

5.3 mm HARDIBRACE or 6.0 mm HARDIFLEX II one side (Hand or Gun Nailed) Design Bracing Strength 4.0 kN/m

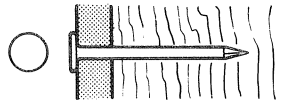
Construction Specification

NAILING

Hardibrace and Hardiflex II installed vertically as cavity bracing should be fixed to timber framed bracing walls with:

Hand Nailing

2.8 mm clouts (galvanised).
30 mm long for softwoods
25 mm long for hardwoods
Drive clouts so that the head remains proud of the sheet surface.



Gun Nailing

Bostitch CR3D coil nails driven from a N12 pneumatic coil nailer or Jambro 3.1/35 clouts driven by a NV45 AA coil nailer.

Drive nails so that the head remains proud of the sheet surface.

The nail spacing to studs shall be 100 mm centres at the edge of all sheets and at 150 mm centres along intermediate studs.

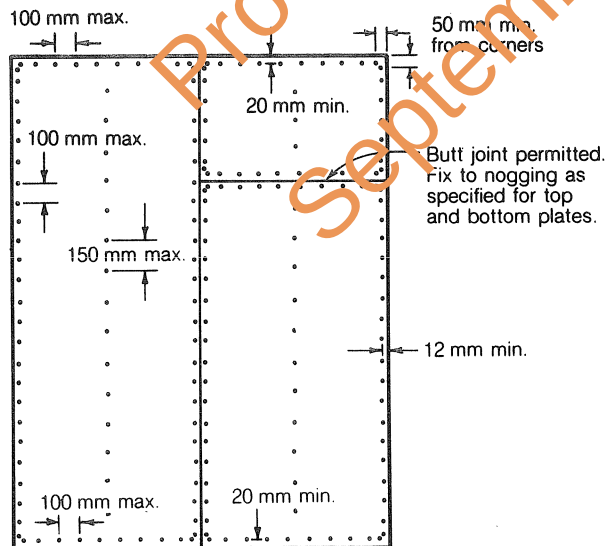
Nail spacing along the top and bottom plates shall be —

- 100 mm centres for anchor rods, also for anchor bolts with nailing plates.
- 50 mm centres for anchor bolts with straps.

Nails should be a minimum of 12 mm from the edge of the sheets on studs and a minimum of 20 mm from the edge of sheets on plates and 50 mm from the corner of the sheets.

CLADDING

HARDIBRACE (925 and 1225 mm wide)
HARDIFLEX II (900 and 1200 mm wide)



Hardibrace or Hardiflex II — Sheets fixed Vertically

ANCHOR RODS

Anchor rods are 12 mm dia. full length mild steel rods tying the wall top plate through the frame cavity to the sub-structure.

A standard 38 mm dia. flat round washer must be used under each nut except on a 5.5 kN/m wall using a softwood frame where a 38 mm square x 3 mm thick washer must be used.

ANCHOR BOLTS

Anchor bolts are 10 mm dia. and are for tying the wall's bottom plate to the sub-structure.

A standard 30 mm dia. flat round washer must be used under each nut, except where tie-down straps are used.

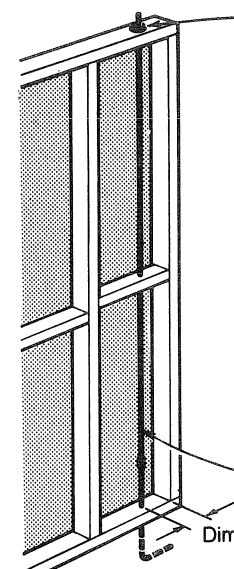
SPACING OF ANCHOR RODS AND BOLTS For Structural Wall Bracing

Anchor rods must be installed in accordance with building regulations or as determined by a structural engineer and must be placed at both ends of each section of bracing wall and at not more than 2.4 m centres.

Anchor rods must be located within 'Dimension A' of the adjacent face of the end studs as shown.

Between anchor rods one M 10 bolt shall be provided at a maximum of 1.2 m centres to further fix the bottom plate to the sub-structure.

Racking Resistance kN/m	Maximum 'Dimension A' with Top and Bottom Plate of		
	75 x 50 F11	70 x 45 F5	70 x 35 F5
5.5	—	—	—
4.5	100	50	—
3.5	130	65	—
3.0	150	75	50
2.5	180	90	50
2.0	220	110	60
1.5 or less	300	150	80



38 mm square x 3 mm thick washer on nominal 5.5 kN/m double sided wall on softwood frame.

38 mm dia. washer on all other bracing walls.

Notes:

Test frames of nominal 2400 mm height were constructed from 70 x 45 mm seasoned radiata pine plates and studs (Stress Grade F5)

Studs were butted to plates and each end nailed with 75 x 3.15 mm plain shank nails.

Frames were tested without noggings.

70 x 35 mm dressed seasoned softwood is acceptable for studs for all wall racking strengths and for plates for walls of racking strengths of 3 kN/m and under.

MANUFACTURER
James Hardie & Coy Pty Limited

**FIXING OF 5.3 mm HARDIBRACE OR
6.0 mm HARDIFLEX II FOR THE
STRUCTURAL BRACING OF EXTERNAL WALLS**

CERTIFIED *[Signature]* M.E. Aust.
DATE 7/10/87

**NORTHERN TERRITORY
CYCLONIC AREAS**

APPROVED *[Signature]* M.E. Aust.
11/3/88

DESIGN DATA SHEET

M/203/4