

6.0 mm VILLABOARD II one side – Design Bracing Strength 2.9 kN/m
6.0 mm VILLABOARD II both sides – Design Bracing Strength 4.5 kN/m

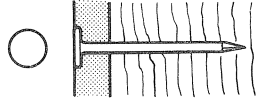
Construction Specification

NAILING

Sheets should be fixed to timber framed bracing walls with 30 x 2.8 mm Fibre Cement Nails (galvanised).

Nails should be driven just below the surface of the sheet using the hammer face only.

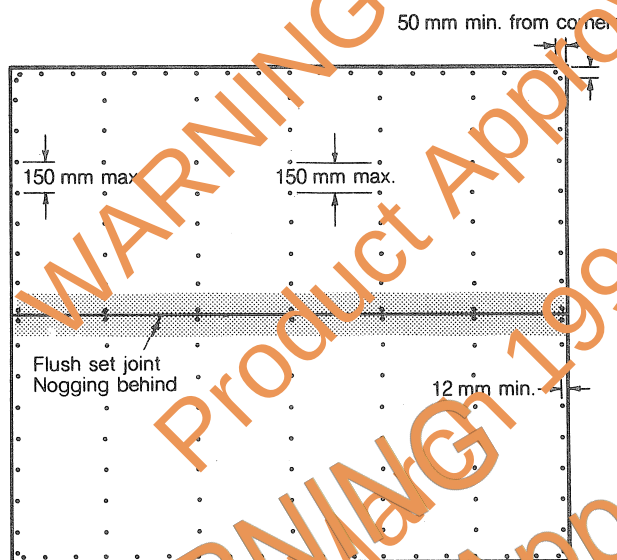
Nails must not be punched.



The nails shall be 150 mm centres along top and bottom plates and at 150 mm centres along all studs.

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

LINING (900 and 1200 mm wide)



Villaboard II – Sheets fixed Horizontally

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.

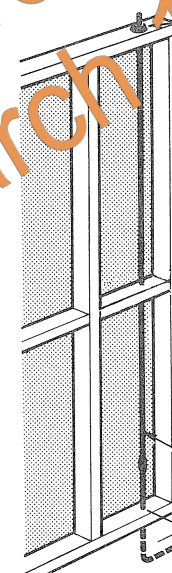
SPACING OF ANCHOR RODS AND BOLTS For Structural Wall Bracing

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	250	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 6.0 mm VILLABOARD II FOR THE STRUCTURAL BRACING OF INTERNAL WALLS

DESIGN DATA SHEET

CERTIFIED..... M.T.E. Aust.

DATE..... 7/10/87.....

NORTHERN TERRITORY CYCLONIC AREAS

APPROVED

11/3/88

M/302/2