Steeline

JH STEPHENSON

STEELINE HOUSE FRAMING

Stud and Truss 90mm
Dimensions same as timber

- DIMENSIONALLY STABLE
- WILL NOT TWIST, CRACK OR SHRINK
- TERMITE RESISTANT
- NON COMBUSTIBLE
- LIGHT WEIGHT
- EACH PROJECT IS ENGINEERED AND COMPLIANCE CERTIFICATE PROVIDED

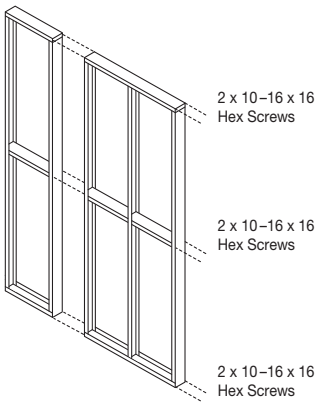
Suitable for extension

Accurate and straight frames

High Strength Steel • Light Weight • Economical • Custom Cut

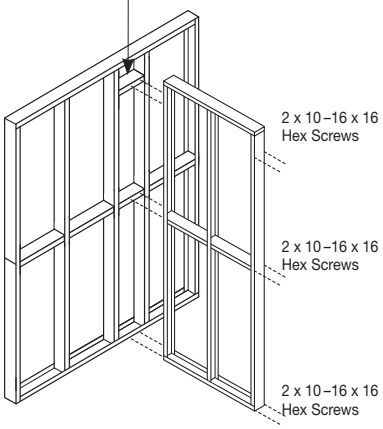
Steeline - Wall Framing

In all cases shown a minimum of 6 x 10-16 x 16 screws required per connection



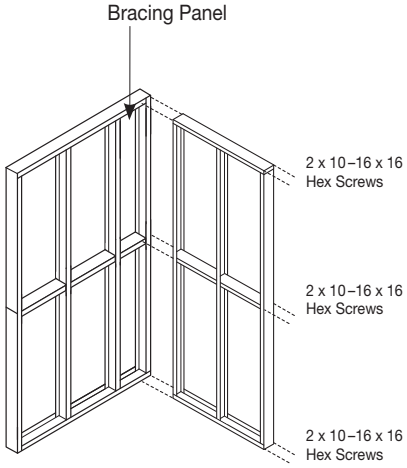
NOTE: For walls exceeding 2800mm in height, intermediate fasteners spacings are not to exceed 1400mm centres

Where required it may be necessary to have an additional noggin dropped 150mm to achieve top connection



Where the value of bracing in a panel exceeds a total raking resistance of 4.7kN, then the top set of screws should be supplemented with an additional M12 bolt set

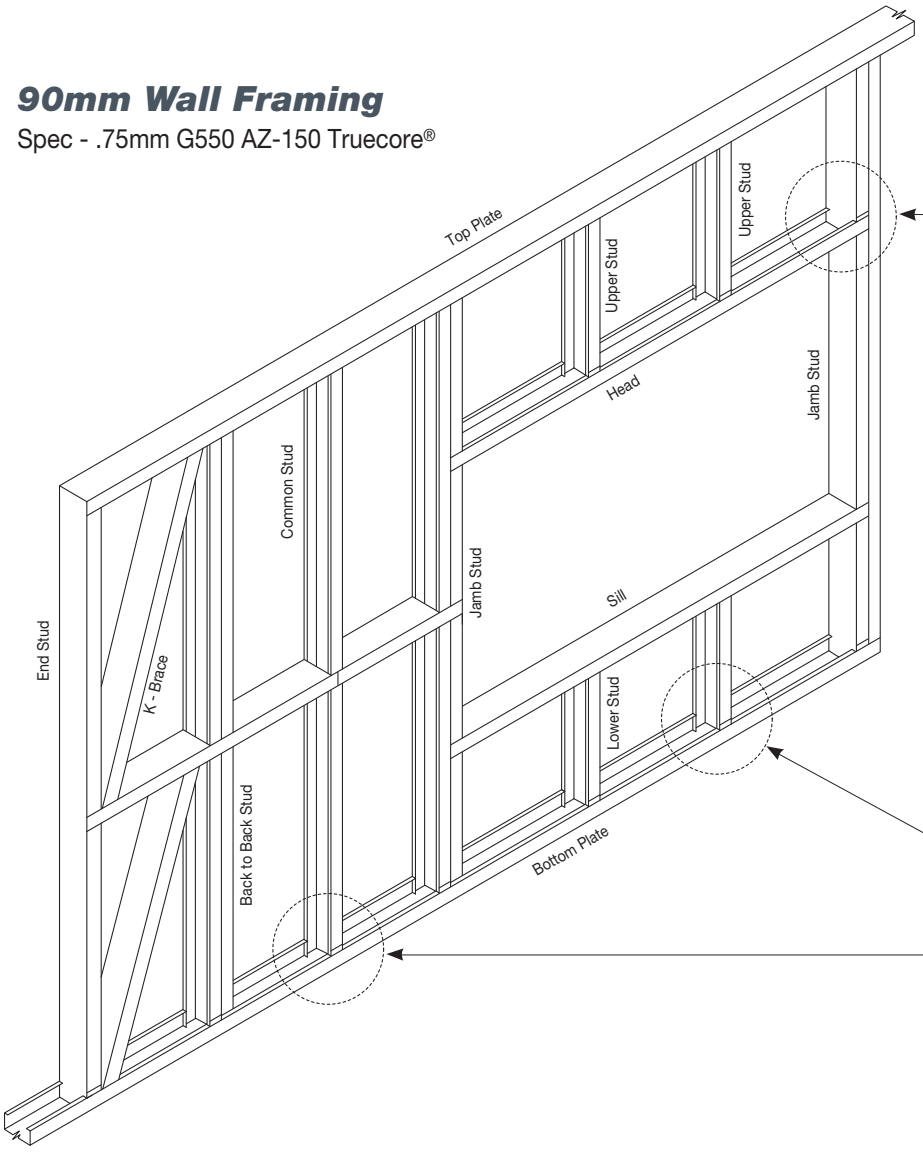
Bracing Panel

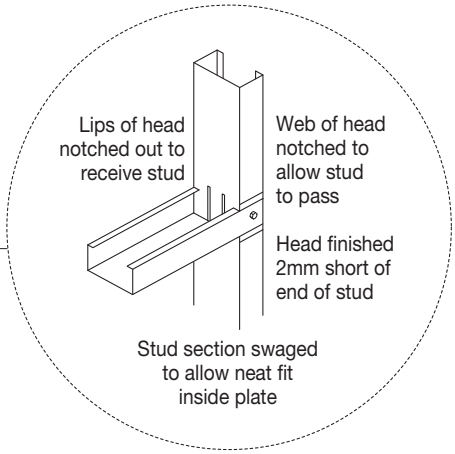


Where a wall panel contains a bracing panel, then the quantity of screws should be increased to a minimum of three screws per location

90mm Wall Framing

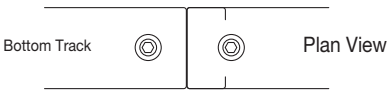
Spec - .75mm G550 AZ-150 Truecore®

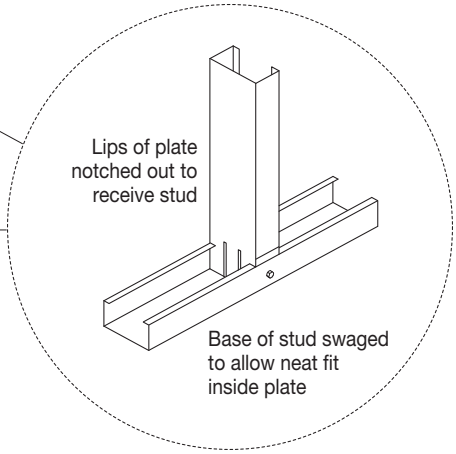




Bottom Plate Hold Down

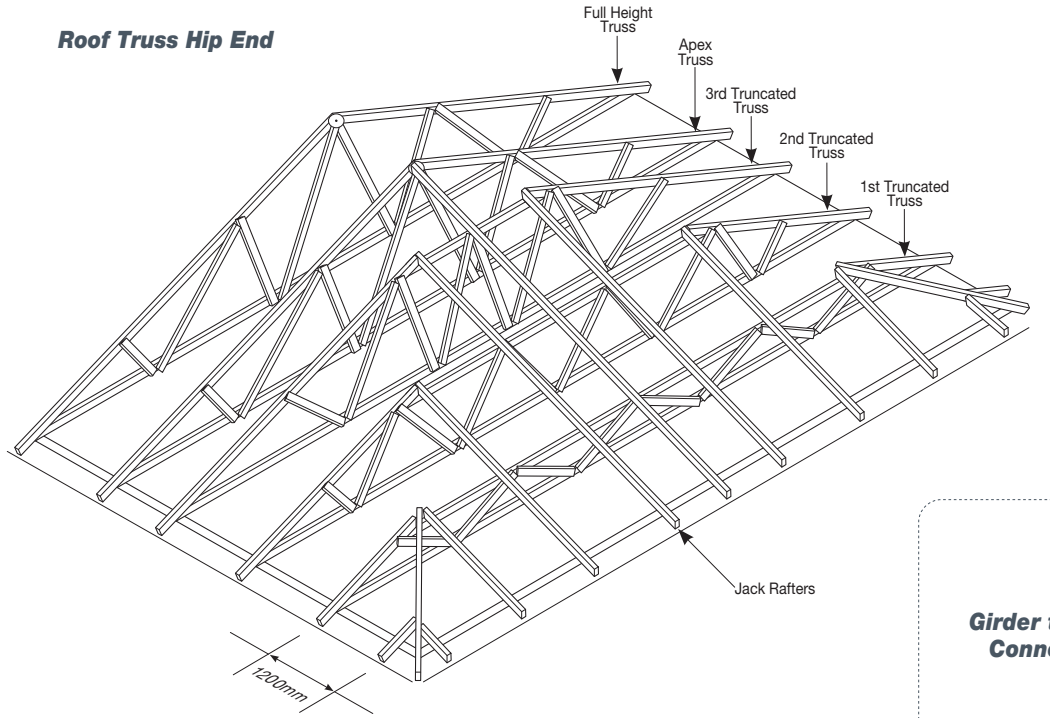
- Each end of each wall panel
- Each side of each opening
- Each side of each brace panel
- Each side of girder support studs
- Elsewhere not exceeding 1200mm





Steeline - Roof Truss

Roof Truss Hip End



90mm Roof Truss

Spec - .75mm & 1.0mm
G550 AZ-150 Truecore®

Bridge Truss Connection Requirements with 10-16x16 Tek Screws

Screw Quantity per Face	Maximum Truss Span / Design Wind Speed					
	N1	N2	N3	N4	C1	C2
2	10250	6750	3750	2250	3750	2250
3	14000+	10250	5750	3500	5750	3500
4	14000+	13750	7750	4750	7750	4750
5	14000+	14000+	9750	6000	9750	6000
6	14000+	14000+	11750	7250	11750	7250

Triple Grip Truss Chord or Top Plate (kN)

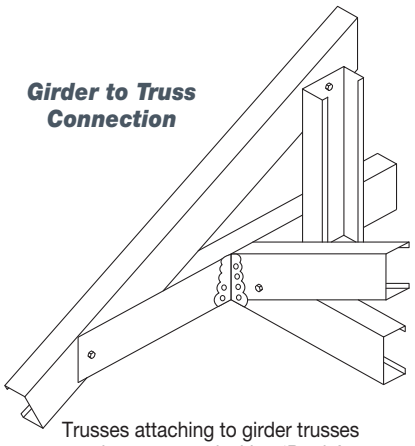
Screw Quantity per Face	One Triple Grip		Two Triple Grip		Three Triple Grip		Four Tripple Grip	
	10-16x16	12-14x20	10-16x16	12-14x20	10-16x16	12-14x20	10-16x16	12-14x20
2	2.35	2.52	4.70	5.04	7.06	7.55	9.41	10.07
3	3.53	3.78	7.06	7.55	10.58	11.33	14.11	15.11
4	4.70	5.04	9.41	10.07	14.11	15.11	18.82	20.14

This capacity table is in addition to the triple grip connection capacity

Cyclone Straps to Truss Chord or Top Plate (kN)

Screw Quantity per Face	One Cyclone Strap		Two Cyclone Straps	
	10-16x16	12-14x20	10-16x16	12-14x20
2	2.35	2.52	4.70	5.04
3	3.53	3.78	7.06	7.55

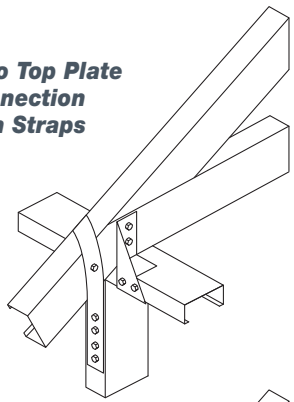
Girder to Truss Connection



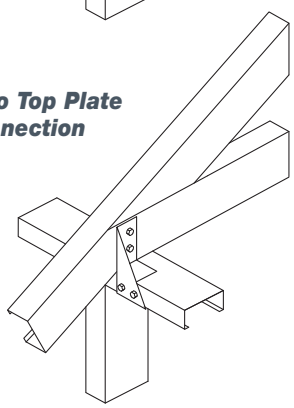
Trusses attaching to girder trusses to be connected with a 'Pryda' truss boot bracket or similar

Fix with screws as per attached tables

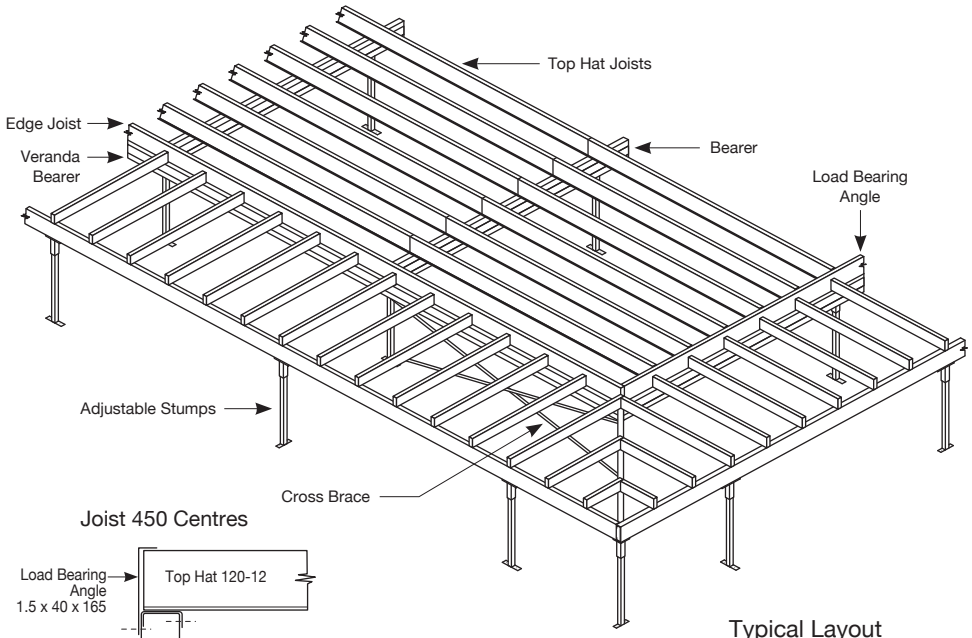
Truss to Top Plate Connection with Straps



Truss to Top Plate Connection

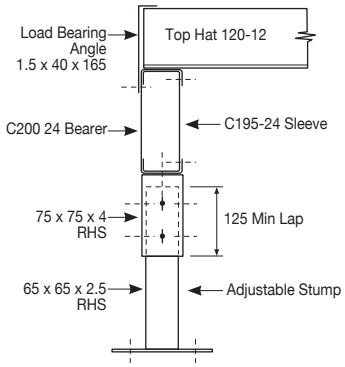


Steel Flooring System



Typical Layout

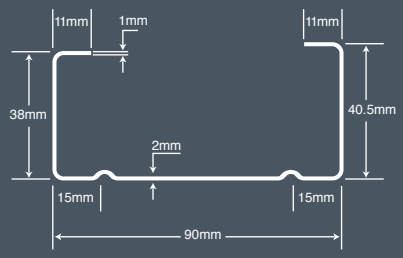
Joist 450 Centres



Adjustable Stumps

Section Properties

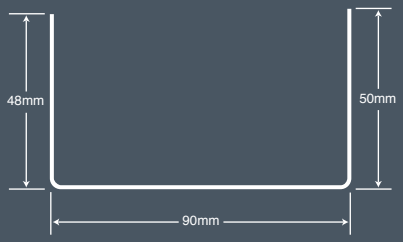
Property	Value
Feed Width	182.02
Gross Area	136.52
Gross Weight	1.072
Centroid Left	11.839
Centroid Top	44.625
Second Moment Ixx	175933
Second Moment Tyy	23413
Radius of Gyration rx	35.899
Radius of Gyration ry	14.427
Shear Centre X	30.174
Shear Centre Y	0.000
Polar Radius ro1	49.276
Torsion Constant J	25.597
Warping Constant Iw	50585790
Modulus Zx	3910
Modulus Zy	1079
Monosymmetry Bx	0.000
Monosymmetry By	100.84
Gross Area (Simple)	139.57
Second Moment Ixx (Simple)	182128
Second Moment Tyy (Simple)	29702

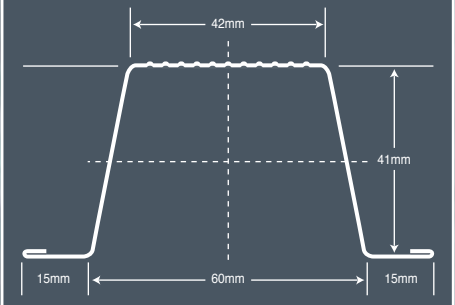


.75mm Stud with uneven flanges allows the stud to be boxed for maximum strength

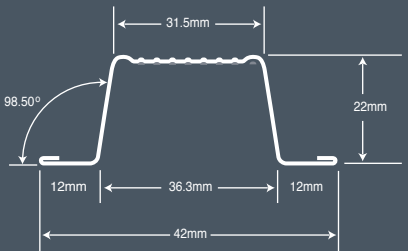
1.0mm Rafter with strengthening grooves to web

.75mm Top and bottom plate available without lip.

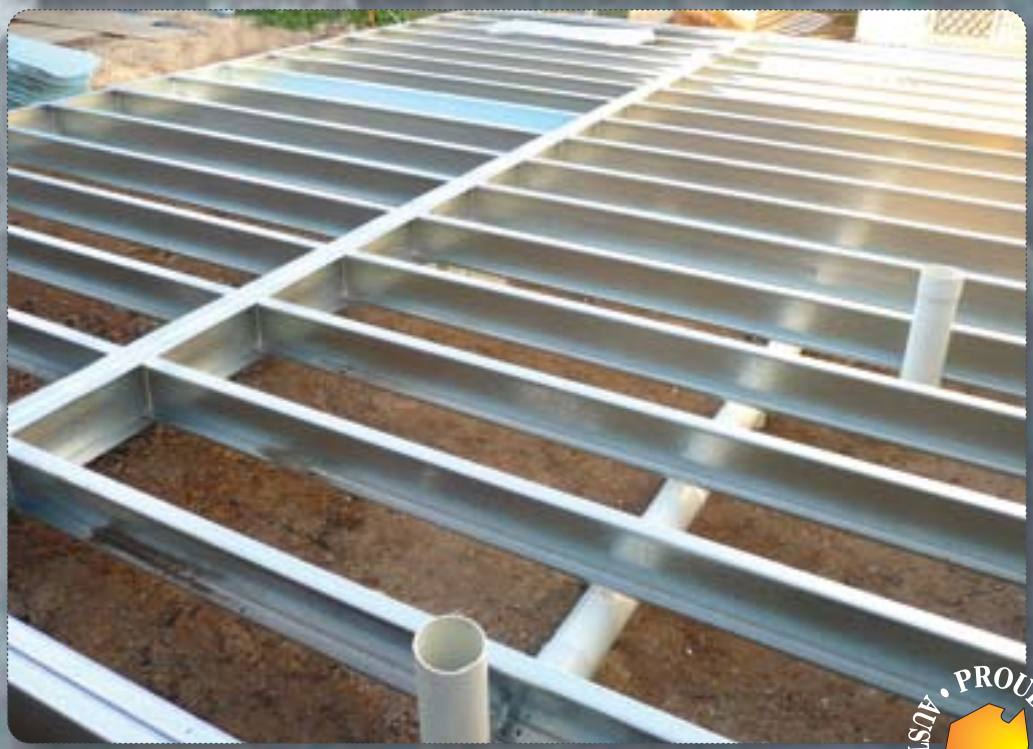




.55mm G550 AZ150 Roof Batten for Steel Roofing



.42mm G550 AZ150 Ceiling Batten



Whilst every care is taken in the preparation of these specifications, JH Stephenson & Son Pty Ltd accept no responsibility for the accuracy of the information supplied.

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