S000 - GENERAL NOTES

GOVERNING CODES

BUILDING CODE	NATIONAL CONSTRUCTION CODE
LOADING CODE	AS 1170 (ALL PARTS)
COLD-FORMED STEEL	AS/NZS 4600:2018

DRAWINGS

THESE DRAWINGS AND THE DESIGNS THEY PORTRAY REMAIN THE INTELLECTUAL PROPERTY OF SHEDTECH HOLDINGDS PTY LTD. THEIR VALIDITY IS CONDITIONAL TO THE BUILDING BEING SUPPLIED BY A DISTRIBUTOR OF SHEDTECH.

THESE DRAWINGS MAY BE USED FOR OBTAINING BUILDING APPROVAL AND AIDING CONSTRUCTION. ANY OTHER USE OR REPRODUCTION IS PROHIBITED WITHOUT WRITTEN APPROVAL FROM SHEDTECH.

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER WRITTEN INSTRUCTIONS ISSUED BY SHEDTECH. ALL DISCREPANCIES SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE ORDERING. THESE DRAWINGS SHALL NOT BE SCALED.

DESIGN CRITERIA

GENERAL

NCC BUILDING CLASSIFICATION	10a
IMPORTANCE LEVEL	2

VERTICAL LOADING

DEAD LOAD	SELF WEIGHT
COLLATERAL LOAD	0 kPa
LIVE LOAD	N/A

WIND LOADING

WIND REGION	A0
REGIONAL WIND SPEED V_R	45.0 m/s
TERRAIN CATEGORY	TC3.0
SHIELDING MULTIPLIER M_s	1.00
TOPOGRAPHIC MULTIPLIER M_t	1.00
DESIGN WIND SPEED V_{des}	41.0 m/s
INTERNAL PRESSURE COEFFICIENTS	N/A

SNOW LOADING

SITE ALTITUDE	191.0 m
GROUND SNOW LOAD S_g	N/A
ROOF SNOW LOAD S_{roof}	N/A

SOIL PROPERTIES

ALLOWABLE BEARING CAPACITY q_a	100 kPa
UNDRAINED SHEAR STRENGTH S_u	50 kPa
ULTIMATE SHAFT ADHESION f_s	36.75 kPa

CONSTRUCTION

MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE LATEST RELEVANT AUSTRALIAN CODES (AS AMENDED) AND THE STATUTORY AUTHORITIES' REQUIREMENTS INCLUDING WHS REGULATIONS.

SHEDTECH SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING SITE CONDITIONS BEFORE CONSTRUTION.

THE CONTRACTOR MUST NOT DEVIATE FROM THESE DRAWINGS OR MAKE ANY ALTERATIONS (INCLUDING SHEETING REMOVAL) WITHOUT OBTAINING WRITTEN APPROVAL FROM THE CERTIFYING ENGINEER. SHEDTECH IS NOT RESPONSIBILE FOR CHANGES MADE WITHOUT APPROVAL.

DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART IS OVER-STRESSED. THE BUILDING IS NOT STRUCTURALLY ADEQUATE UNTIL THE INSTALLATION OF ALL COMPONENTS AND DETAILS IN ACCORDANCE WITH THESE DRAWINGS. FOR GUIDANCE ON CONSTRUCTION, THE CONTRACTOR SHOULD CONSULT THE REVELANT SHEDTECH CONSTRUCTION GUIDE.

SHEDTECH AND THE ENGINEER ARE NOT THE PROJECT MANAGERS AND WILL NOT BE PRESENT DURING CONSTRUCTION. THE UNDERSIGNING ENGINEER HAS ONLY REVIEWED THIS BUILDING FOR CONFORMITY TO THE STRUCTURAL DESIGN COMPONENTS OF THE GOVERNING CODE.

THE GOVERNING CODE REQUIRES NO SPECIAL INSPECTIONS ON THIS JOB. ANY OTHER INSPECTIONS REQUESTED BY THE LOCAL AUTHORITIES SHALL BE CONDUCTED AT THE OWNER'S EXPENSE.

DOORS AND WINDOWS SHALL BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS AND DETAILS.

BEFORE WALKING ON ROOF, ENSURE THE ROOF IS TRAFFICABLE AND CONSULT CLADDING MANUFACTURER'S GUIDLINES ON HOW TO DO SO SAFELY AND WITHOUT DAMAGE TO THE PRODUCT.

CONCRETE

ALL CONCRETE DETAILS, MATERIALS AND WORKMANSIP SHALL BE TO AS 2870 AND AS 3600.

CONCRETE SHALL HAVE A MINIMUM CHARACTERISTIC STRENGTH GRADE OF N25 (28-DAY STRENGTH OF 25MPa). SLUMP TO BE 100mm ± 15mm WITH MAXIMUM AGGREGATE SIZE OF 20mm.

SLABS TO BE CURED FOR 7 DAYS AFTER PLACEMENT BY AN APPROVED METHOD. THESE INCLUDE:

a. MAINTAINING A WET SURFACE
b. COVERING THE SLAB WITH PLASTIC MEMBRANE
c. SPRAYING WITH FOSROC CONCURE A99 CURING COMPOUND

REINFORCEMENT SHALL CONFORM TO AS/NZS 4671 AND BE SECURED IN PLACE WHILE CONCRETING BY APPROVED PLASTIC TIPPED BAR CHAIRS, SPACERS OR SUPPORT BARS AT MAX. CENTRES OF 800mm FOR FABRIC, 600mm FOR BARS UP TO 12mm DIAMETER, 900mm FOR BARS 16mm OR GREATER.

ALL REINFORCEMENT SHALL HAVE 30mm MINIMUM TOP COVER AND A MINIMUM SIDE AND BOTTOM COVER OF 40mm IN SLABS AND 50mm IN FOOTINGS. FOR CONCRETE SUBJECT TO REPEATED WETTING/DRYING OR LOCATED 50km FROM COASTLINE, ALL COVER SHALL BE INCREASED BY 10mm.

REINFORCEMENT SYMBOLS & SPLICES (NOTE: REINFORCEMENT WELDING NOT PERMITTED)

'N'	DEFORMED BAR GRADE D500N TO AS/NZS 4671 (600mm LAP FOR N12 & 800mm LAP FOR N16)
'R'	PLAIN ROUND BAR GRADE R250N TO AS/NZS 4671
'SL'	RIBBED REINFORCING MESH GRADE D500L TO AS/NZS 4671 (ONE GRID PLUS 25mm LAP)

ENSURE THAT HOLD DOWN BOLTS ARE NOT OVER-TIGHTENED.

STRUCTURAL STEEL

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 AND AS/NZS 4600 AND MANUFACTURERS INSTALLATION RECOMMENDATIONS.

ALL COLD-FORMED STRUCTURAL STEEL (INCLUDING SHEETING) SHALL BE MANUFACTURED FROM ZINC GALVANISED (Z350) HIGH STRENGTH STEEL STRIP CONFORMING TO AS/NZS 1397:

GAUGE ≤ 1mm	G550 (f_y = 550MPa)
1mm < GAUGE < 1.5mm	G500 (f_y = 500MPa)
GAUGE ≥ 1.5mm	G450 (f_y = 450MPa)

ALL HOT-ROLLED PLATES SHALL BE MINIMUM GRADE 300 TO AS/NZS 3678.

ALL HOLLOW SECTIONS SHALL BE MINIMUM GRADE 350 TO AS/NZS 1163.

NO WELDING IS TO BE PERFORMED ON THIS BUILDING.

BOLTS SHALL BE IN CONFORMITY WITH AS 4100 AS FOLLOWS:

4.6/S	COMMERCIAL BOLTS TO AS/NZS 1111 & AS/NZS 1112, SNUG TIGHTENED
8.8/S	HIGH STRENGTH STRUCTURAL BOLTS, NUTS AND WASHERS TO AS/NZS 1252, SNUG TIGHTENED

KNEE AND APEX PLATE BOLTS ARE DESIGNED AS FRICTION TYPE TO AS/NZS 1252 AND SHALL BE INSTALLED AND TENSIONED TO AS 4100. AN APPROVED METHOD OF TENSIONING IS 1/3 A TURN PAST SNUG TIGHT (PODGER SPANNER TIGHT).

ROOF AND/OR WALL SHEETING TO AS/NZS 1562 SHALL BE FIXED TO PURLINS OR GIRTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

ALL RAINWATER PRODUCTS SHALL COMPLY WITH AS/NZS 2179.1.

ALL BOLTS, NUTS AND WASHERS INCLUDING HOLDDOWNS SHALL BE HOT DIP GALVANISED. GALVANISED ITEMS CAST INTO CONCRETE MUST BE PASSIVATED.

STRUCTURAL SCREWS MUST COMPLY WITH AS/NZS 3566.

FOUNDATIONS

FOUNDATION DESIGN IS VALID FOR FIRM TO STIFF CLAY SOILS WITH AN AS 2870 SITE CLASSIFICATIONS OF M OR BETTER AND WITH AN ALLOWABLE BEARING CAPACITY GREATER THAN THE MINIMUM SPECIFIED IN THE DESIGN CRITERIA. FOR OTHER SOIL CONDITIONS, THE ENGINNER'S ADVICE SHOULD BE SOUGHT FOR A CUSTOMIZED FOUNDATION DESIGN.

REGARDLESS OF SPECIFIED DEPTHS, THE MINIMUM FOUNDATION DEPTH SHALL BE 100mm INTO NATURAL GROUND OR BELOW THE FROST DEPTH SPECIFIED BY THE LOCAL COUNCIL. EXCAVATIONS SHALL BE CLEANED OF LOOSE MATERIAL AND WATER AND THEIR SIDES SHALL BE FORMED WHEN UNSTABLE.

WHERE FOUNDATION MATERIAL DIFFERS FROM THAT DESCRIBED IN THE SITE INVESTIGATION REPORT OR SOFT SPOTS ARE FOUND,SHEDTECH HEAD OFFICE SHALL BE NOTIFIED AND IF NECESSARY THE MATERIAL SHALL BE EXCAVATED AND BACKFILLED WITH APPROVED SELECT FILL MATERIAL.

SLAB

THE BUILDING AREA IS TO BE STRIPPED OF TOPSOIL AND VEGETATION. EDGE BEAMS SHALL BE FOUNDED ON NATURAL SOIL OR CONTROL COMPACTED FILL.

SLAB/BEAMS ON CUT/FILL SITES MAY USE MASS CONCRETE PIERS PLACED THROUGH FILL, 200mm INTO NATURAL SOIL AT 2.5m CENTRES AS PER DETAILS.

ALL FILL SHALL BE TREATED AS UNCOMPACTED FILL UNLESS IT IS LEVEL 1 CERTIFIED TO AS 3798.

A LAYER OF 200 MICRON PVC SHEETING SHALL BE PLACED UNDER THE SLAB. 50mm CRUSHER DUST IS RECOMMENDED FOR A LEVEL COMPACTED SURFACE.

SOIL CONDITIONS ARE ASSUMED TO BE CLASS M OR BETTER FOR STANDARD SLAB. SLAB AND EDGE BEAMS SHALL BE POURED IN A CONTINUOUS OPERATION.

DOMESTIC SHED SLABS SHALL BE REINFORCED WITH SL72 MESH WITH 30mm TOP COVER. SLABS PLACED OVER SPANS WIDER THAN 15m SHALL HAVE SL92 SLAB MESH AND BE 150mm THICK AS STANDARD. ALL SLABS PLACED LONGER THAN 24m (ONE POUR) SHALL HAVE SL92 SLAB MESH AS STANDARD.

MAXIMUM LENGTH BETWEEN CONSTRUCTION JOINTS OF SLAB SHALL BE:

100mm THICK	18 metres
125mm THICK	24 metres
150mm THICK	30 metres

CONCRETE IS TO BE COMPACTED BY VIBRATION OR OTHER MECHANICAL MEANS. ANY SAW CUTTING OF CRACK CONTROL JOINTS SHALL BE CARRIED OUT WITHIN 24hrs OF THE PLACING OPERATION.

ALL INDUSTRIAL SLAB DESIGNS SHOULD BE REFERRED TO AN ENGINEER FOR A SITE-SPECIFIC DESIGN.

MODERN STEEL BUILDINGS
SHEDS • CARPORTS • PATIOS

Site Details

Ross Clarke
153 Galah Street
Longreach
QLD 4730
M: 0412 917 292

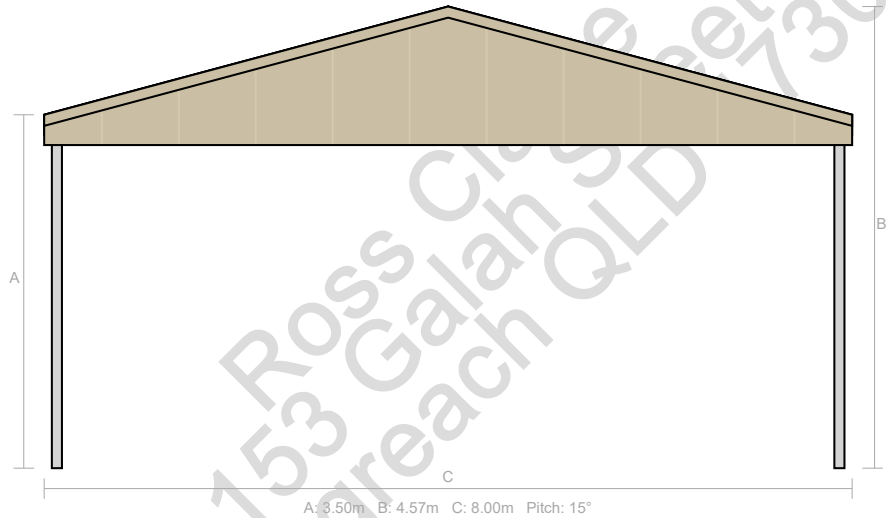
Shed Sold By

Modern Steel Buildings
ABN: 58 655 740 408
Suite 12, 11/71 Township Drive, Burleigh Heads QLD 4220
P: 1300 520 378
W: www.modernsteelbuildings.com.au
E: sales@modernsteelbuildings.com.au

General Notes

Shed Order Number: 390742

S100 - FRONT VIEW



DRAWING SCHEDULE

FRONT VIEW

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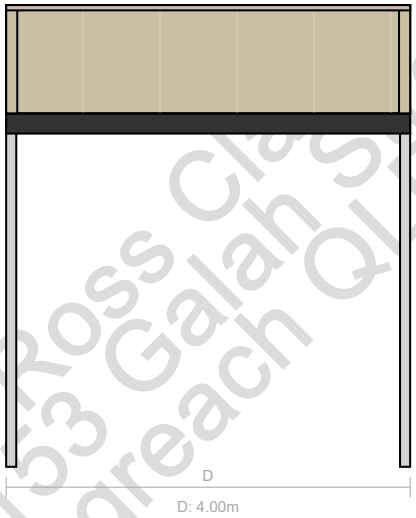
Specifics

Shed Order Number: 390742

S200 - SIDE VIEW



SIDE VIEW

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Specifics

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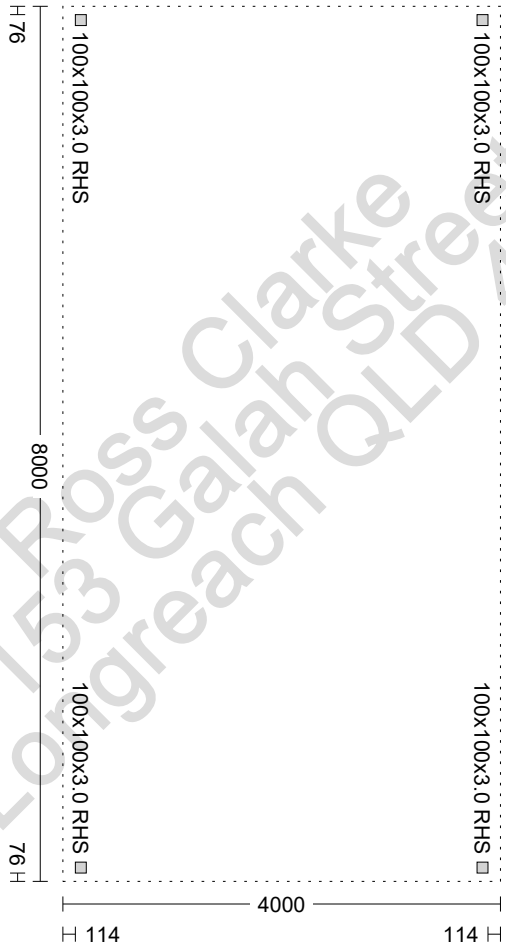
S300 - COLUMN LOCATIONS



* All columns are to be in cement footings.

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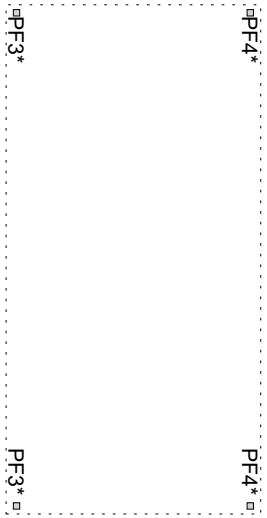
Specifics

Shed Order Number: 390742

Shed Type: Gable Carport

1. This drawing is not to scale (NTS) and all dimensions are in millimetres unless noted.
2. This drawing should be used in conjunction with the relevant engineering diagrams and hold down brackets specified in the order.

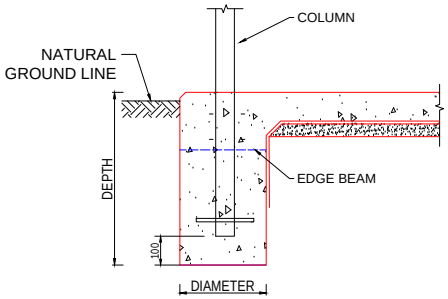
S400 - PIER & SLAB DETAILS



450 Diameter Piers				
Pier Footing	Diameter (mm)	Depth (mm)	Reinforcement	Ties (mm)
PF3 (see Note)	450	1300	Embed Columns	–
PF4 (see Note)	450	1300	Embed Columns	–

Note: Columns to be embedded in pier footings.

A 100 mm slab is assumed in this design.



LOCAL FOOTING WITH SLAB

This design assumes Class M (AS2870-2011) Firm to Stiff Clay with a 100 kPa minimum safe bearing capacity. For Class H Firm to Stiff Clay, pier embedments should be a minimum of 1500 mm with steel reinforcement extending to the depths specified in the tables. For other soils, an engineer's advice is to be sought. Refer to the 'Slab & Foundation Details' drawing for slab and edge beam details of domestic structures. Industrial structures should always be referred to an engineer for site-specific designs.

MSB MODERN STEEL BUILDINGS
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Specifics

Shed Order Number: 390742

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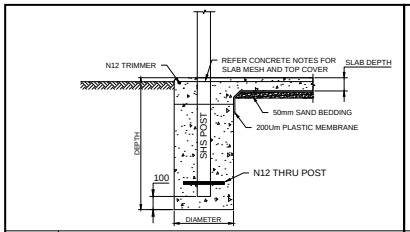
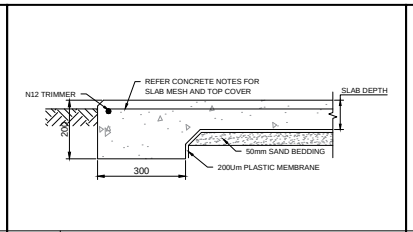
2. This drawing should be used in conjunction with the relevant engineering diagrams and hold down brackets specified in the order.

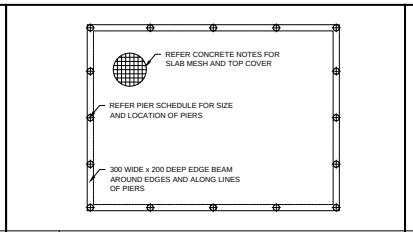
S450 - DOMESTIC SLAB & FOUNDATION DETAILS



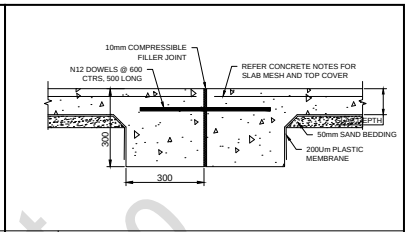
#1 PIER DETAIL FOR EMBEDDED SHS POSTS



#2 EDGE BEAM AND SLAB DETAIL



#3 TYPICAL DOMESTIC SLAB DESIGN - PLAN VIEW



#4 CONSTRUCTION JOINT DETAIL

A 100 mm slab is assumed in this Class M design. For Class H soils, ensure slab is 110 mm minumum. Domestic shed slabs shall be reinforced with SL72 mesh with 30 mm top cover. Slabs placed over spans wider than 15 m shall have SL92 slab mesh and be 150 mm thick as standard. All slabs placed longer than 24 m (one pour) shall have SL92 slab mesh as standard.

Industrial structures should be referred to an engineer for site-specific designs.

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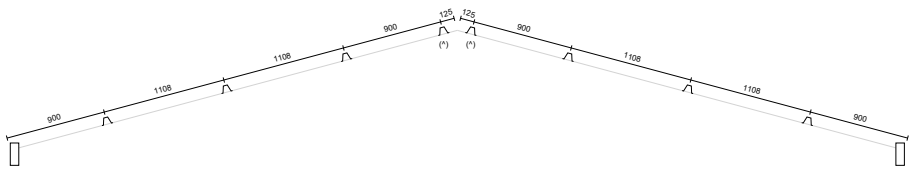
Specifics

Shed Order Number: 390742

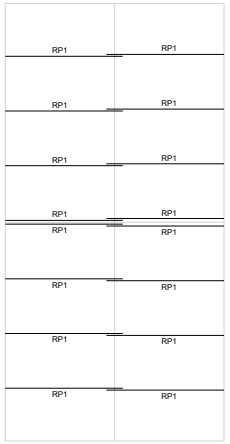
The design and details shown on this drawing are applicable to domestic shed structures only

- Details are not to scale

S500 - PURLIN & GIRT LAYOUT



Purlin & Girt Spacings



Roof Purlins

Label	Length
RP1	2.150m

7.03 / 7.03

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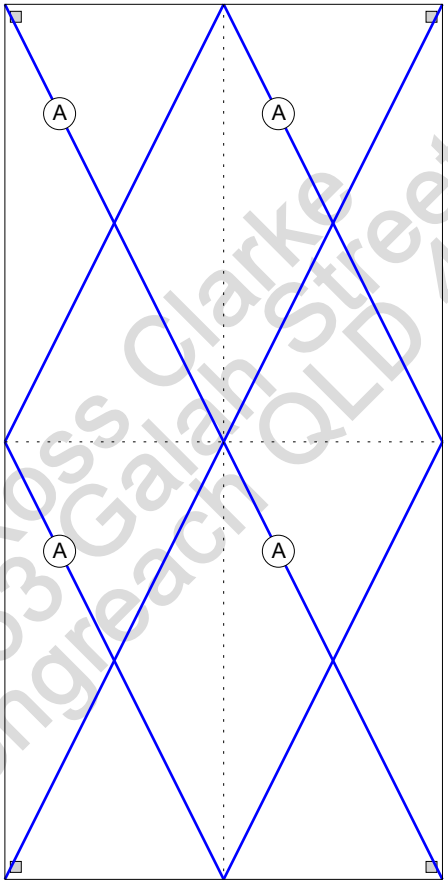
Purlin & Girt Locations

Shed Order Number: 390742

(*) Place batten as close to apex as possible

S600 - BRACING LOCATIONS



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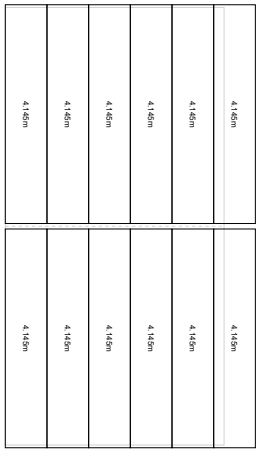
Bracing Specifics

Shed Order Number: 390742

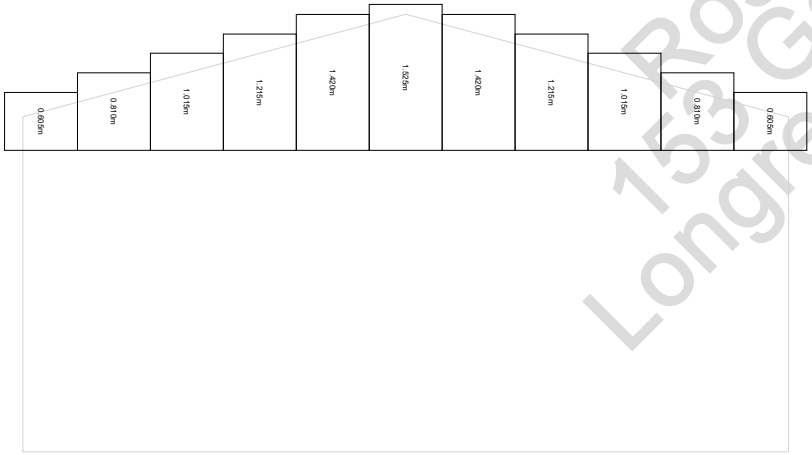
- (A) 32mm x 1.20mm G500 Strap (Minimum)
- (B) 50mm x 1.60mm G450 Strap (Minimum)
- (C) 12mm Rod
- (D) 16mm Rod

S700 - SHEETING LAYOUT



Roof View

Width View



Reverse Width View

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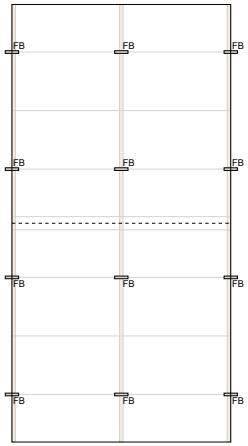
Sheeting Layout

Shed Order Number: 390742

- Start sheets 50mm down from Apex
- Sheets fall 50mm into the gutter
- Install centre sheets first

S800 - FLY BRACE LOCATIONS



Roof View

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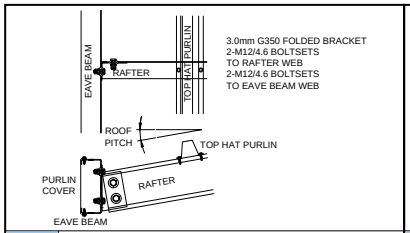
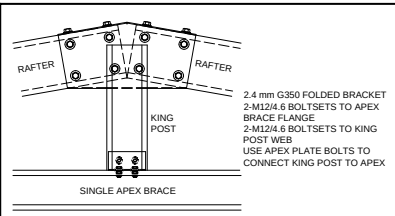
Fly Brace Specifics

Shed Order Number: 390742

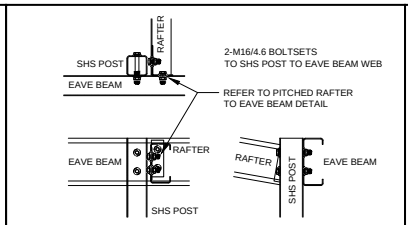
S900 - TYPICAL DETAILS



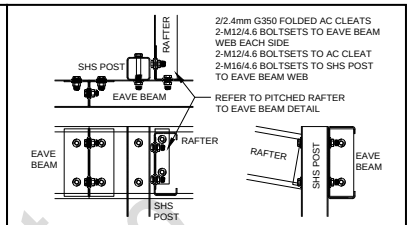
E1 PITCHED RAFTER TO EAVE BEAM (STEPPED)



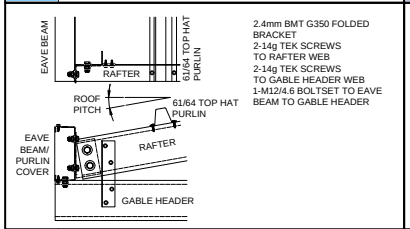
A1 SINGLE APEX BRACE KING POST TO SINGLE RAFTER



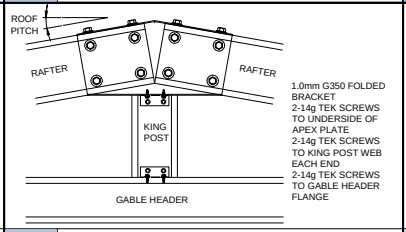
B1 EAVE BEAM TO CARPORT SHS POST (C100 TO C400)



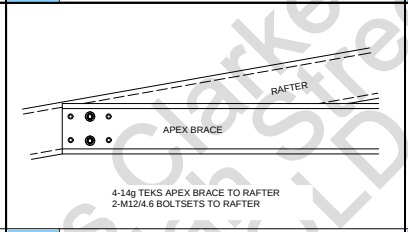
B2 EAVE BEAM SPLICE DETAIL (C100 TO C400)



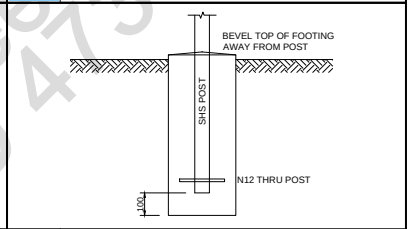
H1 CARPORT GABLE HEADER CONNECTION



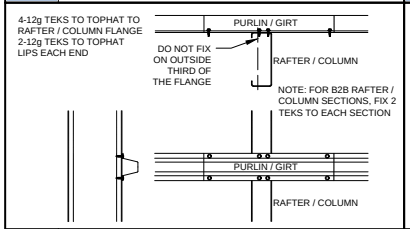
H2 CARPORT GABLE KING POST CONNECTION



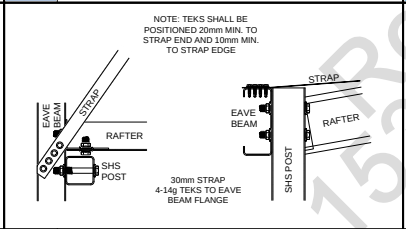
A2 CARPORT APEX BRACE CONNECTION



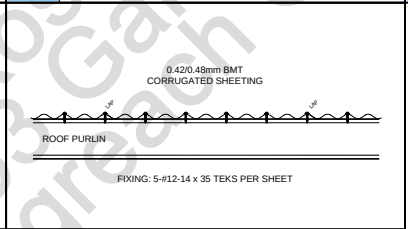
B3 EMBEDDED SHS POST



P1 TOPHAT PURLIN / GIRT TO RAFTER / COLUMN CONNECTION (61/64/96/120)



X1 ROOF BRACING - 30mm STRAP



R1 CORRUGATED ROOF SHEETING FIXING

MEMBER & MATERIAL SCHEDULE		
1	Column	100 x 3.0 SHS
2	Rafter	C15015
3	Eave Beam	C20015
4	Collar Tie	C15012
5	Collar Tie Length	3.0m
6	Roof Purlin Size	TopHat 64mm 0.75 BMT
7	Roof Purlin Spacing	1108mm (Max. 1500mm)
8	Roof Purlin Fasteners	SDM HEX BARE C4 14-14x22 12G HEAD ON 14G Zinc
9	Column Base Connection	Embedded into pier
10	Frame Bolt Fasteners	M12 x 30 Gr4.6 Std Purlin Assembly
11	Roof Sheeting	Corodek - 0.42 BMT Paperbark
12	Roof Sheeting Fasteners	12-14x42 SDM HEX SEAL
13	Wall Sheeting	Trimclad - 0.42 BMT Paperbark
14	Wall Sheeting Fasteners	10-16x16 Hex
15	Gutter	Gutter 310 Metroline Square
16	Rain Goods Colour	Monument
17	Down Pipe	Downpipe - PVC 90mm round 6m length
18	Down Pipe Colour	Paperbark
19	Ridge Capping Colour	Paperbark
20	Barge Capping Colour	Paperbark
21	Beam Flashing Colour	Monument

MSB MODERN STEEL BUILDINGS
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Site Details

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Specifics

Shed Order Number: 390742

The design and details shown on these drawings are applicable to this project only

- Details are not to scale