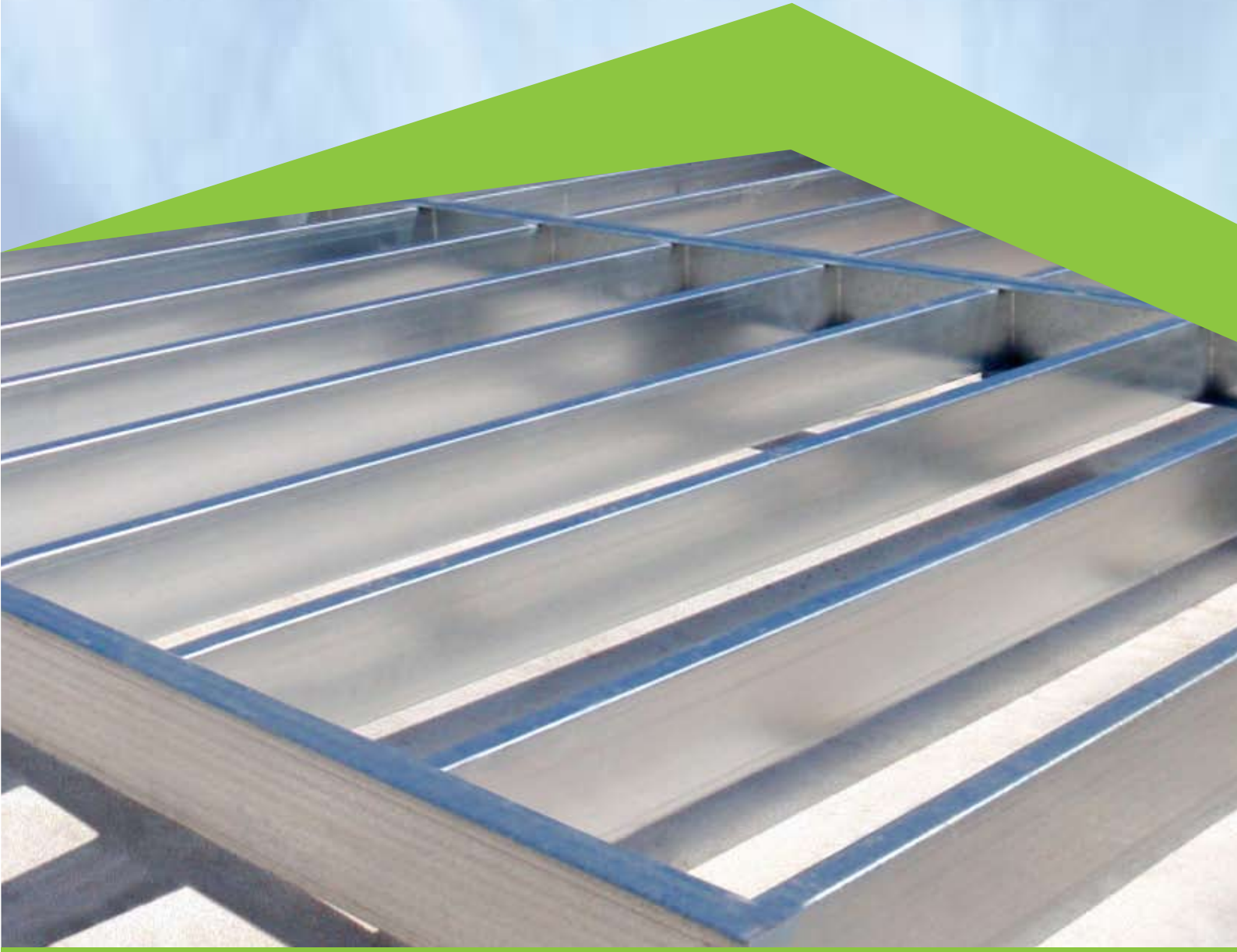
Steeline

JH STEPHENSON

- ADJUSTABLE STUMPS
- JOIST OVER BEARER *or*
- BEARER & JOIST IN SAME PLANE
- CUSTOM CUT



Steel Flooring Systems

GEELONG	75 Heales Road Corio 3214	Phone 03 5274 6222	Fax 03 5274 6200
NORTH GEELONG	152 Victoria Street North Geelong 3215	Phone 03 5274 6222	Fax 03 5274 6200
LAVERTON	11 Westside Drive Laverton North 3026	Phone 03 9314 1044	Fax 03 9314 5675

JH STEPHENSON & SON PTY LTD ABN 52 004 570 370 **jhstephenson.com**

Steeline

EASY FLOOR

TOP HAT FLOORING SYSTEM

Install concrete pads and stumps

- Provide concrete pads to suit pier layout.
- Mark out stump positions and fix to pads using 12 x 125 masonary anchors.

NOTE: Set base plates at right angles to previous stump to assist bracing.

- Install stump caps to required height using Ezipier adjustable pier heads .
- Make sure to use the correct stump cap where required. (Figs 2, 3 & 4).

Install Main Bearer and Sleeves

- Install sleeves to bearer where a stump is flange mounted and where bearers butt-join on a stump (Fig 3 & 9).
- Bolt sleeve and bearer to stump.
- Fix sleeve to bearer using 4 off 14 x 22 Teks through lip of bearer (Fig 3).

Install Bracing

- Make sure stumps and bearers are level and plumb before bracing.
- Fit a bearer brace between stumps where bracing is required.
- Fit angle brace (Fig 6).

Install Joists

- Install Joists with C120 Edge Joist (Fig 3).
- The remaining joists at 450mm centres.

NOTE: Joists will be required under internal load bearing walls.

Load Bearing Angles

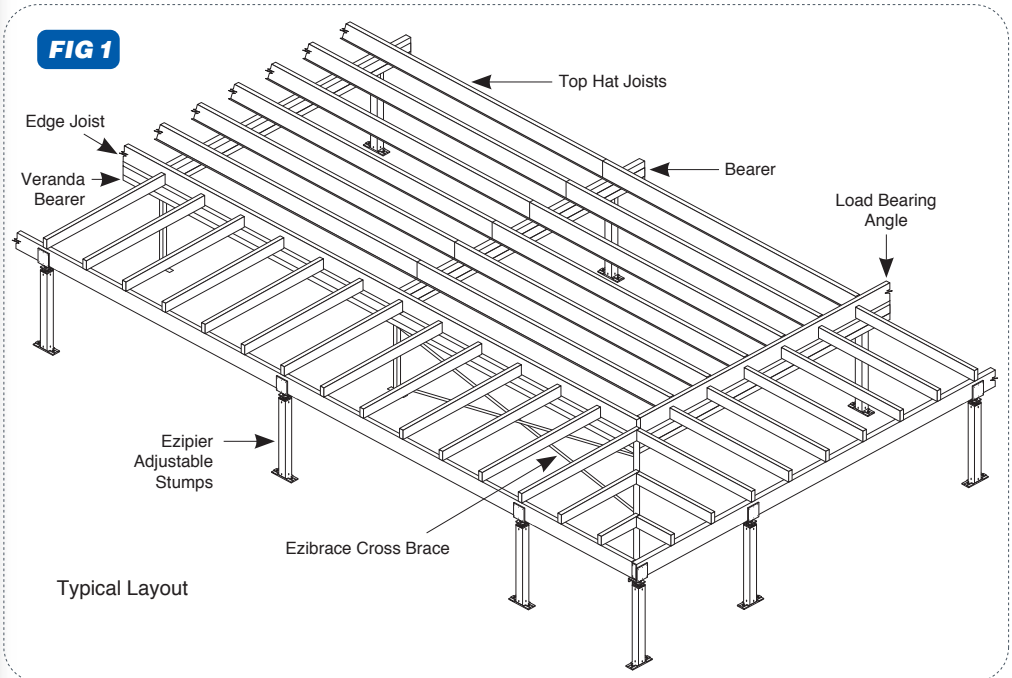
- Add the load bearing angle to the ends of floor joists (Fig 8).
- Fix the load bearing angle to the web of the bearer mid span between joists (Fig 8).

Install Corner Brackets

- Corner brackets are provided to join edge joist, load bearing angle and main bearers at all corners (Fig 10).

The floor frame is now ready for floor sheeting.

FIG 1



Typical Layout

FIG 2

Joist 450 Centres

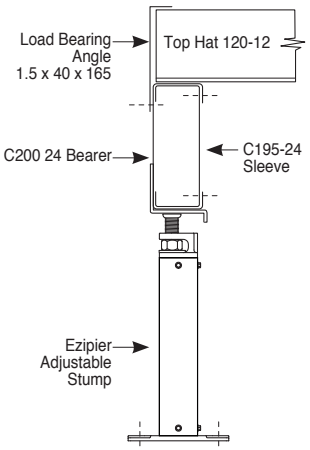


FIG 4

Side Elevation

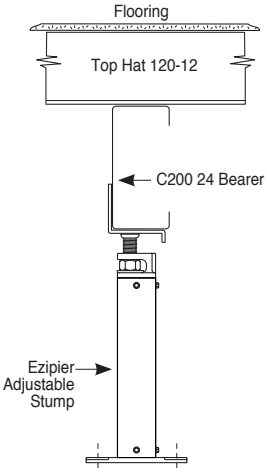


FIG 5

Internal Stumps Web Fixing

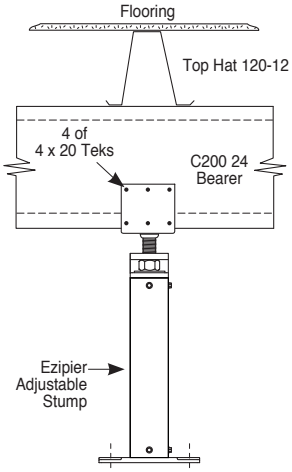
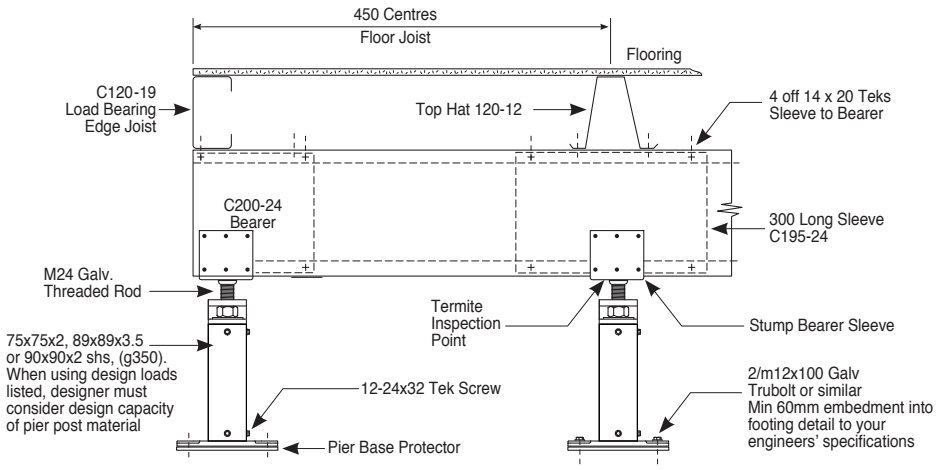


FIG 3 Perimeter Stumps Flange Fixing (with Sleeve)



TOP HAT FLOORING SYSTEM

The Top Hat Flooring System is similar to a traditional timber floor where the Joist (Top Hat) is fastened to the Bearer (C20024 Purlin).

Bearers and Joists are custom cut to suit.

All sections are manufactured from Galvanised Z350-G450 Hi Tensile Steel.

The Steel Flooring System uses the Spantec Ezipier Adjustable Cap and Base Plate (Figs. 8, 9, 10, 11 & 12) and the Ezibrace Sub-Floor Bracing (Fig. 6).

Top Hat Flooring System		Single Storey Metal Roof	
Joist	Simply Supported	Two Equal Spans	Multiple Equal Spans
TH-12012	2.7	3.1	3.0

Bearer	Simply Supported	Two Equal Spans	Multiple Equal Spans
C-20024	3.0	3.0	3.0

Note: These tables to be used as a guide only. Independant engineering is required for steel flooring systems and is not available in this brochure.

FIG 11

ezipier™ Adjustable Cap

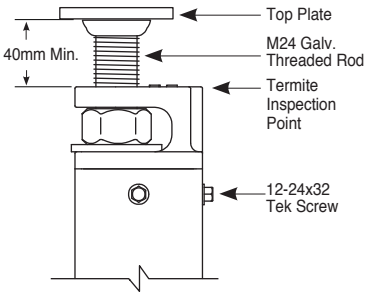
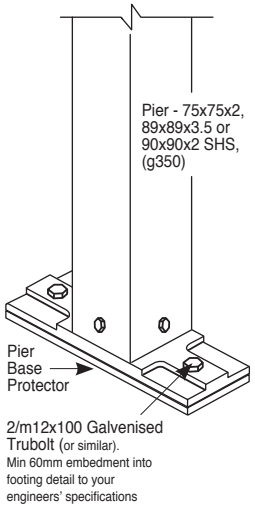


FIG 12

ezipier™ Base Plate



Note: If flooring is used in corrosive environment corrosive paint protection will be required. Adequate ventilation should be provided for flooring systems close to the ground.

FIG 8

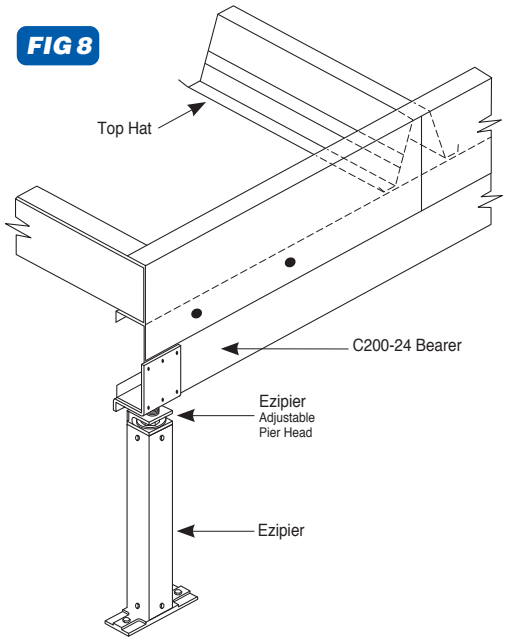


FIG 7

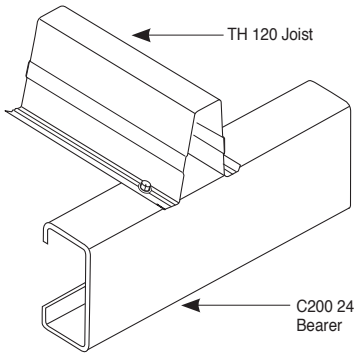


FIG 9

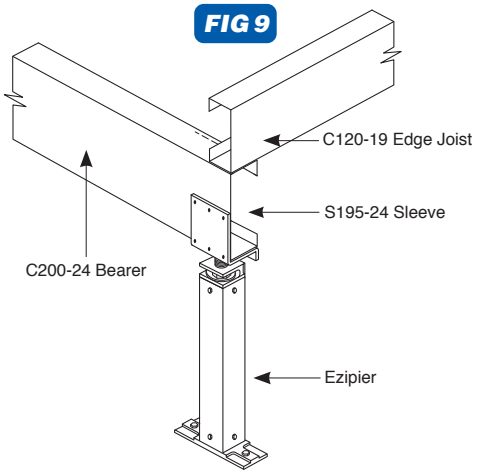
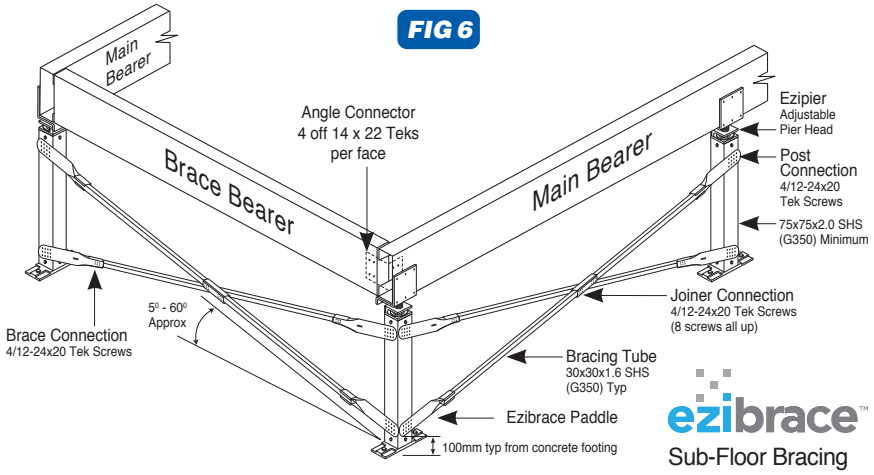
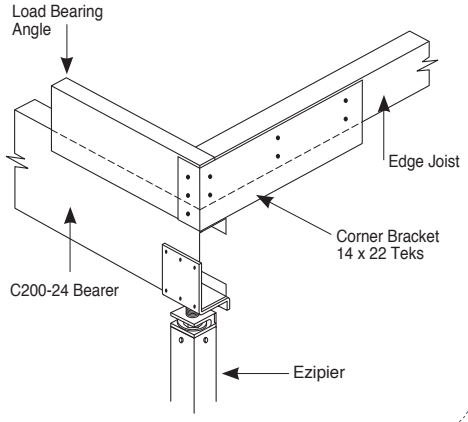


FIG 6



ezibrace™ Sub-Floor Bracing

FIG 10



Steeline

This system offers a reduced height (240mm max) because the bearers and joists are in the same plane, which can be an advantage in some applications.

This system uses adjustable galvanised stumps. Bearers and joists are custom cut to suit.

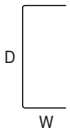
All sections are manufactured from galvanised Z350-G450 hi-tensile steel.

Flooring System can be screwed together - Fig 3, 4 & 7 or welded on site - Fig 6.

"C" SECTION FLOORING SYSTEM

Assembled and welded on site.

Bearer



Section	D	W	T	Mass Kg/m
FB 182-19	187	58	1.9	4.46
FB 182-24	187	58	2.4	5.62
FB 235-19	240	72	1.9	5.68
FB 235-24	240	72	2.4	7.15

Joist

Section	D	W	T	Mass Kg/m
FJ 182-19	182	51	1.9	4.46
FJ 182-24	182	51	2.4	5.62
FJ 235-19	240	64	1.9	5.68
FJ 235-24	240	64	2.4	7.15

Joist Spans

Single Storey	Steel Roof
Joist	450 Centres
FJ 182-19	2650
FJ 182-24	2900
FJ 235-19	3300
FJ 235-24	3600

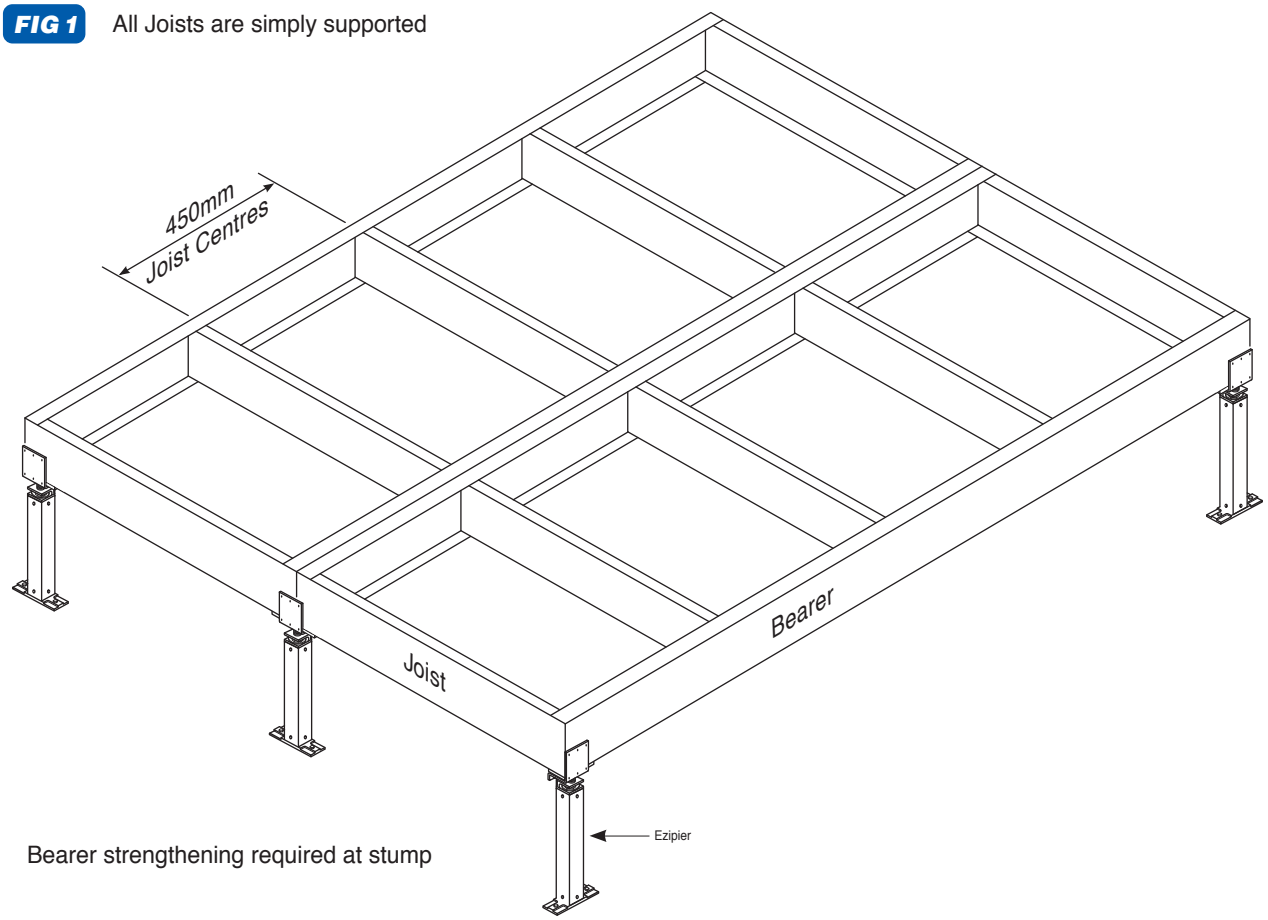
Bearer Spans

Single Storey	Steel Roof	
Joist Span	FB 182-24	FB 235-24
2400	2800	3500
3000	2700	3400
3600	2500	3000

These tables to be used as a guide only.
Independant engineering is required for Steel Flooring Systems and is not available in this brochure.

"C" SECTION FLOORING SYSTEM *[Bearer & joist in the same plane]*

FIG 1 All Joists are simply supported



Bearer strengthening required at stump

FIG 2

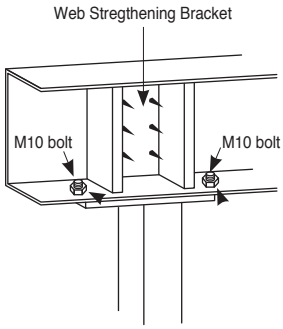


FIG 3

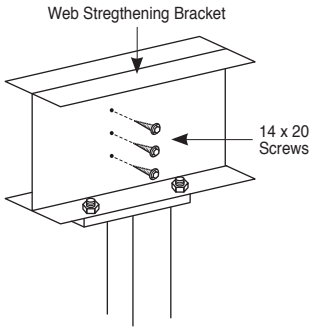


FIG 4

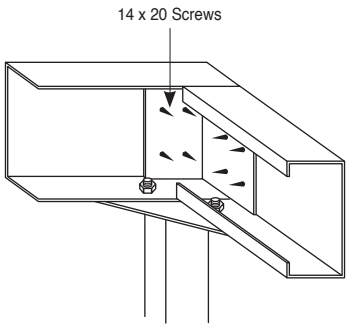


FIG 5

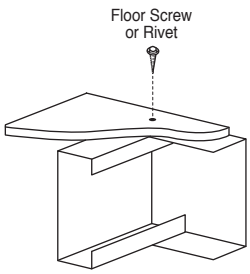


FIG 6

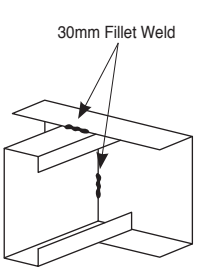
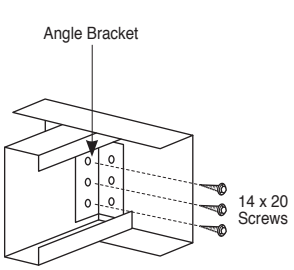


FIG 7



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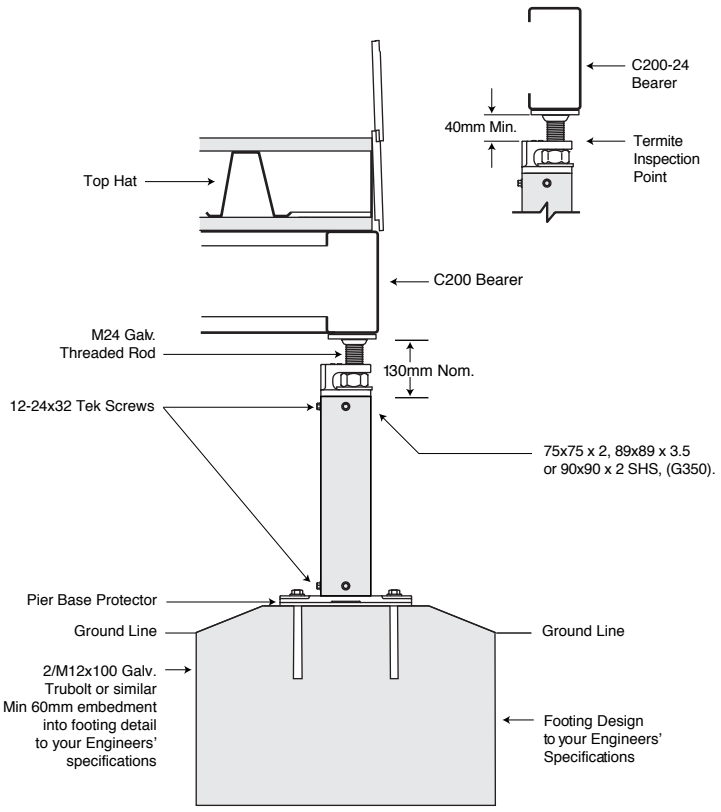
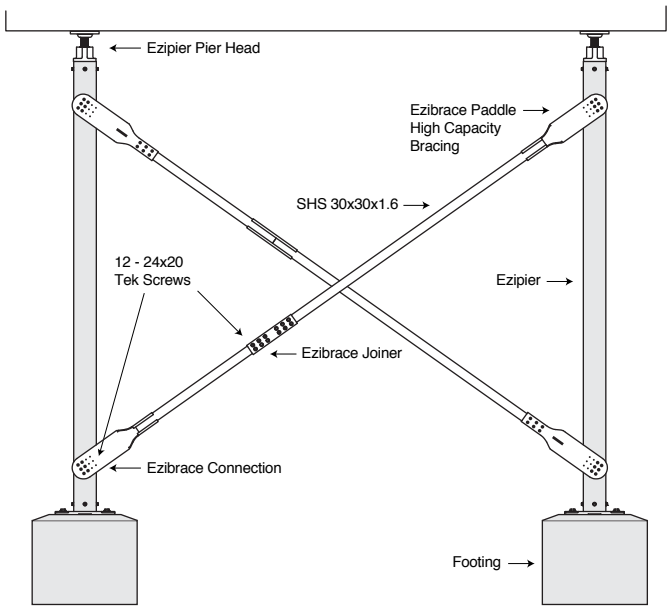


Adjustable Height Pier Head & Base

ezibrace™



Sub-Floor Bracing

Extension using inline C Section Bearers and Joists

C Section Bearer - 120 Top Hat Joists

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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