.26	$239.39	$1,762.92	$118.44	$779.24	$11.00
4.88	x	0.15	x	3.05	14.9	200	4.0	4.4	$864.45	$119.97	$12.20	$5.61	$231.29	$192.74	$1,426.26	$95.83	$630.43	$8.90
4.88	x	0.15	x	3.05	14.9	250	4.0	3.9	$724.84	$119.97	$12.20	$5.02	$206.97	$172.46	$1,241.46	$83.41	$548.74	$7.75
4.88	x	0.15	x	3.05	14.9	300	4.0	3.7	$631.76	$119.97	$12.20	$4.69	$193.44	$161.20	$1,123.26	$75.47	$496.50	$7.01
4.88	x	0.15	x	3.05	14.9	350	4.0	3.5	$565.28	$119.97	$12.20	$4.48	$184.85	$154.05	$1,040.83	$69.93	$460.06	$6.50
4.88	x	0.15	x	3.05	14.9	400	4.0	3.4	$515.42	$119.97	$12.20	$4.34	$178.86	$149.06	$979.85	$65.83	$433.11	$6.12

2" x 6" (38 x 152mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
49.26	7.38	0.82	0.36	14.36	13.06

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1268.71	85.24	560.79	7.92

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.7	$1,097.14	$109.84	$12.20	$7.25	$287.26	$261.15	$1,774.84	$119.24	$784.51	$11.08
4.88	x	0.15	x	3.05	14.9	200	4.0	4.6	$864.45	$109.84	$12.20	$5.84	$231.29	$210.26	$1,433.88	$96.34	$633.80	$8.95
4.88	x	0.15	x	3.05	14.9	250	4.0	4.1	$724.84	$109.84	$12.20	$5.22	$206.97	$188.14	$1,247.21	$83.80	$551.29	$7.78
4.88	x	0.15	x	3.05	14.9	300	4.0	3.8	$631.76	$109.84	$12.20	$4.88	$193.44	$175.86	$1,127.98	$75.78	$498.58	$7.04
4.88	x	0.15	x	3.05	14.9	350	4.0	3.7	$565.28	$109.84	$12.20	$4.67	$184.85	$168.05	$1,044.89	$70.20	$461.86	$6.52
4.88	x	0.15	x	3.05	14.9	400	4.0	3.5	$515.42	$109.84	$12.20	$4.52	$178.86	$162.61	$983.45	$66.07	$434.70	$6.14

2" x 6" (38 x 152mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
49.26	10.07	0.82	0.36	14.36	13.06

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1308.75	87.93	578.49	8.17

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	5.7	$1,097.14	$149.88	$12.20	$7.25	$287.26	$261.15	$1,814.88	$121.93	$802.20	$11.33
4.88	x	0.15	x	3.05	14.9	200	4.0	4.6	$864.45	$149.88	$12.20	$5.84	$231.29	$210.26	$1,473.92	$99.03	$651.49	$9.20
4.88	x	0.15	x	3.05	14.9	250	4.0	4.1	$724.84	$149.88	$12.20	$5.22	$206.97	$188.14	$1,287.25	$86.49	$568.98	$8.03
4.88	x	0.15	x	3.05	14.9	300	4.0	3.8	$631.76	$149.88	$12.20	$4.88	$193.44	$175.86	$1,168.02	$78.47	$516.28	$7.29
4.88	x	0.15	x	3.05	14.9	350	4.0	3.7	$565.28	$149.88	$12.20	$4.67	$184.85	$168.05	$1,084.93	$72.89	$479.56	$6.77
4.88	x	0.15	x	3.05	14.9	400	4.0	3.5	$515.42	$149.88	$12.20	$4.52	$178.86	$162.61	$1,023.49	$68.76	$452.40	$6.39

2" x 6" (38 x 152mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
49.26	10.41	0.82	0.38	14.36	14.36

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1333.50	89.59	589.43	8.32

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	6.0	$1,097.14	$154.94	$12.20	$7.60	$287.26	$287.26	$1,846.40	$124.05	$816.14	$11.52
4.88	x	0.15	x	3.05	14.9	200	4.0	4.8	$864.45	$154.94	$12.20	$6.12	$231.29	$231.29	$1,500.29	$100.80	$663.15	$9.36
4.88	x	0.15	x	3.05	14.9	250	4.0	4.3	$724.84	$154.94	$12.20	$5.47	$206.97	$206.95	$1,311.37	$88.11	$579.64	$8.19
4.88	x	0.15	x	3.05	14.9	300	4.0	4.0	$631.76	$154.94	$12.20	$5.12	$193.44	$193.44	$1,190.90	$80.01	$526.40	$7.43
4.88	x	0.15	x	3.05	14.9	350	4.0	3.8	$565.28	$154.94	$12.20	$4.89	$184.85	$184.86	$1,107.02	$74.38	$489.32	$6.91
4.88	x	0.15	x	3.05	14.9	400	4.0	3.7	$515.42	$154.94	$12.20	$4.73	$178.86	$178.87	$1,045.02	$70.21	$461.91	$6.52

2" x 6" (38 x 152mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS $/m2	$/m2	$/m2	$/m2	$/m2	$/m2
49.26	12.09	0.82	0.38	14.36	14.36

AVERAGE CALCULATIONS-Summary Total	$/m2	$/m3	$/SF
1358.51	91.27	600.48	8.48

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours	(material) Metal Stud $	(material) Panel $	(material) Connections $	Equipment $	Total Labour Metal Stud $	Total Labour Panel $	Total	$/m2	$/m3	$/SF
4.88	x	0.15	x	3.05	14.9	150	4.0	6.0	$1,097.14	$179.95	$12.20	$7.60	$287.26	$287.26	$1,871.41	$125.73	$827.19	$11.68
4.88	x	0.15	x	3.05	14.9	200	4.0	4.8	$864.45	$179.95	$12.20	$6.12	$231.29	$231.29	$1,525.30	$102.48	$674.21	$9.52
4.88	x	0.15	x	3.05	14.9	250	4.0	4.3	$724.84	$179.95	$12.20	$5.47	$206.97	$206.95	$1,336.38	$89.79	$590.70	$8.34
4.88	x	0.15	x	3.05	14.9	300	4.0	4.0	$631.76	$179.95	$12.20	$5.12	$193.44	$193.44	$1,215.91	$81.69	$537.45	$7.59
4.88	x	0.15	x	3.05	14.9	350	4.0	3.8	$565.28	$179.95	$12.20	$4.89	$184.85	$184.86	$1,132.03	$76.06	$500.37	$7.07
4.88	x	0.15	x	3.05	14.9	400	4.0	3.7	$515.42	$179.95	$12.20	$4.73	$178.86	$178.87	$1,070.03	$71.89	$472.97	$6.68

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Hanscomb

TABLE 24 GROUP 4 - HEAVY GAUGE METAL STUDS - 2" X 8" (14G) - EXT. WALL

OCT 2013

(Various Metal Gauges - c/w Various Standard Square Edge (SE) Wall Panels)

2" x 8" (38 x 203mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
58.68	4.54	0.82	0.35	14.37	11.97	
(material)	(material)	(material)		Total Labour		
Metal Stud	Panel	Connections	Equipment	Metal Stud	Panel	
$	$	$	$	$	$	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1350.25	90.72	446.89	8.43

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours									
4.88	x	0.20	x	3.05	14.9	150	4.0	5.5	$1,311.47	$67.57	$12.20	$6.96	$287.26	$239.39	$1,924.85	$129.32	$637.06	$12.01
4.88	x	0.20	x	3.05	14.9	200	4.0	4.4	$1,031.41	$67.57	$12.20	$5.61	$231.29	$192.74	$1,540.82	$103.52	$509.96	$9.62
4.88	x	0.20	x	3.05	14.9	250	4.0	3.9	$863.37	$67.57	$12.20	$5.02	$206.97	$172.46	$1,327.59	$89.20	$439.39	$8.29
4.88	x	0.20	x	3.05	14.9	300	4.0	3.7	$751.34	$67.57	$12.20	$4.69	$193.64	$161.00	$1,190.44	$79.98	$394.00	$7.43
4.88	x	0.20	x	3.05	14.9	350	4.0	3.5	$671.32	$67.57	$12.20	$4.48	$184.85	$154.05	$1,094.47	$73.53	$362.23	$6.83
4.88	x	0.20	x	3.05	14.9	400	4.0	3.4	$611.31	$67.57	$12.20	$4.34	$178.86	$149.06	$1,023.34	$68.75	$338.69	$6.39

2" x 8" (38 x 203mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) SE Densglas or Glasroc

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
58.68	6.25	0.82	0.35	14.37	11.97	
(material)	(material)	(material)		Total Labour		
Metal Stud	Panel	Connections	Equipment	Metal Stud	Panel	
$	$	$	$	$	$	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1375.68	92.43	455.30	8.59

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours									
4.88	x	0.20	x	3.05	14.9	150	4.0	5.5	$1,311.47	$93.00	$12.20	$6.96	$287.26	$239.39	$1,950.28	$131.03	$645.48	$12.17
4.88	x	0.20	x	3.05	14.9	200	4.0	4.4	$1,031.41	$93.00	$12.20	$5.61	$231.29	$192.74	$1,566.25	$105.23	$518.38	$9.78
4.88	x	0.20	x	3.05	14.9	250	4.0	3.9	$863.37	$93.00	$12.20	$5.02	$206.97	$172.46	$1,353.02	$90.90	$447.80	$8.45
4.88	x	0.20	x	3.05	14.9	300	4.0	3.7	$751.34	$93.00	$12.20	$4.69	$193.64	$161.00	$1,215.87	$81.69	$402.41	$7.59
4.88	x	0.20	x	3.05	14.9	350	4.0	3.5	$671.32	$93.00	$12.20	$4.48	$184.85	$154.05	$1,119.90	$75.24	$370.65	$6.99
4.88	x	0.20	x	3.05	14.9	400	4.0	3.4	$611.31	$93.00	$12.20	$4.34	$178.86	$149.06	$1,048.77	$70.46	$347.11	$6.55

2" x 8" (38 x 203mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 1/2" (13mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
58.68	8.06	0.82	0.35	14.37	11.97	
(material)	(material)	(material)		Total Labour		
Metal Stud	Panel	Connections	Equipment	Metal Stud	Panel	
$	$	$	$	$	$	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1402.65	94.24	464.23	8.76

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours									
4.88	x	0.20	x	3.05	14.9	150	4.0	5.5	$1,311.47	$119.97	$12.20	$6.96	$287.26	$239.39	$1,977.25	$132.84	$654.40	$12.34
4.88	x	0.20	x	3.05	14.9	200	4.0	4.4	$1,031.41	$119.97	$12.20	$5.61	$231.29	$192.74	$1,593.22	$107.04	$527.30	$9.94
4.88	x	0.20	x	3.05	14.9	250	4.0	3.9	$863.37	$119.97	$12.20	$5.02	$206.97	$172.46	$1,379.99	$92.72	$456.73	$8.61
4.88	x	0.20	x	3.05	14.9	300	4.0	3.7	$751.34	$119.97	$12.20	$4.69	$193.64	$161.00	$1,242.84	$83.50	$411.34	$7.76
4.88	x	0.20	x	3.05	14.9	350	4.0	3.5	$671.32	$119.97	$12.20	$4.48	$184.85	$154.05	$1,146.87	$77.05	$379.58	$7.16
4.88	x	0.20	x	3.05	14.9	400	4.0	3.4	$611.31	$119.97	$12.20	$4.34	$178.86	$149.06	$1,075.74	$72.27	$356.03	$6.71

2" x 8" (38 x 203mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
58.68	7.38	0.82	0.36	14.37	13.06	
(material)	(material)	(material)		Total Labour		
Metal Stud	Panel	Connections	Equipment	Metal Stud	Panel	
$	$	$	$	$	$	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1408.93	94.66	466.31	8.79

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours									
4.88	x	0.20	x	3.05	14.9	150	4.0	5.7	$1,311.47	$109.84	$12.20	$7.25	$287.26	$261.15	$1,989.17	$133.64	$658.35	$12.42
4.88	x	0.20	x	3.05	14.9	200	4.0	4.6	$1,031.41	$109.84	$12.20	$5.84	$231.29	$210.26	$1,600.84	$107.55	$529.82	$9.99
4.88	x	0.20	x	3.05	14.9	250	4.0	4.1	$863.37	$109.84	$12.20	$5.22	$206.97	$188.14	$1,385.74	$93.10	$458.63	$8.65
4.88	x	0.20	x	3.05	14.9	300	4.0	3.8	$751.34	$109.84	$12.20	$4.88	$193.64	$175.66	$1,247.56	$83.82	$412.90	$7.79
4.88	x	0.20	x	3.05	14.9	350	4.0	3.7	$671.32	$109.84	$12.20	$4.67	$184.85	$168.05	$1,150.93	$77.33	$380.92	$7.18
4.88	x	0.20	x	3.05	14.9	400	4.0	3.5	$611.31	$109.84	$12.20	$4.52	$178.86	$162.61	$1,079.34	$72.52	$357.23	$6.74

2" x 8" (38 x 203mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 5/8" (16mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
58.68	10.07	0.82	0.36	14.37	13.06	
(material)	(material)	(material)		Total Labour		
Metal Stud	Panel	Connections	Equipment	Metal Stud	Panel	
$	$	$	$	$	$	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1448.97	97.35	479.56	9.04

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours									
4.88	x	0.20	x	3.05	14.9	150	4.0	5.7	$1,311.47	$149.88	$12.20	$7.25	$287.26	$261.15	$2,029.21	$136.33	$671.60	$12.67
4.88	x	0.20	x	3.05	14.9	200	4.0	4.6	$1,031.41	$149.88	$12.20	$5.84	$231.29	$210.26	$1,640.88	$110.24	$543.08	$10.24
4.88	x	0.20	x	3.05	14.9	250	4.0	4.1	$863.37	$149.88	$12.20	$5.22	$206.97	$188.14	$1,425.78	$95.79	$471.89	$8.90
4.88	x	0.20	x	3.05	14.9	300	4.0	3.8	$751.34	$149.88	$12.20	$4.88	$193.64	$175.66	$1,287.60	$86.51	$426.15	$8.04
4.88	x	0.20	x	3.05	14.9	350	4.0	3.7	$671.32	$149.88	$12.20	$4.67	$184.85	$168.05	$1,190.97	$80.02	$394.17	$7.43
4.88	x	0.20	x	3.05	14.9	400	4.0	3.5	$611.31	$149.88	$12.20	$4.52	$178.86	$162.61	$1,119.38	$75.21	$370.48	$6.99

2" x 8" (38 x 203mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 23/32" (19mm) Standard SE - OSB

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
58.68	10.41	0.82	0.38	14.37	14.36	
(material)	(material)	(material)		Total Labour		
Metal Stud	Panel	Connections	Equipment	Metal Stud	Panel	
$	$	$	$	$	$	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1473.72	99.01	487.75	9.20

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours									
4.88	x	0.20	x	3.05	14.9	150	4.0	6.0	$1,311.47	$154.94	$12.20	$7.60	$287.26	$287.26	$2,060.73	$138.45	$682.03	$12.86
4.88	x	0.20	x	3.05	14.9	200	4.0	4.8	$1,031.41	$154.94	$12.20	$6.12	$231.29	$231.29	$1,667.25	$112.02	$551.80	$10.41
4.88	x	0.20	x	3.05	14.9	250	4.0	4.3	$863.37	$154.94	$12.20	$5.47	$206.97	$206.95	$1,449.90	$97.41	$479.87	$9.05
4.88	x	0.20	x	3.05	14.9	300	4.0	4.0	$751.34	$154.94	$12.20	$5.12	$193.64	$193.24	$1,310.48	$88.05	$433.73	$8.18
4.88	x	0.20	x	3.05	14.9	350	4.0	3.8	$671.32	$154.94	$12.20	$4.89	$184.85	$184.86	$1,213.06	$81.50	$401.48	$7.57
4.88	x	0.20	x	3.05	14.9	400	4.0	3.7	$611.31	$154.94	$12.20	$4.73	$178.86	$178.87	$1,140.91	$76.65	$377.60	$7.12

2" x 8" (38 x 203mm) 14 Gauge Metal Stud - Framed Exterior Wall

Vertical Install - 16' x 10' (4.88 x 3.05m) On Upper Deck (Platform Framing)
Labour & Equip. Rate Varies
Exterior Wall Panel - 3/4" (20mm) Standard SE - Spruce Ply

AVERAGE CALCULATIONS						
$/m2	$/m2	$/m2	$/m2	$/m2	$/m2	
58.68	12.09	0.82	0.38	14.37	14.36	
(material)	(material)	(material)		Total Labour		
Metal Stud	Panel	Connections	Equipment	Metal Stud	Panel	
$	$	$	$	$	$	

AVERAGE CALCULATIONS-Summary			
Total	$/m2	$/m3	$/SF
1498.73	100.69	496.03	9.35

Length		Width		Height	Wall Area m2	Stud Spacing mm	Crew	Total Man Hours									
4.88	x	0.20	x	3.05	14.9	150	4.0	6.0	$1,311.47	$179.95	$12.20	$7.60	$287.26	$287.26	$2,085.74	$140.13	$690.31	$13.02
4.88	x	0.20	x	3.05	14.9	200	4.0	4.8	$1,031.41	$179.95	$12.20	$6.12	$231.29	$231.29	$1,692.26	$113.70	$560.08	$10.56
4.88	x	0.20	x	3.05	14.9	250	4.0	4.3	$863.37	$179.95	$12.20	$5.47	$206.97	$206.95	$1,474.91	$99.09	$488.15	$9.21
4.88	x	0.20	x	3.05	14.9	300	4.0	4.0	$751.34	$179.95	$12.20	$5.12	$193.64	$193.24	$1,335.49	$89.73	$442.00	$8.34
4.88	x	0.20	x	3.05	14.9	350	4.0	3.8	$671.32	$179.95	$12.20	$4.89	$184.85	$184.86	$1,238.07	$83.18	$409.76	$7.73
4.88	x	0.20	x	3.05	14.9	400	4.0	3.7	$611.31	$179.95	$12.20	$4.73	$178.86	$178.87	$1,165.92	$78.33	$385.88	$7.28

Source: Simpson Strong Tie
Goodfellow Inc.
Kent Building Supplies
Hanscomb Ltd.

Appendix
Z - DRAWING LIST

APPENDIX Z - DRAWING LIST

ARCHITECTURAL

Title	Dated	Received
Rendering - Main Entry View	4-Feb-13	11-Apr-13
Rendering - Main Level	4-Feb-13	11-Apr-13
Rendering - Upper Level	4-Feb-13	11-Apr-13
Associated Documents		
Discussion Framework Document	18-Jul-12	18-Jul-12
Discussion Framework Document	8-Aug-12	23-Aug-12
Wood Design Seminar - Halifax	7-Nov-12	7-Nov-12
Morrison Herschfield - CLT Report	6-Jun-12	23-Nov-12
Cost Analysis - Project Launch Phase	4-Feb-13	4-Feb-13