TOTALSPAN®

STEEL BUILDINGS

WHO CAN? TOTALSPAN!

SPECIFIC DESIGN

Gable Range

Producer Statement and Structural Details

(IL2, Habitable, Lined*, Closed)

INDEX:

APPROVED
BC210007
22/02/2021
Andrew Nichols
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Central Hawkes Bay
District Council

CLIENT:

Nathan Tritt
300 Homewood Road
Otane
4277

BUILDING:

TRS Project Ref:	1550193
Location:	Lat: -39.935776 Lng: 176.6435971
Wind Speed: Vdes Θ:	40.95 m/s
Snow Loading:	Sg = None
Span:	7.000m
Length:	12.000m
Knee Height:	2.700m
Bay Size:	2x6.000m
Roof Details:	15° pitch, 7 Rib 0.35mm
Cladding Details:	7 Rib 0.35mm
Downpipe Size:	80mm Dia PVC
Floor Type:	Concrete Slab (No Calculations)
Area:	84.000m²

*Bay 2 only to be lined with GIB on walls and ceiling.
All other walls to be lined with R-board, with bridging at 1350 crs as per R-Board specifications.

NOTES :

1 - Contractor to confirm all dimensions on site at time of construction
2 - These drawings must not be reproduced without express permission from Spanbild New Zealand Limited.

TOTALSPAN
A Division of Spanbild New Zealand Ltd
112 Waterloo Road, Hornby
P.O.Box 11-013, Christchurch Details

SPANBILD
DESIGN. MANUFACTURE. BUILD.

Building Code Clause(s) B1

PRODUCER STATEMENT - PS1 - DESIGN

(Guidance on use of Producer Statements (formerly page 2) is available at www.engineeringnz.org)

ISSUED BY: Calibre Consulting Ltd
(Design Firm)

TO: Totalspan Hawke's Bay
(Owner/Developer)

TO BE SUPPLIED TO: Central Hawke's Bay District Council
(Building Consent Authority)

IN RESPECT OF: 7m span x 12m IL2 Habitable, Unlined portal building; DL=50yrs
(Description of Building Work)

AT: 300 Homewood Road, Otane, 4277, New Zealand
(Address)

LOT: 2 **DP:** 344960 **SO:**

We have been engaged by the owner/developer referred to above to provide Structural Design

(Extent of Engagement)

services in respect of the requirements of Clause(s) B1 of the Building Code for:

☑ All or ☐ Part only (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:

☑ Compliance Documents issued by the Ministry of Business, Innovation & Employment B1/VM1, B1/VM4 or
(verification method / acceptable solution)

☐ Alternative solution as per the attached schedule

The proposed building work covered by this producer statement is described on the drawings titled

Gable Range and numbered Sheets 1-2, 5-18;
together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:
(i) Site verification of the following design assumptions good ground as per NZS3604, with UBC reduced to 225kPa.
(ii) All proprietary products meeting their performance specification requirements;

I **believe on reasonable grounds** that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. I ~~also recommend the following level of construction monitoring/observation:~~
~~☐ CM1 ☐ CM2 ☐ CM3 ☐ CM4 ☐ CM5 (Engineering Categories) or ☐ as per agreement with owner/developer (Architectural)~~

I, John McCurran (Name of Design Professional) am: ☑ CPEng 48451 # ☐ Reg Arch # ☐ NZIA and hold the following qualifications: BE (civil)

I am a member of : ☑ Engineering New Zealand
The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than $200,000*
The Design Firm is a member of ACENZ: ☑

SIGNED BY John McCurran (Signature)

ON BEHALF OF Calibre Consulting Ltd (Design Firm) Date 18 January 2021

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of $200,000*.

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

SPECIFICATIONS

GENERAL NOTES

1. IMPORTANT DESIGN LIMITATIONS
1.1. Design limitations apply to any item or alteration not specifically stated or clearly represented within the scope of these engineering specifications. This is a CAD drawing which must not be altered by manual methods, exceptions to this are:
1.1.1. The documentation clearly states where "generic" items can be crossed out, or the applicable detail circled to provide clarity.
1.1.2. Additional specific design has been carried out by a CPENG engineer with a PS1 supplied covering "part" design works for any ammedment/alterations. Alternative/Additional drawings shall be supplied or these specifications must be clearly marked up in red pen and accompanied by the PS1 engineer's signature on each drawing altered which is covered by the additional specific design, as above.
1.1.3. A letter has been supplied in writing, signed by the original engineer(s) covering "minor" ammedments/alterations or clarifications to varying interpretations of the design drawings.
~~1.2. Habitable/Lined Buildings are not covered within this scope of work.~~

2. GENERAL
2.1. All work shall conform to the New Zealand Building Code
2.2. B2 Durability shall be covered by respective product/manufacturers durability statements

3. LOADINGS
3.1. Buildings are designed to AS/NZS 1170
3.1.1. Refer Schedule for Windspeed, Vdesθ in m/s.
3.1.2. Refer Schedule for Ground Snow Load if applicable in kPa.
3.1.3. The roofing is not designed for point loads of 1.1kN, these are Surfaces (including transparent surface) over which supports (e.g., boards or ladders) are required to be laid to support actions incidental to maintenance (e.g., people).
3.1.4. Earthquake loads, except for "near fault" locations due to the light-weight structure are not critical for unlined, Importance Level 1 & 2 standard structures with cladding as specified below only.
3.1.5. Habitable/Lined or Importance Level 3 and greater structures require specific design engineering in addition to this specification covering the scope of works. (Importance Level 2 structures have been designed to resist "structural damage" deflections only).
3.1.6. Any loads exceeding the above shall require specific design engineering in addition to this specification covering the scope of works.

4. FOUNDATIONS
4.1. Ground shall have a safe bearing capacity of at least 75kPa (225kPa Ultimate).
4.1.1. This is achieved by meeting "good ground", safe bearing capacity of at least 100kPa in accordance with NZS 3604 (i.e. exceeds the above) OR;
4.1.2. Safe bearing capacity of at least 75kPa by Site Specific Geo-Technical Report (as NZS 3604 has no means of determining a minimum safe bearing of 75kPa).

5. CONCRETE
5.1. Designed to NZS 3101
5.2. Remove vegetation and loose material from the building footprint, backfill with compacted hard-fill if required and lay sand blinding to the underside of the concrete slab. Ensure the surface of the slab will be at least 100mm above the highest level of cleared ground around the slab.
5.3. Concrete shall have a maximum aggregate size of 20mm and minimum 20MPa compression strength at 28 days.
5.4. Refer Foundation Details for further details.
5.5. Lesser Ductile Mesh is allowed to be used for Importance Level 1 structures only
5.5.1. Refer NZS 3101 Clause 5.3.2.7 (a)

6. STEELWORK & COMPONENTS
6.1. All Steelwork & Components shall (where applicable) conform to:
6.1.1. AS/NZS 4600 - Cold-formed steel structures
6.1.2. AS/NZS 1252 - High strength steel bolts with associated nuts and ...
6.1.3. AS/NZS 1365 - Tolerances for flat-rolled steel products
6.1.4. AS/NZS 4505:2013 - Garage doors and other large access doors
6.1.5. AS 1110 - ISO metric hexagon bolts and screws
6.1.6. AS 1112 - ISO metric hexagon nuts...
6.1.7. AS 1397 - Continuous hot-dip metallic coated steel sheet and strip
6.1.8. AS 1580 - Paints and related materials - Methods of test
6.1.9. AS 3566 - Self-drilling screws for the building and construction industries
6.1.10. and ...
6.1.11. IFI-114(Imperial) / IFI-505(Metric) - Break Mandrel Blind Rivets

7. CLADDING
7.1. Steel only. Alternative claddings (excluding glass reinforced panel), require an independent specific design certificate for the scope of work.
7.2. Fixing pattern as per E2/AS1 or NZ MRM - NZ Metal Roof and Wall Cladding Code of Practice.
7.3. Flashings shall be fixed as per manufacturers recommendations/instructions.

8. SERVICES
8.1. Penetrations through framing members
8.1.1. Typical hole diameter(s) shall not exceed 29mm (1 ⅛ inch)
8.1.1.1. A single 44mm (1 ¾ inch) hole per C150, C250 or C300 section only is allowed to accommodate an up to 40mm waste water pipe
8.1.2. Distance between holes along the section shall be no less than 1000mm
8.1.3. Holes shall be located:
8.1.3.1. Central in the web, (within the centre 1/3 of the web depth)
8.1.3.2. At least 200mm from the end of a member
8.1.4. Rubber grommets to be applied to un-swaged service holes
8.1.5. Larger and more frequently spaced holes are allowed, however please consult with an engineer first for written approval to ensure compliance with AS/NZS 4600.

TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range - Design

Producer Statement / Specifications

MANUFACTURERS STATEMENT - DURABILITY

Cladding

To satisfy the requirements of Clause B2:"Durability" of the NZBC and to ensure the cladding material meets a 15-year durability life and a 50 year intended working life (design life), the following provisions must apply:

Cladding Range of Product and Use

- Coating Type: Zinc/Aluminium & Painted (Coloured Steel).
- Steel thickness range: 0.35mm - 0.55mm BMT
- Steel grade range: G300 - G550
- Application: Standard Totalspan Roof and Wall Cladding
- Profile: Totalspan 7 Rib, Totalspan 6 Rib, Totalspan Corrugate

Requirements, Limitations and Exclusions

- Fixing and installation of the cladding must be done exactly in accordance with Totalspan Buildings instructions and specifications.
- Normal and regular maintenance must be carried out on the exterior surface of the cladding and the following guide must be followed to ensure the durability requirements are met.

Regular Maintenance

- Normal Maintenance to be completed in accordance with Durability - Acceptable Solution B2/AS 2.1.3
- Corrosion Zones B and C.. (*Reference NZS 3604:2011 Corrosion Zone Figure 4.2)

  Rain-washing only required on exposed (open to airborne salts and rain wetting) material. Sheltered (open to airborne salts, but not rain washed) or protected areas such as under spouting, top-cladding sheets and tops of doors require washing every 3 months.

- Sea Spray Zone D (Includes all off-shore islands, the area within 500m of the coastline of New Zealand, and those areas shown in white - *Reference NZS 3604:2011 Figure 4.2) and areas of Geothermal Activity (*Reference NZS 3604:2011 4.2.4 (c)).

  Rain-washing only required on exposed (open to airborne salts and rain wetting) areas. Sheltered (open to airborne salts, but not rain washed) and protected areas such as under spouting, top cladding and tops of doors require washing down every month and whenever corrosive salts are present.

Extended Maintenance, Painting or Repainting

Extended Durability

Once the metallic coating or the paint system has weathered away, signs of red rust for bare material or signs of the metallic coating for painted material, painting of the entire surface is required to extend the life of the product. Paint manufacturers recommendations are to be followed for surface preparation and paint type to be used.

Evident Corrosion

- Areas that show signs of white or red rust/corrosion (typically in unwashed areas) require cleaning back with a stiff brush and cleaner to remove all dust, surface contaminants and corrosion products and present a sound substrate for painting. Priming of the surface and application of two coats of paint as per the Paint Manufacturer's recommendations is then required.
- Particular attention needs to be paid to laps (side, end, flashing etc) where earlier corrosion may start due to moisture and dirt entrapment.
  If evident corrosion is not treated quickly rapid deterioration of the sheet may occur which could result in perforation. At this stage replacement of the affected sheet is the best option.

Steel Framing

To satisfy the requirements of Clause B2:"Durability" of the NZBC and to ensure the structural framing material meets a 50-year durability life the following provisions must apply:

Steel Framing Range of Product and Use

- Coating Type: Galvanised
- Steel thickness range: 0.75mm – 2.4mm BMT
- Steel grade range: G450 – G550
- Application: Standard Totalspan Purlins, Girts, Portal Frames, Door Jambs, Wall Uprights, Bridging
- Profile: C Sections – 80x40, 150x64, 220x64, 250x85
  Z Sections – 100x53, 150x65
  Tophat Sections – 100x163, 120x170, 150x183

Awnings/Garaports attached to Base Buildings

- Where sections are exposed to or located in salt marine, corrosive industrial or unusually high corrosive environments the below Regular Maintenance must be adhered to.
  Please contact the manufacturer for specialist advice if unsure of requirements.This also applies to all Steelwork that is exposed to the wind but is protected from the rain located in an open sided structure such as carports, awnings or structures closed in on one side only.
  Maintenance is necessary when the Galvanised coating ceases to provide sacrificial protection to the steel base, or where the appearance is no longer aesthetically acceptable. Rust staining or the growth of rust spots usually indicates the breakdown of Galvanised coating. At the first sign of breakdown, the surface should be treated with an appropriate maintenance coating system. All maintenance should be carried out in accordance with AS/NZS 2312: 2002 (Incorporating Amendment No. 1) [c] and New Zealand Steelwork Corrosion Coatings Guide (HERA Report R4-133) [d].

  Regular inspections of the steel work and maintenance at the first signs of a problem will extend the durability of the sections. If any of the structure components show signs of corrosion during normal maintenance these are also easily accessible and simple to replace.

Regular Maintenance

- Normal Maintenance to be completed in accordance with Durability - Acceptable Solution B2/AS 2.1.3
  Corrosion Zones B and C. (*Reference NZS 3604:2011 Corrosion Zone Figure 4.2)

  Rain-washing only required on exposed (open to airborne salts and rain wetting) material.
  Sheltered (open to airborne salts, but not rain washed)or protected areas such as under spouting.
  top-cladding sheets and tops of doors require washing every 3 months.

- Sea Spray Zone D (Includes all off-shore islands, the area within 500m of the coastline of New Zealand, and those areas shown in white - *Reference NZS 3604:2011 Figure 4.2) and areas of Geothermal Activity (*Reference NZS 3604:2011 4.2.4 (c)).

  Rain-washing only required on exposed (open to airborne salts and rain wetting) areas
  Sheltered (open to airborne salts, but not rain washed)and protected areas such as under spouting, top cladding and tops of doors require washing down every month and whenever corrosive salts are present.

References

1. NZBC – Compliance Document – Clause B2 - Durability
2. NZS 3604, Clause 4, Durability*

* - Totalspan Buildings acknowledges and understands that NZS 3604 is a Timber Framed Building standard. Totalspan Buildings has used NZS 3604 as a reference only to identify Corrosion Zones, Sea Spray Zones and areas of Thermal activity.

Totalspan Buildings
112 Waterloo Rd
Sockburn
CHRISTCHURCH

TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

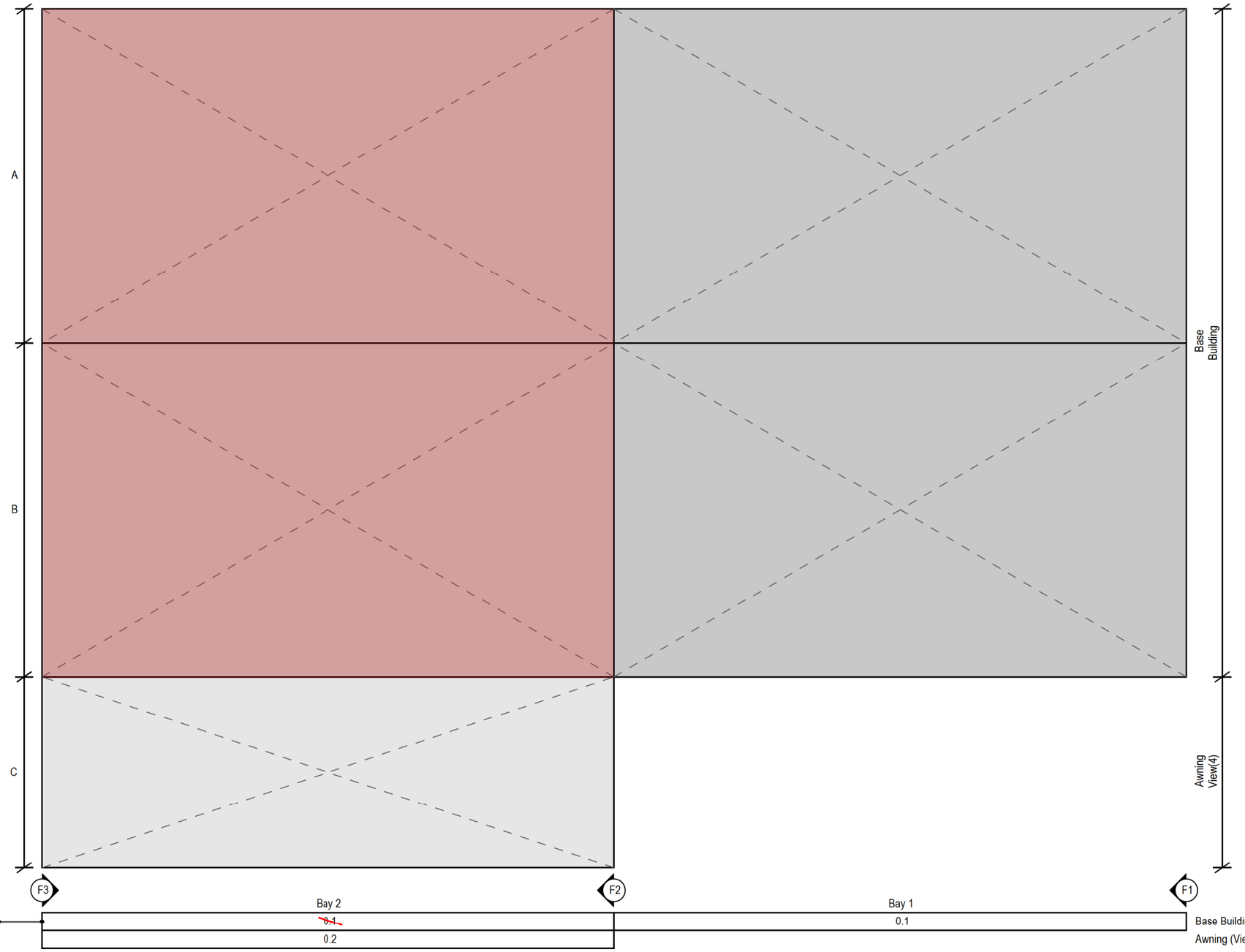
Gable Range

Durability Statement

ROOF - (BAYS 2-1)

A	S1:1 - 5.98kN	S1:1 - 5.98kN
B	S1:1 - 5.98kN	S1:1 - 5.98kN
C	S1:1 - 6.63kN	

BRACING kN (Totals)		
Location	Required	Achieved
A	8.16 kN	11.97 kN
B	2.46 kN	11.97 kN
C	1.00 kN	6.63 kN



BAY 2:
GIB LINED TO CEILING.
C150-19(1) PULRINS AT MAX 600 CRS.

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Central Hawkes Bay District Council

FRAMING SECTION TABLES	
Base Building - 0.1	
Design	Closed
Purlin (Bridge Count)	C150-12(2)
Purlin Centres	0.906m
Awning - 0.2	
Design	Open
Purlin (Bridge Count)	C100-15(2)
Purlin Centres	0.669m

BRACING DESIGN NOTES

All bracing must be connected to main structural members i.e. Portal Legs, Portal Rafters, End Wall, Uprights & Main Access Door Jambs. Bracing shall not be solely connected to intermediate members such as Girts, Purlins, Minor Access Door Jambs & PA Door Jambs.

BRACING LEGENDS

S1:1

Mitek Strip-Brace 27x0.6mm G550, configured as a single cross.

VIEWS
2
3 1
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TOTALSPAN® STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

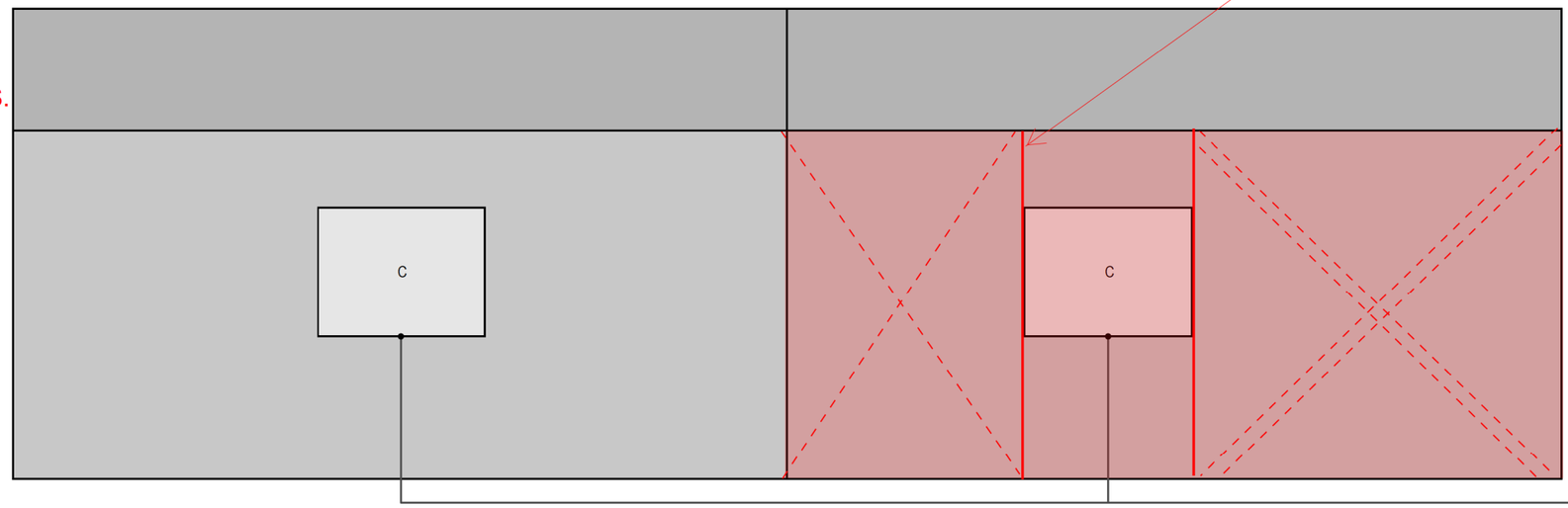
Gable Range - Design

Engineering Tables

VIEW 2 - BUILDING SIDE (BAYS 1-2)

PROVIDE BRIDGING AT MAX 1350 CRS ON ALL R BOARD LINED WALLS.

EXTEND C10015 JAMBS FROM SLAB TO KNEE HEIGHT.



BAY 2 LINED WITH GIB, GIRTS TO BE C80-75(1) AT 600 CRS.

OPENING SECTION TABLES	
Opening - C	
Jambs & Head Beam	C100-15

FRAMING SECTION TABLES	
Base Building - 2.1	
Design	Closed
Girt (Bridge Count)	C100-15(2)
Girt Centres	0.600m

F1 F2 F3

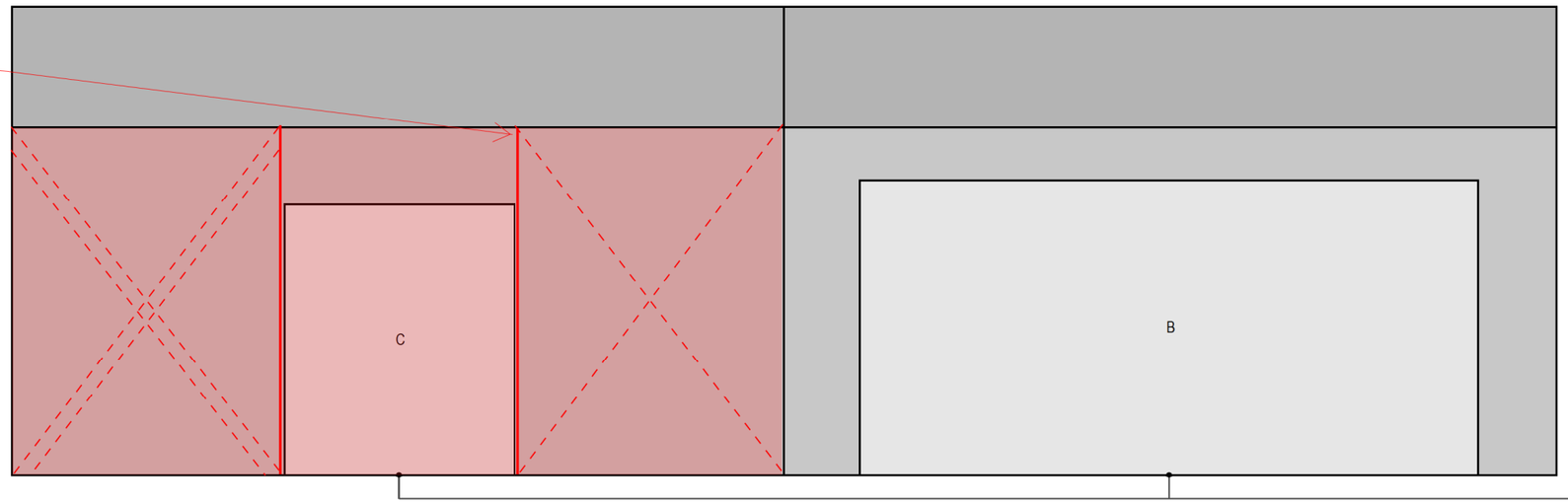
	Bay 1	Bay 2
	2.1	~~2.1~~

BRACING kN (Totals)	
Required	11.75 kN
Achieved ~~(Failed)~~	12.50 kN
~~Transferred to Opposite Wall~~	~~5.31 kN~~

VIEW 4 - BUILDING SIDE (BAYS 2-1)

EXTEND C10015 JAMBS FROM SLAB TO KNEE HEIGHT.

BAY 2 LINED WITH GIB, GIRTS TO BE C80-75(1) AT 600 CRS.



OPENING SECTION TABLES	
Opening - B	
Jambs	B150-10
Head Beam	B150-10
Opening - C	
Jambs & Head Beam	C100-15

FRAMING SECTION TABLES	
Base Building - 4.1	
Design	Closed
Girt (Bridge Count)	C100-15(2)
Girt Centres	0.600m

F3 F2 F1

	Bay 2	Bay 1
	~~4.1~~	4.1

BRACING kN (Totals)	
Required	11.75 kN
Achieved	12.50 kN
~~Transferred to Opposite Wall~~	~~5.31 kN~~

VIEWS
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TOTALSPAN® STEEL BUILDINGS

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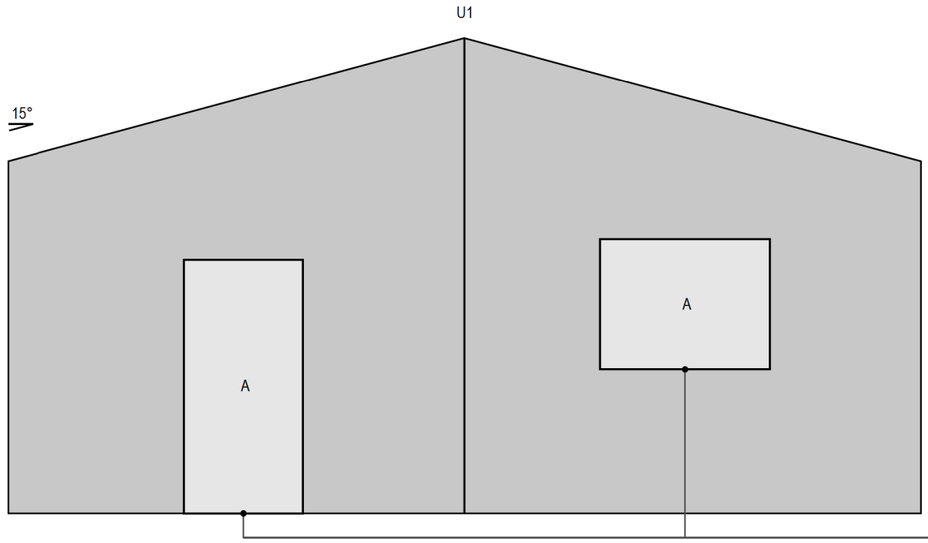
Gable Range - Design

Engineering Tables

FRAME F1

PROVIDE BRIDGING AT MAX 1350
CRS ON ALL R BOARD LINED WALLS.



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FRAMING SECTION TABLES	
Base Building - B.1	
Design	Closed
Leg & Rafter	C250-19
Upright - U1	C150-12
Girt (Bridge Count)	C80-75(1)
Girt Centres	0.600m

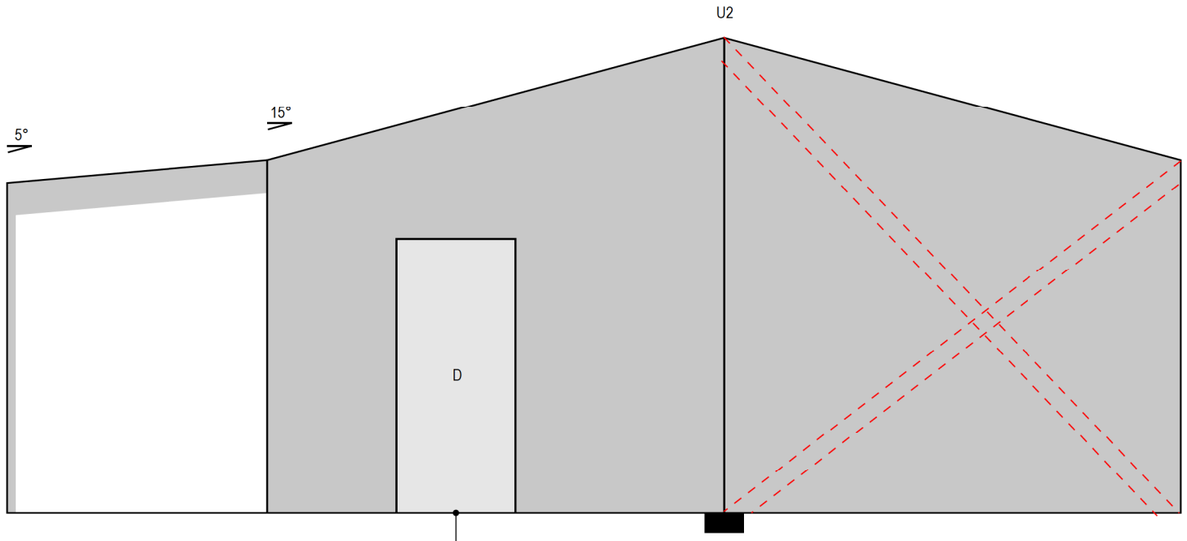
Base Building
B.1
Structual Moment Resistance - NaNkN

OPENING SECTION TABLES	
Opening - A	
Jambs & Head Beam	C80-95
Upper Support Girt	B80-75(1)

BRACING kN	
Required	NaN kN
Achieved	NaN kN

Slab Strengthening, refer to sheet titled Foundation Details SD-F05.1

FRAME F2



FRAME 2 LINED WITH GIB
ON BAY 2 SIDE ONLY.

FRAMING SECTION TABLES	
Base Building - B.2	
Design	Closed
Leg & Rafter	C250-19
Upright - U2	C100-15
Girt (Bridge Count)	C80-75
Girt Centres	0.600m
Awning - A.1	
Design	Open
Rafter	C250-15
Post	SHS65-16

Awning	Base Building
A.1	B.2

OPENING SECTION TABLES	
Opening - D	
Jambs & Head Beam	C80-75
Upper Support Girt	B80-75(1)

VIEWS
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TOTALSPAN® STEEL BUILDINGS

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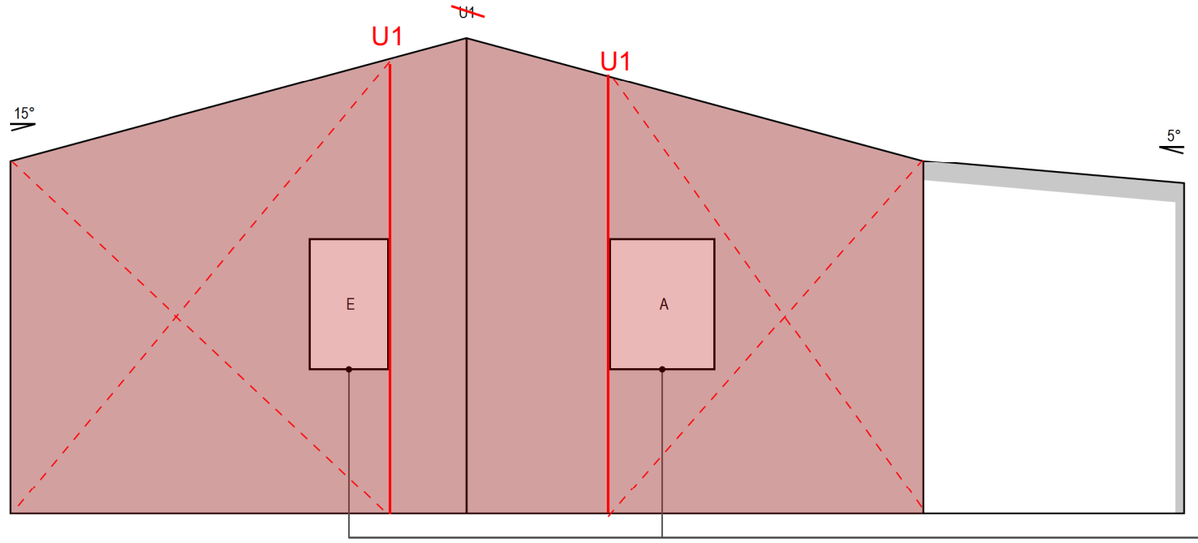
Gable Range - Design

Engineering Tables

FRAME F3

PROVIDE BRIDGING AT MAX 1350
CRS ON ALL R BOARD LINED WALLS.

FRAME 3 LINED WITH GIB.



FRAMING SECTION TABLES	
Base Building - B.1	
Design	Closed
Leg & Rafter	C150-19
Upright - U1	C150-10
Girt (Bridge Count)	C80-75
Girt Centres	0.600m
Awning - A.2	
Design	Open
Rafter	C150-10
Post	SHS65-16

Base Building	Awning
B.1	A.2
Structual Moment Resistance - NaNkN	

OPENING SECTION TABLES	
Opening - A	
Jambs & Head Beam	C80-75
Upper Support Girt	B80-75
Opening - E	
Jambs, Head Beam & Sill	C80-75
Upper & Lower Support Girt	B80-75

BRACING kN	
Required	NaN kN
Achieved	NaN kN

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TOTALSPAN® STEEL BUILDINGS

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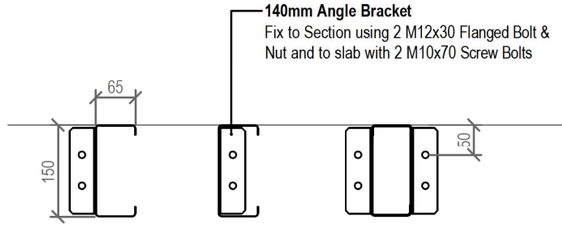
Gable Range - Design

Engineering Tables



- **C150 Foundation Connections**
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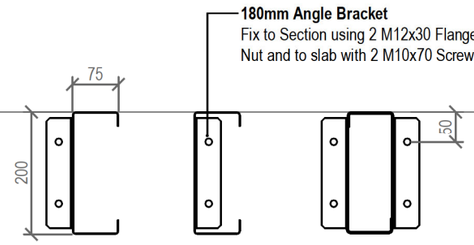

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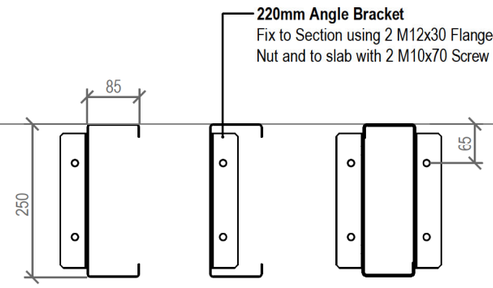

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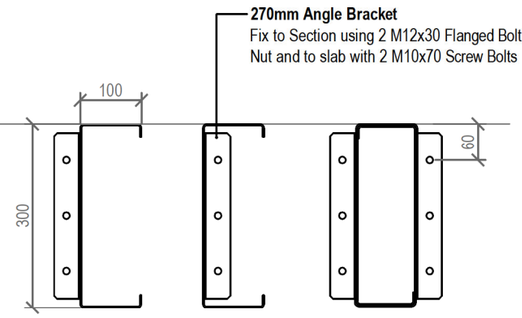

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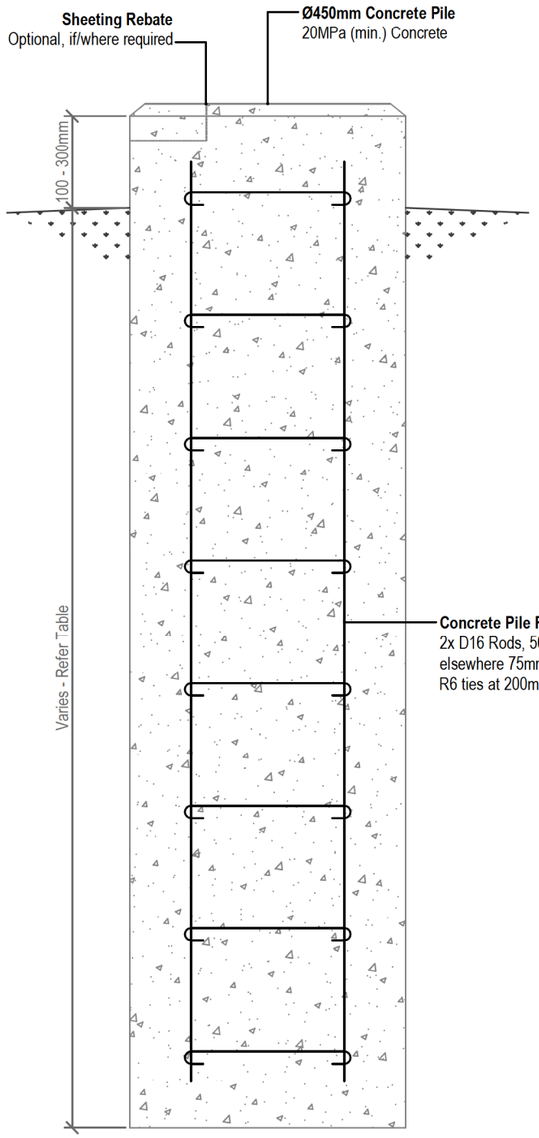
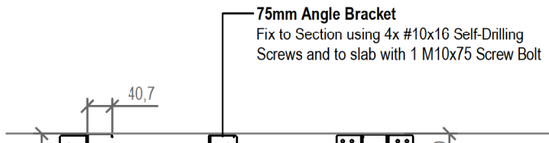


3 **PORTAL FOUNDATION DETAIL**
SCALE 1:10



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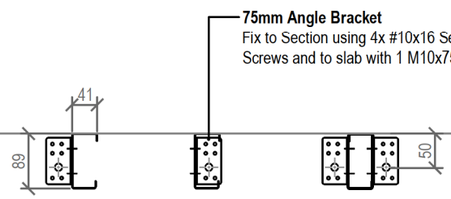
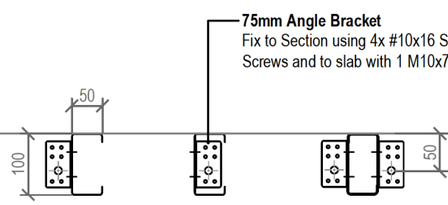
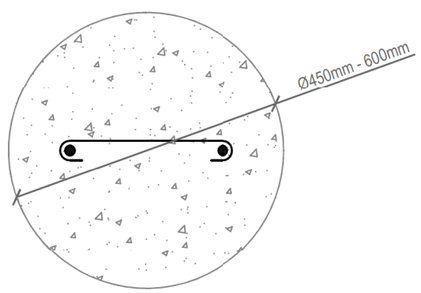


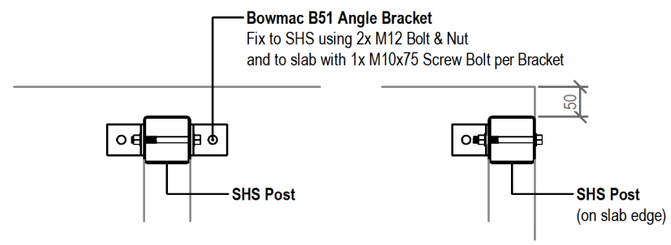
- **C90 Foundation Connections**
  SCALE 1:10



- **C100 Foundation Connections**
  SCALE 1:10

PILE FOUNDATION DEPTHS				
C Section	**Boxed C Section**	**SHS**	**Pile Diameter**	**Depth Required, metres (m)**
C80, C90, C100 & C150-75	2C80, 2C90 & 2C100	-	450	0.600
C150-10 to C150-19	2C150-75 & 2C150-10	65x65	450	1.000
C250-15	2C150-15	75x75 & 100x100	450	1.200
C250-19	2C150-19 & 2C250-15		450	1.500
C250-24, C300-24 & C300-30	2C250-19	-	450	2.000
-	2C250-24, 2C300-24 & 2C300-30	-	600	2.000





- **SHS Foundation Connections**
  SCALE 1:10

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Andrew Nichols
Page 8 of 34
Central Hawkes Bay
District Council

TOTALSPAN®
STEEL BUILDINGS

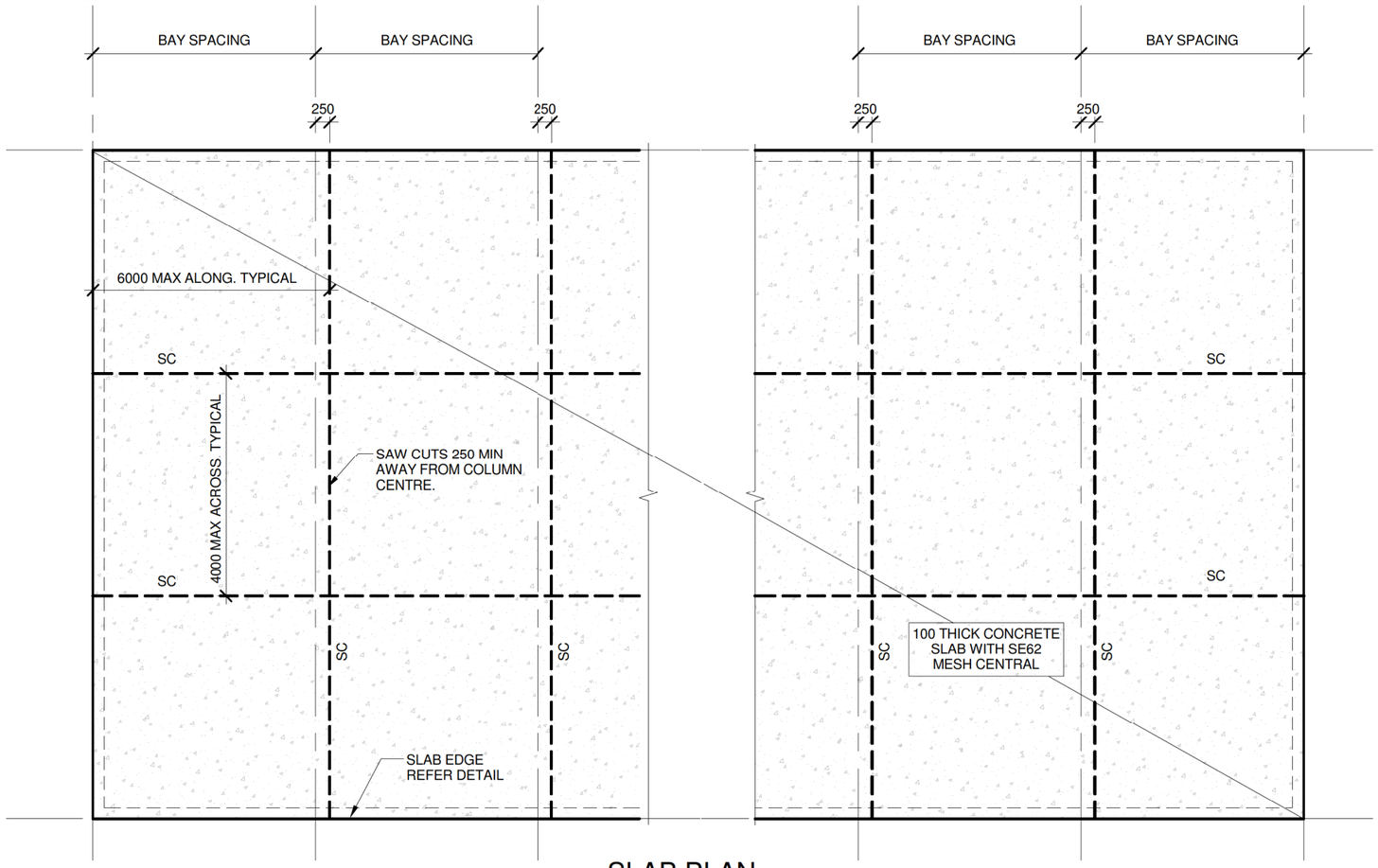
Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range - Design

Foundation Details SD-F01

Sheet 9 of 20



SLAB PLAN

SCALE: 1 : 100

NOTES

GENERAL:

1. ALL WORK SHALL CONFORM TO THE NEW ZEALAND BUILDING CODE.
2. CHECK DIAGONALS TO ENSURE BUILDING IS SQUARE.

FOUNDATIONS:

1. FOUNDATION SUBGRADE TO BE GOOD GROUND AS DEFINED BY NZS3604:2011, EXCEPT HAVING A MINIMUM ULTIMATE BEARING CAPACITY OF 225kPa.

CONCRETE SLAB:

1. STRIP THE SITE, REMOVING VEGETATION, TURF, SOILS CONTAINING ORGANIC MATTER AND LOOSE OR SOFT MATERIAL, TRIM TO A FIRM SUBGRADE. BACKFILL AS REQUIRED WITH COMPACTED GRANULAR MATERIAL AS DEFINED BY NZ3604.2011 AND LAY A BLINDING OF SAND TO UNDERSIDE OF CONCRETE SLAB AND EDGE THICKENINGS. ENSURE THE SURFACE OF THE SLAB WILL BE AT LEAST 100mm ABOVE THE HIGHEST LEVEL OF CLEARED GROUND AROUND SLAB.
2. CONCRETE SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 20mm AND A SLUMP OF 80mm.
3. REINFORCING MESH TO BE LAPPED 225mm.
4. PROVIDE A 0.25mm POLYTHENE DAMP PROOF MEMBRANE AND SLIP LAYER UNDER THE SLAB TAPED WITH 100mm LAPS.
5. CONCRETE REINFORCING STEEL TO BE SUPPORTED BY PLASTIC CHAIRS AT 800mm CRS.
6. CONCRETE TO BE 20MPa UP TO ZONE C AND 25MPa FOR ZONE D
7. COVER TO REINFORCING SHALL BE...
   - 75mm FROM GROUND
   - 50mm FROM GROUND PROTECTED BY DPM
   - 25mm FROM INTERNAL SURFACES
   - 50mm FROM EXTERNAL SURFACES

REINFORCEMENT NOTATION:

1. R - G300E PLAIN BAR REINFORCEMENT.
   D - G300E DEFORMED BAR REINFORCEMENT.
   HD - G500E DEFORMED BAR REINFORCEMENT.

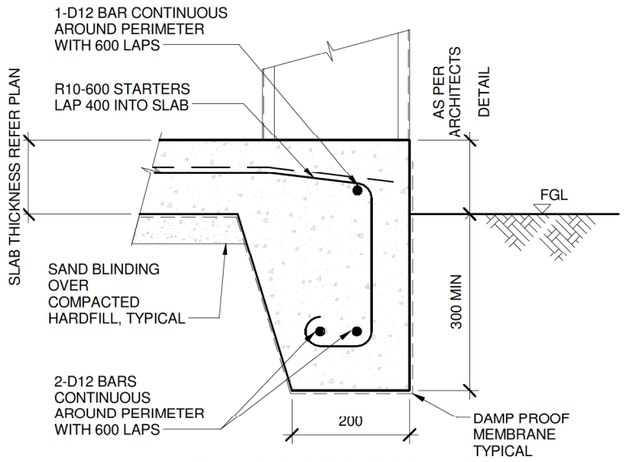
REINFORCEMENT NOTATION: R10-600

- R: REINFORCEMENT TYPE
- 10: NOMINATION 10mm DIAMETER
- 600: 600mm SPACING

ABBREVIATIONS:

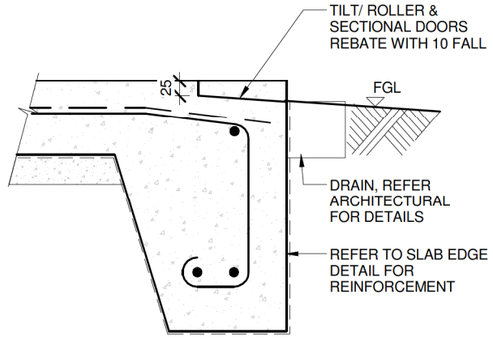
EQ - EQUAL SPACING
FGL - FINISHED GROUND LEVEL

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.



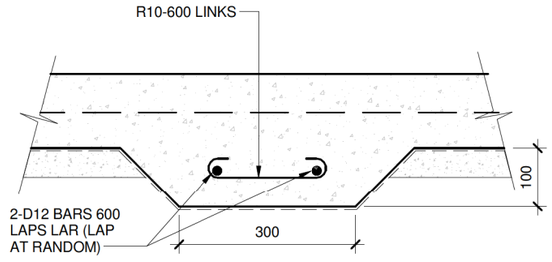
SLAB EDGE DETAIL

SCALE: 1 : 10



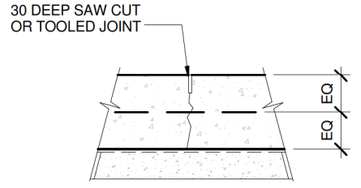
P.A. DOOR & GARAGE DOOR ENTRY SLAB EDGE DETAIL

SCALE: 1 :10



TYPICAL SLAB THICKENING DETAIL BELOW INTERNAL WALLS

SCALE: 1 :10



SAW CUT (SC) DETAIL

SCALE: 1 : 10

Revision | App | Date

Designed
Drawn
Reviewed
Approved

Client: TOTALSPAN STEEL BUILDINGS

Project Title: Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

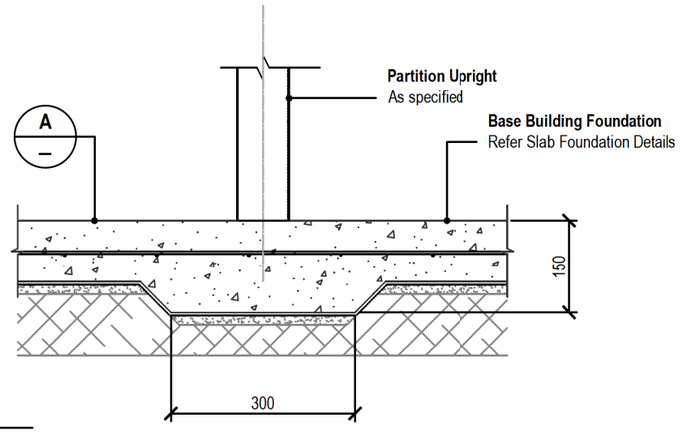
Sheet Title: IL2 SLAB PLAN AND DETAILS

Scale (A3 Original) As indicated

20 10 0 20 40 60 mm

Project Ref: 1550193
Foundation Details SD-F02

H:\AKL\706749 Spanbild proposals\Drawings\REVIT\706749 - SPANBILD - 12.0m SPAN PORTALS - IL2.rvt Plotted at: 20/12/2017 10:40:05 AM



1 **300x300x150 PAD**
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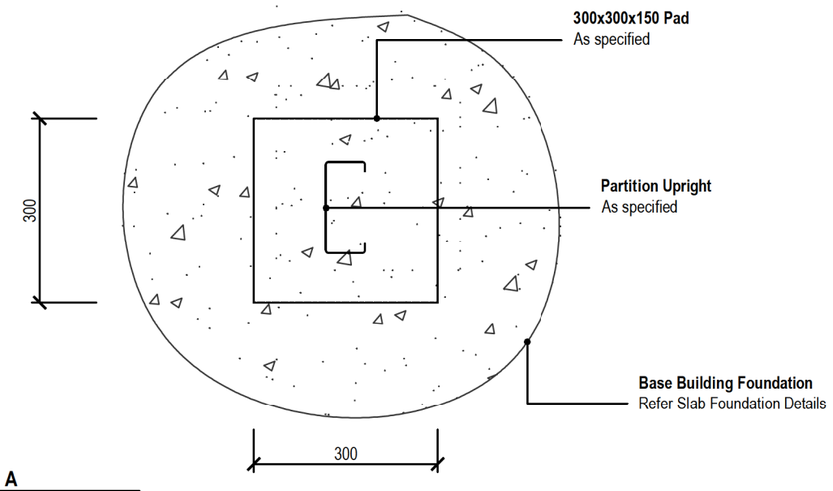


A **Section A**
SCALE 1:10

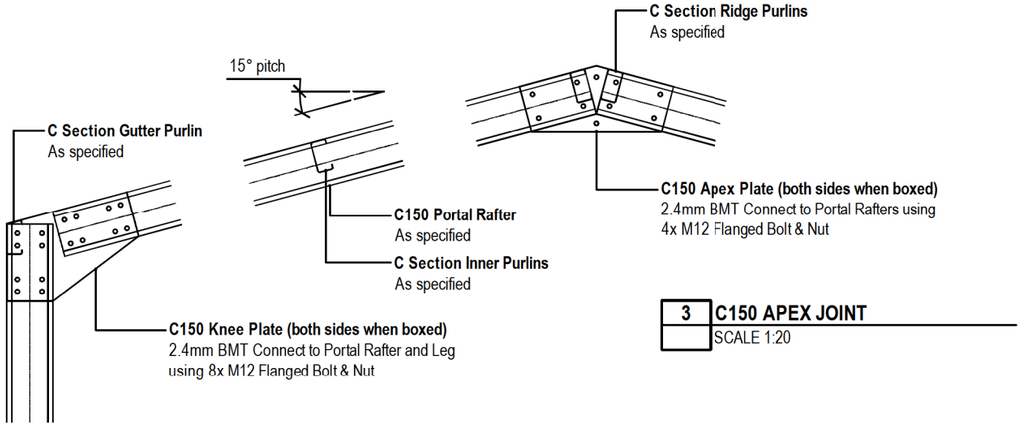
TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range - Design

Foundation Details SD-F05.1



3 C150 APEX JOINT
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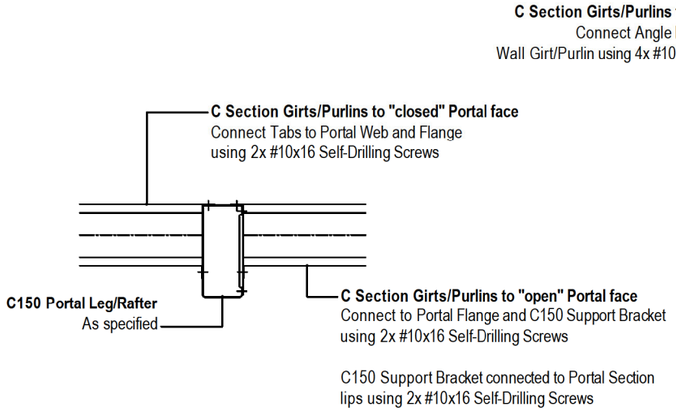

6 GIRT/PURLIN TABBED CONNECTION
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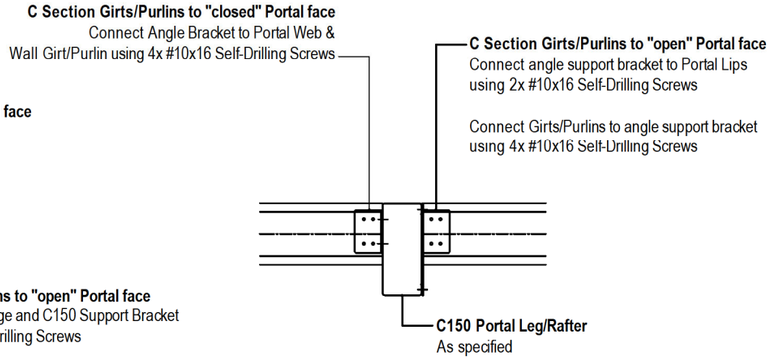

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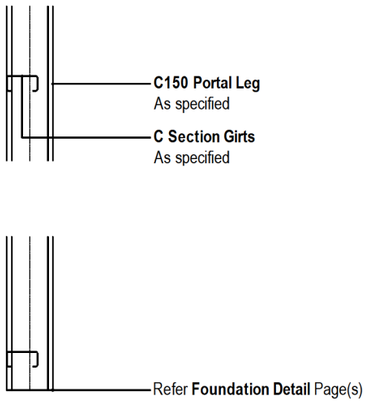

2 C150 KNEE JOINT
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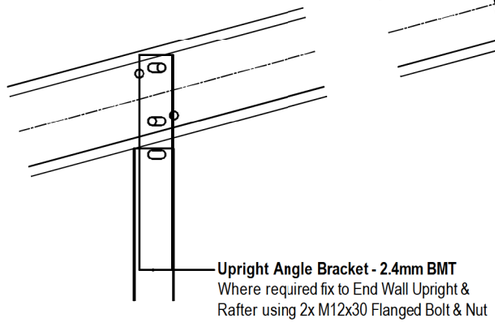
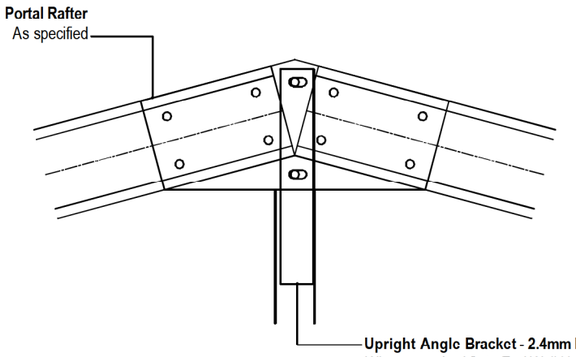


5 UPRIGHT TO RAFTER CONNECTION
SCALE 1:10



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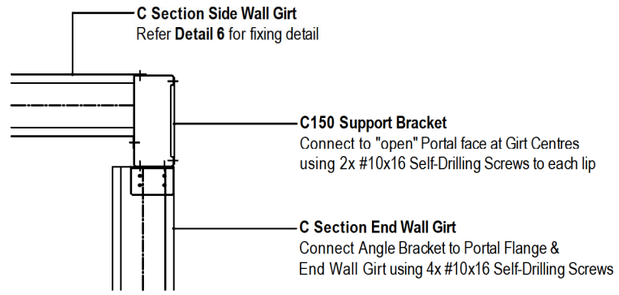
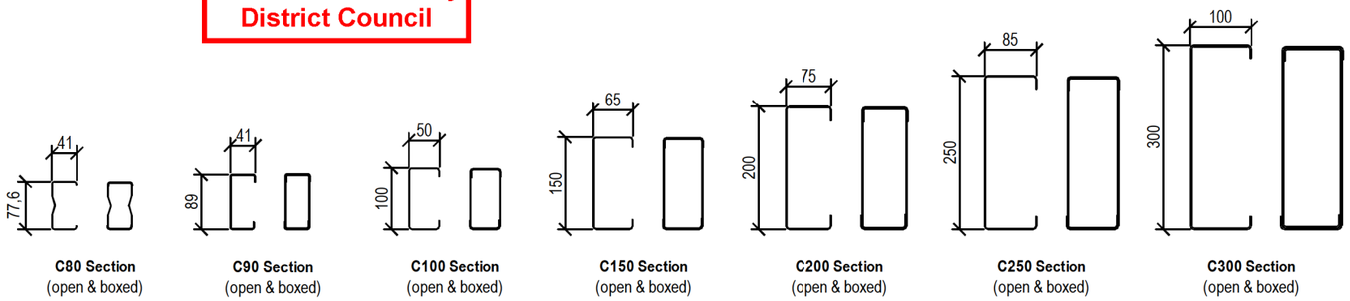
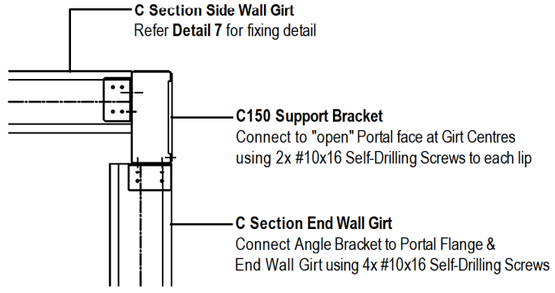


8 END WALL GIRT CONNECTION
SCALE 1:10



- C SECTION PROFILES (INCL. BOXING)
SCALE 1:20



9 END WALL GIRT CONNECTION
SCALE 1:10

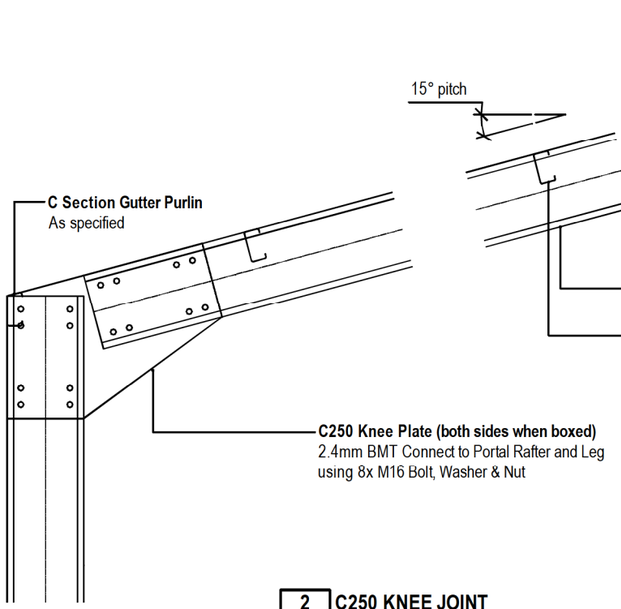
TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range - Design

Frame Details SD-P01



3 C250 APEX JOINT
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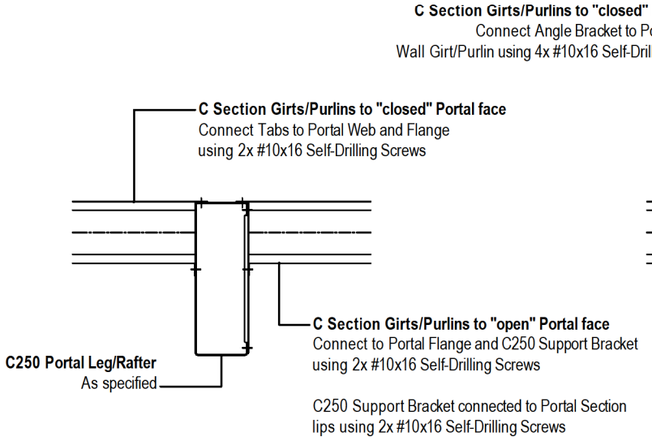

6 GIRT/PURLIN TABBED CONNECTION
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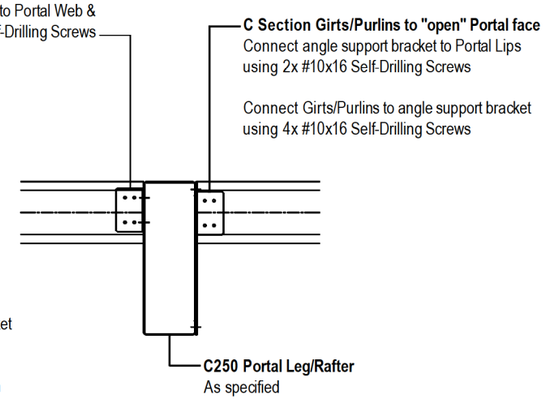
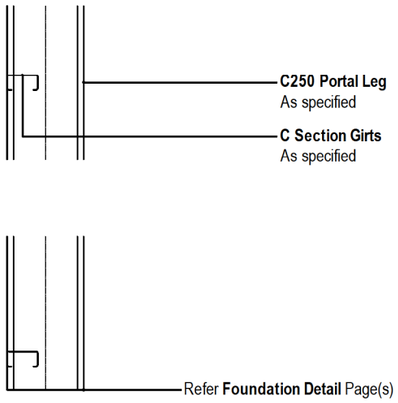
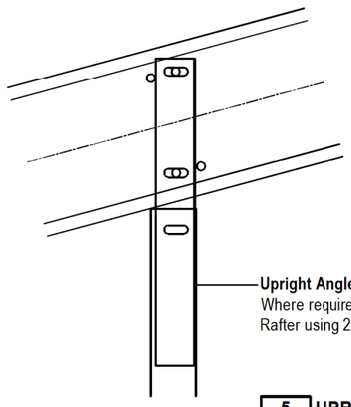


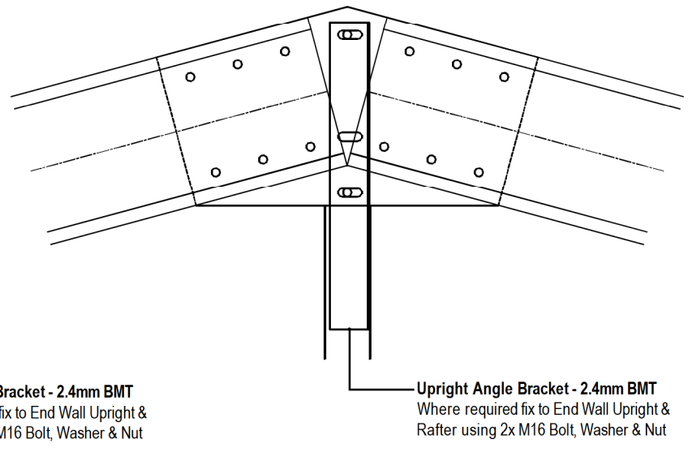
7 GIRT/PURLIN BRACKET CONNECTION
SCALE 1:10

2 C250 KNEE JOINT
SCALE 1:20





5 UPRIGHT TO RAFTER CONNECTION
SCALE 1:10



4 UPRIGHT TO APEX CONNECTION
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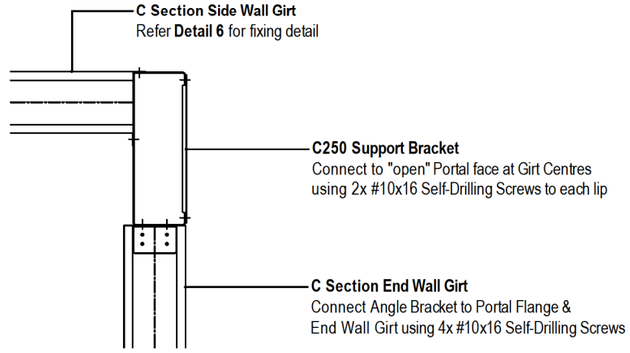
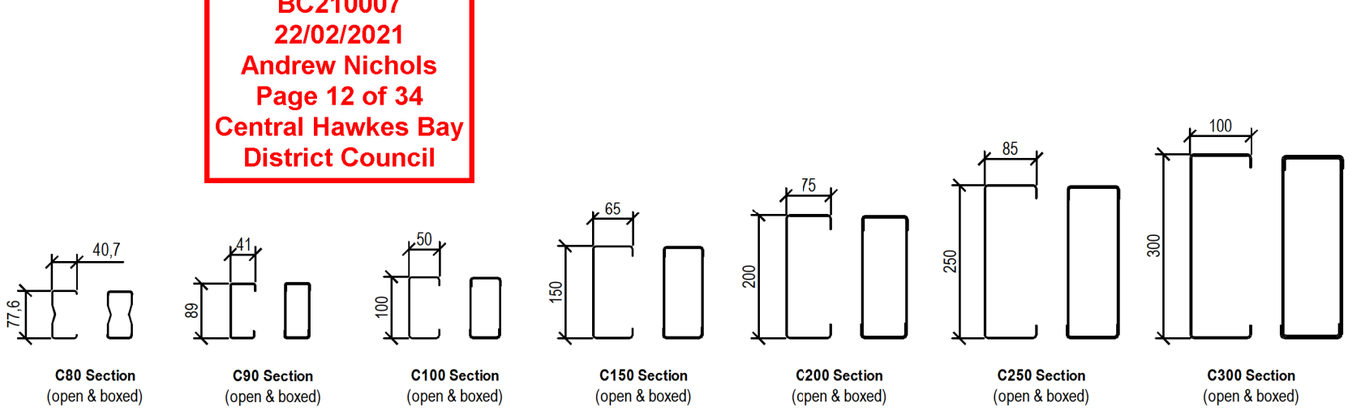
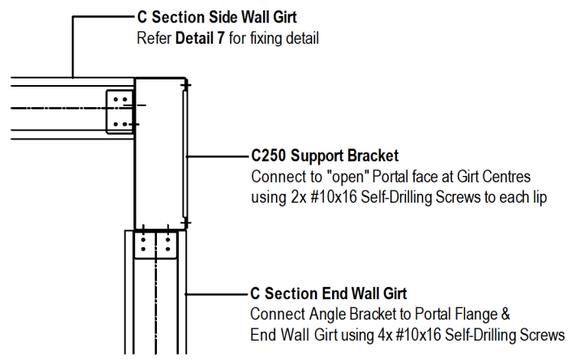


8 END WALL GIRT CONNECTION
SCALE 1:10



- C SECTION PROFILES (INCL. BOXING)
SCALE 1:20



9 END WALL GIRT CONNECTION
SCALE 1:10

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Page 12 of 34
Central Hawkes Bay
District Council

TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range - Design

Frame Details SD-P03

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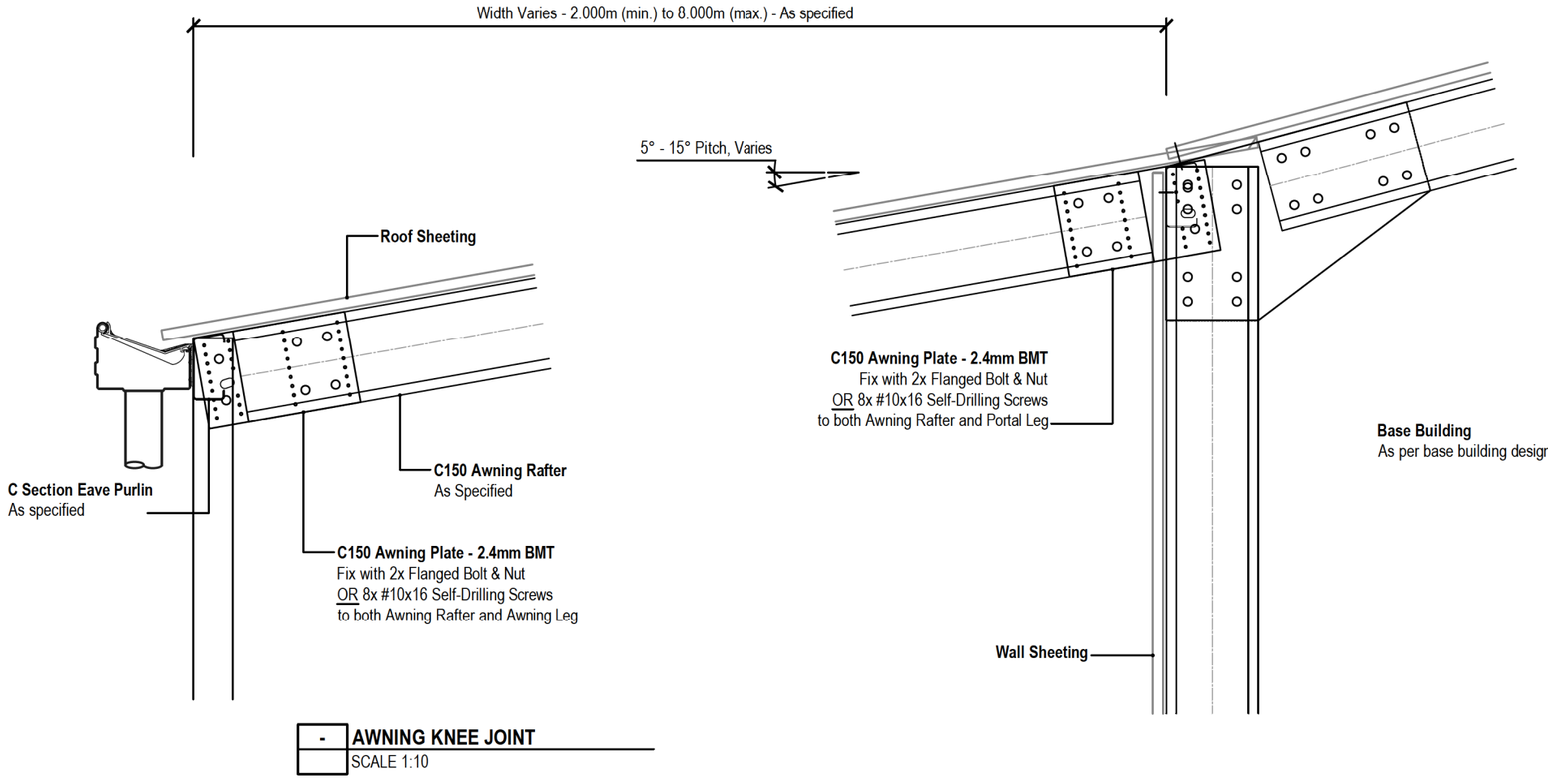
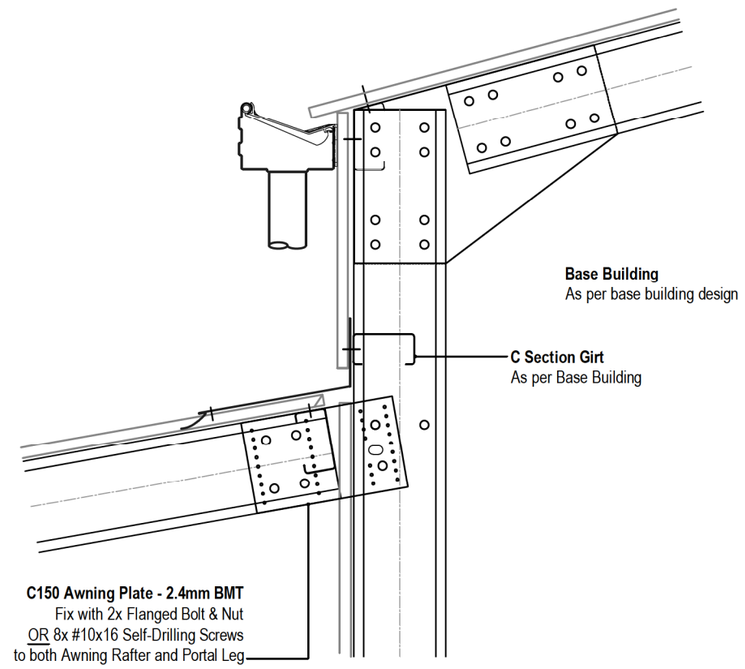
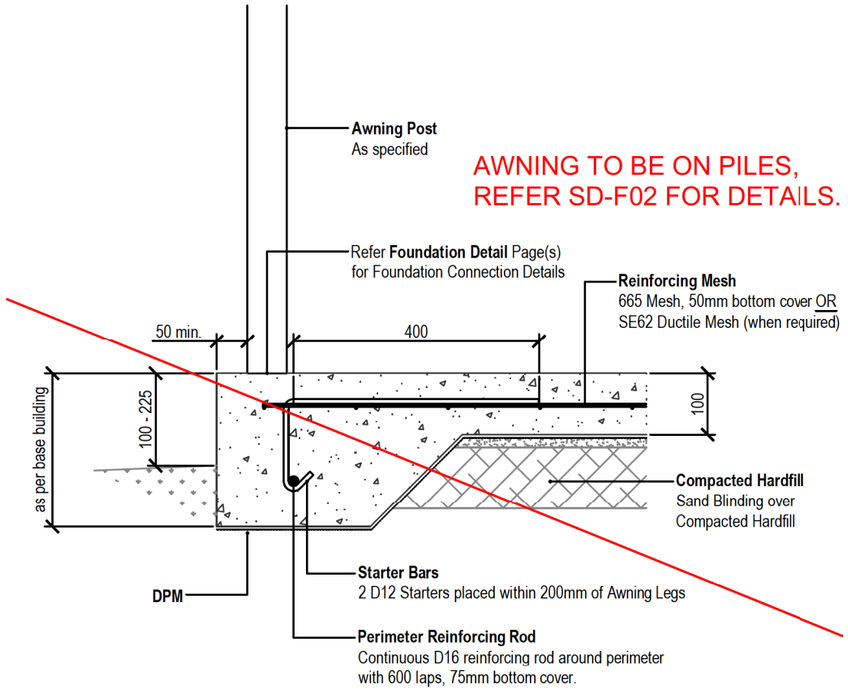


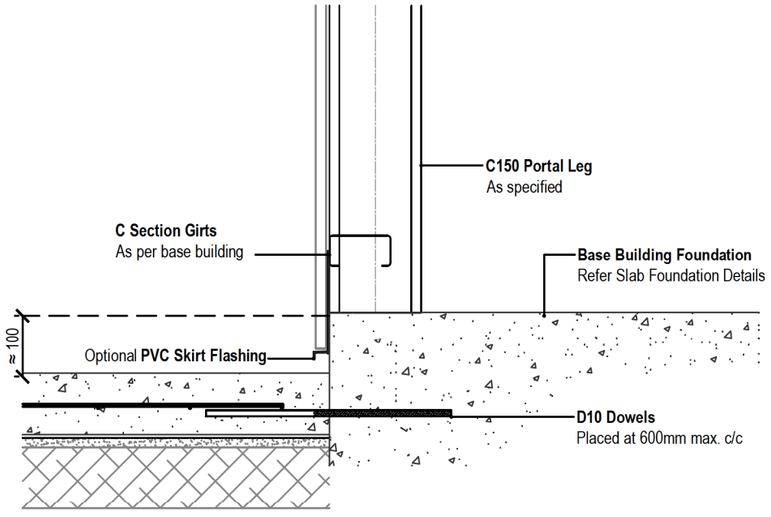
- **AWNING KNEE JOINT**
SCALE 1:10



- **AWNING CONNECTION TO BASE BUILDING**
SCALE 1:10



- **AWNING FOUNDATION DETAIL**
SCALE 1:10



- **AWNING FOUNDATION TO BASE FDTN.**
SCALE 1:10

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Andrew Nichols
Page 13 of 34
Central Hawkes Bay District Council

NOTES
1 Awning Foundation to have a 1:100 fall
2 Wall Girts (providing restraint to Portal Legs) shall only be removed/altered in accordance with standard opening specifications, drawings: SD-M01 to SD-M06 & SD-O01. Alternative configurations shall require a specific design certificate for the scope of work.

TOTALSPAN®
STEEL BUILDINGS

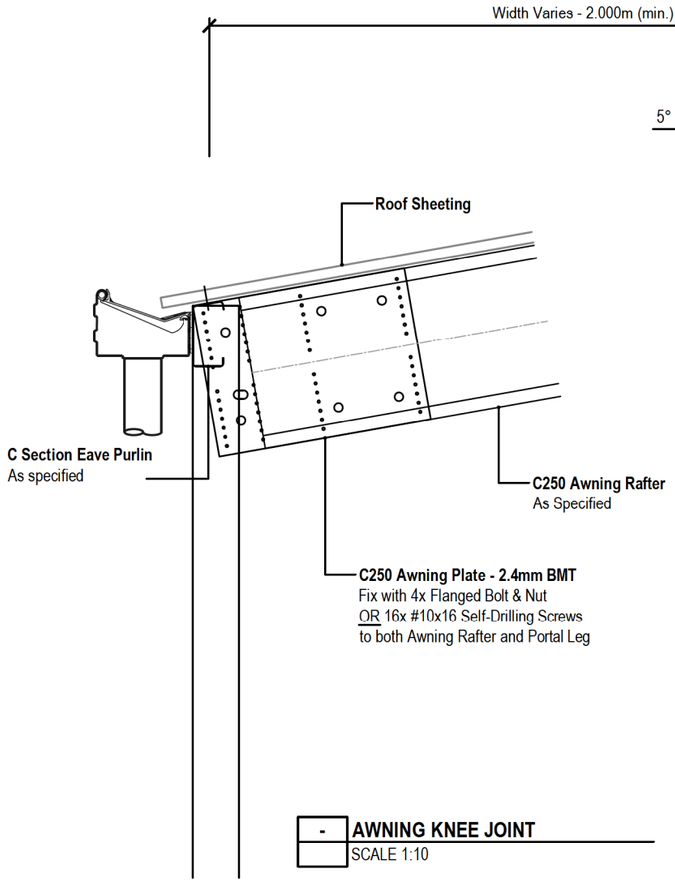
Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

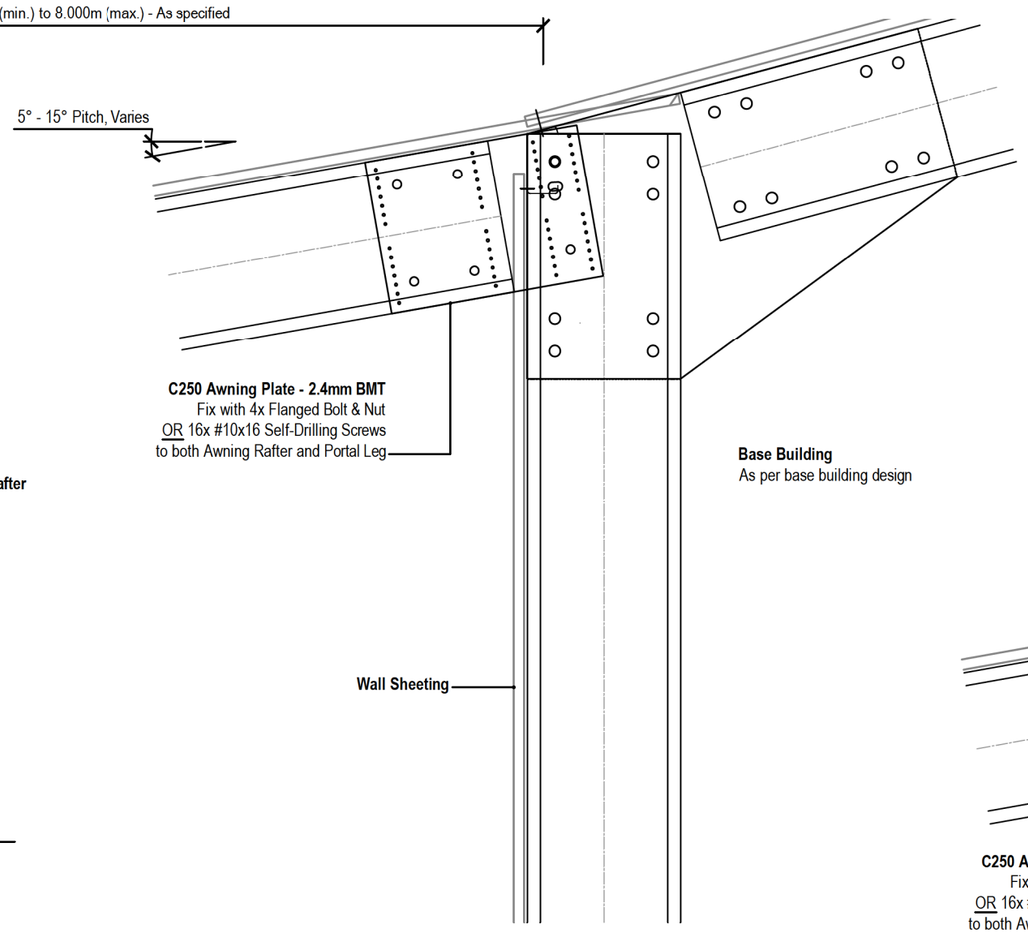
Gable Range - Design

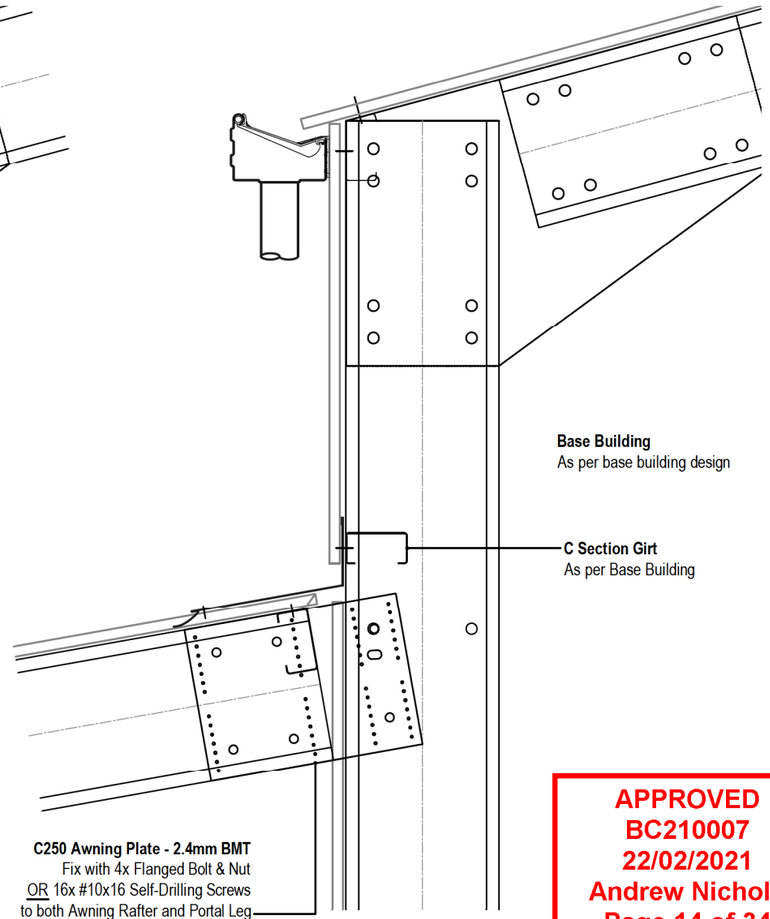
Frame Details SD-A01

Sheet 14 of 20

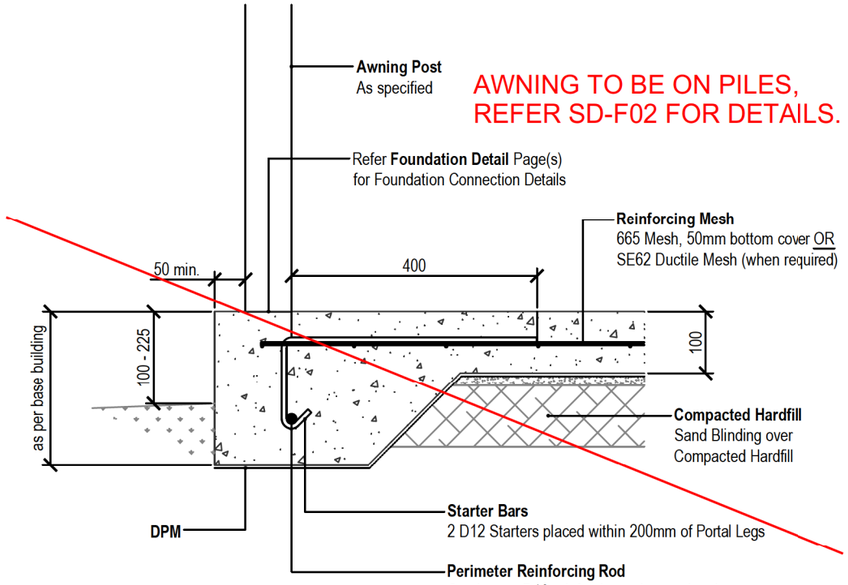


- **AWNING KNEE JOINT**
  SCALE 1:10





- **AWNING CONNECTION TO BASE BUILDING**
  SCALE 1:10



- **AWNING FOUNDATION DETAIL**
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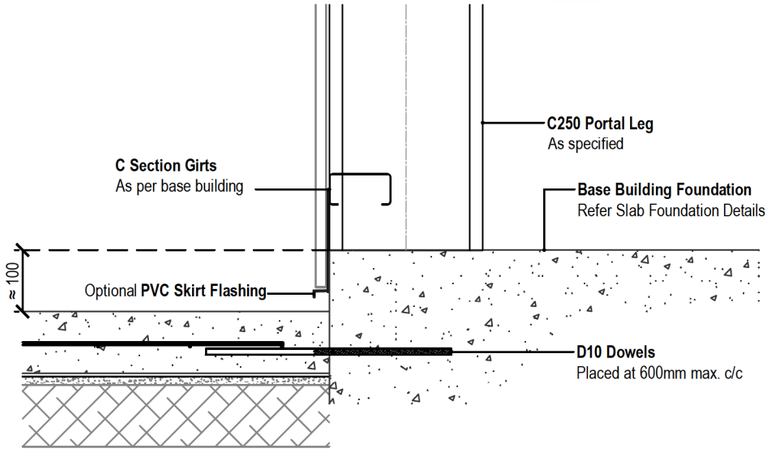

- **AWNING FOUNDATION TO BASE FDTN.**
  SCALE 1:10

NOTES

1 Awning Foundation to have a 1:100 fall

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TOTALSPAN® STEEL BUILDINGS

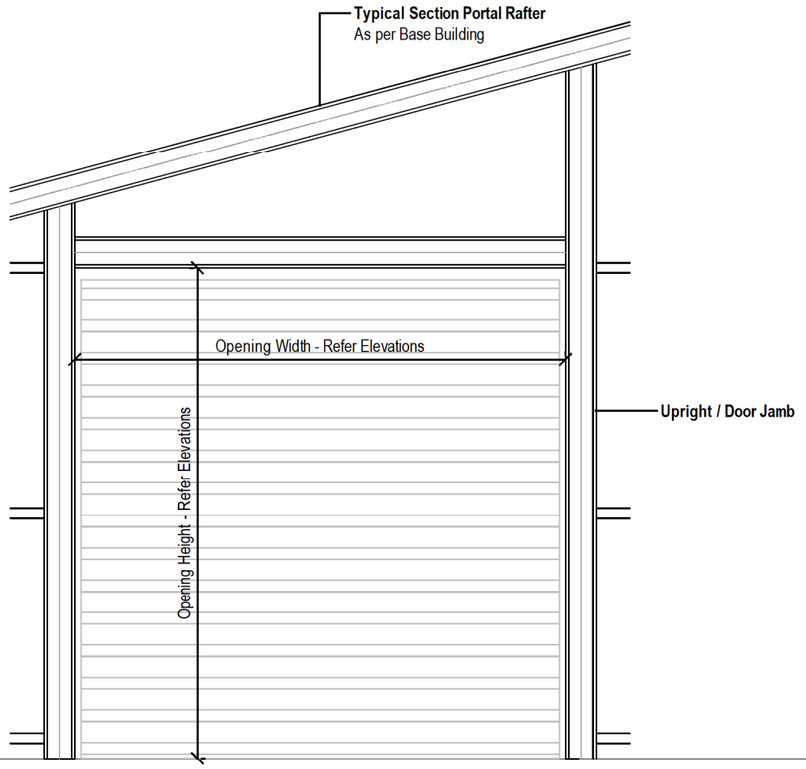
Project Ref: 1550193

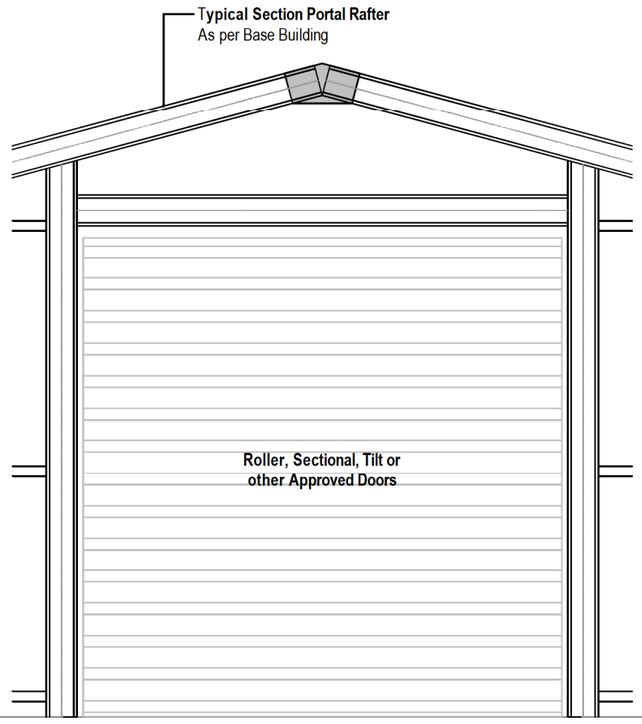
Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

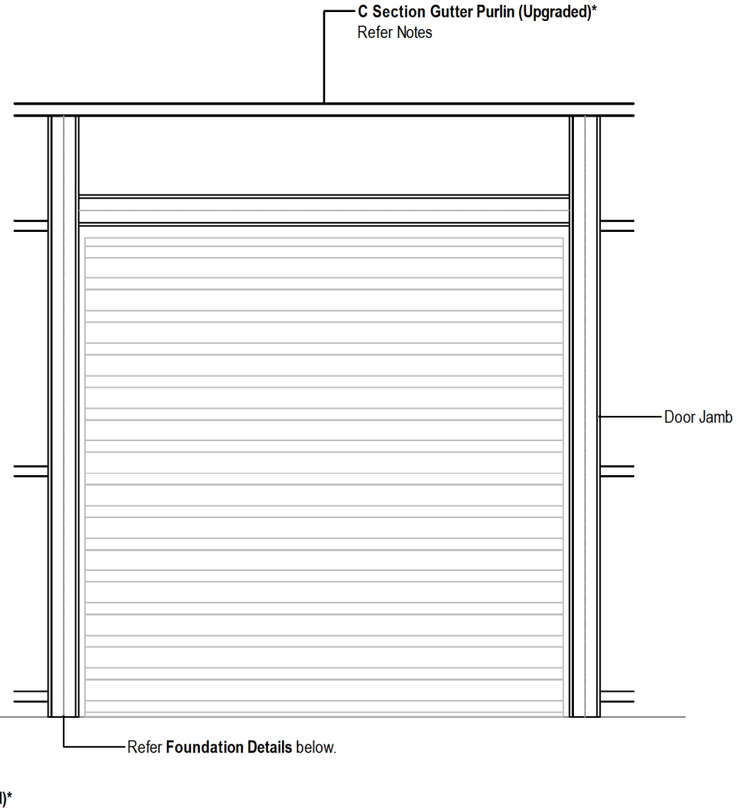
Gable Range - Design

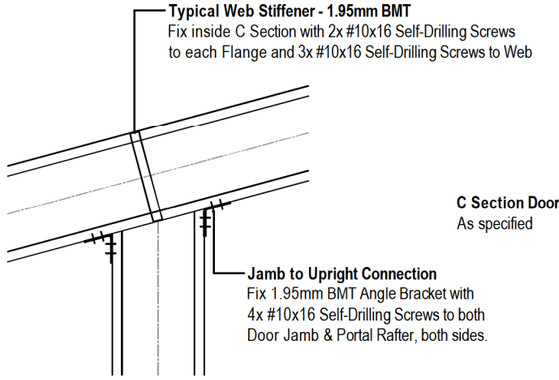
Frame Details SD-A02

Sheet 15 of 20

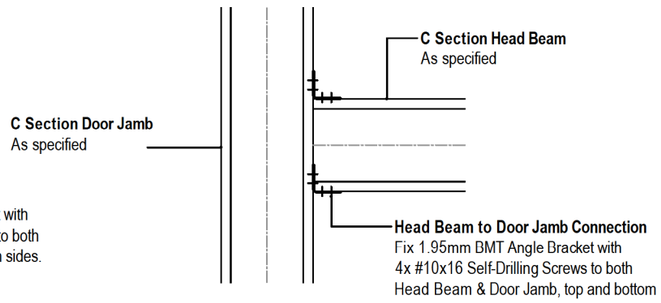








- **DOOR JAMB/UPRIGHT TO RAFTER CONNECTION**
  SCALE 1:10



- **HEAD BEAM TO DOOR JAMB CONNECTION**
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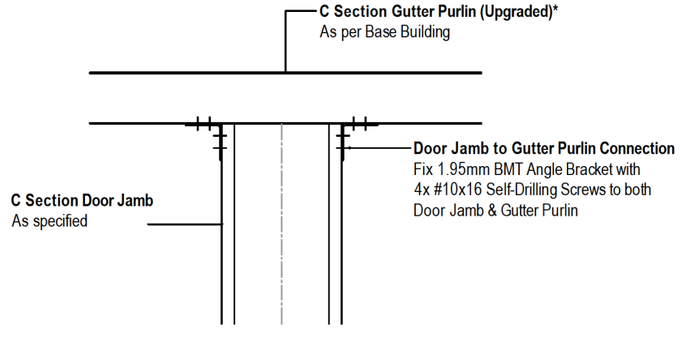

- **HEAD BEAM TO GUTTER PURLIN CONNECTION**
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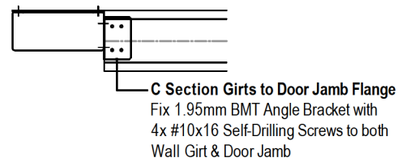
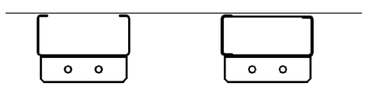


- **GIRT TO DOOR JAMB CONNECTION**
  SCALE 1:10



C150 Section Door Jambs
(open or boxed options)

- **C150 Jamb to Foundation Connections**
  SCALE 1:10

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BC210007
22/02/2021
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Central Hawkes Bay
District Council

TOTALSPAN®
STEEL BUILDINGS

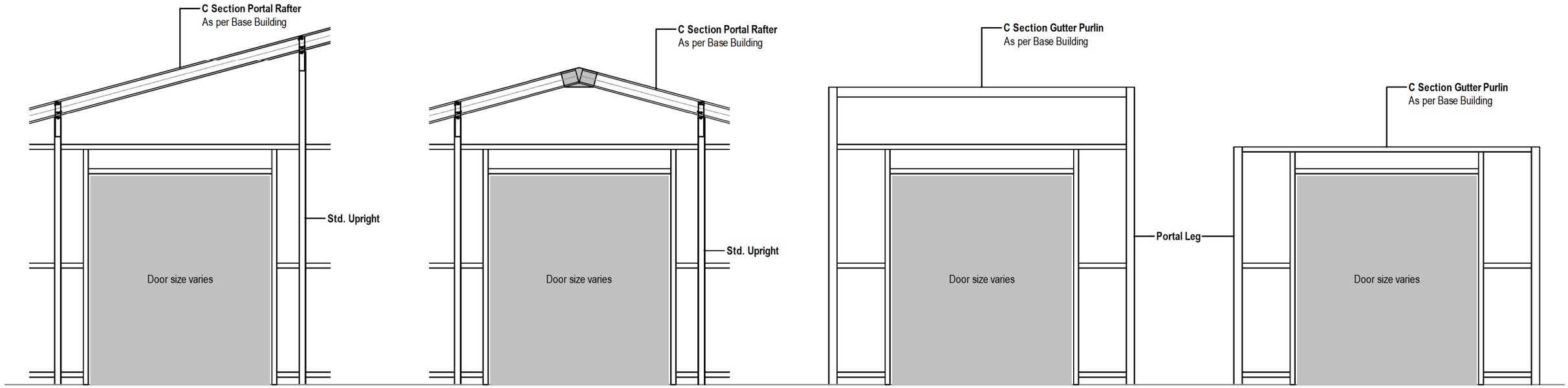
Project Ref: 1550193

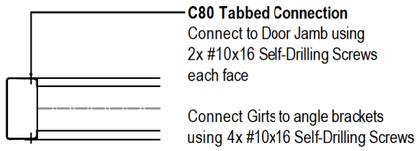
Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

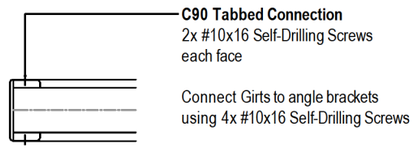
Gable Range - Design

Major Openings SD-M01

Sheet 16 of 20







-	C SECTION TABBED CONNECTION
	SCALE 1:10

-	C SECTION NOTCHED CONNECTION
	SCALE 1:10

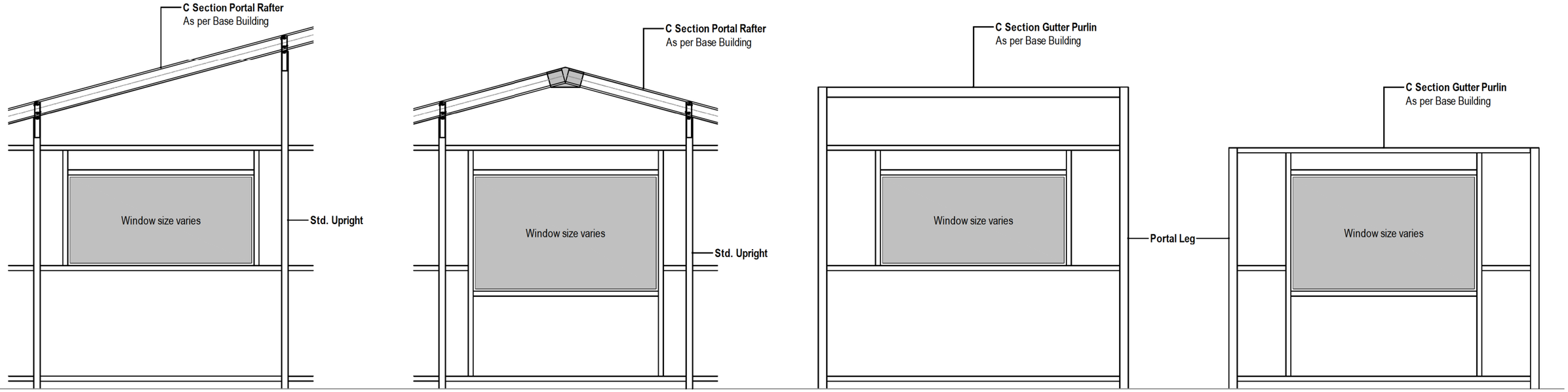
TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range - Design

Minor Door Openings SD-M05



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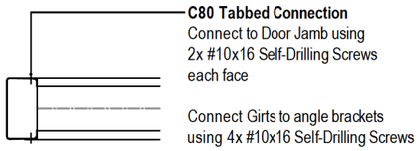
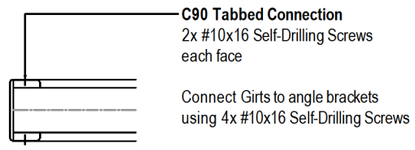
BC210007
22/02/2021
Andrew Nichols
Page 17 of 34
Central Hawkes Bay
District Council





-	C SECTION TABBED CONNECTION
	SCALE 1:10

-	C SECTION NOTCHED CONNECTION
	SCALE 1:10

TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range - Design

Minor Window Openings SD-M06

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TOTALSPAN®
STEEL BUILDINGS

Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range

Flashing Details

Sheet 19 of 20

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TOTALSPAN®
STEEL BUILDINGS

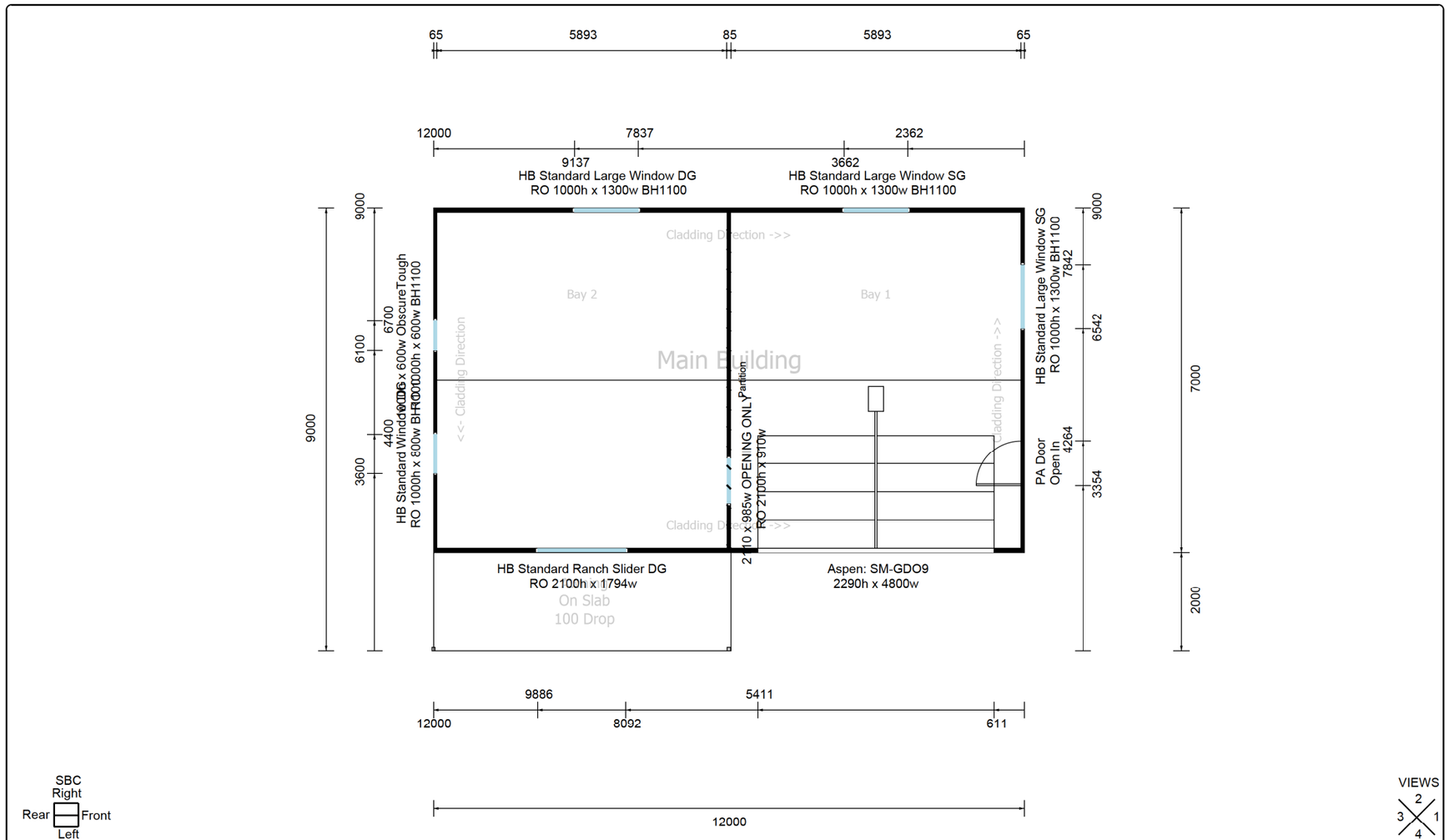
Project Ref: 1550193

Nathan Tritt
300 Homewood Road
Otane 4277
0272031205

Gable Range

Flashing Detail SD-E01

APPROVED
BC210007
22/02/2021
Andrew Nichols
Page 20 of 34
Central Hawkes Bay
District Council



Project No.: 1550193

TOTALSPAN
STEEL BUILDINGS
WHO CAN? TOTALSPAN!

Totalspan Hawke's Bay
RD 5, Hastings
4175
06 870 6936
hawkesbay@totalspan.co.nz

For: Nathan Tritt
300 Homewood Road
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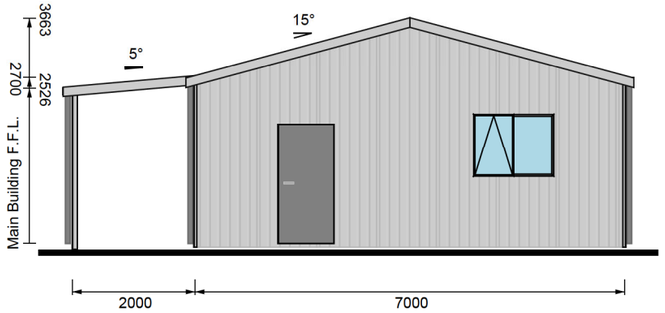
4277

Scale: 1:104

ARCHITECTURAL DETAILS
FLOOR PLAN

APPROVED
BC210007
22/02/2021
Andrew Nichols
Page 21 of 34
Central Hawkes Bay
District Council

VIEW 1



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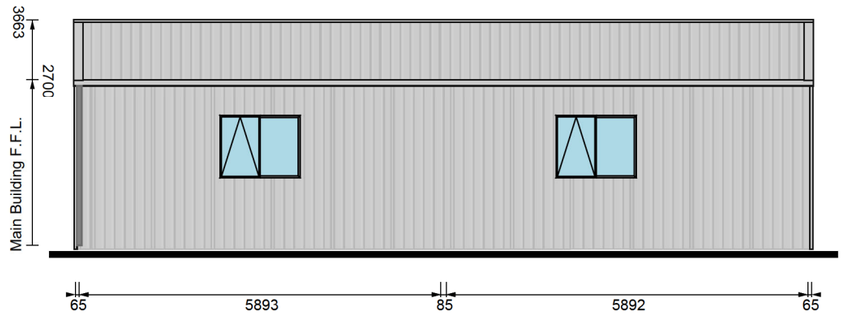

Project No.: 1550193

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For: Nathan Tritt
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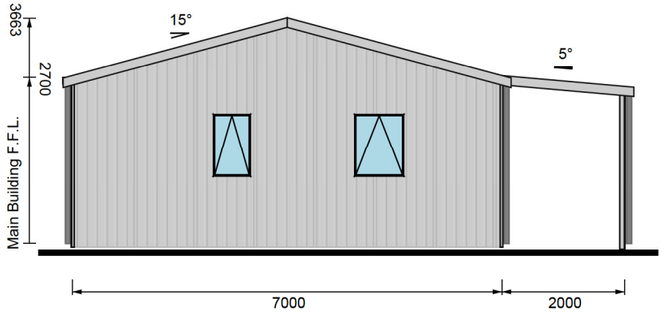
Otane
4277

Scale: 1:100

ARCHITECTURAL DETAILS
ELEVATIONS

VIEW 3



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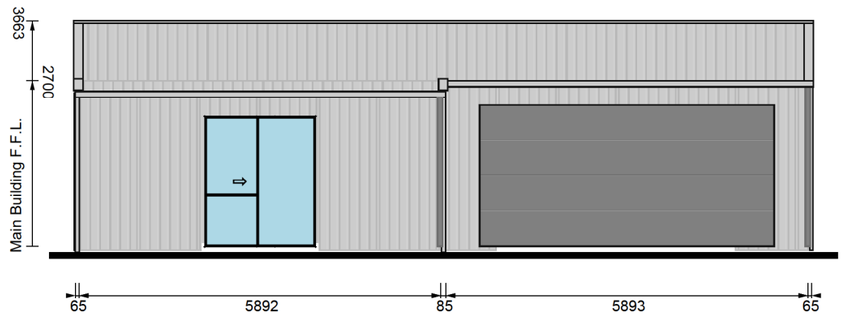

Project No.: 1550193

TOTALSPAN
STEEL BUILDINGS
WHO CAN? TOTALSPAN!

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hawkesbay@totalspan.co.nz

For: Nathan Tritt
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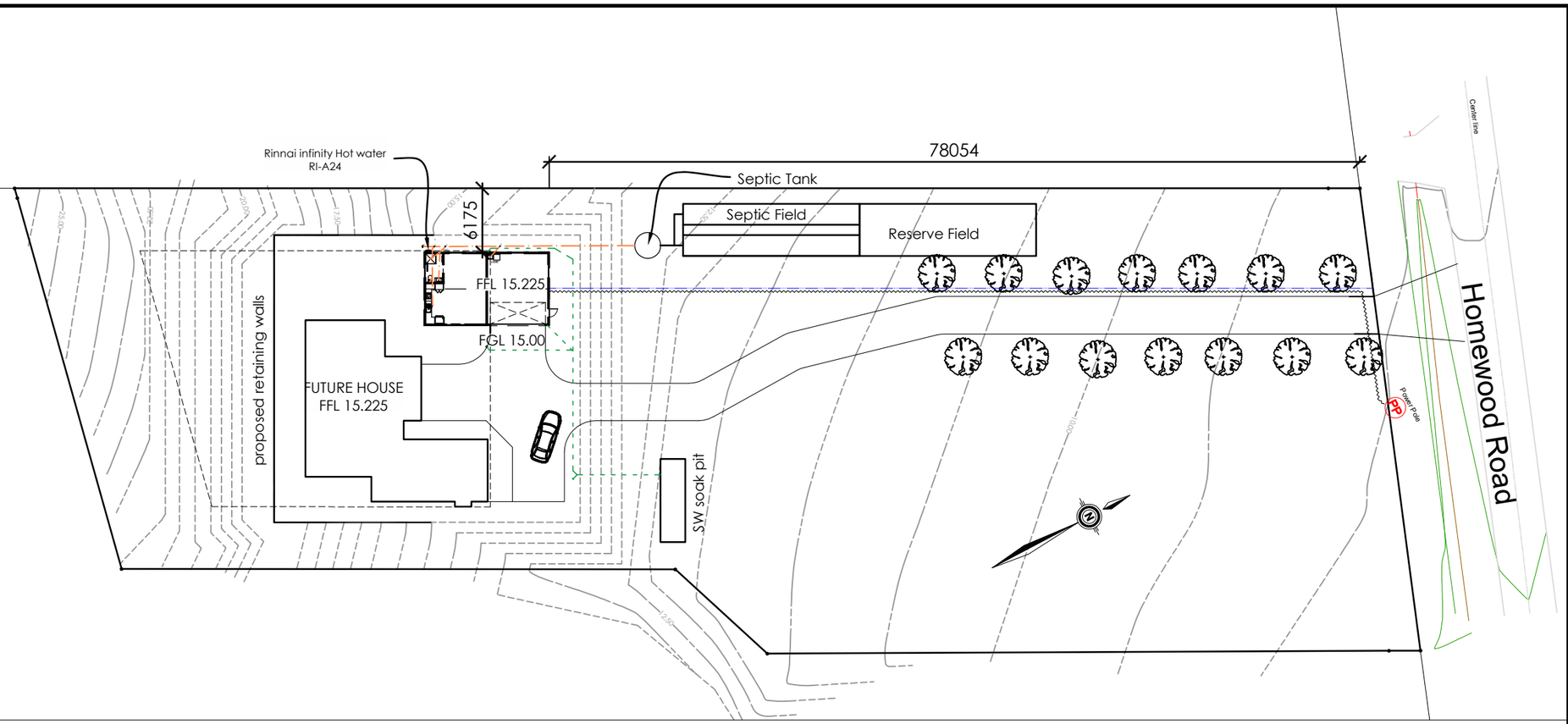
4277

Scale: 1:100

ARCHITECTURAL DETAILS
ELEVATIONS



ALL BUILDING LEVELS TO BE CONFIRMED ON SITE.
- FINISHED FLOOR LEVEL MUST BE A MINIMUM OF 225mm ABOVE UNSEALED GROUND & 150mm ABOVE PERMANENT PAVING
- WHERE THE STEP DOWN HEIGHT AT ANY EXTERNAL DOOR EXCEEDS 190mm, A CONCRETE STEP OR STEPS IS TO BE CONSTRUCTED WITH A MAXIMUM RISE OF 190mm AND A MIN TREAD OF 280mm

TEMPORARY SITE FENCING

Temporary site fencing to be constructed around the building site to stop public access. An acceptable fence may be constructed with galvanised chain link netting having a max sized grid of 50mm x 50mm. Post spacing shall be a maximum of 2.5 m, and the gap between the bottom of the fence and ground no greater than 100 mm. NZBC F5 AS/1

Wind Zone: Extra High
Earthquake Zone: Zone 3
Exposure Zone: Zone B
Subsoil classification: Class D
District Plan Zone: Residential
Building Category: IV
Residential
Floor Loadings: 2kPa

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1) ALL DIMENSIONS TO BE CONFIRMED ON SITE BY CONTRACTOR BEFORE MANUFACTURE / CONSTRUCTION. DO NOT SCALE OFF DRAWINGS. NOTIFY DESIGNER IMMEDIATELY OF ANY DISCREPANCIES.
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TRITT Sleepout

300 Homewood Rd, Waipawa

CONTENTS:

REV	DATE	AMENDMENT
1	16.12.20	CONSENT ISSUE

DRAWING TITLE:

Location & Site Plan

DATE:	16-Dec-20	JOB #:	20030
DESIGNED:	MCJ	DRAWN:	MCJ
ISSUE:	Consent	CHECKED:	MCJ

SCALE: A3 @ 1:500

DRAWING #: L101 REV: R1

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22/02/2021
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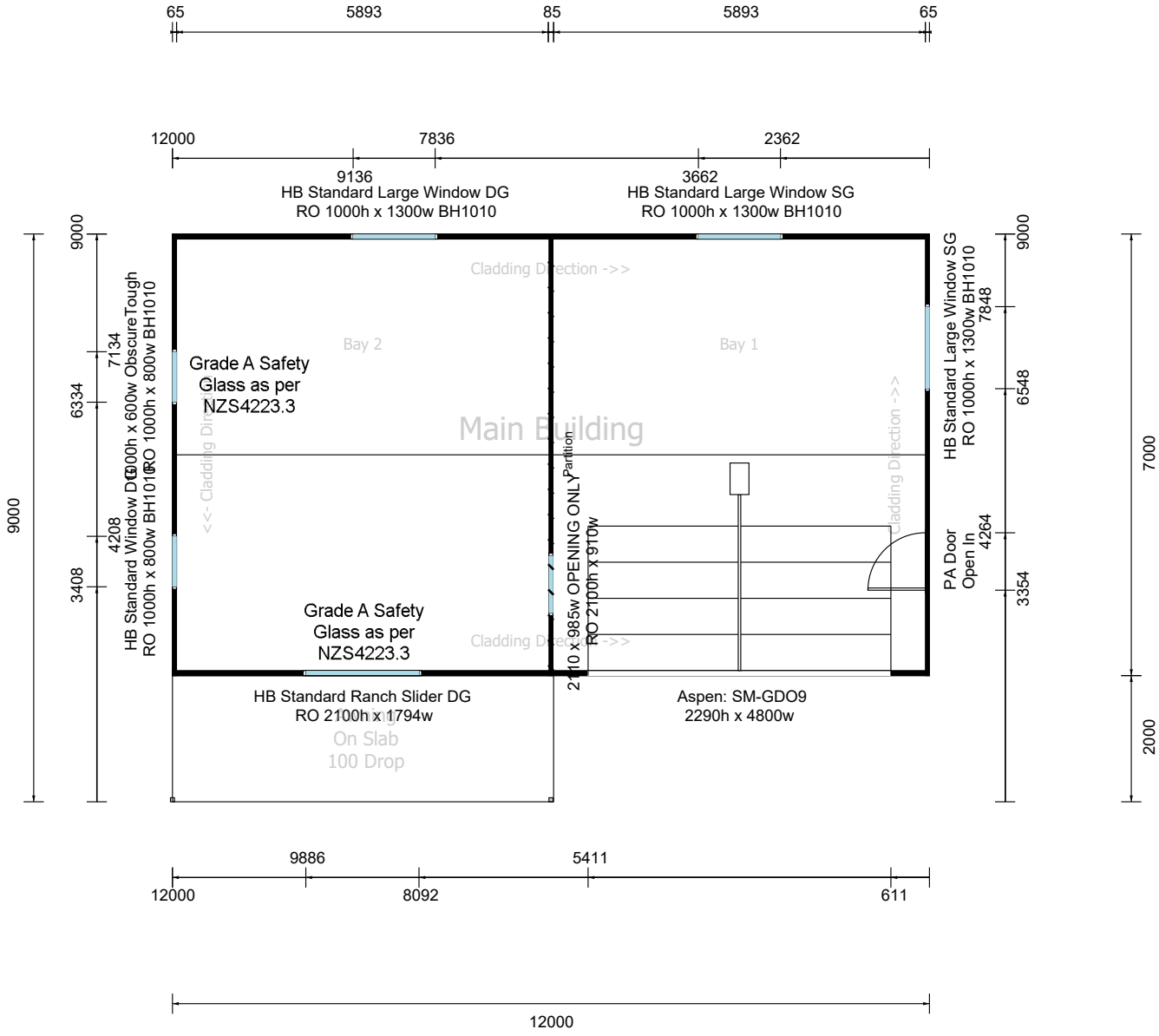
District Council



SBC
Right
Rear
Front
Left

VIEWS
2
3
1
4

Project No.: 1550193

Totalspan Hawke's Bay
RD 5, Hastings
4175
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hawkesbay@totalspan.co.nz

For: Nathan Tritt
300 Homewood Road
Otane
4277

Scale: 1:104

ARCHITECTURAL DETAILS
FLOOR PLAN

VIEW 1

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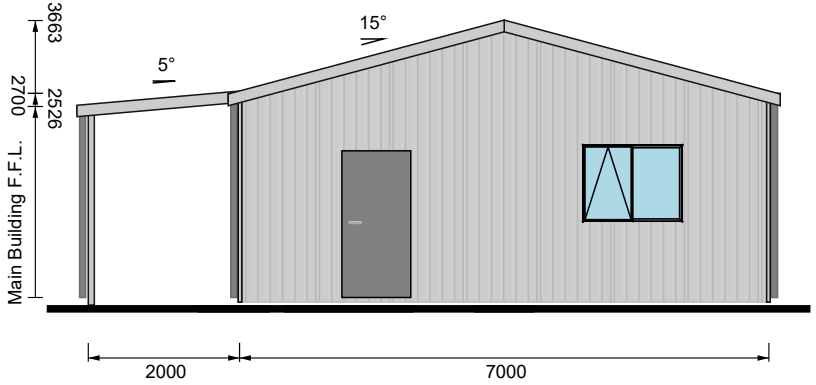
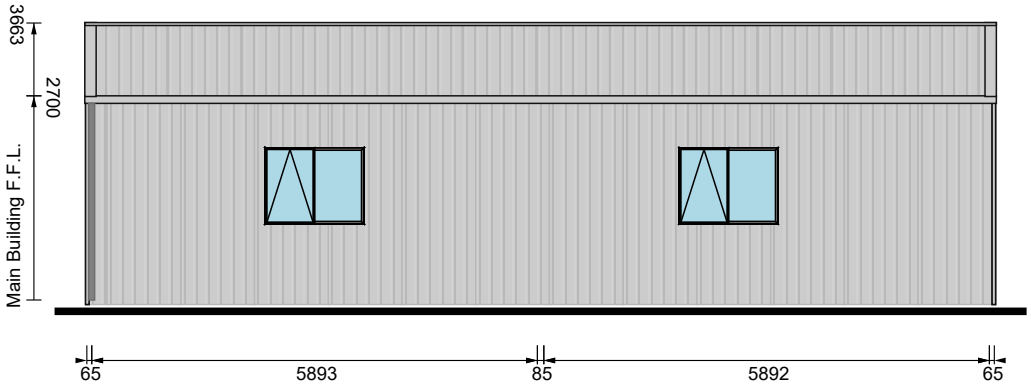
Central Hawkes Bay
District Council



RISK MATRIX									
	Risk severity								
Risk factor	low		med		high		v-high		subtotals
Wind zone	0		0		1		2	√	2
No. of storeys	0	√	1		2		4		0
Roof/wall intersection design	0		1	√	3		5		1
Eaves width	0		1		2	√	5		2
Envelope complexity	0	√	1		3		6		0
Deck design	0	√	2		4		6		0
							Total risk score:		5

VIEW 2



RISK MATRIX									
	Risk severity								
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Wind zone	0		0		1		2	√	2
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Eaves width	0		1		2	√	5		2
Envelope complexity	0	√	1		3		6		0
Deck design	0	√	2		4		6		0
							Total risk score:		5

Project No.: 1550193

TOTALSPAN STEEL BUILDINGS WHO CAN? TOTALSPAN!

Totalspan Hawke's Bay
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hawkesbay@totalspan.co.nz

For: Nathan Tritt
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Scale: 1:100

ARCHITECTURAL DETAILS ELEVATIONS

VIEW 3

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22/02/2021
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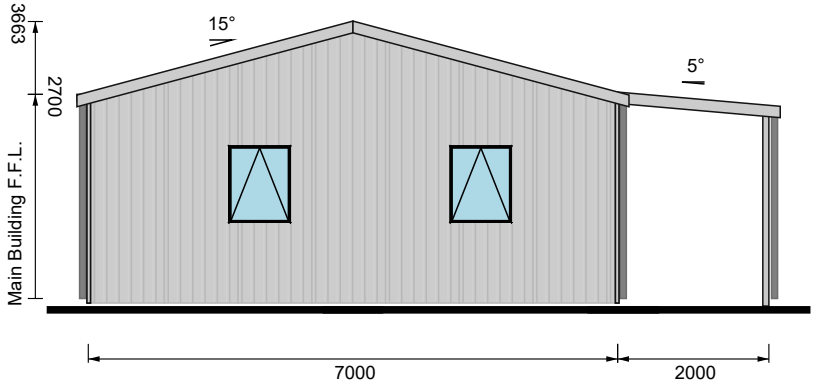
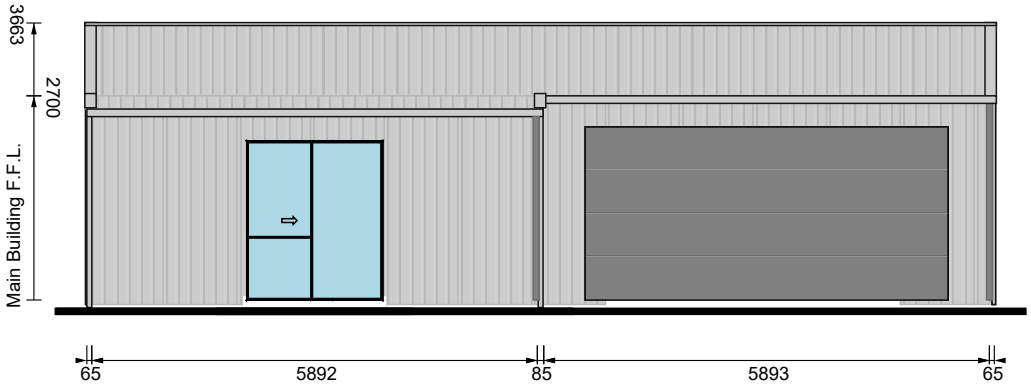
District Council



RISK MATRIX												
	Risk severity											
Risk factor	low		med		high		v-high		subtotals			
Wind zone	0		0		1		2	√	2			
No. of storeys	0	√	1		2		4		0			
Roof/wall intersection design	0		1	√	3		5		1			
Eaves width	0		1		2	√	5		2			
Envelope complexity	0	√	1		3		6		0			
Deck design	0	√	2		4		6		0			
Total risk score:									5			

VIEW 4



RISK MATRIX												
	Risk severity											
Risk factor	low		med		high		v-high		subtotals			
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No. of storeys	0	√	1		2		4		0			
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Eaves width	0		1		2	√	5		2			
Envelope complexity	0	√	1		3		6		0			
Deck design	0	√	2		4		6		0			
Total risk score:									5			

Project No.: 1550193

TOTALSPAN
STEEL BUILDINGS
WHO CAN? TOTALSPAN!

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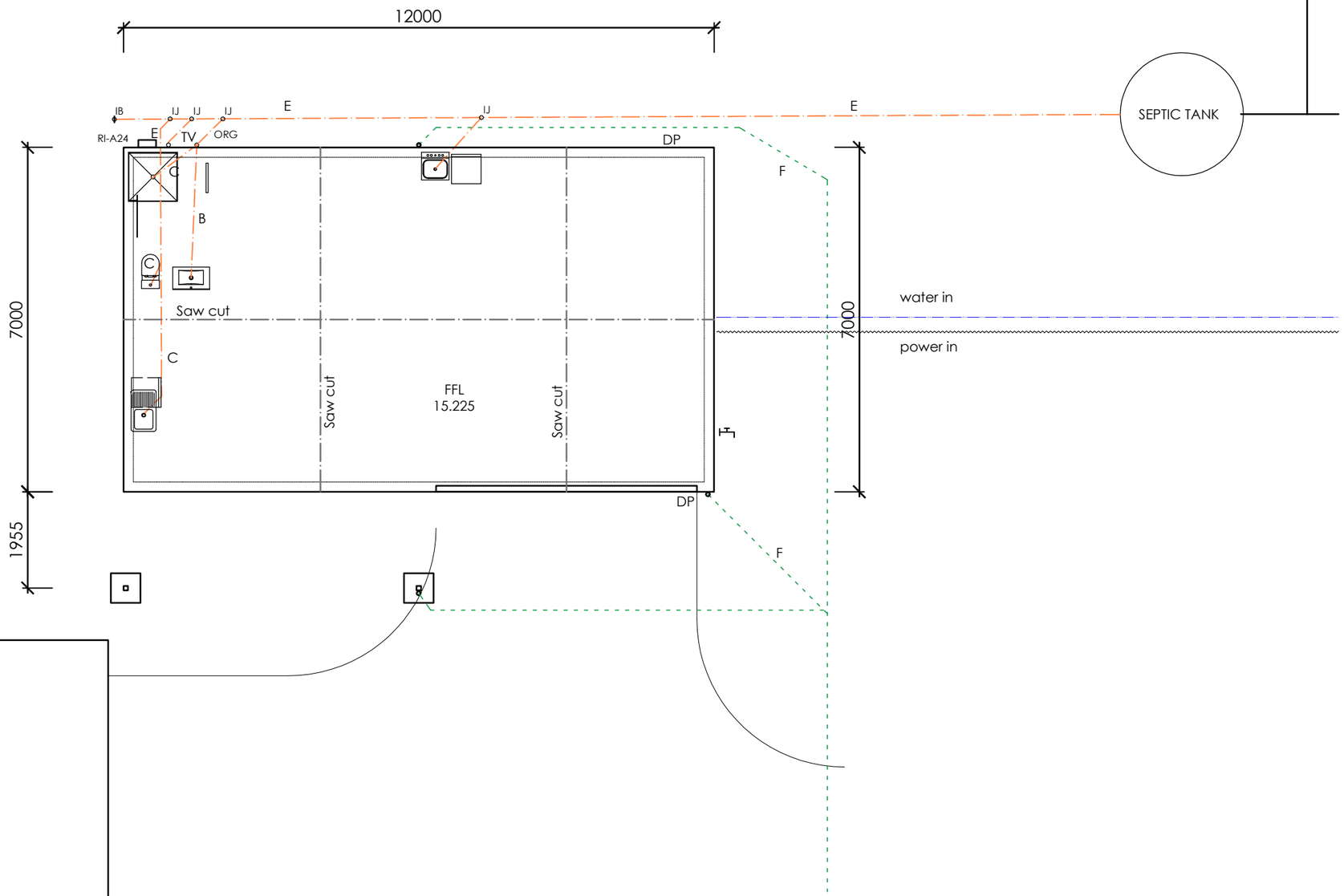
RD 5, Hastings
4175
06 870 6936
hawkesbay@totalspan.co.nz

For: Nathan Tritt
300 Homewood Road
Otane
4277

Scale: 1:100

ARCHITECTURAL DETAILS
ELEVATIONS



NOTE:
All pipework to be separated from the foundation by a minimum gap of 25mm. pipework must also be sleeved where it passes through the concrete slab or concrete footings to allow expansion & contraction of the pipe

PLUMBING & DRAINAGE NOTES:
1. Execute and complete all plumbing & drainage requirements in accordance with AS3500 & E1/AS1
2. Hot & Cold water supply pipe sizing MD16 & 20.
3. For Sinks Over 3.5m away from crown of water trap an AAV is a viable solution for pressure regulation.
4. Insulate lagging to the first 3m of the hot water pipe

HOT WATER SUPPLY NOTES:
1. To limit the growth of Legionella bacteria the control thermostat on the water storage heater to be set at a temperature NO less than 60°C
2. A tempering valve to be installed to limit the water supply at any fixture or fitting to be a maximum of 55°

LEGEND:

ORG	Gully Trap
IJ	Inspection Junction
IB	Inspection Bend
IV	Isolation Valve
TV	80Ø Terminal Vent
DP	Down Pipe
TH	Brass Exterior Taps
AP	Access point

PIPE SIZES / FALLS:

A	= 32Ø to 1:40 fall min
B	= 40Ø to 1:40 fall min
C	= 80Ø to 1:60 fall min
E	= 100Ø to 1:60 fall min foul water drain
F	= 100Ø to 1:100 fall min stormwater drain

ACCEPTABLE MAXIMUM PIPE LENGTHS
The developed length of the pipe-run from the water heater to the kitchen sink outlet shall be minimized, Table 5 (below) provides acceptable maximum pipe lengths. Where the pip supplying the sink unit is composed of sections of different diameters, the total volume of water in the pipe run shall not exceed 2 litres.

Nominal Pipe Size (mm)	10
Length (m)	25

TO BE READ IN CONJUNCTION WITH TOTAL SPAN GARAGE DOCUMENTATION

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REV	DATE	AMENDMENT
1	16.12.20	CONSENT ISSUE

pak design
ARCHITECTURAL DESIGNERS
8 Connolly Place, Milson, Palmerston North 4414
P: 06 350 3902 C:027 204 9423
E:office@pakdesign.co.nz W:www.pakdesign.co.nz

PROJECT:
Tritt Home
Homewood Rd, Wapawa

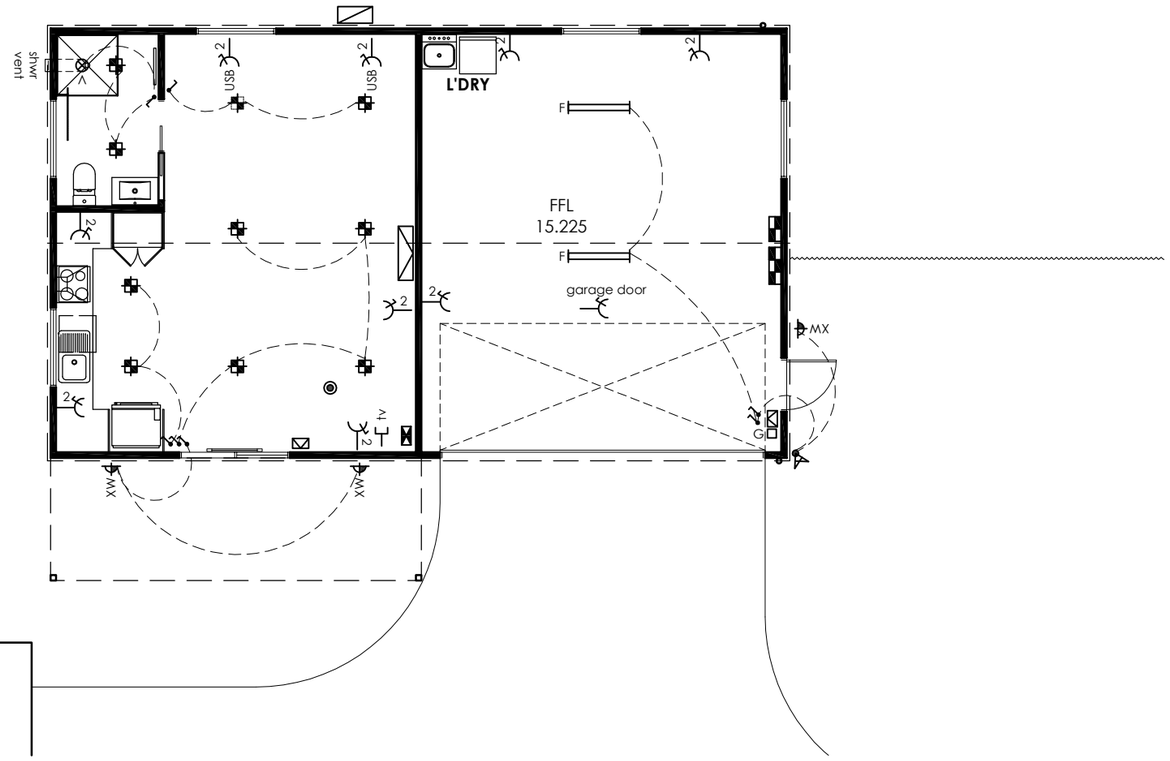
DRAWING TITLE:
Drainage Plan

DATE:	16-Dec-20	JOB #:	20030
DESIGNED:	MCJ	DRAWN:	MCJ
ISSUE:	Consent	CHECKED:	MCJ

SCALE: A3 @ 1:100

DRAWING #: **L103** REV: **R1**

NOTE: ALL LIGHTING TO BE CONFIRMED ON SITE BY OWNER WITH ELECTRICAL CONTRACTOR



Contractor shall calculate & provide sufficient power cabling to meter board & distribution board to suit loadings, as necessary. Electrical contractor to provide & fit all exterior grills & cowl to range hood ducting. Confirm all final light & power point locations on site with client prior to setting out. Multiple lights are to be run in straight lines, evenly setout. Wire the following kitchen appliances: Oven, Cooktop, Refrigerator, Extraction Hood, & dish washer. provide remote isolation switches for all of the above equipment. locations for remote switches are to be confirmed on site by client, but generally cut & concealed within kitchen cabinetry. Avoid surface mounting conduits. All wiring to be concealed from view. Client to confirm: Sky, Audio, Data, Security, Surround sound system, TV Aerial installation.

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ELECTRICAL & LIGHTING LEGEND

	Meter board, proprietary manufactured, zinc plated powder coated metal case or ABS plastic with glazed panel door
	Flush mounted distribution board. provide board complete with all required circuit breakers & RCD protection to all necessary circuits.
2	Double socket outlet PDL 600 series white cover plate (height determined on site)
	Single socket outlet PDL 600 series white cover plate (height determined on site) ("RCD" Denote RCD Type socket)
	Single socket outlet PDL 600 series white cover plate (height determined on site) ("RCD" = RCD socket) ("EX" = Exterior)
USB 2	Double socket - Double USB outlet
" "	"PH" Denotes phone / data outlet "TV" Denotes television outlet socket - client to organize decoders as required.
G	Garage Door wall mounted control
	Security Sensor
	Security control pad
	Fibre/Telephone Demarc Point with dedicated Power Supply
	Hard wired Smoke Alarm
	High wall heat pump
	Heat pump outdoor unit
V shwr vent	Mechanical vent Extract Fan run on timer linked to light switch
XW	Exterior Wall Mounted light
	LED Down Light
F	1500 long double fluorescent fitting with owner selected diffuser.
	Soffit mounted Exterior Double Spot Light with Sensor
	PDL 600 series white cover plate, white switch, 1000mm high

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1	16.12.20	CONSENT ISSUE

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8 Connolly Place, Milson, Palmerston North 4414
P: 06 350 3902 C:027 204 9423
E:office@pakdesign.co.nz W:www.pakdesign.co.nz

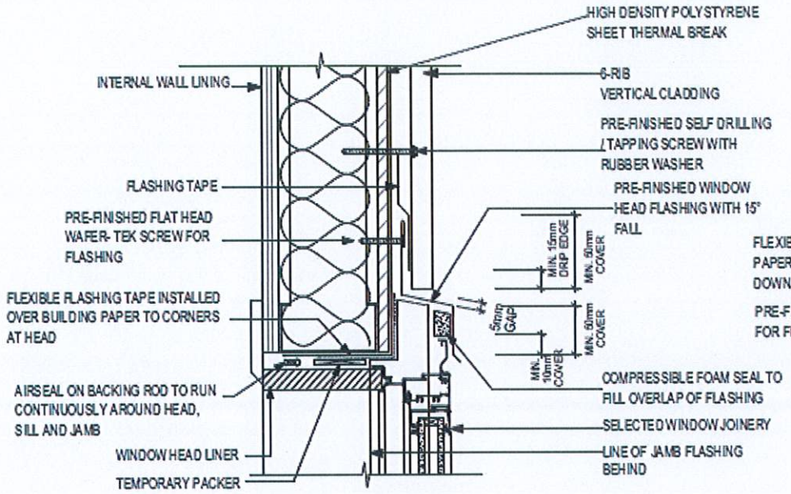
PROJECT:
Tritt Home
Homewood Rd, Wapawa

DRAWING TITLE:
Electrical Layout

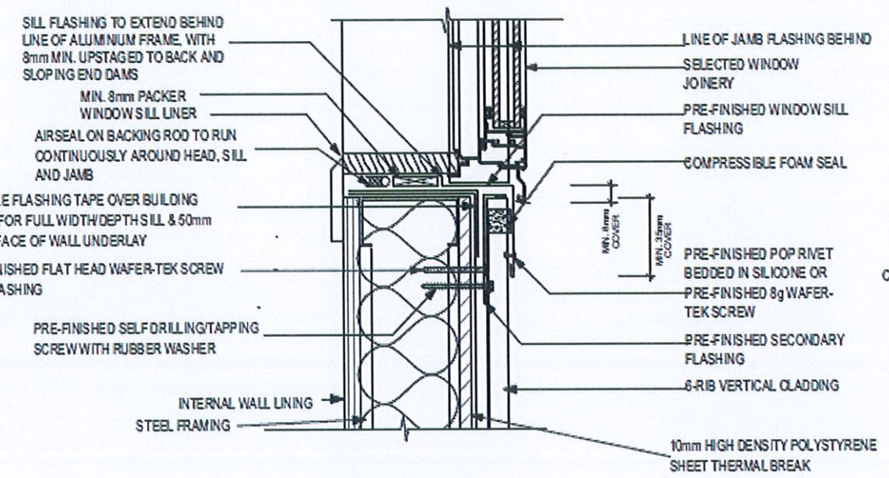
DATE:	16-Dec-20	JOB #:	20030
DESIGNED:	MCJ	DRAWN:	MCJ
ISSUE:	Consent	CHECKED:	MCJ

SCALE:
A3 @ 1:100
A1 @ 1:50

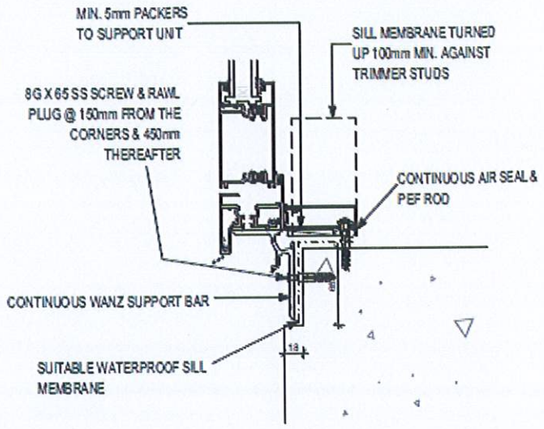
DRAWING #: **L105** REV: **R1**



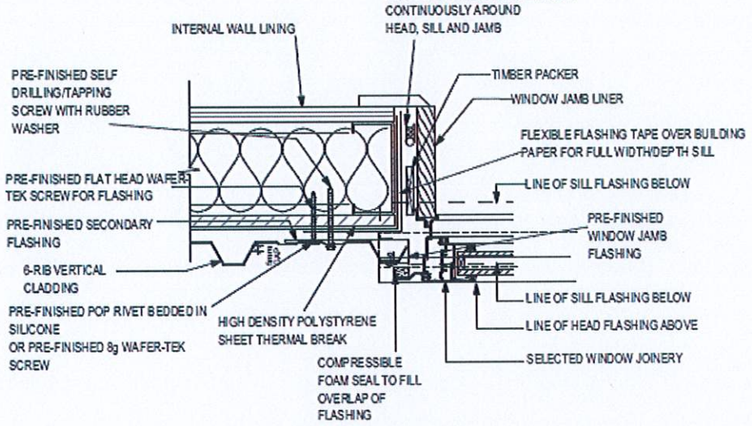
1. Window Head Detail



2. Window Sill Detail



3. Door Sill Detail



5. Window Jamb Detail

ALL EXTERIOR DOOR SILL REBATE DIMENSIONS SHALL BE CONFIRMED WITH SELECTED JOINERY MANUFACTURER BY CONTRACTOR PRIOR TO CONSTRUCTION.

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22/02/2021
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Central Hawkes Bay
District Council

TOTALSPAN STEEL BUILDINGS
WHO CAN? TOTALSPAN!

Flashing Details

SCALE: AS GIVEN - FOR A3 PRINT

DOCUMENT STATUS:

JOB No.

ISSUED ON: 23/01/2020

TO BE READ IN CONJUNCTION WITH TOTAL SPAN GARAGE DOCUMENTATION

COMPLIANCE WITH H1/AS1 - ENERGY EFFICIENCY

FLOOR AREA OF INSULATION:

Small building envelope - NZS4218

TOTAL WALL AREA	= 42.4m²
TOTAL WINDOW AREA	= 6.6m²
WINDOW TO WALL %	= 15.5%

Less than 50% so schedule method can be used

SCHEDULE METHOD:

-	Roof	-R2.9min	-R3.98 achieved
-	Walls	-R1.9 min	-R2.01 achieved
-	Floor	-R1.3 min	-R1.99 achieved
-	Glazing	-R0.26 min	-R0.26 achieved

INSULATION REQUIREMENTS:

Roof - over ceiling	Pink Batts	- R3.6
Exterior walls - Timber	Pink Batts (Classic)	- R2.4
Windows - Double Glazed	Glass.	- R0.26

- MINIMUM R-VALUES HAVE BEEN ACHIEVED

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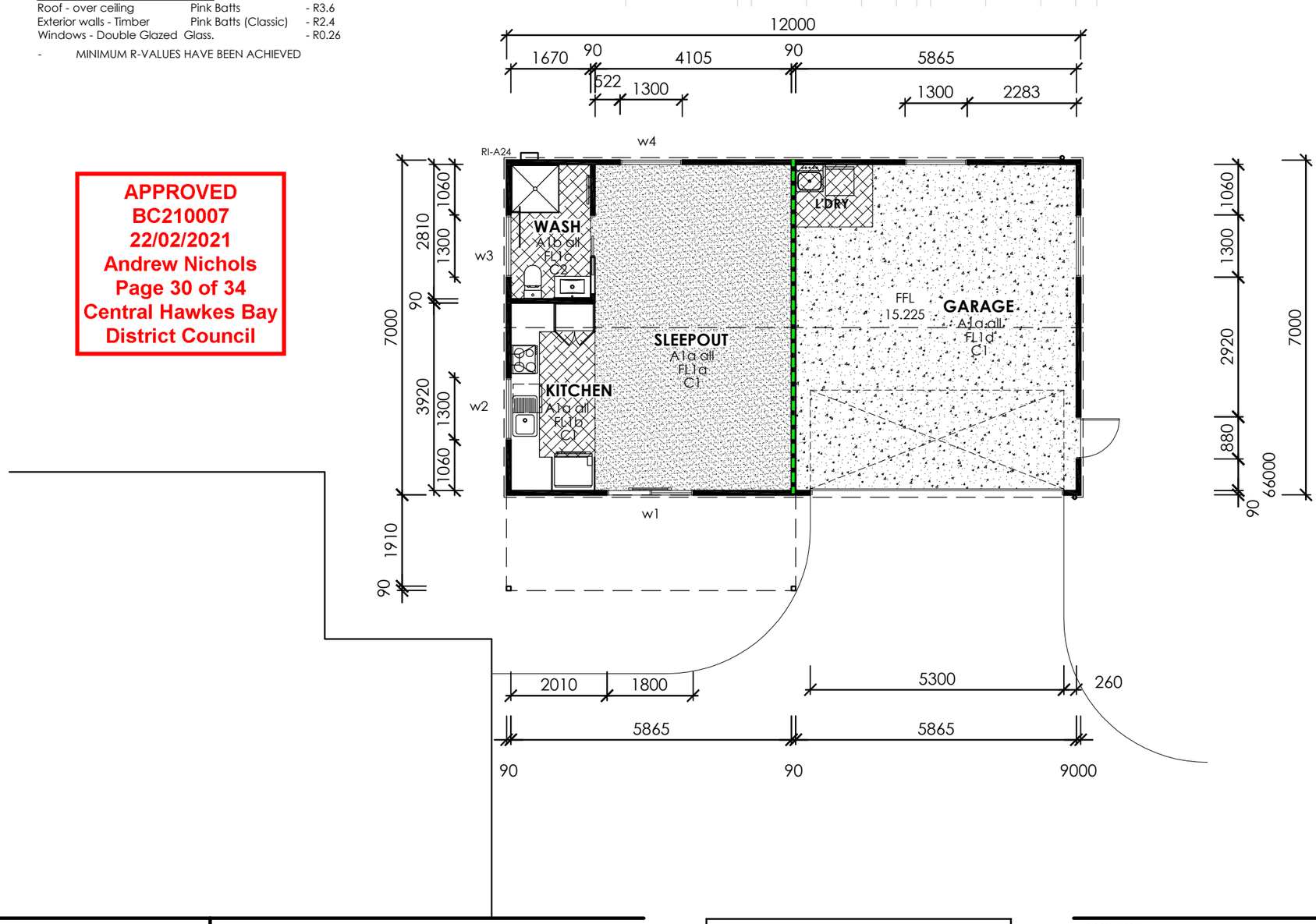
Ventilation and Lighting Calculations

ROOM NAME	VENTILATION CALCULATIONS In accordance with NZBC G4/AS1		LIGHTING CALCULATIONS In accordance with NZBC G7	
Sleepout (Incl. Kitchen)	Room Area	34.8 m²	Room Area	34.8 m²
	5% Ventilation	1.98 m²	10% Lighting	3.48 m²
	Actual Vent W1	1.6 m²	Actual Light W1	3.6 m²
	Actual Vent W2	0.8 m²	Actual Light W2	0.8 m²
	Actual Vent W4	0.5 m²	Actual Light W4	1.3 m²
	Total Vent	2.9 m²	Total Light	5.7 m²
	Compliant	Yes	Compliant	Yes
Bathroom	Room Area	4.60 m²	Room Area	4.60 m²
	5% Ventilation	0.23 m²	10% Lighting	0.46 m²
	Actual Vent W3	0.8 m²	Actual Light W3	0.8 m²
	Total Vent	0.8 m²	Total Light	0.8 m²
	Compliant	Yes	Compliant	Yes



WALL FINISHES & CONSTRUCTION CODES:

All surfaces to be painted/polyurethaned/stained are to be selected at a later date by owner.

Skirting:	60x10mm MDF/FJ pine 100mm high tile to Wash
Scotia:	55mm Gib Cove through House 40x10mm FJ pine to cupboards
Architraves:	60x10mm MDF/FJ pine

A- Timber framed wall with
A1a 10mm Gib Standard wall linings, stopped, sanded, sealed & painted.
A1b 10mm Gib Aqualine wall linings, stopped, sanded, sealed & painted

GIB to be finished to ' Grade 4 ' level generally unless noted otherwise. Refer to the Resene manufactures spec for sealer, undercoat & interior low sheen acrylic paint top coat. Follow paint manufacturer's specifications for paint application & preparation to all surfaces.

FLOOR FINISHES & CONSTRUCTION CODES:

FL1- 100mm thick 20MPa Concrete Slab with 500E 665 mesh on DPM on sand blinding on compacted fill
FL1a Owner selected Carpet on heavy duty underlay
FL1b Owner selected Vinyl Plank
FL1d U3 Float finish concrete

Supply of carpet, vinyl & concrete are to be selected at a later date by owner from builders selection. Natural Anodized Aluminum trim bars to be used between different flooring types unless otherwise stated.

KITCHEN:

Proprietary Kitchen Design by others (layout indicative only). All food preparation areas to be impermeable / hygienic to prevent food contamination. Ref. NZBC G3/AS1.

JOINERY:

All joinery to be confirmed with client

SOFFIT LININGS:

Soffit linings up to 600mm wide to be 4.5mm JH HardieSoffit with uPVC jointers

EXTERNAL WALL & CLADDING CODES:

Ex1 70 Series Owner selected Brick Veneer cladding over drained cavity over building wrap
Ex2 Hermpac HP62 Cedar bevelback weatherboard on 20mm drained cavity over building wrap

INSULATION REQUIREMENTS:

Pink Batts Classic R2.4 to External Walls + Internal Garage Walls
Pink Batts Classic R3.2 Ceiling
Double Glazed Windows R0.26 - to house only - garage single glazed
Pink Batts Classic R2.2 to Garage Walls & Ceiling as per GIB Intertenancy Barrier System

CEILING FINISHES & CONSTRUCTION CODES:

All surfaces to be painted are to be selected at a later date by owner.

C1 13mm Gib Standard ceilings over 70x35 SG8 H1.2 ceiling battens @ 600crs, 2420 high
C2 13mm Gib Aqualine ceilings over 70x35 SG8 H1.2 ceiling battens @ 600crs, 2420 high

1) ALL DIMENSIONS TO BE CONFIRMED ON SITE BY CONTRACTOR BEFORE MANUFACTURE / CONSTRUCTION. DO NOT SCALE OFF DRAWINGS. NOTIFY DESIGNER IMMEDIATELY OF ANY DISCREPANCIES.
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REV	DATE	AMENDMENT
1	16.12.20	CONSENT ISSUE

pak design
ARCHITECTURAL DESIGNERS
8 Connolly Place, Milson, Palmerston North 4414
P: 06 350 3902 C:027 204 9423
E:office@pakdesign.co.nz W:www.pakdesign.co.nz

PROJECT:
Tritt Home
Homewood Rd, Wapawa

DRAWING TITLE:
Floor Finishes Plan

DATE:	20-Jan-21	JOB #:	20030
DESIGNED:	MCJ	DRAWN:	MCJ
ISSUE:	Consent	CHECKED:	MCJ

SCALE: A3 @ 1:100
DRAWING #: **L102** REV: **R0**

TO BE READ IN CONJUNCTION WITH TOTAL SPAN GARAGE DOCUMENTATION

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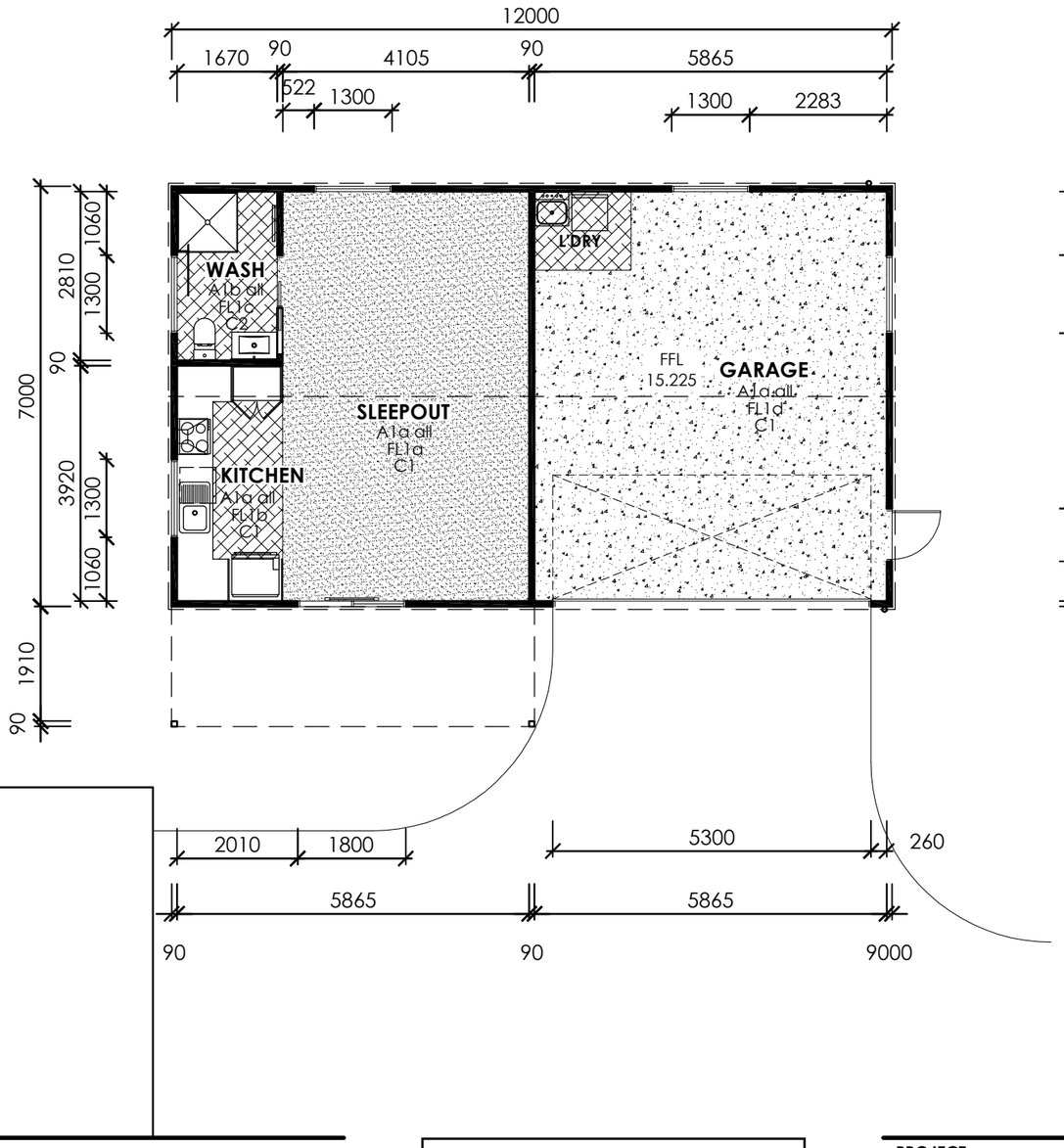

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P: 06 350 3902 C:027 204 9423
E:office@pakdesign.co.nz W:www.pakdesign.co.nz

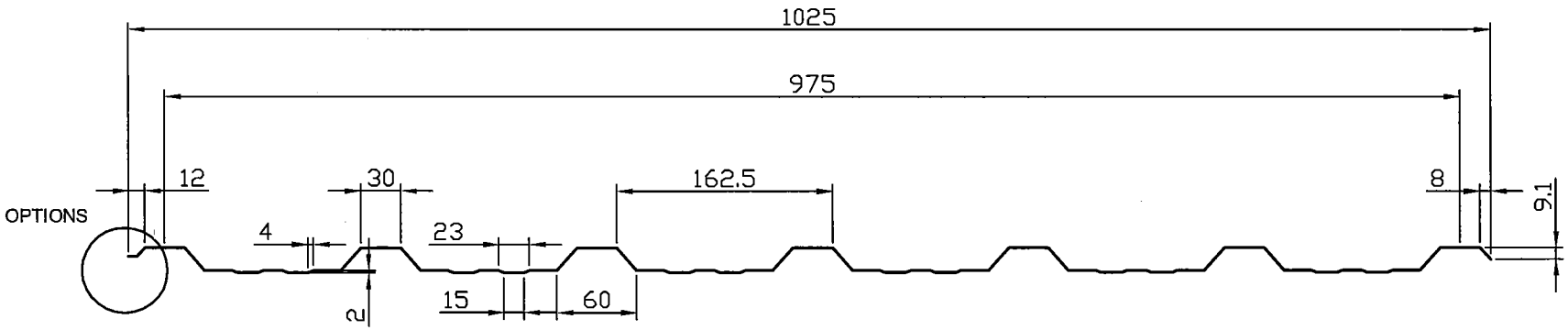
PROJECT:
Tritt Home
Homewood Rd, Wapawa

DRAWING TITLE:
Floor Finishes Plan

DATE:	16-Dec-20	JOB #:	20030
DESIGNED:	MCJ	DRAWN:	MCJ
ISSUE:	Consent	CHECKED:	MCJ

SCALE: A3 @ 1:100
DRAWING #: **L102** REV: **R0**

DIMENSIONS IN mm UNLESS STATED. THIS IS A C.A.D. DRAWING AND MUST NOT BE ALTERED BY MANUAL METHODS.



OPTION 1. FOR PANEL SHED, 301200 &301225

OPTION 2. FOR GARAGE, 301250 &301300

OPTION 3. FOR ALL

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22/02/2021
Andrew Nichols
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Central Hawkes Bay
District Council

VERSATILE BUILDINGS
74 PLATINUM ST CRESTMEAD, QUEENSLAND 4132
AUSTRALIA (P.O. BOX 2301)
PH: +61 (07) 3803 4044 FAX: +61 (07) 3803 2220

VERSATILE BUILDINGS LTD
ENGINEERING DETAILS

MATERIAL DATA

SLIT	GAUGE	TENSILE	COLR.	CODE
1100	0.3	550	ZN	301225
1100	0.35	550	CB	301250
1100	0.35	550	ZN	301300

REVISION

DESCRIPTION	DATE

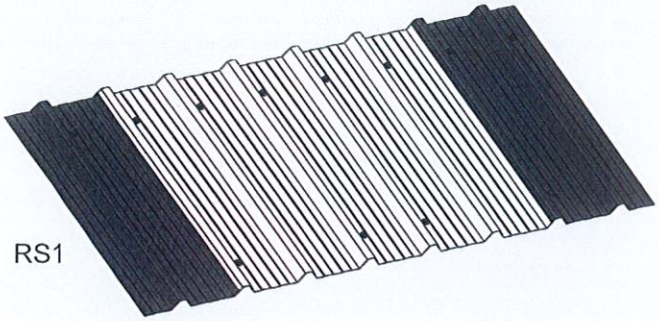
DRAWN:	DATE:
PK	08/08/2018
CHECKED:	SCALE: 1:5

DRAWING TITLE: 7 RIB

DRAWING NUMBER: 301225

REVISION:

Roof Sheeting

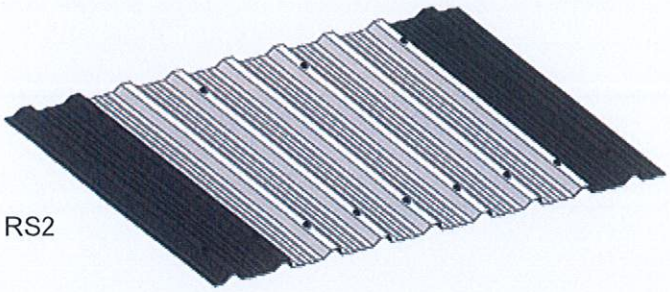


RS1

6 Rib

The cladding for roof sheeting shall be fixed using Cladding Hex Tek #12x45 to all purlins, except the ridge purlin, and extend 50mm into the gutter.

On middle purlins tek rib on every join then miss one, place two. On gutter purlin tek every rib.

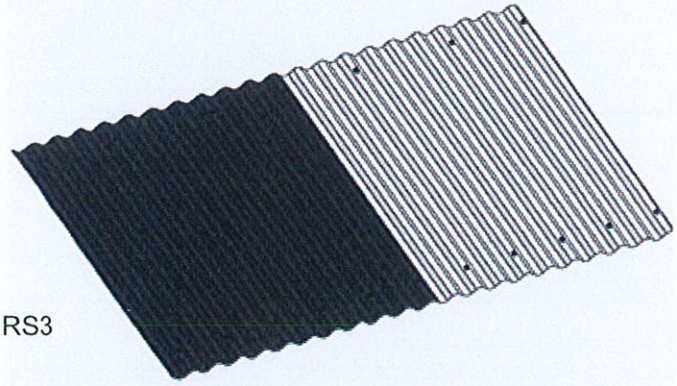


RS2

7 Rib

The cladding for roof sheeting shall be fixed with Cladding Hex Tek #12x35 to all purlins, except the ridge purlin, and extend 50mm into the gutter.

On middle purlins tek every second rib. On gutter purlins tek every rib.

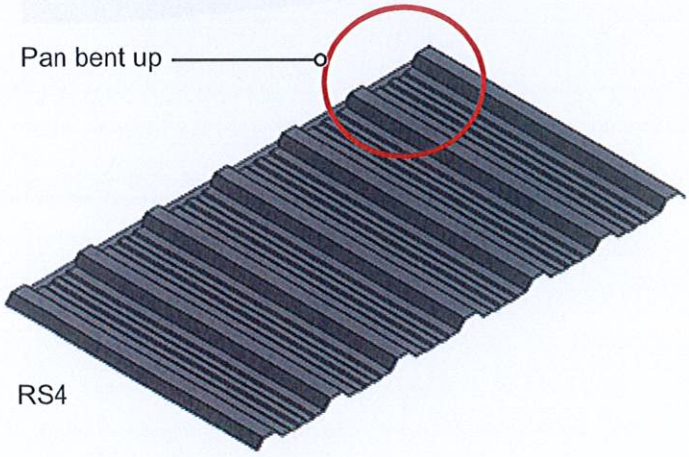


RS3

Corrugate

The cladding for roof sheeting shall be fixed with Cladding Hex Tek #12x35 to all purlins, except the ridge purlin, and extend 50mm into the gutter.

On middle purlins tek on rib at every join then miss two, tek one, miss three, tek one. On gutter purlins tek every second rib.



RS4

Pan Detail to Ridge

Roof Sheeting to have pans bent up, as shown, to ridge end. Use a crescent if no suitable bending tool is available.

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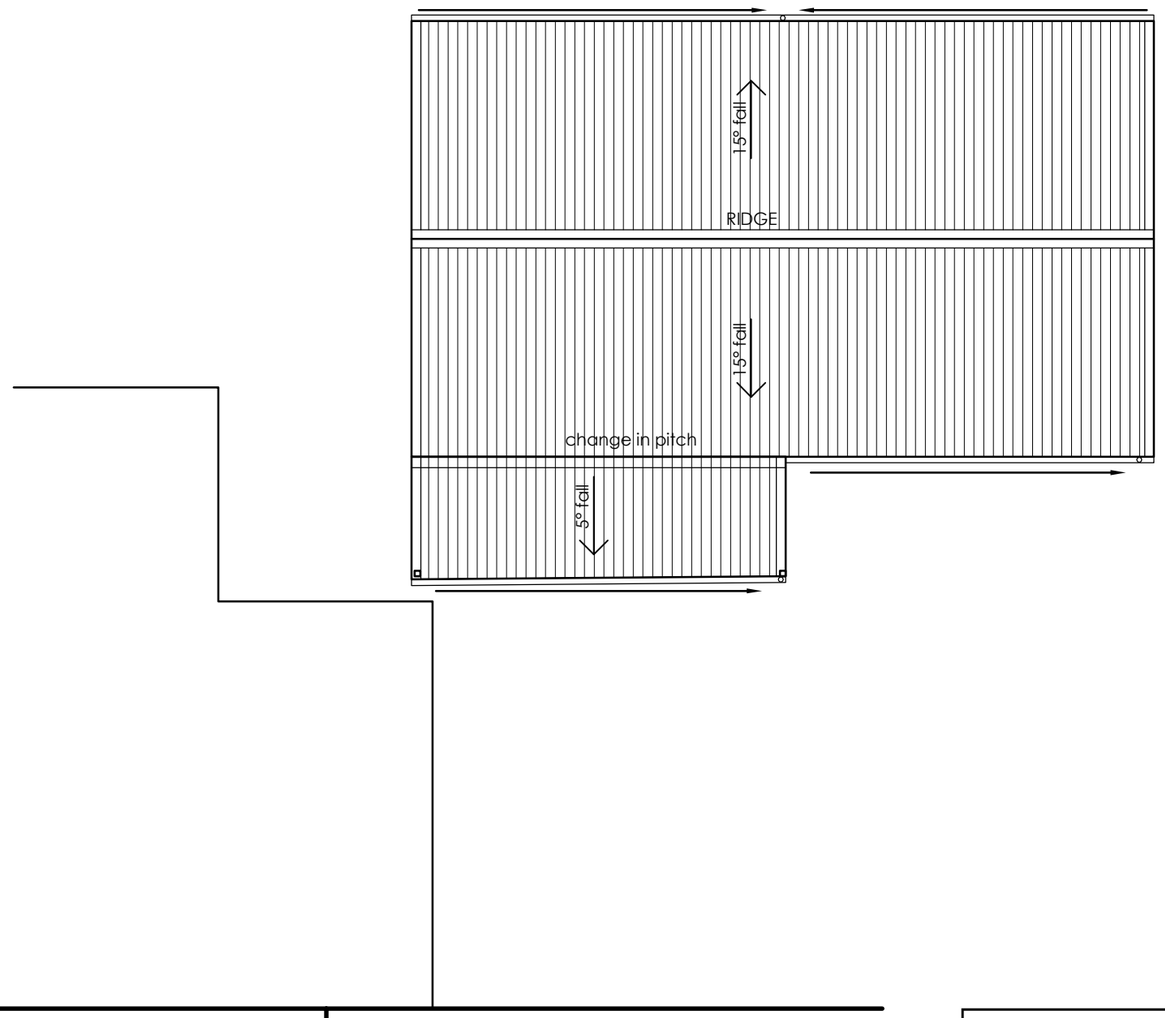
District Council



ROOFING NOTES:

1. Fix Roof cladding in accordance with manufacturers specifications, render water tight all flashing at hips, valleys and ridge.
2. All Ridge, Valley, Barge, Eaves & Exposed Apron Flashing to be Colorcote Colorsteel 0.55BMT Unless otherwise stated.
3. Execute and complete all plumbing and drainage requirements in accordance with NZBC E1

K E Y:

0.40 BMT Metalcraft T-Rib
Longrun Colorsteel Endura Trapezoidal roofing on
Thermakraft Covertek 407 self-supporting roof underlay

$\frac{1}{4}$ round Profile Colorsteel Continuous
Spouting with External Brackets,
80mm Ø Colorsteel downpipes

ROOF DRAINAGE CALCULATION

DP #	PLAN AREA	AREA TOTAL (m²)
dp1	43 x 1.13	49
dp2	22 x 1.13	25
dp3	33 x 1.13	37

Roof Pitch:	15°
Spouting:	125mm $\frac{1}{4}$ round profile
Roofing:	Trapezoidal
Rain Fall:	100mm/hr
Max Roof Area:	45m2
Down Pipe Size:	80Ø Colorsteel
Max Down Pipe Area:	85m2

ROOF PERIMETER LENGTH - 38m ±

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PROJECT:
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Homewood Rd, Wapawa

DRAWING TITLE:
Roof Drainage Plan

DATE:	20-Dec-17	JOB #:	20030
DESIGNED:	MCJ	DRAWN:	MCJ
ISSUE:	Consent	CHECKED:	MCJ

SCALE:
A3 @ 1:100
A1 @ 1:50

DRAWING #: **L104** REV: **R1**