

# DA Form 2 – Building work details

Approved form (version 1.2 effective 7 February 2020) made under Section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving building work**.

For a development application involving **building work only**, use this form (DA Form 2) only. The DA Forms Guide provides advice about how to complete this form.

For a development application involving **building work associated and any other type of assessable development** (i.e. material change of use, operational work or reconfiguring a lot), use *DA Form 1 – Development application details* and parts 4 to 6 of this form (DA Form 2).

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

**Note:** All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).

## PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	DJ & LK Doyle Pty Ltd
Contact name (only applicable for companies)	David Doyle
Postal address (PO Box or street address)	PO Box 238
Suburb	Gayndah
State	QLD
Postcode	4625
Country	
Contact number	0427582390
Email address (non-mandatory)	ddoyle.mail4@bigpond.com
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

## PART 2 – LOCATION DETAILS

2) Location of the premises (complete 2.1 and 2.2 if applicable)	
<b>Note:</b> Provide details below and attach a site plan for any or all premises part of the development application. For further information, see <a href="#">DA Forms Guide: Relevant plans</a> .	
2.1) Street address and lot on plan	
<input checked="" type="checkbox"/> Street address <b>AND</b> lot on plan (all lots must be listed), <b>or</b>	
<input type="checkbox"/> Street address <b>AND</b> lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).	



Unit No.	Street No.	Street Name and Type	Suburb
	2-6	Walker Street	Gayndah
Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
	14	RP 32450	North Burnett Regional Council

## 2.2) Additional premises

- ☐ Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application
- X Not Required

## 3) Are there any existing easements over the premises?

**Note:** Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see the [DA Forms Guide](#)

- ☐ Yes – All easement locations, types and dimensions are included in plans submitted with this development application
- X No

# PART 3 – FURTHER DETAILS

## 4) Is the application only for building work assessable against the building assessment provisions?

- X Yes – proceed to 8)
- ☐ No

## 5) Identify the assessment manager(s) who will be assessing this development application

## 6) Has the local government agreed to apply a superseded planning scheme for this development application?

- ☐ Yes – a copy of the decision notice is attached to this development application
- ☐ The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
- ☐ No

## 7) Information request under Part 3 of the DA Rules

- ☐ I agree to receive an information request if determined necessary for this development application
- ☐ I do not agree to accept an information request for this development application

**Note:** By not agreeing to accept an information request I, the applicant, acknowledge:

- that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties.
- Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.

Further advice about information requests is contained in the [DA Forms Guide](#).

## 8) Are there any associated development applications or current approvals?

- ☐ Yes – provide details below or include details in a schedule to this development application
- X No

List of approval/development application	Reference	Date	Assessment manager
<input type="checkbox"/> Approval			
<input type="checkbox"/> Development application			
<input type="checkbox"/> Approval			
<input type="checkbox"/> Development application			



9) Has the portable long service leave levy been paid?

- ☐ Yes – a copy of the receipted QLeave form is attached to this development application
- ☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid
- ☒ Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

10) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

- ☐ Yes – show cause or enforcement notice is attached
- ☒ No

11) Identify any of the following further legislative requirements that apply to any aspect of this development application

- ☐ The proposed development is on a place entered in the **Queensland Heritage Register** or in a local government's **Local Heritage Register**. See the guidance provided at [www.des.qld.gov.au](http://www.des.qld.gov.au) about the requirements in relation to the development of a Queensland heritage place

Name of the heritage place:		Place ID:	
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## PART 4 – REFERRAL DETAILS

12) Does this development application include any building work aspects that have any referral requirements?

- ☐ Yes – the *Referral checklist for building work* is attached to this development application
- ☒ No – proceed to Part 5

13) Has any referral agency provided a referral response for this development application?

- ☐ Yes – referral response(s) received and listed below are attached to this development application
- ☐ No

Referral requirement	Referral agency	Date referral response

Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application (if applicable)

## PART 5 – BUILDING WORK DETAILS

14) Owner's details

- ☐ Tick if the applicant is also the owner and proceed to 15). Otherwise, provide the following information.

Name(s) (individual or company full name)	Phillip Grambower
Contact name (applicable for companies)	
Postal address (P.O. Box or street address)	4 Walker Street
Suburb	Gayndah
State	Qld



Postcode	4625
Country	
Contact number	0418736557
Email address <i>(non-mandatory)</i>	
Mobile number <i>(non-mandatory)</i>	
Fax number <i>(non-mandatory)</i>	

#### 15) Builder's details

☐ Tick if a builder has not yet been engaged to undertake the work and proceed to 16). Otherwise provide the following information.

Name(s) <i>(individual or company full name)</i>	DJ & LK Doyle Pty Ltd
Contact name <i>(applicable for companies)</i>	David Doyle
QBCC licence or owner – builder number	71465
Postal address <i>(P.O. Box or street address)</i>	PO Box 238
Suburb	Gayndah
State	Qld
Postcode	4625
Contact number	0427582390
Email address <i>(non-mandatory)</i>	ddoyle.mail4@bigpond.com
Mobile number <i>(non-mandatory)</i>	
Fax number <i>(non-mandatory)</i>	

#### 16) Provide details about the proposed building work

What type of approval is being sought?

- ☒ Development permit  
☐ Preliminary approval

b) What is the level of assessment?

- ☒ Code assessment  
☐ Impact assessment *(requires public notification)*

c) Nature of the proposed building work (tick all applicable boxes)

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> New building or structure                               | <input type="checkbox"/> Repairs, alterations or additions |
| <input type="checkbox"/> Change of building classification <i>(involving building work)</i> | <input type="checkbox"/> Swimming pool and/or pool fence   |
| <input type="checkbox"/> Demolition   | <input type="checkbox"/> Relocation or removal             |

d) Provide a description of the work below or in an attached schedule.

Extension to existing Garage

e) Proposed construction materials

External walls	<input type="checkbox"/> Double brick	<input checked="" type="checkbox"/> Steel	<input type="checkbox"/> Curtain glass
	<input type="checkbox"/> Brick veneer	<input type="checkbox"/> Timber	<input type="checkbox"/> Aluminium
	<input type="checkbox"/> Stone/concrete	<input type="checkbox"/> Fibre cement	<input type="checkbox"/> Other
Frame	<input type="checkbox"/> Timber	<input checked="" type="checkbox"/> Steel	<input type="checkbox"/> Aluminium
	<input type="checkbox"/> Other		
Floor	<input checked="" type="checkbox"/> Concrete	<input type="checkbox"/> Timber	<input type="checkbox"/> Other
Roof covering	<input type="checkbox"/> Slate/concrete	<input type="checkbox"/> Tiles	<input type="checkbox"/> Fibre cement
	<input type="checkbox"/> Aluminium	<input checked="" type="checkbox"/> Steel	<input type="checkbox"/> Other

f) Existing building use/classification? *(if applicable)*

10a



g) New building use/classification? (if applicable)
h) Relevant plans <i>Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <a href="#">DA Forms Guide: Relevant plans</a>.</i>
X Relevant plans of the proposed works are attached to the development application

17) What is the monetary value of the proposed building work?
\$ 20,500

18) Has Queensland Home Warranty Scheme Insurance been paid?		
X Yes – provide details below <input type="checkbox"/> No		
Amount paid	Date paid (dd/mm/yy)	Reference number
\$ 336.20	07/06/23	014594086

## PART 6 – CHECKLIST AND APPLICANT DECLARATION

19) Development application checklist	
The relevant parts of <i>Form 2 – Building work details</i> have been completed	X Yes
This development application includes a material change of use, reconfiguring a lot or operational work and is accompanied by a completed <i>Form 1 – Development application details</i>	<input type="checkbox"/> Yes X Not applicable
Relevant plans of the development are attached to this development application <i>Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <a href="#">DA Forms Guide: Relevant plans</a>.</i>	X Yes
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 9)	<input type="checkbox"/> Yes X Not applicable

20) Applicant declaration
<p>X By making this development application, I declare that all information in this development application is true and correct</p> <p>X Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the <i>Electronic Transactions Act 2001</i></p> <p><i>Note: It is unlawful to intentionally provide false or misleading information.</i></p> <p><b>Privacy</b> – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website. Personal information will not be disclosed for a purpose unrelated to the <i>Planning Act 2016</i>, <i>Planning Regulation 2017</i> and the <i>DA Rules</i> except where:</p> <ul style="list-style-type: none"> <li>such disclosure is in accordance with the provisions about public access to documents contained in the <i>Planning Act 2016</i> and the <i>Planning Regulation 2017</i>, and the access rules made under the <i>Planning Act 2016</i> and <i>Planning Regulation 2017</i>; or</li> <li>required by other legislation (including the <i>Right to Information Act 2009</i>); or</li> <li>otherwise required by law.</li> </ul> <p>This information may be stored in relevant databases. The information collected will be retained as required by the <i>Public Records Act 2002</i>.</p>



## PART 7 – FOR COMPLETION BY THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received:  Reference numbers:

For completion by the building certifier		
Classification(s) of approved building work		
Name	QBCC Certification Licence number	QBCC Insurance receipt number

Notification of engagement of alternative assessment manager	
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

Additional information required by the local government			
Confirm proposed construction materials:			
External walls	<input type="checkbox"/> Double brick	<input type="checkbox"/> Steel	<input type="checkbox"/> Curtain glass
	<input type="checkbox"/> Brick veneer	<input type="checkbox"/> Timber	<input type="checkbox"/> Aluminium
	<input type="checkbox"/> Stone/concrete	<input type="checkbox"/> Fibre cement	<input type="checkbox"/> Other
Frame	<input type="checkbox"/> Timber	<input type="checkbox"/> Steel	<input type="checkbox"/> Aluminium
	<input type="checkbox"/> Other		
Floor	<input type="checkbox"/> Concrete	<input type="checkbox"/> Timber	<input type="checkbox"/> Other
Roof covering	<input type="checkbox"/> Slate/concrete	<input type="checkbox"/> Tiles	<input type="checkbox"/> Fibre cement
	<input type="checkbox"/> Aluminium	<input type="checkbox"/> Steel	<input type="checkbox"/> Other

QLeave notification and payment			
<i>Note: For completion by assessment manager if applicable</i>			
Description of the work			
QLeave project number			
Amount paid (\$)		Date paid (dd/mm/yy)	
Date receipted form sighted by assessment manager			
Name of officer who sighted the form			

Additional building details required for the Australian Bureau of Statistics			
Existing building use/classification? (if applicable)			
New building use/classification?			
Site area (m <sup>2</sup> )		Floor area (m <sup>2</sup> )	



This form is the approved form that must be used in accordance with section 10 of the *Building Act 1975* and sections 73 and 77 of the *Building Regulation 2021* (Design-specification certificate) stating that an aspect of building work or specification will, if installed or carried out as stated in this form, comply with the building assessment provisions.

Additional explanatory information is included in the Appendix at the end of this form.

<p><b>1. Property description</b></p> <p>This section need only be completed if details of street address and property description are applicable.</p> <p>E.g. in the case of (standard/generic) pool design/shell manufacture and/or patio and carport systems this section may not be applicable.</p> <p>The description must identify all land the subject of the application.</p> <p>The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice.</p> <p>If the plan is not registered by title, provide previous lot and plan details.</p>	<p>Street address <i>(include number, street, suburb/locality and postcode)</i></p> <p><b>4 Walker Street Gayndah 4625</b></p> <p>State <b>QLD</b> Postcode <b>4625</b></p> <p>Lot &amp; plan details <i>(attach list if necessary)</i></p> <p><b>Lot: 14, RP 32450</b></p> <p>Local government area the land is situated in</p> <p><b>North Burnett Regional Council</b></p>
<p><b>2. Description of aspect/s certified</b></p> <p>Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.</p>	<p><b>All structural aspects of elements described on the drawings listed below:</b></p> <ul style="list-style-type: none"> <li>- Slab &amp; Footings to suit S/M site classification</li> <li>- Steel framing elements of Portal Frame Gable Roof 7.000 x 6.000</li> </ul>
<p><b>3. Basis of certification</b></p> <p>Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon</p>	<p><b>Structural elements designed in accordance with the BCA:</b></p> <ul style="list-style-type: none"> <li><b>AS 1170.0, 1, 2 &amp; 4 Structural Design Actions</b></li> <li><b>AS 2870 - 2011 Residential Slabs &amp; Footings</b></li> <li><b>AS 3600 - 2018 Concrete Structures</b></li> <li><b>AS 4100 - 2020 Steel Structures</b></li> <li><b>AS 4600 - 2018 – Cold-Formed Steel Structures</b></li> <li><b>NCC 2022</b></li> </ul>



**4. Reference documentation for McHugh Steel Job No 33051504482147**

Clearly identify any relevant documentation, e.g. numbered structural engineering plans.

1264NT PG1 PG2 REV-15, SLAB PG1 REV-7, RADMUL-CYC PG1 & PG2 REV-0,  
EW1, QP1, RP1, MT1, FP1, BC1, SW1  
Site Check Assessment Code: mch23050067XQ

**5. Building certifier reference number and building development approval number**

Building certifier reference number

Building development application number (if available)

**6. Appointed competent person details**

Under Part 6 of the Building Regulation a person must be assessed as a competent for the type of work (design-specification) by the relevant building certifier.

Name (in full)

**John Towler**

Company Name (if applicable)

**McHugh Steel Pty Ltd**

Business phone number

**(07) 4153 6588**

Email address

**rob@mchughsteel.com.au**

Postal address

**17 Phoebe Crescent**

State

**QLD**

Postcode **4670**

Licence class or registration type (if applicable)

**Civil**

Licence or registration number (if applicable)

**N.P.E.R 131 7430 R.P.E.Q No: 4562**

Certificate No

**33051504482147.C01**

**Contact person**

**John Towler**

Mobile

**7. Signature of appointed competent person**

This certificate must be signed by the individual assessed and appointed by the building certifier as competent to give design-specification help.

Signature

Date

**31 May 2023**

**LOCAL GOVERNMENT USE ONLY**

Date received

Reference number/s



## Appendix – explanatory information

**IMPORTANT NOTE:** it is an offence for a competent person to give a building certifier a document, including this form, that the person knows or reasonably suspects, is false or misleading.

**Who can complete this certificate?** (section 10 of the Building Act 1975 (Building Act) and sections 73 and 77 of Building Regulation 2021 (BR 2021))

A building certifier can accept from a competent person (design-specification) a certificate stating that the competent person has assessed the building design or specification for the aspect of building work, and it will, if installed or carried out under the certificate, comply with the building assessment provisions, including any relevant standards and codes.

Schedule 10 of the BR 2021 defines building design or specification as any material, system, method of building or other thing related to the design of or specifications for building work.

When completing the certificate, a competent person is required under section 77 of the BR 2021 to include the basis for giving the certificate and state the extent to which the competent person has relied on tests, specifications, rules, standards, codes of practice or other publications.

**What is the purpose of this form?** (section 10 of the Building Act and sections 73 and 77 of the BR2021)

The information in this form informs the building certifier's decision making when they are assessing a building development application, issuing the building development approval for the building work the subject of the certificate (form) and when amending the building development approval due to the receipt of updated aspect information such as glazing or truss specifications or revised excavation drawings.

**Can a manufacturer or supplier give this Form 15?**

A building certifier can accept this form from a manufacturer or supplier who the certifier has decided is a competent person (design specification).

A manufacturer or supplier of building materials can give this form if they have undertaken the design component for the product. For example a window manufacturer who designs, constructs and supplies the windows to industry could give this form.

**Competent person** (section 10 of the Building Act 1975 and Part 6 of the BR 2021)

A building certifier must assess and decide to appoint an individual as a competent person before they can accept design-specification help.

When deciding whether a person can be a competent person, the building certifier must assess the person having regard to their experience, qualifications and skills and ensure the person holds a licence or registration if required.

The building certifier is required to keep detailed records about what was considered when appointing a competent person.

For further information about assessment of someone as a competent person refer to the **Guideline for the assessment of competent persons**.

**What is required if a manufacturer or supplier did not do the design work for the product?**

A manufacturer or supplier who is not part of the design process may give the construction contractor, builder, competent person or the building certifier evidence of suitability such as a product technical statement under Part A5 of the Building Code of Australia (BCA), for an aspect or material stating that it is compliant with the relevant reference documents in the BCA i.e. the applicable Australian Standard/s.

**What if there is not enough space for all the supporting material/documents?**

Items 2, 3 and 4 requires the competent person to clearly identify the extent of the assessment that was undertaken for aspect/s of work identified in this form.

For instance, there is provision for material such as specifications, standards, codes or other relevant publications to be referenced in the form. However, if the space in the form is not sufficient to accommodate all of this material, you can create and refer to additional material in an addendum or attachment to the form.

The form is also available in a Microsoft Word version, that you can download and edit to include additional material in the relevant parts of the form. Note that editing the form in the Microsoft Word version may cause the relevant boxes to expand and increase the length of the document. This is acceptable and does not change the approved form, provided the section text (description on the lefthand side of the page) is not altered.

**Appointed competent person (design or specification)** – (sections 34 and 36 of the BR 2021)

A building certifier must assess and decide to appoint an individual as a competent person before they can, as a competent person, give design-specification help. The building certifier is required to keep detailed records about what was considered when appointing a competent person.

A building certifier must be satisfied that an individual is competent to give the type of help having regard to the individual's experience, qualifications and skills and if required by law to hold a licence or registration, that the individual is appropriately registered or licensed.

An individual is appointed as competent to give design-specification help on or from a particular day.

For further information about assessment of someone as a competent person refer to the **Guideline for the assessment of competent persons**.

## PRIVACY NOTICE

The Department of Energy and Public Works is collecting personal information as required under the Building Act 1975. This information may be stored by the Department, and will be used for administration, compliance, statistical research and evaluation of building laws. Your personal information will be disclosed to other government agencies, local government authorities and third parties for purposes relating to administering and monitoring compliance with the Building Act 1975. Personal information will otherwise only be disclosed to third parties with your consent or unless authorised or required by law.



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# SITE SPECIFIC DESIGN CRITERIA ANALYSIS

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**Issued:**  
31/05/2023

**Prepared for:**  
D.J & L.K Doyle  
4 Walker Street  
Gayndah QLD 4625

**Supplier:**  
McHugh Steel

**Assessment Ref:**  
mcH23050067XQ

**Building Details:**

Span: 7  
Length: 6  
Avg. Height: 3.317

**Assesment basis:**

NCC 2022  
AS/NZS 1170.2:2021  
AS/NZS 1170.3:2003  
AS1170.4:2007  
AS/NZS 3500.3:2021

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**Certified by:**

John Towler





### Site Location:

Geographic coordinates of  
-25.61754,151.6118

The address provided for reference purpose only is:  
4 Walker Street Gayndah QLD 4625



## Executive Summary - Site Specific Analysis

The design analysis of the building has not been considered for each of the 4 orthogonal directions. Hence the maximum wind speed in any of the 8 cardinal directions has been used as the design wind speed. This is a conservative approach.

Each cardinal direction has been considered and the results are summarised below

Factor	N	NE	E	SE	S	SW	W	NW
Wind Region	B1							
Importance level (IL)	2							
Distance from Smoothed Coastline	N/A							
Regional Wind Speed (Vr)	57.0							
Climate Change Factor (Mc)	1							
Terrain Category (TC)	2.57	2.52	2.12	2.48	2.94	2.98	2.84	2.5
Terrain Category Multiplier (Mz)	0.86	0.87	0.90	0.87	0.83	0.83	0.84	0.87
Shielding Multiplier (Ms)	0.85	0.83	0.84	0.89	1	0.91	0.89	0.81
Topographic Multiplier (Mt)	1	1	1	1	1	1	1	1
Wind Direction Multiplier 1 (Md1)	0.75	0.75	0.85	0.9	0.95	0.95	0.95	0.9
Site specific design wind speed (Vsite1)	31.4	30.8	36.6	39.8	45.2	41	40.6	36.2

Wind Direction Multiplier 2 (Md2)	0.75	0.75	0.85	0.9	0.95	0.95	0.95	0.9
Site specific design wind speed (Vsite2)	31.4	30.8	36.6	39.8	45.2	41	40.6	36.2

Design Wind Speed (Vsite1)	45.2 m/s	for the resultant forces and overturning moments on the complete building and wind actions on major structural elements.
Design Wind Speed (Vsite2)	45.2 m/s	for cladding and immediate supporting structures (Purlins and Girts)
Snow Load	Nil	
Earthquake	0.09	Hazard Design Factor (Z)
Durability Alert	No	
Rainfall Intensity	232mm/hr	AEP 20 Years
Rainfall Intensity	301mm/hr	AEP 100 Years



# Compliance Statement

## Quote Details

Quote No: 33051504482147      Quote Date: 15 May 2023  
Customer: D.J & L.K Doyle  
Site: 4 Waker Street Gayndah 4625  
Site Check: <https://sitecheck.shedsafe.com.au/Engineering/WindRegion/3f3b7f10-562e-4ea2-ab5b-1fce401c6d57>

## Building Details

Building Style	Portal Frame Gable Roof-Open Domestic Design
Roof Style	Gable
Roof Pitch	10.00°
Length	6.000m
Width	7.000m
Height	2.700m
Bay Count	2
Bay Sizes	3.00m, 3.00m
Roller Door Notes	The shed has been designed for full internal pressure, Cpi = +0.7 & -0.65. Roller door strength is not critical to design.
Building Class	10A Domestic: Non-Isolated Shed or Carport
Building Importance Level	2
Design Wind Speed	45 m/s
Design Wind Pressure	1.215 kPa
Wind Speed Certificate	mcH23050067XQ

## Members

### Portals

Internal Portal PF2	C20019 Punched		
Knee Braces	N/A	Apex Braces	N/A

### Purlins / Girts

Side Wall Girt SWG1	TopHat 64mm 1.2 BMT	Side Wall Girt Spacing	0.300m, 1.500m
End Wall Girt EWG1	TopHat 64mm 1.0 BMT	End Wall Girt Spacing	0.300m, 1.500m, 2.700m
Roof Purlin P1	TopHat 64mm 1.2 BMT	Roof Purlin P2	TopHat 64mm 1.2 BMT
Roof Purlin Spacing	0.000m, 0.888m, 1.776m, 2.664m	Eave Purlin EP1	C15012 UnPunched

### Bracing

Side Wall Bracing	50x1.2 Strap Bracing	Roof Bracing	50x1.2 Strap Bracing
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### Doors / Windows

Doors & Windows	None
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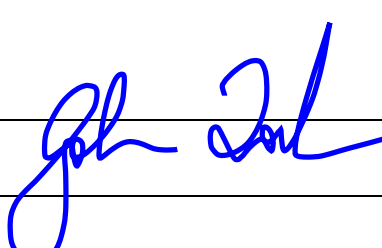
### Cladding

Roof Cladding	M-Deck Hi-Profile 0.42bmt 0.47 TCT	Roof Screws	Roof Screw - 12x50 Hi Rib - Colour
Wall Cladding	M-Deck Hi-Profile 0.42bmt 0.47 TCT	Wall Screws	Wall Screw - 10-16x16mm - Colour

### Barge / Gutter

Gutter	Square Gutter & 90mm PVC D-P	Down Pipe	90mm PVC Downpipe - 6m Length
Barge	120mm CustomSquare/3-B Ridge Hi-Rib Roof	Ridge Cap	397G-CO/TD 3 Brk .40 Ridge Cap C/B

I certify that the shed kit components listed below are structurally adequate for their purpose. This document takes precedence over selections from tables in the standard drawings.



DWG-MT1



# Bracing Calculations

## Quote Details

Quote No: 33051504482147

Quote Date: 15 May 2023

Customer: D.J & L.K Doyle

Site: 4 Waker Street Gayndah 4625

## Effective End Wall Area

3.77 m<sup>2</sup>

## Building Details

Building Style	Portal Frame Gable Roof-Open Domestic Design
Roof Style	Gable
Roof Cladding	M-Deck Hi-Profile 0.42bmt 0.47 TCT
Wall Cladding	M-Deck Hi-Profile 0.42bmt 0.47 TCT
Design Wind Speed Vzu	45 m/s
Design Wind Pressure Qu	1.2 kPa
Wind Speed Certificate	mcH23050067XQ

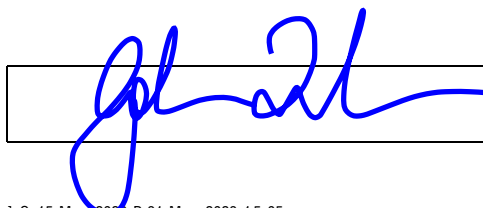
	Main Building	Left Awning	Right Awning	Total
Length	6.000m			
Width	7.000m			7.000m
Wall Height	2.700m			
Average Roof Height	3.009m			
Roof Pitch	10.00°			
Bay Count	2			
Flashed Rafter Depth	0.298m			
End Portal Column Width	0.204m			

## Drag

	Roof	Wall
Sheeting Drag Coefficient	0.04	0.04
Drag	0.00	0.00

## Main Building

Leeward Wall Cpe	0.50	Cross Wind Bracing Requirements - 181121.xlsx - CrossWind Enclosed - Leeward Wall Cpe
Windward Wall Cpe	0.70	Long Wind Bracing Calculator 140311.xlsx
Cpt	1.00	Restricted Internal Pressure: Gable Roof
Enclosed End Wall Area	3.8 m <sup>2</sup>	Restricted Internal Pressure: (Width / (Cos(DegToRad(RoofPitch)) * Flashed Rafter Depth)) + ((Height * End Portal Column Width) * WallCount)
Effective End Wall Area	3.8 m <sup>2</sup>	Enclosed End Wall Area
End Wall Force	4.6 m <sup>2</sup>	Effective End Wall Area * Cpt * Qu

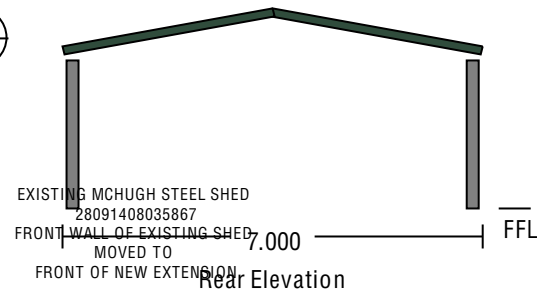
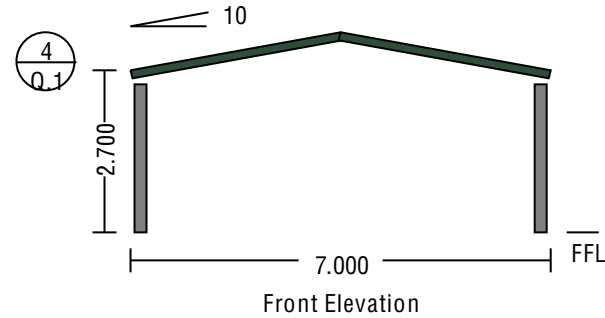
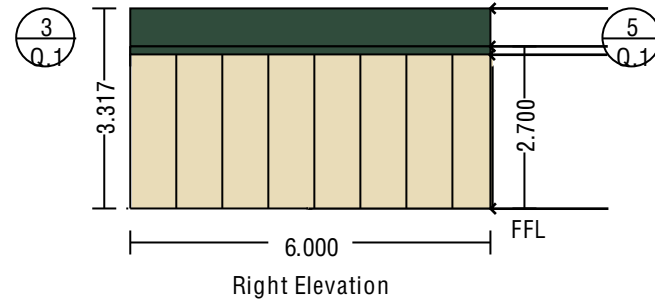
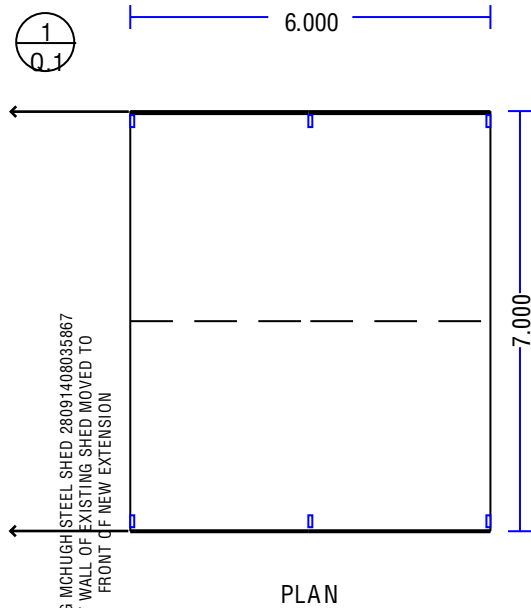


DWG- BC1



Wall Drag Force	0.00 kN	Length Factor = 0. Result = 0
Roof Drag Force	0.00 kN	Length Factor = 0. Result = 0
Side Wall Bracing Force Requirement	4.58 kN	Roof Drag Force + Wall Drag Force + End Wall Force
Side Wall Area	2.1 m²	Length * Height
End Wall Bracing Force Requirement	1.20 kN	





#### CLIENT

Portal Frame Gable Roof-Open Domestic Design Vdes=39 m/s (Reg-B) 7.000 x 6.000 x 2.700

At: 4 Walker Street Gayndah 4625

For: D.J & L.K Doyle

Approved by:

Date:

#### DRAWING

QP1

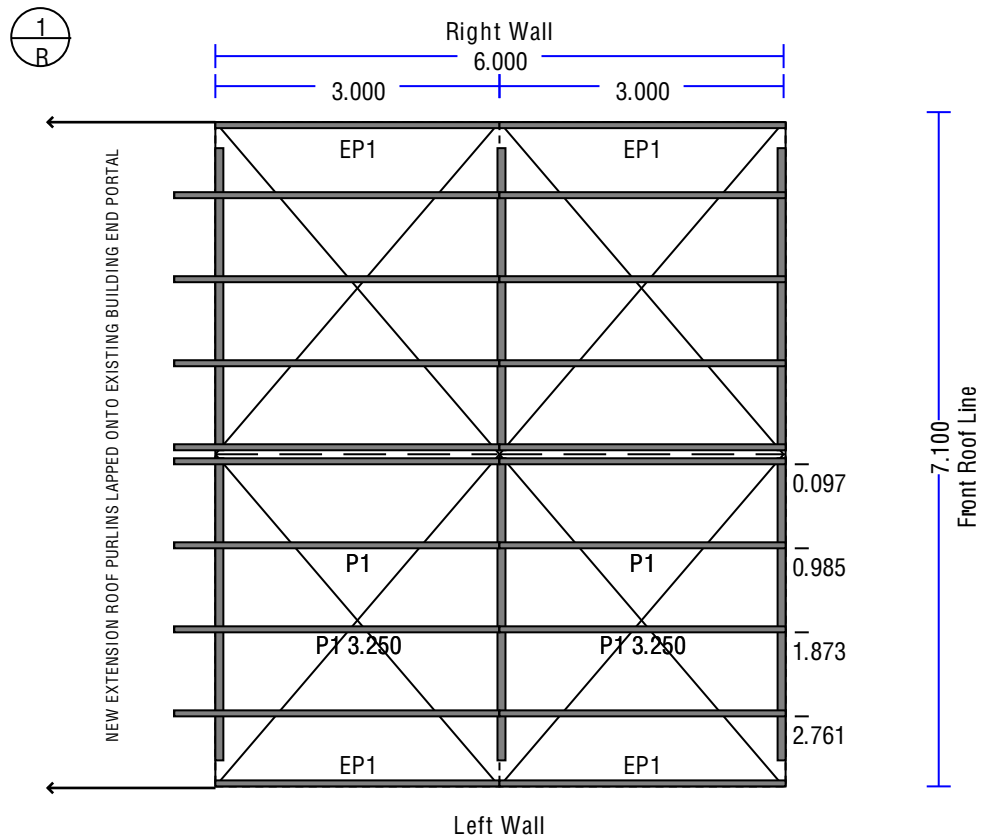
Ref: 33051504482147

NTS

ARCHITECTURAL DRAWINGS



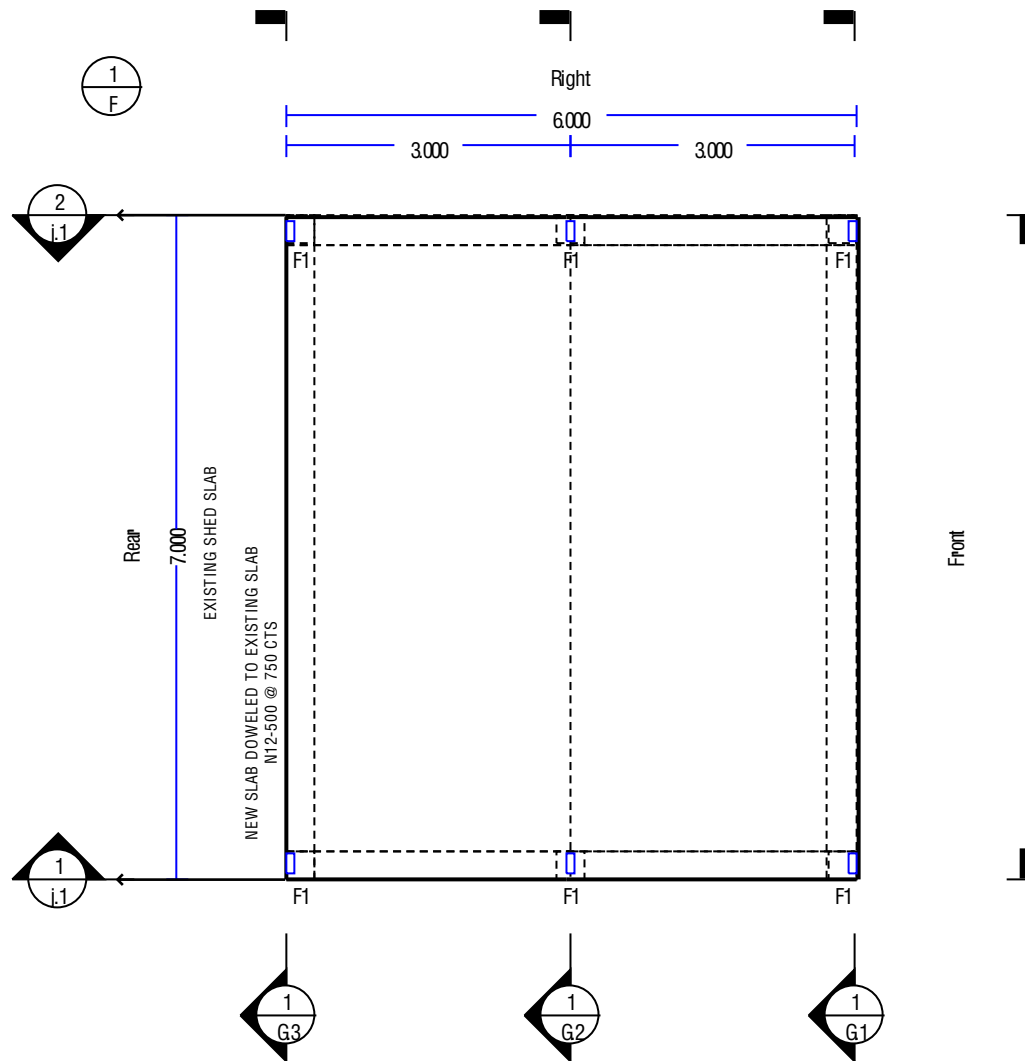
Roof Bracing
Type: 50x1.2 Strap Bracing



CLIENT
Portal Frame Gable Roof-Open Domestic Design Vdes=39 m/s (Reg-B) 7.000 x 6.000 x 2.700
At: 4 Walker Street Gayndah 4625
For: D.J & L.K Doyle
Approved by: _____ Date: _____

DRAWING		
RP1	Ref: 33051504482147	NTS
Roof Purlin View		





Refer to standard drawing SLAB

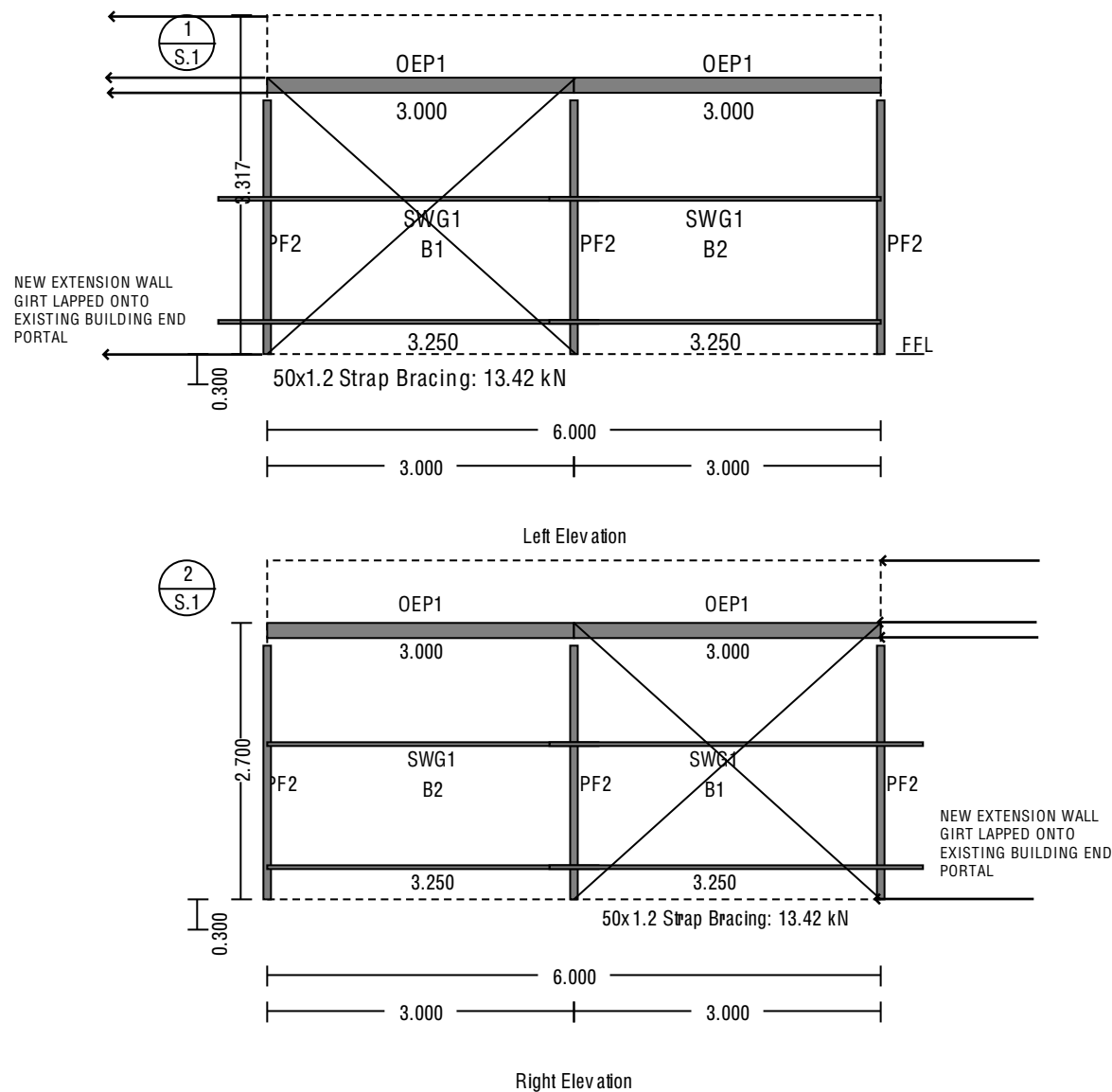


CLIENT	
Portal Frame Gable Roof-Open Domestic Design Vdes=39 m/s (Reg-B) 7,000 x 6,000 x 2,700	
At: 4 Walker Street Gayndah 4625	
For: D.J & L.K Doyle	
Approved by:	Date:

DRAWING		
FP1	Rd: 3305150442147	NTS
Footing View		



Long Wind Bracing
Bracing Required: 4.58 kN
Bracing Designed: 26.84 kN

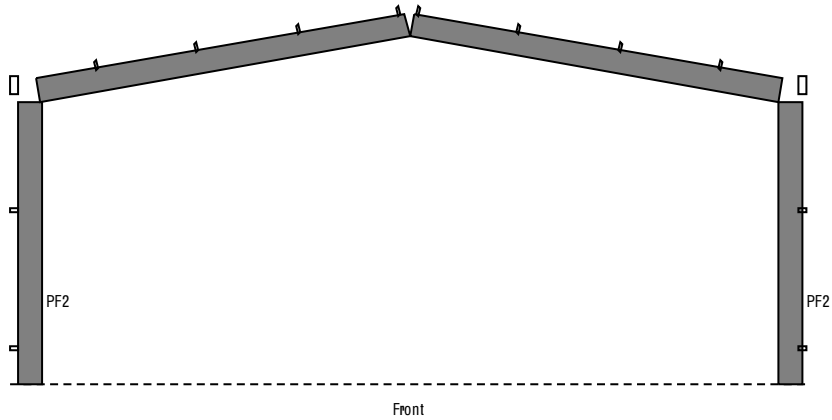


CLIENT
Portal Frame Gable Roof-Open Domestic Design Vdes=39 m/s (Reg-B) 7.000 x 6.000 x 2.700
At: 4 Walker Street Gayndah 4625
For: D.J & L.K Doyle
Approved by: _____ Date: _____

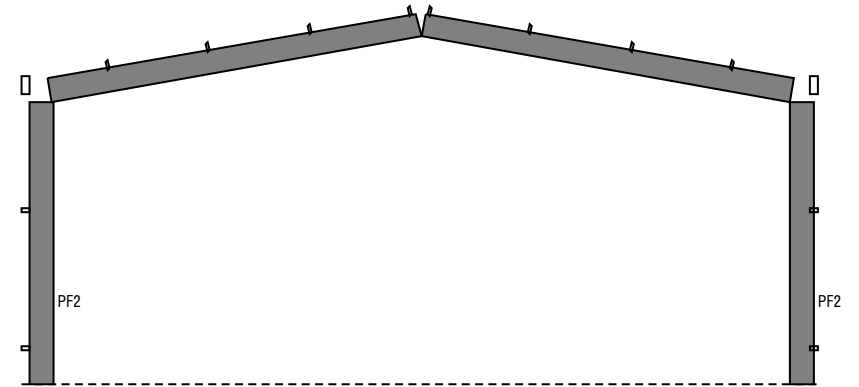
DRAWING		
SW1	Ref: 33051504482147	NTS
Side Wall		



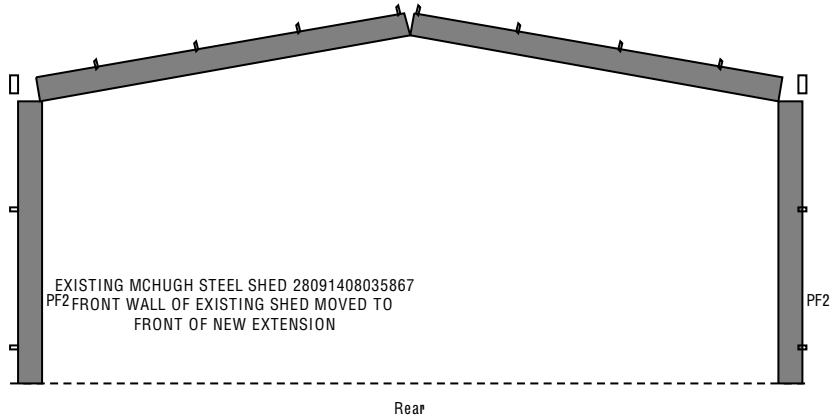
1  
E.1



1  
E.2



1  
E.3



EXISTING MCHUGH STEEL SHED 28091408035867  
PF2 FRONT WALL OF EXISTING SHED MOVED TO  
FRONT OF NEW EXTENSION



#### CLIENT

Portal Frame Gable Roof-Open Domestic Design Vdes=39 m/s (Reg-B) 7.000 x 6.000 x 2.700

At: 4 Walker Street Gayndah 4625

For: D.J & L.K Doyle

Approved by:

Date:

#### DRAWING

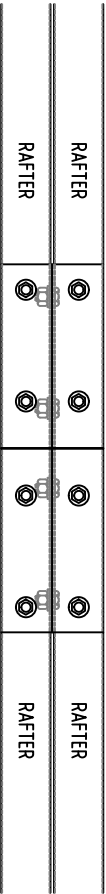
EW1

Ref: 33051504482147

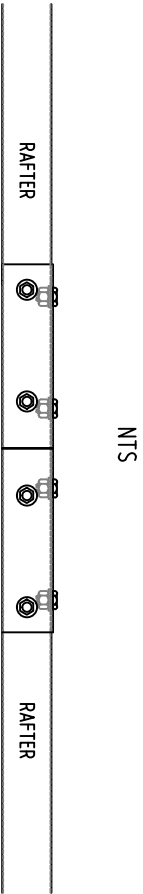
NTS

End Wall Frame

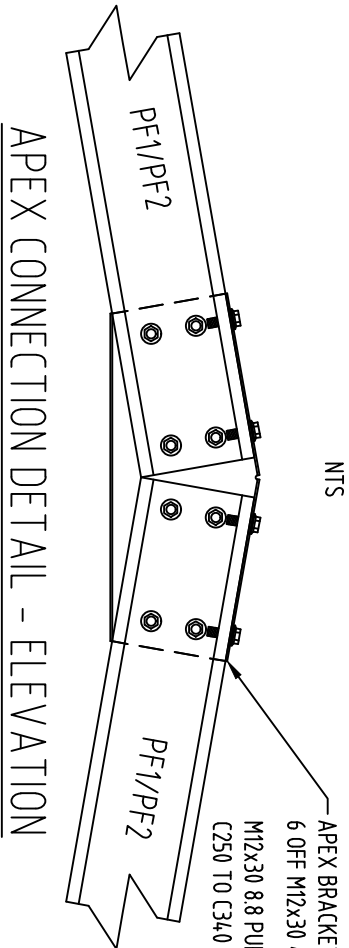




## APEX CONNECTION DETAIL, PLAN VIEW - DOUBLE



APEX BRACKET THICKNESS	
COLUMN BRACKET SIZE	THICKNESS
100	1.9MM
150	2.4MM
200	2.4MM
250	3.0MM
300	3.0MM
340	3.0MM
350	3.0MM
400	3.0MM



**GENERAL NOTES:**  
This engineering is suitable for building class 6, 7, 8 or 10 structures.  
All dimensions are in millimetres and to be checked prior to commencement of work with any discrepancies being referred to the supplier.

**WIND LOADING:**  
Wind loadings in accordance with AS1170.2-2011 (Building Imp Cat 2)

**CLADDING & FRAMING NOTES:**  
Roof cladding is 5 rib Trim profile or Corrugated 0.47 TCT.  
Wall cladding is 5 rib Trim profile or Corrugated 0.42 TCT.  
Minimum roof pitch is 5 degrees. Maximum roof pitch is 25 degrees.

**BRACING:**  
1 off 30 x 10mm G500 Metal Strap bracing to be provided in every roof bay, including any attached awning unless notified otherwise. To be secured with 1 off 12-14x20 Tek screws at each purlin and 3 off 12-14x20 Tek screws at each end.

**STEEL WORK:**  
Relevant Australian codes to be adhered to are: AS4100 Steel Structures Code (limited states design).  
AS4600 Cold Formed Steel Structures Code (limited states design).  
AS3566 Screws – Self Drilling – Building & Construction.

**TEK SCREWS:**  
Screw length x No. per sheet  
Roof Screws (Hex + Neo) 14-10  
Type Corrugated 42x5  
Trinclud 50x5  
Comments up to 59m/s  
Wall Screws: 10-16x16 hex bare, 4 fasteners per sheet each girt.  
Frame Screws: 12-14x20 hex tek bare, 3 fasteners per end and intersection.  
Tek screws must be applied in accordance with the manufactures instruction – no responsibility taken for over stressing of screws.

McHUGH STEEL

Sheds and Roofing for You!

Consulting Engineer: JOHN TOWLER (RPEQ 4562)

Phone: (07) 4153 6588 Fax: (07) 4153 6981

Email: rob@mchughsteel.com.au

Consulting Engineer: JOHN TOWLER (RPEQ 4562)

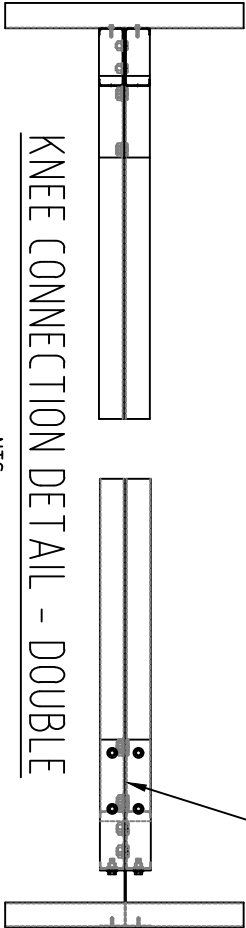
15	NOTES & DETAILS UPDATED
14	NO CLEATS FOR Z100 NOTE ON PG2
13	REVISED TO SUIT NEW DESIGN
12	REMOVE SLAB & MULLION DETAILS
0	ORIGINAL RELEASE

	JR	01/12/16
NN PG2	JR	10/05/16
N	JR	04/02/16
TALLS	JR	10/12/15
	CB	12/06/14
	BY	DATE

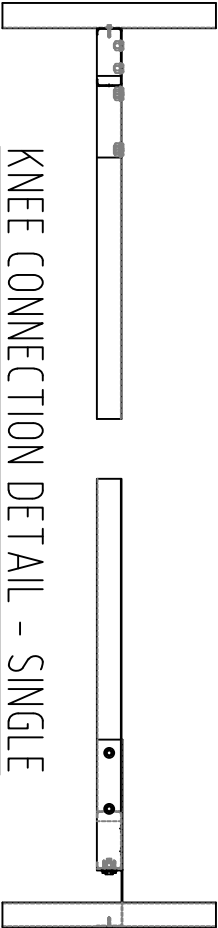
OTHER INFORMATION:	
THIS DETAIL PAGE IS TO BE USED IN CONJUNCTION WITH ALL DRAWINGS SPECIFIED: DWGNT1 & PROFILE INFO FORM	
DRAWN: CODY BALSDON	A3

	TITLE: NOTES & CONNECTION DETAIL RIVERA DESIGNS GABLE PORCH
	DRAWING NUMBER: DWG1264NT-PG1

S FOR			
ITAL FRAME SHEDS, NO TIES			

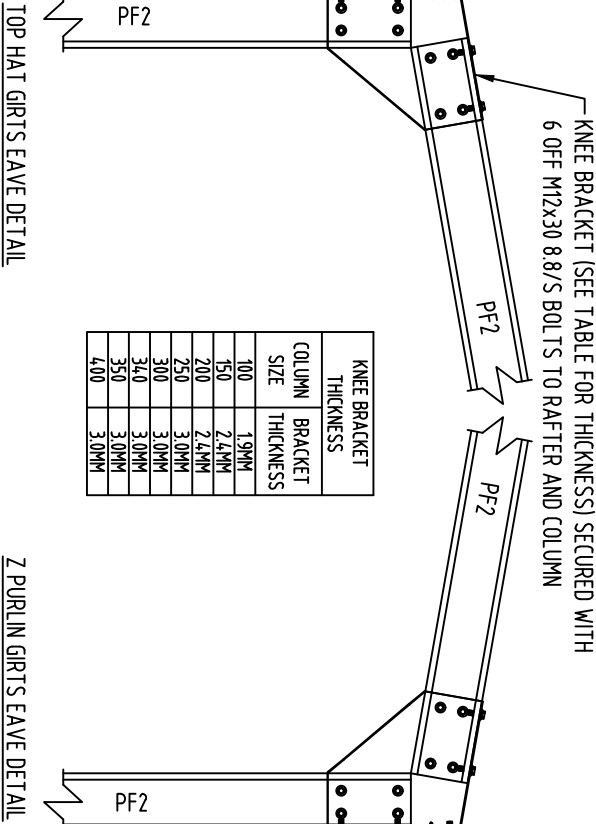


## KNEE CONNECTION DETAIL - DOUBLE



## KNEE CONNECTION DETAIL - SINGLE

KNEE BRACKET THICKNESS	
COLUMN BRACKET SIZE	THICKNESS
100	1.9MM
150	2.4MM
200	2.4MM
250	3.0MM
300	3.0MM
340	3.0MM
350	3.0MM
400	3.0MM

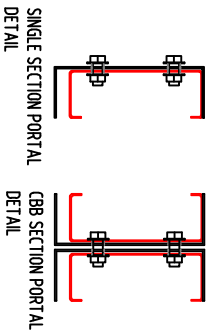


TOP HAT GIRTS EAVE DETAIL

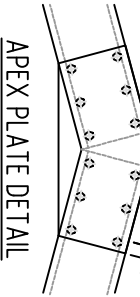
Z PURLIN GIRTS EAVE DETAIL

## KNEE CONNECTION DETAIL

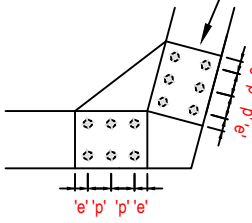
NOTE: WASHERS REQUIRED ALL BOLTS



GAB SECTION PORTAL DETAIL

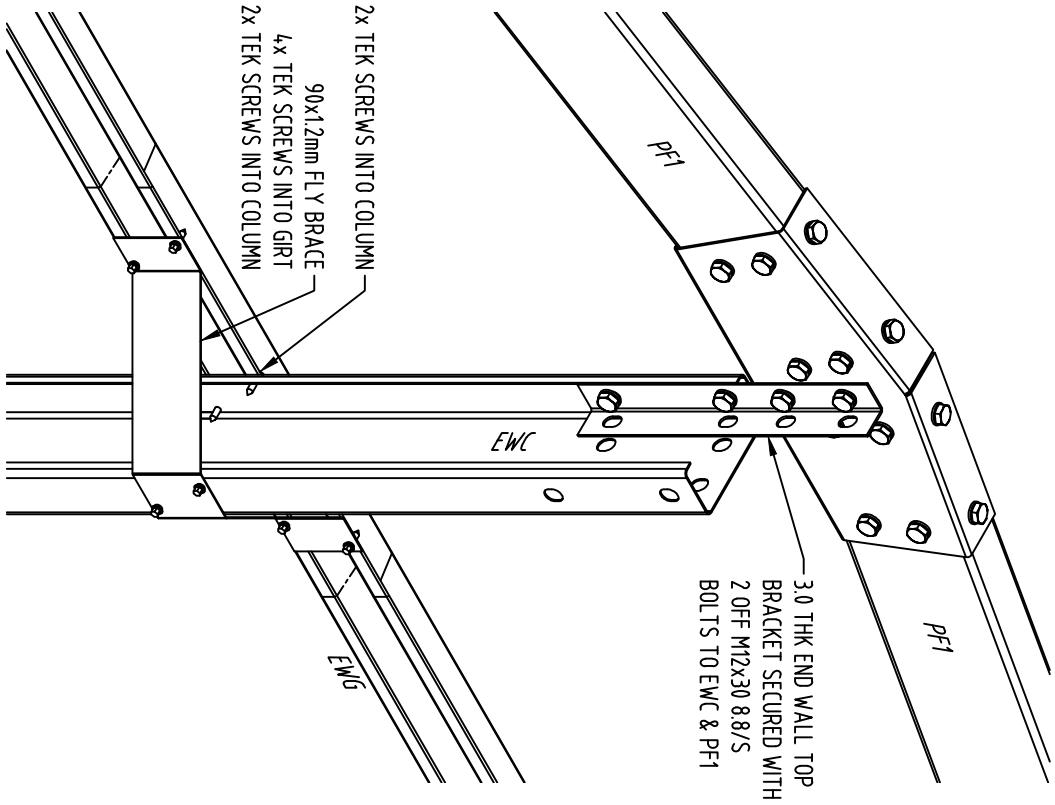


APEX PLATE DETAIL

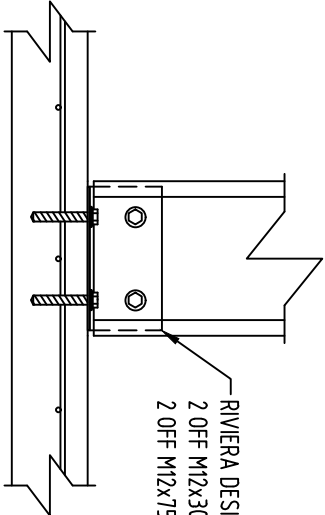


KNEE PLATE DETAIL

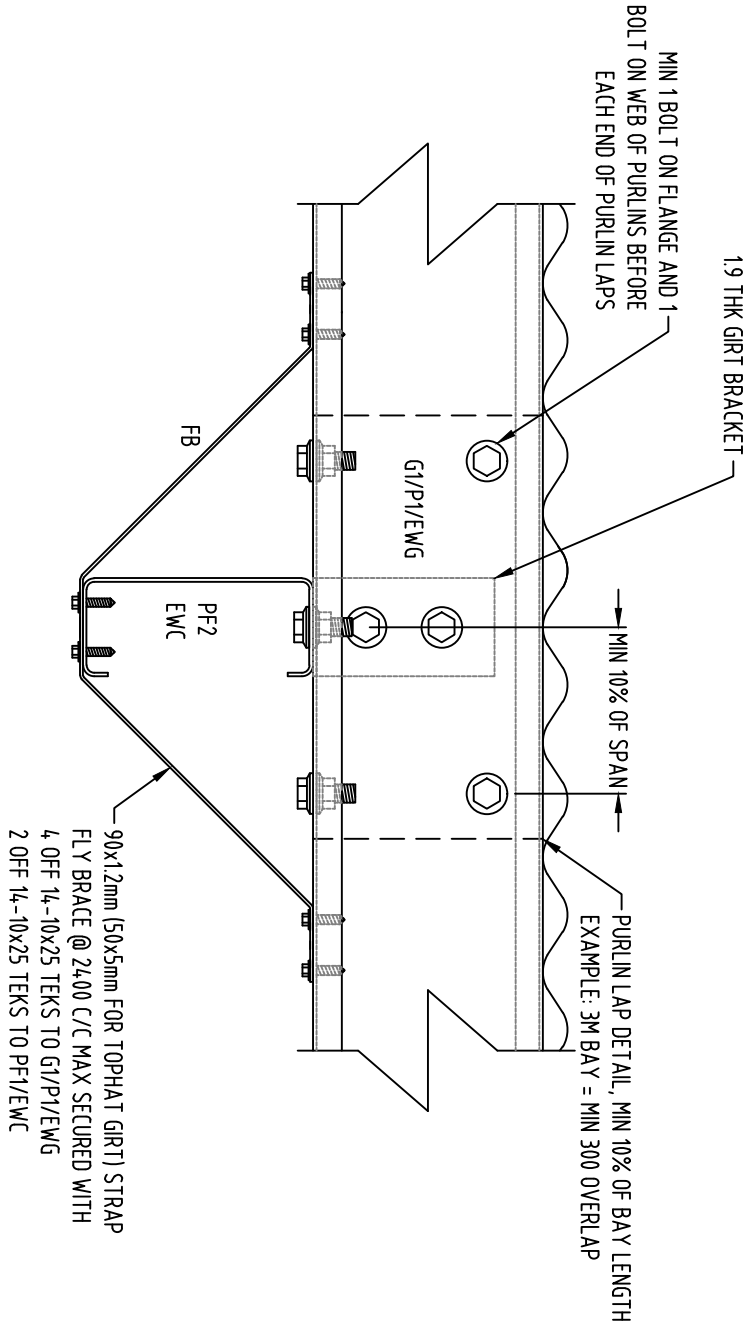




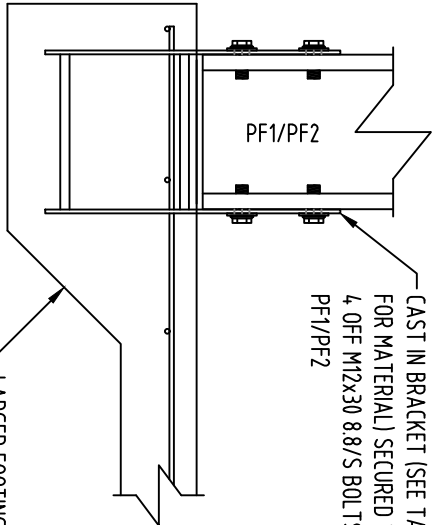
END WALL COLUMN DETAILS



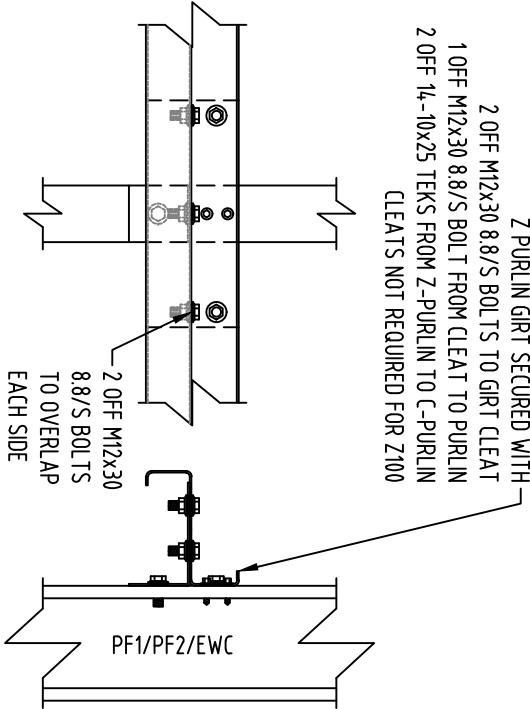
RIVIERA DESIGNS (3.0 THK) HOLD DOWN BRACKET SECURED WITH  
2 OFF M12x30 8/8/S BOLTS TO WEB OF CLAD/UNCLAD/EWC COLUMN AND  
2 OFF M12x75 SCREWBOLTS TO SLAB AT EACH COLUMN



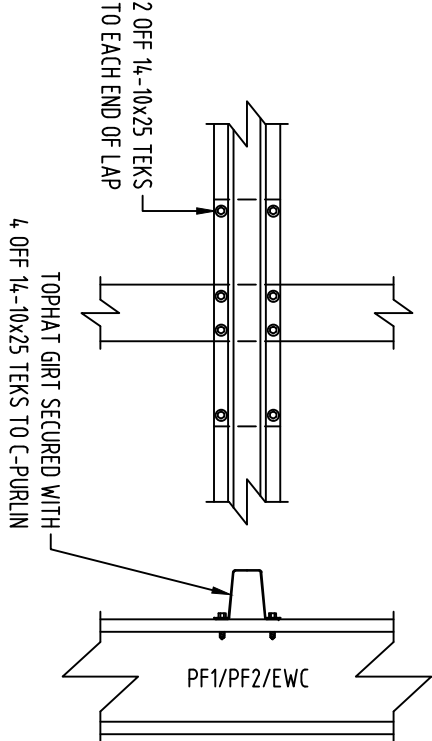
FLY BRACE & PURLIN  
OVERLAP PLAN VIEW



CAST-IN-BRACKET MATERIAL			
COLUMN SIZE	BRACKET WIDTH	BRACKET THICKNESS	ROD
100	50	5	M12
150	65	5	M12
200	75	5	M12
250	75	5	M12
300	100	5	M12
340	100	5	M12
350	75	5	M12
400	100	5	M12



Z PURLIN/GIRT CONNECTION  
& OVERLAP SIDE VIEW



TYPICAL CLAD/UNCLAD/EWC COLUMN  
BOLT DOWN DETAIL

TYPICAL CAST IN HOLD DOWN DETAIL

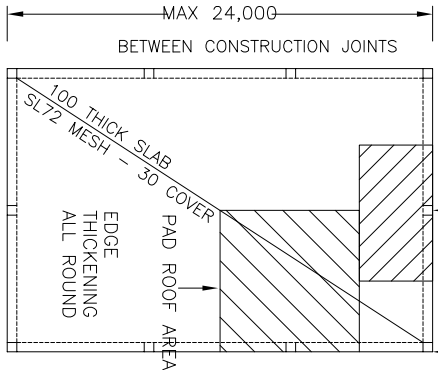
TOP HAT GIRT/PURLIN CONNECTION  
& OVERLAP SIDE VIEW

NOTE: REFER TO DWGFP1(FOOTING) FOR LOCATIONS OF EDGEBEAMS AND FOOTINGS

<div>McHUGH STEEL</div> <div>Sheds and Roofing for You!</div>		Consulting Engineer: JOHN TOWLER (RPEQ 4562)		<div>John Towler</div>							
Phone: (07) 4153 6588	Fax: (07) 4153 6981	15	NOTES & DETAILS UPDATED	JR	01/12/16	OTHER INFORMATION: THIS DETAIL PAGE IS TO BE USED IN CONJUNCTION WITH ALL DRAWINGS SPECIFIED: DWG11 & PROFILE INFO FORM		TITLE: CONNECTION DETAILS FOR RIVIERA DESIGNS GABLE PORTAL FRAME SHEDS, NO TIES			
Email: rob@mchughsteel.com.au		14	NO CLEATS FOR Z100 NOTE ON PG2	JR	10/05/16						
		13	REVISED TO SUIT NEW DESIGN	JR	04/02/16						
		12	REMOVE SLAB & MULLION DETAILS	JR	10/12/15						
		0	ORIGINAL RELEASE	CB	12/06/14	DRAWN: CODY BALSDON		A3	DRAWING NUMBER: DWG1264NT-PG2	DATE: 12/06/2014	REV 15
		REV	WORK DONE	BY	DATE						



DOMESTIC OPTION



PIER FOOTINGS UNDER ALL COLUMNS AND MULLIONS AS REQUIRED

DOMESTIC SHED SLABS

SUITABLE FOR CLASS 10g SHEDS IN FIRM STABLE GROUND.  
MAX SHRINKAGE – CLASS M & M-D.  
FOR CLASS H AND H-D SOILS INCREASE SLAB DEPTH TO 110mm AND INSTALL 300Ø MASS CONCRETE PIERS UNDER EACH PAD FOOTING TO 1500 BELOW SURFACE.

SITE WIND SPEED (m/s)	Qu (kPa)
30	0.50
33	0.60
37	0.78
41	0.95
45	1.15
50	1.45
55	1.78
61	2.20
66	2.55

SLAB NOTES:

- USERS SHALL CALCULATE THE REQUIRED TIE DOWN STRENGTH FOR EACH COLUMN LOCATION AND HENCE THE REQUIRED PIER DEPTH "D" TO BE INSTALLED IF NECESSARY
- ONLY THE PIER DEPTH "D" SHALL CONTRIBUTE TO SKIN FRICTION TIE DOWN.
- SLAB TIE DOWN RESISTANCE FROM DEAD WEIGHT IS NOTED ON CROSS SECTIONS MINIMUM 28 DAYS,CONCRETE STRENGTH TO BE 25 MPa.
- MAXIMUM AGGREGATE STONE SIZE –20mm.
- DESIGN SLUMP TO BE 100mm ± 10mm.
- EDGE BEAM TO BE FOUNDED ON NATURAL SOIL OR CONTROL COMPACTED FILL.
- CONCRETE ON CUT/FILL SITES AND APPLICABLE PROBLEM SOILS MAY USE MASS CONCRETE PIERS PLACED THROUGH FILL 200mm INTO NATURAL SOIL.
- SOIL CONDITIONS ARE ASSUMED TO BE CLASS M OR BETTER FOR STANDARD SLAB UNO. TABLE OPTIONS FOR CLASS H, HD & E ARE ALSO PROVIDED. SLAB AND EDGE BEAMS SHALL BE POURED IN ONE CONTINUES OPERATION UNO.
- CONCRETE IS TO BE COMPACTED BY VIBRATION OR OTHER MECHANICAL MEANS. SAW CUTTING OF CRACK CONTROL JOINTS SHALL BE CARRIED OUT WITHIN 24hrs OF THE PLACING OPERATION.
- A SINGLE LAYER OF 200 MICRON PVC SHEETING SHALL BE PLACED UNDER THE SLAB. 50mm OF CRUSHER DUST IS RECOMMENDED FOR A LEVEL EVEN COMPACTED SURFACE.
- CURING OF SLAB SURFACE AGAINST EXCESSIVE MOISTURE LOSS SHALL BE CARRIED OUT FOR 7 DAYS AFTER PLACING. ENGINEER APPROVED METHODS ONLY.
- SLABS PLACED WIDER THAN 15m SPAN SHALL HAVE SL92 SLAB MESH AND 150 Thk SLAB AS STANDARD.
- ALL SLABS PLACED LONGER THAN 24m (ONE POUR) SHALL HAVE SL92 SLAB MESH AS STANDARD
- MAXIMUM LENGTH BETWEEN CONNECTION JOINTS OF SLAB.  
100mm Thk – 18m  
150mm Thk – 30m
- INDUSTRIAL SLAB DESIGNS ARE A GUIDE ONLY WITH MINIMUM DESIGN FOR WHEEL AND POST LOADS. ALL INDUSTRIAL SLAB DESIGNS SHOULD BE REFERRED TO AN RPEQ ENGINEER FOR A SITE SPECIFIC DESIGN

SL72 MESH – 30mm COVER UNO

SLAB TIE DOWN RESISTANCE  
- 100mm SLAB - 5kN per Col  
110mm SLAB - 6kN per Col

PIER TIE DOWN RESISTANCE FOR DEPTH "D"  
Ø = 300mm - 20kN/m  
Ø = 450mm - 30kN/m  
Ø = 600mm - 40kN/m

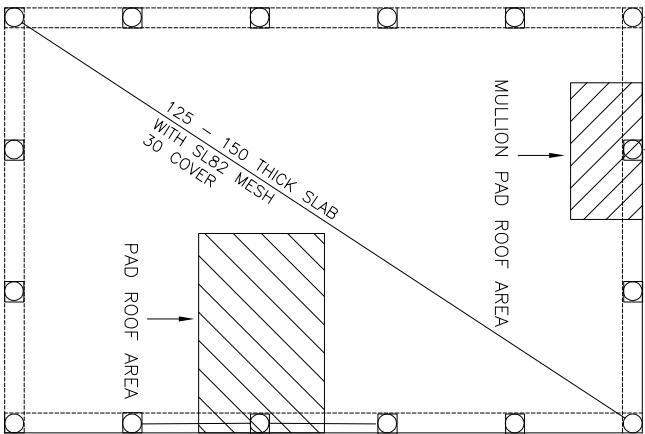
PIER REINFORCING FOR  
Ø = 300mm - 4 x Y12  
Ø = 450mm - 4 x Y16  
Ø = 600mm - 6 x Y16

TIE DOWN REQUIRED

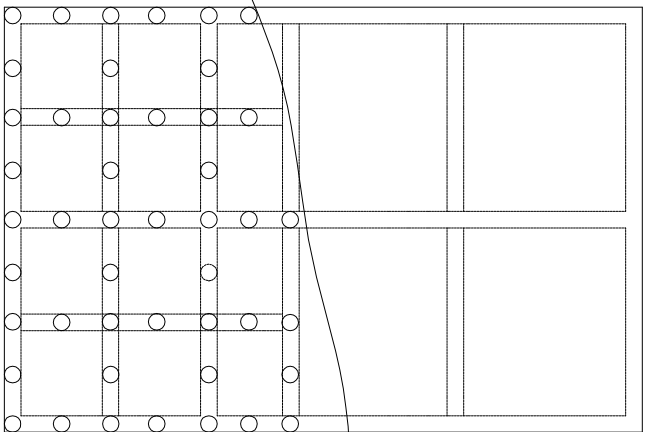
DOMESTIC & INDUSTRIAL SHED SLABS

NOTE: PAD ROOF AREA IS THE ROOFED AREA THAT THE PAD IS HOLDING FOR TIE DOWN. REFER INDICATIVE SKETCHES.  
PAD ROOF AREA = 1/2 SPAN ? BAY WIDTH. (AS SHOWN)  
MULLION ROOF AREA = 1/2 BAY ? MULLION SPACING. (AS SHOWN)  
TIE DOWN REQ (kN) = ROOF AREA (m²) \* Qu (kPa) \* Cpe  
Cpe - ASSUMED = 0.9 Qu - REFER TABLE

INDUSTRIAL OPTION



CUT & FILL



EDGE BEAM AND SLAB SCHEDULE

SITE CLASS	DEPTH	SLAB MESH	TRENCH MESH	MAX INTERNAL BEAM SPACING "X"	PIERS
A	300	SL82	3-8TM	-	-
S	300	SL82	3-8TM	-	-
M	300	SL82	3-11TM	-	-
M-D	300	SL82	3-11TM	8.0m	-
H	400	SL82	3-11TM	7.0m	2.5m Cts
H-D	400	SL82	3-11TM	6.0m	2.5m Cts
E	500	SL82	3x Y12TM	5.0m	2.5m Cts
P	500	SL82	3x Y12TM	5.0m	2.5m Cts

CLASS E & P SITES SHOULD BE REFERRED TO AN ENGINEER FOR CONFIRMATION  
CLASS P DESIGN CAN BE USED FOR CUT/FILL SITES.

REINFORCED INDUSTRIAL

SLAB DETAIL

5kPa SLAB – NORMAL GROUND PREP.  
REFER NOTES  
10kPa SLAB – SEE BELOW.  
COMPACT SURFACE UNDER SLAB AND PLACE 100mm CRUSHER DUST (OR SIMILAR) COMPACTED AND LEVELED

Member	Lop	Member	Lop
Y12	350	F81M MESH	425 END 225 SIDE

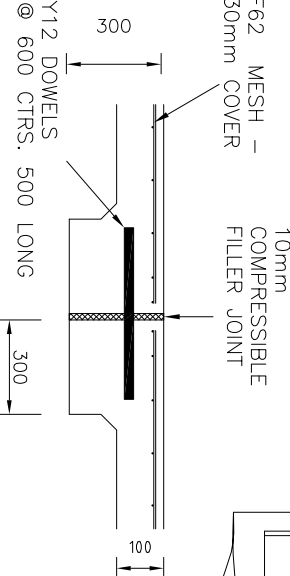
ENSURE OUTER BAR OF MESH IS WITHIN 20-30mm OF SLAB EDGE.  
FOR BOLT SET CLOSE TO SLAB EDGE. A 12mm TRIMMER BAR IS RECOMMENDED.

VARIES – REFER TABLES  
OPTIONS – 100mm, 110mm  
125mm & 150mm

REINFORCED EDGE BEAM SLAB DESIGN

SUITABLE FOR ALL SHEDS IN FIRM STABLE GROUND AND CUT TO FILL SITES.  
FOR INDUSTRIAL SLABS INCREASE SLAB DEPTH TO 150mm AND MESH SIZE TO SL82.  
THIS DESIGN ALSO MAY BE SUITABLE FOR CLASS P "PROBLEM SITES". REFER TO ENGINEER.

CONSTRUCTION JOINT DETAIL



Consulting Engineer: JOHN TOWLER (RPEQ 4562)

**McHUGH STEEL**

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Phone: (07) 4153 6588 Fax: (07) 4153 6981

Email: rob@mchughsteel.com.au

*John Towler*

7	NEW PIER DESIGN & INDUSTRIAL INCLUSION	CB	23/08/17
6	ALL DETAILS REVISED	JR	13/02/17
5	SLAB MESH MIN SL62 NOW SL72	JR	10/02/17
4	PIER DETAIL MOVED TO SEPARATE DRAWING	JR	18/05/16
0	ORIGINAL RELEASE	JR	15/12/15
REV	WORK DONE	BY	DATE

OTHER INFORMATION:

WIND DESIGN:

DRAWN: C. BALSDON

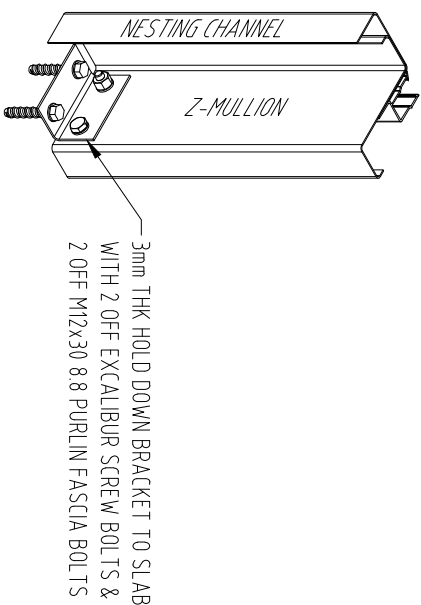
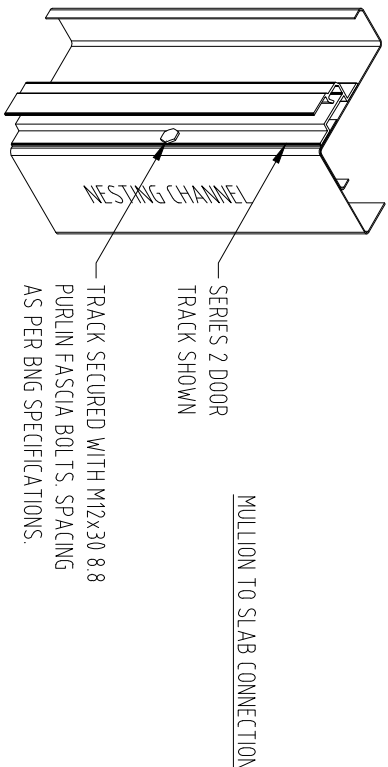
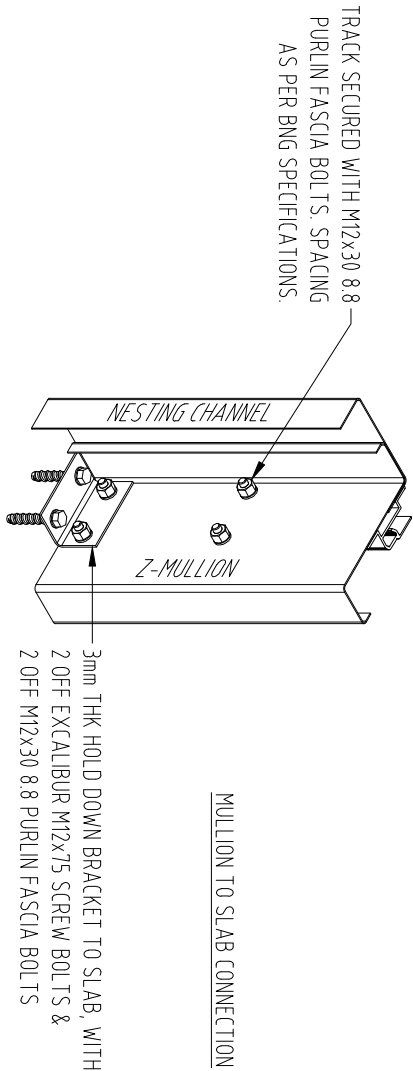
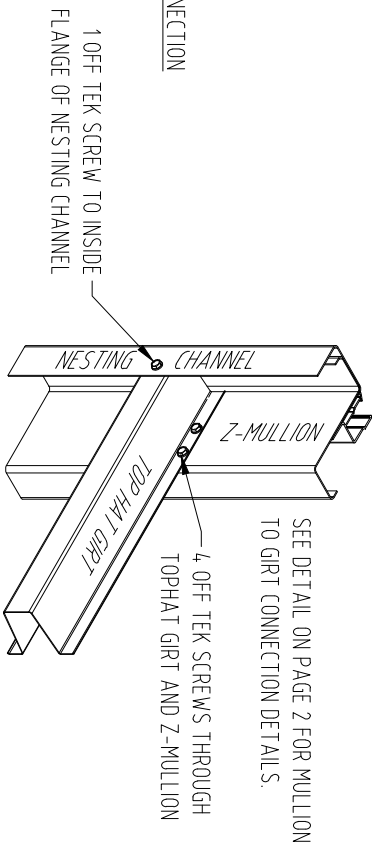
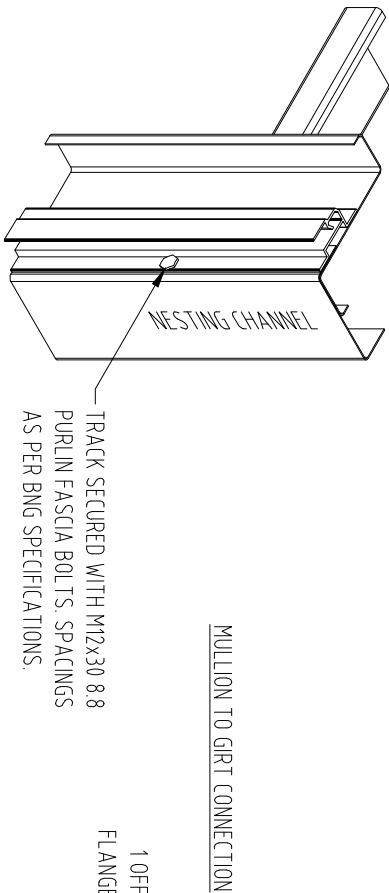
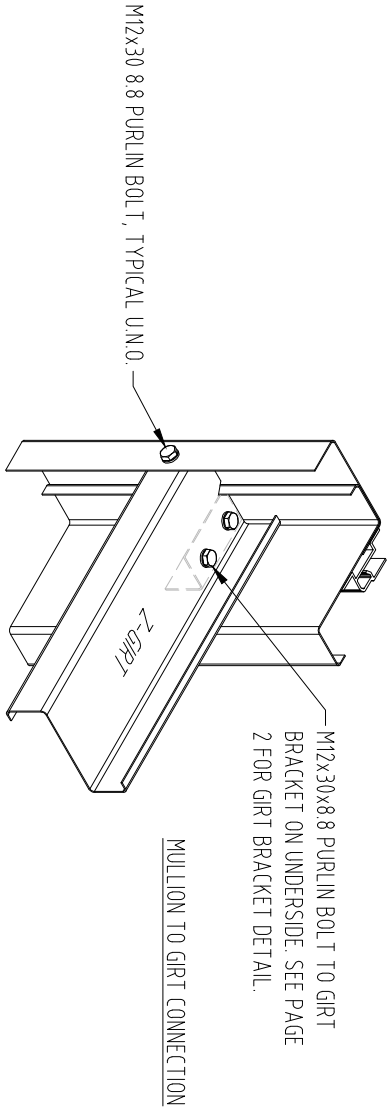
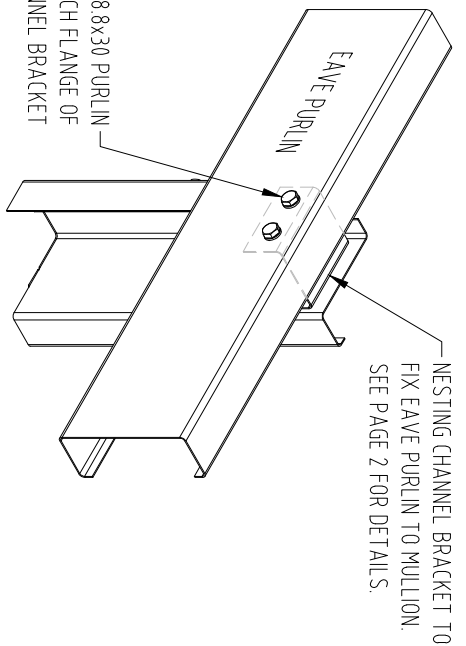
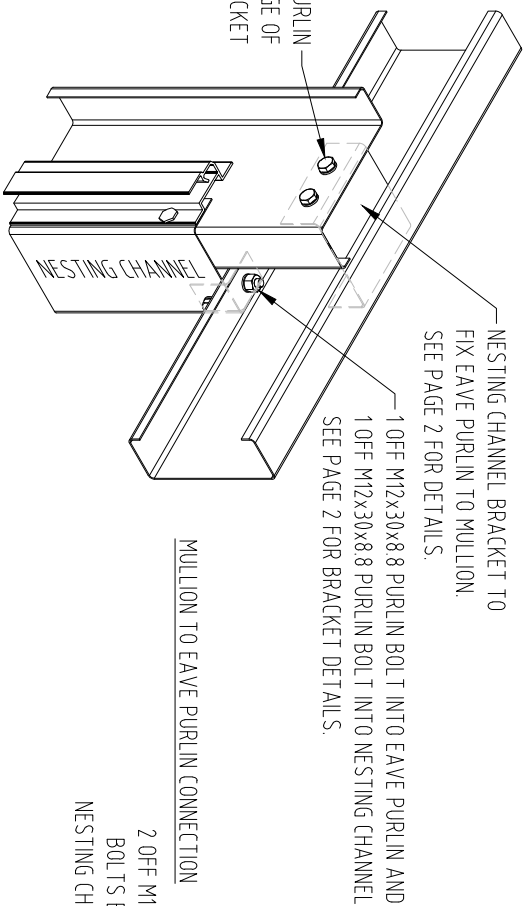
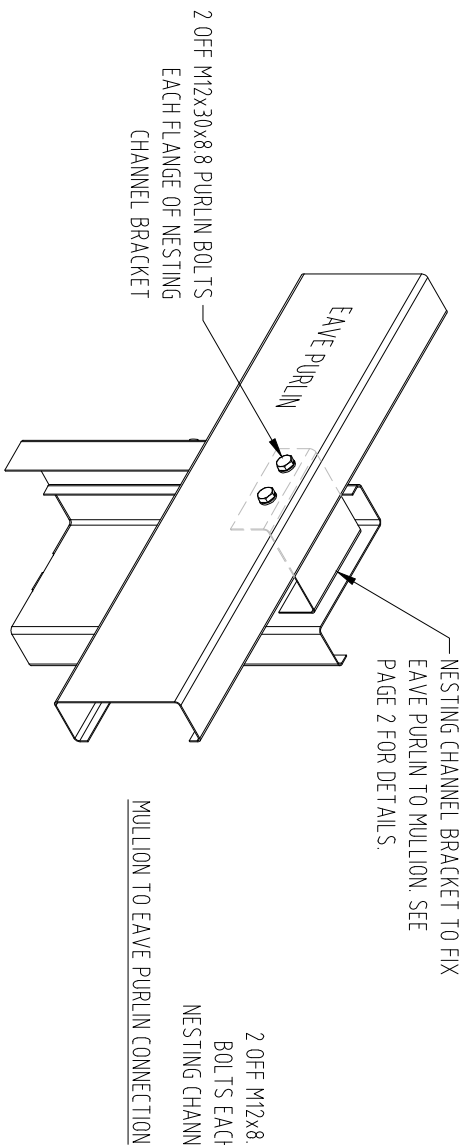
TITLE: STANDARD DOMESTIC & INDUSTRIAL SLAB DETAIL

DRAWING NUMBER: DWG-SLAB

DATE: 23/08/2015

REV 7





## Z-MULLION WITH Z-GIRT OUTSIDE ISOMETRIC

SCALE 1:10 AT A3

## Z-MULLION WITH Z-GIRT INSIDE ISOMETRIC


SCALE 1:10 AT A3

## Z-MULLION WITH TOP HAT GIRT INSIDE ISOMETRIC

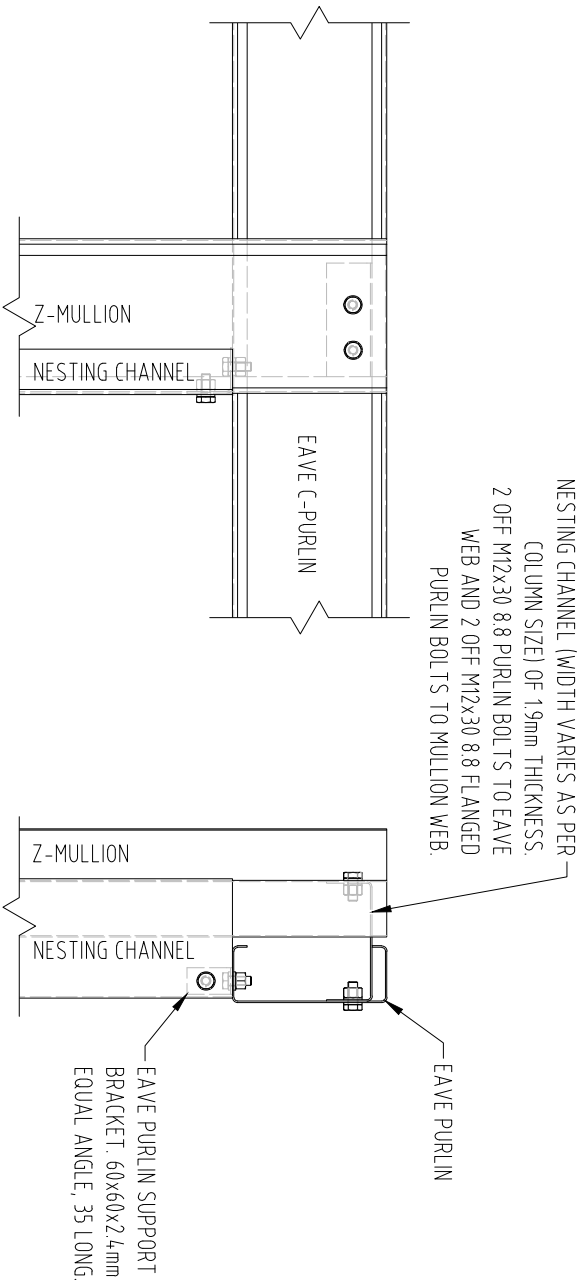
SCALE 1:10 AT A3

NOTE: FOR MULLION SIZES REFER TO DWG-MT1 MEMBER TABLE

SEE PAGE 2 (RADMUL-CYC-PG2) FOR ALL DETAIL

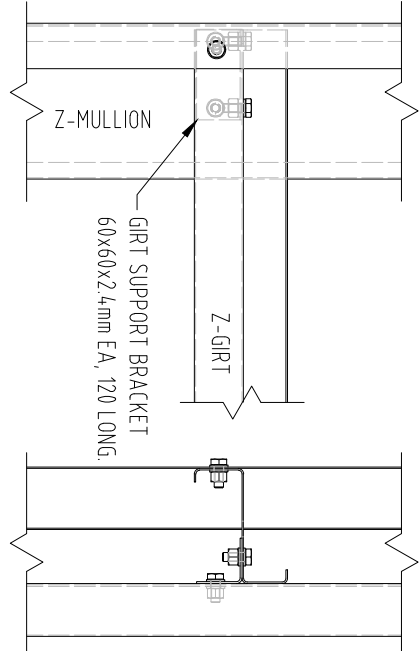
<div>McHUGH STEEL</div> <div>Sheds and Roofing for You!</div> <div>Phone: (07) 4153 6588    Fax: (07) 4153 6981</div> <div>Email: rob@mchughsteel.com.au</div>				<div>Consulting Engineer:    JOHN TOWLER (RPEQ 4562)</div> <div></div>			
				OTHER INFORMATION:		TITLE:    RAD MULLION DETAILS ISOMETRIC GENERAL ASSEMBLY	
				WIND DESIGN:			
0	Original Release	JR	04/02/16	DRAWN: J. RADLOFF	A3	DRAWING NUMBER: RADMUL-CYC-PG1	
REV	WORK DONE	BY	DATE			DATE: 04/02/2016	REV 0





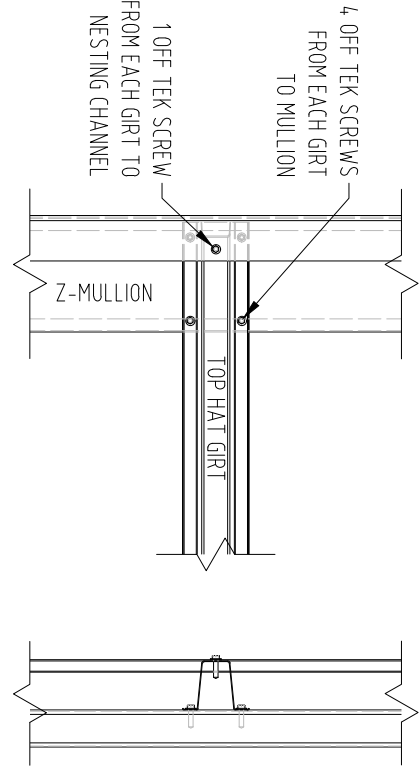
## RAD MULLION AND NESTING TO EAVE PURLIN DETAIL

NTS



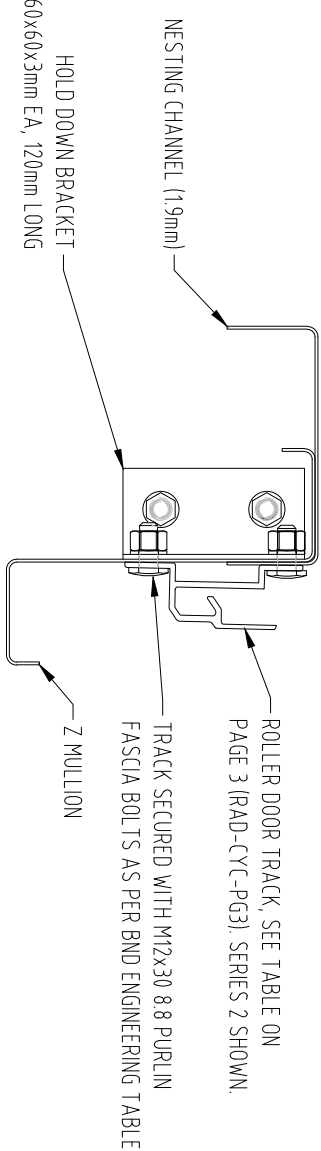
## RAD MULLION TO Z-GIRT DETAIL

NTS



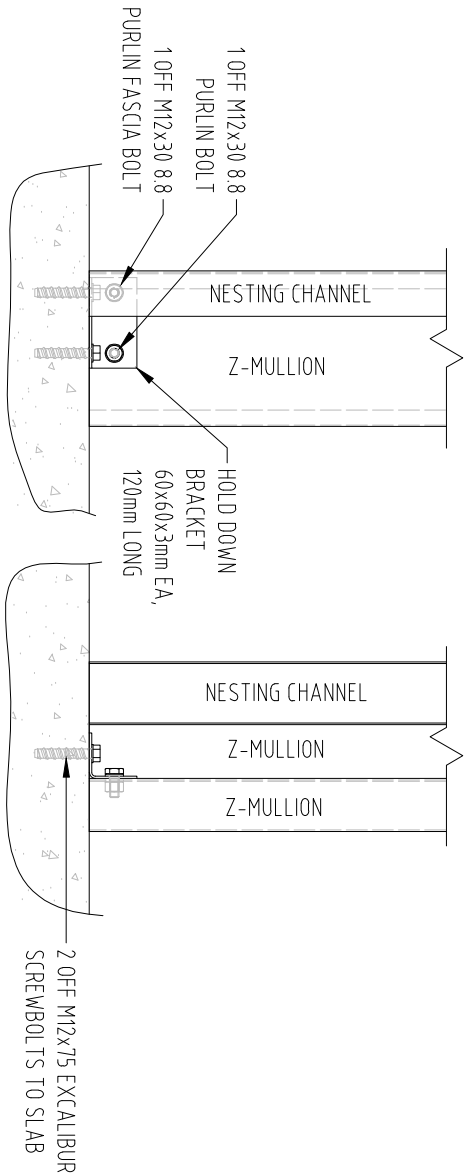
## RAD MULLION TO TOP HAT GIRT DETAIL

NTS



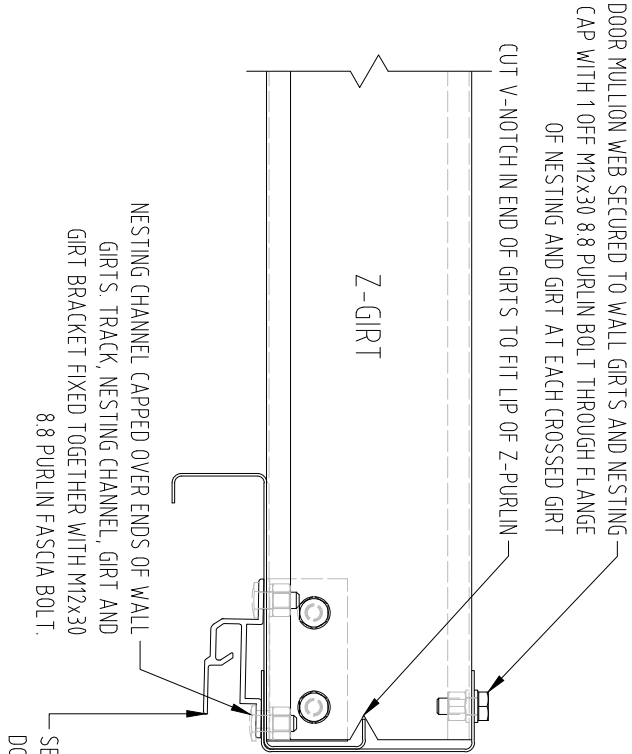
## RAD MULLION TO SLAB PLAN VIEW

NTS



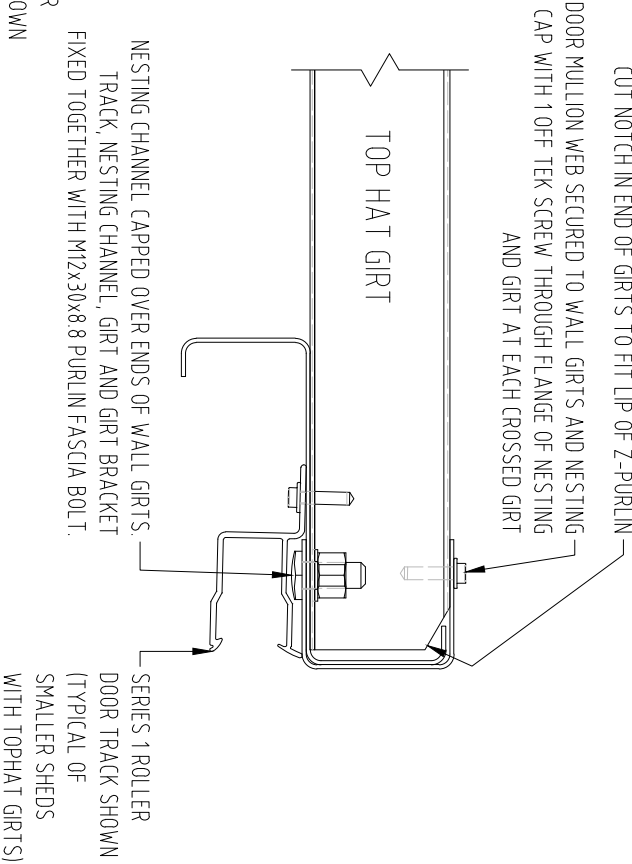
## RAD MULLION TO SLAB DETAIL

NTS



## RAD MULLION TO Z-GIRT PLAN VIEW


NTS



## RAD MULLION TO TOPHAT GIRT PLAN VIEW

NTS

NOTE: FOR MULLION SIZES REFER TO DWG-MT1 MEMBER TABLE

<div>McHUGH STEEL</div> <div>Sheds and Roofing for You!</div>				Consulting Engineer: JOHN TOWLER (RPEQ 4562)			
Phone: (07) 4153 6588 Fax: (07) 4153 6981							
Email: rob@mchughsteel.com.au							
							</



20117

138°52'0"

50292

LOT 14

50292

48°52'0"

7000

EXISTING  
GARAGE

9000

PROPOSED  
EXTENSION

6000

2000

20117

9100

318°52'0"

2-6 WALKER ST

SITE PLAN  
P. GRAMBOWER  
6 WALKER ST  
GAYNDAH  
LOT 14 RP32450  
AREA 1011 m<sup>2</sup>