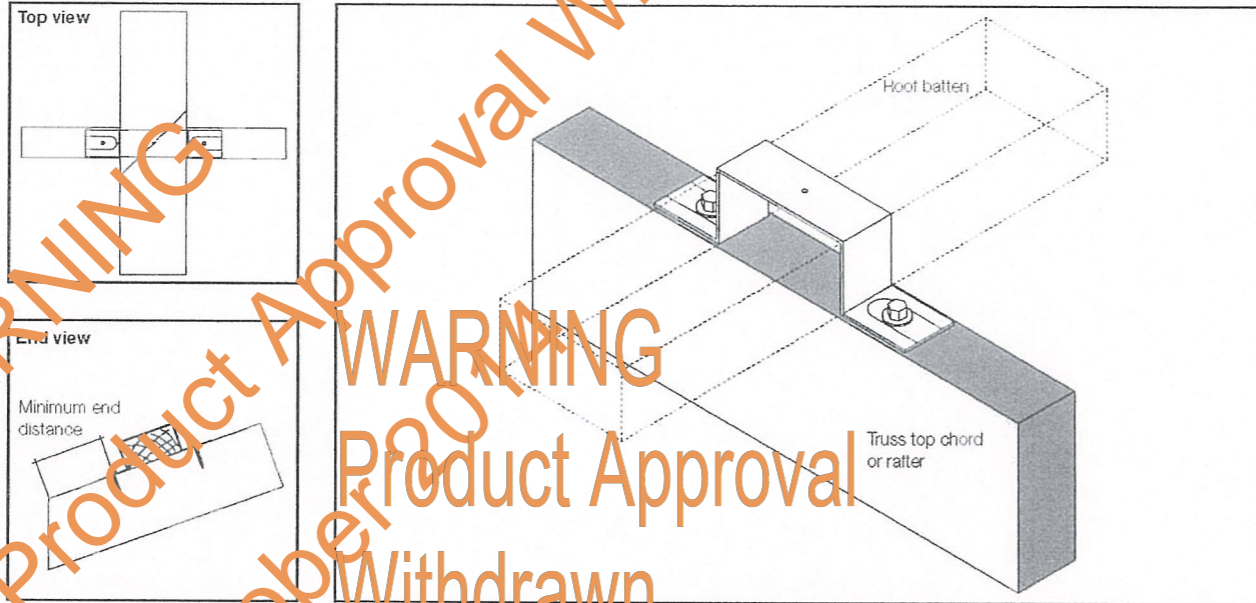




Top Hat Bracket

APPLICATION

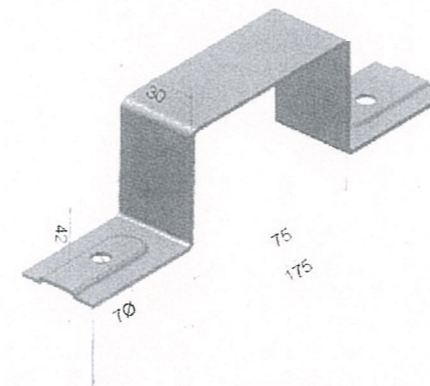


Screw size number	Strength limit state design load (kN)	Timber Joint Group
12	4.2	J2/JD3

Fixing procedure:

- Fix each side of bracket with one Type 17 screw as noted above.
- Screws are Type 17, 50mm long galvanised batten screws.
- Minimum end distance for: No.12 gauge screws 55mm.
- Screw holes to be prebored.

Manufactured from 1.0mm Galvanised G300 Z275 Steel



Product Name: TOP HAT BRACKET

Product Description: USED TO TIE DOWN ROOF BATTENS

Manufacturer's Name: MULTINAIL AUSTRALIA

Design Criteria:

STRENGTH LIMIT STATE DESIGN LOAD IS 4.2 kN

Limitations:

TO BE USED ONLY ON HARD WOOD RAFTERS OR ROOF TRUSSES OF A MINIMUM DEPTH OF 90mm

RAFTERS TO BE A MINIMUM 35mm THICK

MAX ROOF PITCH 35°

Accepted for Inclusion

DTCM ref: M/655/01

Chairman's Signature:

Chairman's Name: STEVEN EHRlich

Date of Approval: 11/2/10 Expiry Date: 10/2/13

- Capacity from Low High Low cyclone testing as specified in the BCA for inclusion in the Northern Territory deemed to comply manual (DTCM)
- This bracket has been tested by James Cook University at the Cyclone Testing Station. Report No. TS725.

**Design Engineers Certification

Name: VICTOR PORCHUN
 Rego Number: MIEAUST 115940
 Date: 27/1/2010
 Signature: *N.T. Porchun*

**registered as a structural engineer in Australia

**Certifying Engineers Certification

Name: MATTHEW SMITH
 NT Rego Number: 46510ES
 Date: 27/1/2010
 Signature: *M. Smith*

**registered as a structural engineer in Northern Territory

New Expiry: 10/1/14
 Signature: *J*



Top Hat Bracket

Rafter or truss spacing (mm)	Batten spacing (mm)	Wind classification							
		N1		N2		N3		N4	
		General area	Edges	General area	Edges	General area	Edges	General area	Edges
Tile roof									
450	330	✓	✓	✓	✓	✓	✓	✓	✓
600	330	✓	✓	✓	✓	✓	✓	✓	✓
900	330	✓	✓	✓	✓	✓	✓	✓	✓
1200	330	✓	✓	✓	✓	✓	✓	✓	✓
Sheet roof									
	370	✓	✓	✓	✓	✓	✓	✓	✓
	450	✓	✓	✓	✓	✓	✓	✓	✓
600	600	✓	✓	✓	✓	✓	✓	✓	✓
	750	✓	✓	✓	✓	✓	✓	✓	✓
	900	✓	✓	✓	✓	✓	✓	✓	✓
	1200	✓	✓	✓	✓	✓	✓	✓	✓
	370	✓	✓	✓	✓	✓	✓	✓	✓
	450	✓	✓	✓	✓	✓	✓	✓	✓
900	600	✓	✓	✓	✓	✓	✓	✓	✓
	750	✓	✓	✓	✓	✓	✓	✓	✓
	900	✓	✓	✓	✓	✓	✓	✓	✓
	1200	✓	✓	✓	✓	✓	✓	✓	✓
	370	✓	✓	✓	✓	✓	✓	✓	✓
	450	✓	✓	✓	✓	✓	✓	✓	✓
1200	600	✓	✓	✓	✓	✓	✓	✓	✓
	750	✓	✓	✓	✓	✓	✓	✓	✓
	900	✓	✓	✓	✓	✓	✓	✓	✓
	1200	✓	✓	✓	✓	✓	✓	✓	✓

Rafter or truss spacing (mm)	Batten spacing (mm)	Maximum internal pressure						Partial internal pressure					
		C1		C2		C3		C1		C2		C3	
		General area	Edges	General area	Edges	General area	Edges	General area	Edges	General area	Edges	General area	Edges
Tile roof													
450	330	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
600	330	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
900	330	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sheet roof													
	370	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	450	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
600	600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	750	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	900	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	370	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	450	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
900	600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	750	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	900	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	370	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	450	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1200	600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	750	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	900	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1200	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTE:
 • General area also includes any roof area that is greater than 1200 mm away from the edges of a roof.

NOTE:
 • General area also includes any roof area that is greater than 1200 mm away from the edges of a roof. Edges include, hips, ridges, fascias and barge.
 • Where ceiling or eaves lining is placed on top of rafters or trusses, or where the ceiling or eaves lining does not have sufficient strength to resist internal pressures, or where roof cavities are vented to internal room, e.g., manhole covers not rigidly fixed, then the batten to truss shall be designed for maximum internal pressure. Where ceiling-lining material is structurally sufficient to resist the maximum internal pressure and the ceiling cavity is not vented to internal room pressure, then the batten to truss connection may be designed for partial internal pressure.

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 MAX ROOF PITCH 35°

Accepted for Inclusion

DTCM ref: M/65B/02

Chairman's Signature:

Chairman's Name: STEVEN EHRLICH

Date of Approval: 11/2/10 Expiry Date: 10/2/13

✓ Top Hat Bracket is adequate
 ✗ Top Hat Bracket is not adequate

****Design Engineers Certification**
 Name: VICTOR PORCHUN
 Rego Number: MIEAUST 115940
 Date: 27/1/2010
 Signature:

****Certifying Engineers Certification**
 Name: MATTHEW SMITH
 NT Rego Number: 46510ES
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**registered as a structural engineer in Australia

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New Expiry: 10/10/14
 Signature: