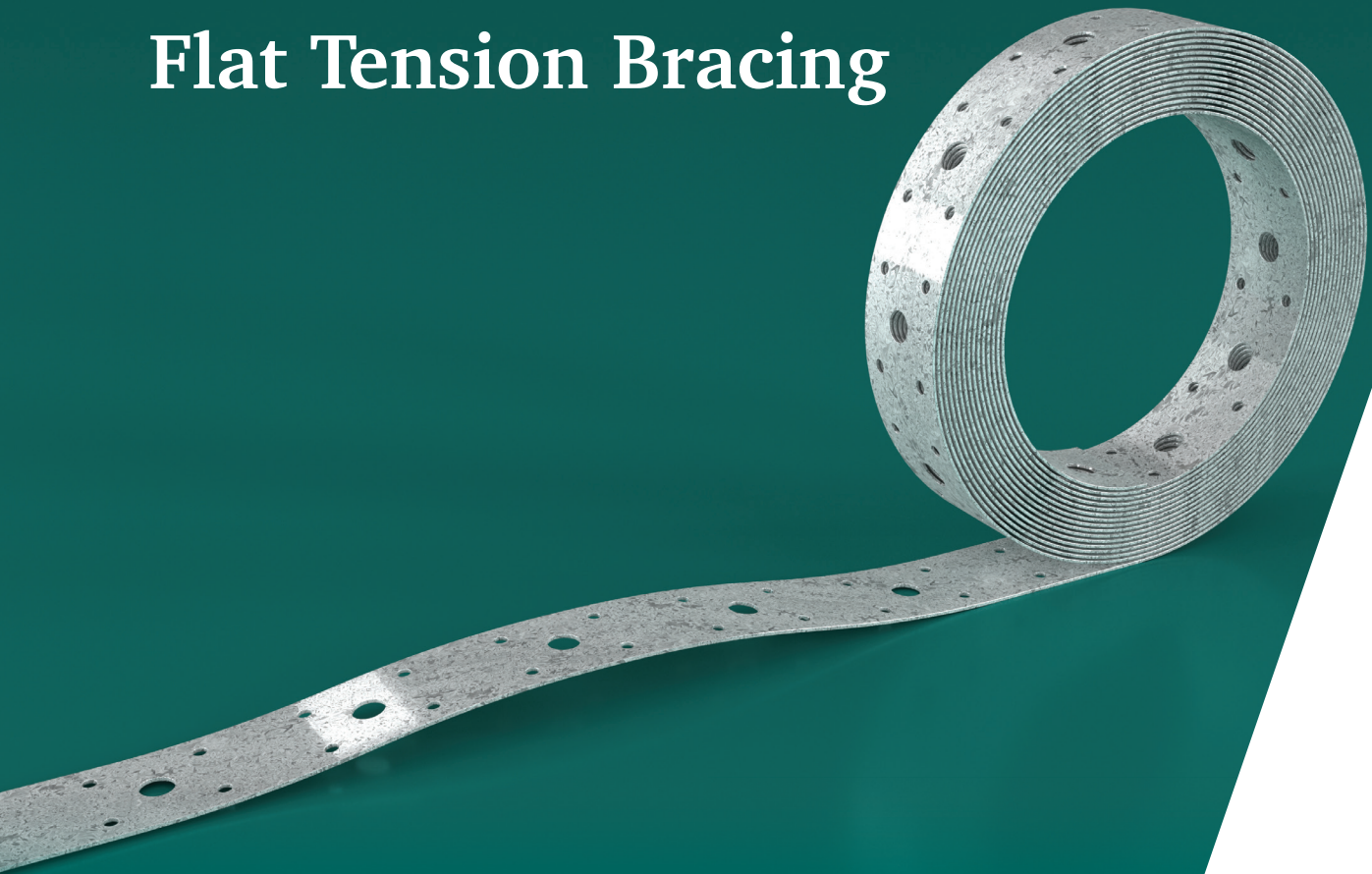


Multinail Flat Tension Bracing



Pre-punched galvanised steel tension brace, designed to support timber wall frames in domestic construction.

Benefits of Flat Tension Bracing

This pre-punched galvanised steel brace is:

- Highly effective in situations where bracing cannot be cut into studs.
- An ideal tension bracing system when used in conjunction with a Multi-Tensioner
- Practical – it significantly reduces on-site labour time since studs do not need to be notched
- Made in Australia

Installation - Hand-Nailed

Two individually cut pieces of Flat Tension Bracing are required to brace a timber framed wall section. These pieces should overlap to form an 'X'.

1. Secure the first end of one piece of bracing into position using 30mm x 2.8Ø Multinail nails.
2. Stretch the Flat Tension Bracing over the entire panel to be braced, ensuring the brace is taut.
3. Secure the second end while maintaining tension on the brace.
4. Repeat this procedure for the second piece of Flat Tension Bracing, ensuring an 'X' is formed.
5. Secure the Multi Tensioner in each length of Flat Tension Bracing to remove any remaining slack.
6. Fix Flat Tension Bracing to each stud in each braced with 1/30mm x 2.8Ø Multinail nail.
7. Fix a T-Plate, Stud Tie, or Nail-On Stud Tie as required (refer to individual Multinail product brochures for details).

Please use the relevant standards to determine the number, location, and tie-down of bracing units. Bracing capacities stated are applicable for wall heights up to and including 2.7m. For wall heights greater than 2.7m, please refer to AS1684

Typical use - 1.5kN/m

Use 30x0.8mm or 30x1.0mm Flat Tension Bracing
1.5kN/m Bracing Capacity as per AS1684 Residential Timber-Framed Construction, Table 8.18(b)

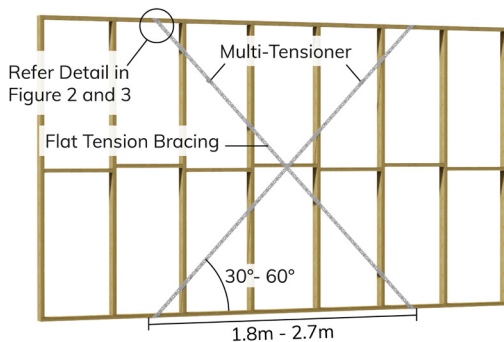


Figure 1: Brace panel view (maximum wall height 2.7m)

No Stud Ties required for 1.5kN/m Bracing Capacity as per AS1684 Residential Timber-Framed Construction, Table 8.18(b)

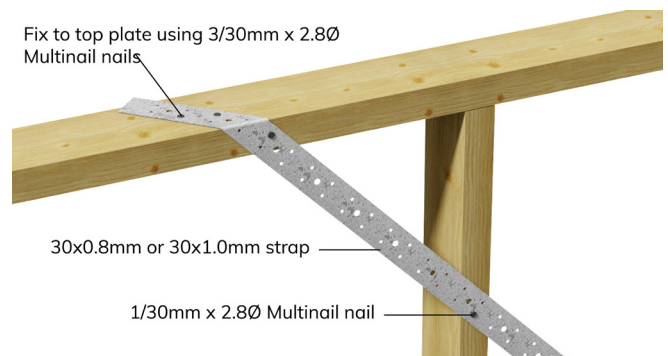


Figure 2: Nails to the top of the top plate - for 1.5kN/m bracing wall

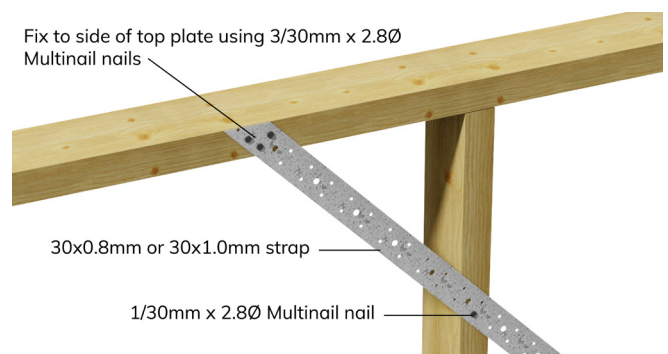


Figure 3: Nails to the side of the top plate - for 1.5kN/m bracing wall

Typical use - 3.0kN/m

Use 30x1.0mm Flat Tension Bracing ONLY
3.0kN/m Bracing Capacity as per AS1684 Residential Timber-Framed Construction, Table 8.18(d)

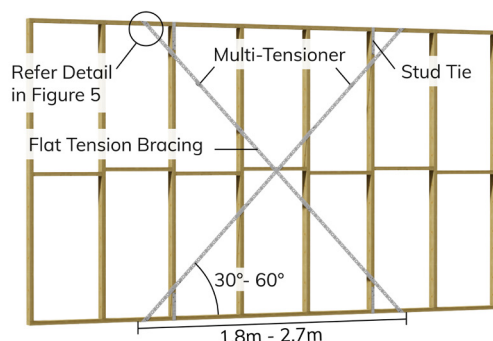


Figure 4: Brace panel view (maximum wall height 2.7m)

Stud Tie required to adjacent stud as per AS1684 Residential Timber-Framed Construction, Table 8.18(d)

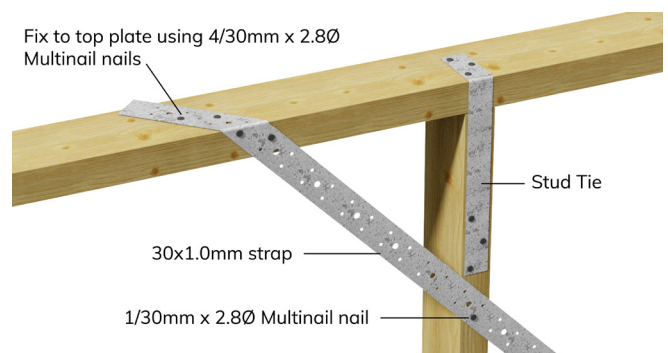


Figure 5: Nails to top plate - for 3.0kN/m bracing wall

Strap Tension Capacity

Table 1

Size(mm)	Tension Capacity (kN)
30 x 0.8	5.6
30 x 1.0	6.5

Short Wall Bracing

Four individually cut pieces of Flat Tension Bracing are required to brace a timber framed wall section. These pieces should overlap to form a double 'X', as shown in Figure 6.

- Wrap the ends of the Flat Tension Bracing around the plate and secure with nails (refer to Figure 5).
- Attach a minimum of 30 x 1.0mm Flat Tension Bracing with 2/30mm x 2.8Ø Multinail nails into each stud.
- A Multi-Tensioner is required for each strap.
- Use a minimum of 70 x 35-F5 Wall Stud.
- Install Stud Ties or one T-Plate on both sides of the frame.
- For tie-down, comply with AS1684 or use a minimum M10 Concrete Screw Anchor. Use the relevant Standards to determine the number, location and tie-down of bracing units. Bracing capacities stated are relevant for wall heights up to (and including) 2.7m. For wall heights greater than 2.7m, please refer to AS1684.

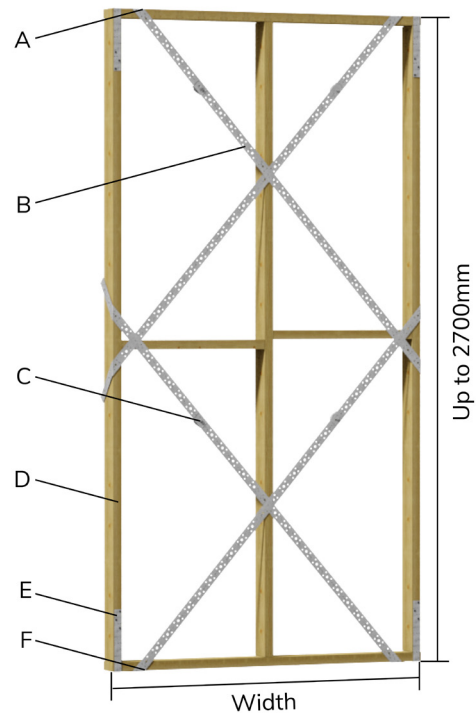


Figure 6: Brace panel view

Table 2: Wall heights up to 2.7m

Panel Type	Bracing Capacity (kN) for Unit Width (mm)									
	600	900	1000	1100	1200	1300	1400	1500	1600	1700
Short Wall Bracing	1.5	2.2	2.7	3.0	3.3	3.6	3.8	4.0	4.1	4.2

Fixing - Gun-Nail

Nail-Gun driven nails are not to be driven through the existing nail holes, as this can lead to widening of the holes, resulting in the heads pulling through easier. Instead, Nail-Gun driven nails must be more than 5mm from any metal edge or hole and spaced evenly apart.

Minimum nail spacing from AS1720.1 includes the following:

- Timber end distance – 50mm
- Timber edge distance – 12.5mm
- Between nails, across the grain – 25mm
- Between nails, along the grain – 50mm

Gun-Nails are not to be driven at excessively high pressure, as they may punch through the steel product. Nail heads should be flush with the metal surface.

Care must be taken when using Nail-Gun driven nails through metal products. Refer to the Nail-Gun supplier's safety recommendations before operating these tools. Items to consider include safety clothing, eye protection and the angle of the nail to the metal should be 90°. Multinail does not accept any responsibility for injuries incurred, if Nail-guns are used for installing Multinail metal products.

Illustration of gun-nail fixing areas refer to Figure 7.

Refer to Use of Gun-Nails with Multinail products for more information.

Notes:

- All gun-nails need to be 32mm long x 2.5Ø hardened screw shank nails and comply with AS2334-1980 or ASTM F1667-15.
- Due to the smaller diameter of the gun nail, one additional gun-nail is required to achieve match required bracing capacity:
 - 4/32mm long x 2.5 Ø gun-nails end fixing detail for 1.5kN/m bracing wall
 - 5/32mm long x 2.5 Ø gun-nails end fixing detail for 3.0kN/m bracing wall



Figure 7: Gun-nail fixing areas
(example shown for 1.5kN/m bracing wall)

Multi Tensioner

For an ideal tension bracing system, use Flat Tension Bracing in conjunction with a Multi-Tensioner.

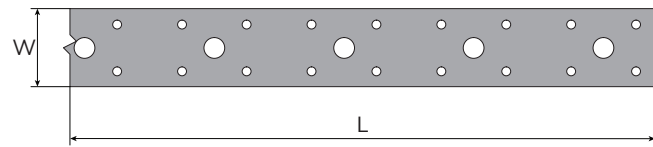
Secure the Multi-Tensioner in each length of Flat Tension Bracing to remove any remaining slack.



Figure 8: Multi Tensioner

Technical Specifications

Steel	G300 Steel Z275, Thickness as specified
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Description and Packing

Product Code	Description W x T x L	Carton Qty	Pallet Qty	Carton kg.
TA501	30 x 0.8mm x 10m Roll	1	100	2.0
TA502	30 x 0.8mm x 20m Roll	1	100	4.0
TA500	30 x 0.8mm x 30m Roll	1	100	5.6
TA503	30 x 0.8mm x 50m Roll	1	100	9.0
TA504	30 x 0.8mm x 100m Roll	1	50	18.5
TA555	30 x 1.0mm x 3.15m Length	500	1	256.0
TA556	30 x 1.0mm x 3.35m Length	500	1	272.0
TA557	30 x 1.0mm x 3.60m Length	500	1	292.0
TA558	30 x 1.0mm x 3.90m Length	500	1	316.0
TA559	30 x 1.0mm x 4.20m Length	500	1	342.0
TA551	30 x 1.0mm x 10m Roll	1	100	2.2
TA552	30 x 1.0mm x 20m Roll	1	100	4.9
TA550	30 x 1.0mm x 30m Roll	1	100	7.3
TA553	30 x 1.0mm x 50m Roll	1	100	12.2
TA554	30 x 1.0mm x 100m Roll	1	50	24.5
FTN3001008	30 x 0.8mm x 10m Roll Unpunched	1	100	2.0
FTN3002008	30 x 0.8mm x 20m Roll Unpunched	1	100	4.0
FTN3003008	30 x 0.8mm x 30m Roll Unpunched	1	100	6.0
FTN3005008	30 x 0.8mm x 50m Roll Unpunched	1	100	9.1
FTN3010008	30 x 0.8mm x 100m Roll Unpunched	1	50	18.3
FTN3001010	30 x 1.0mm x 10m Roll Unpunched	1	100	2.2
FTN3002010	30 x 1.0mm x 20m Roll Unpunched	1	100	4.4
FTN3003010	30 x 1.0mm x 30m Roll Unpunched	1	100	6.6
FTN3005010	30 x 1.0mm x 50m Roll Unpunched	1	100	11.0
FTN3010010	30 x 1.0mm x 100m Roll Unpunched	1	50	22.0

Fixings		
MT-150	Multi-Tensioner	
TA302	30mm x 2.8Ø Multinail Nails	
NOTE: The 100m Roll requires a special floor-mounted Bulk Coil Dispenser. Please contact Multinail for more information		



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