

## Certificate of Structural Performance Upcycled Building Products Australia t/a saveBOARD

**School of Civil Engineering** 

The design methodology and criteria for applications using the 7mm saveBOARD™ panels are based upon the results of full scale testing undertaken during 2024 at the University of Queensland, and have been prepared in accordance with widely recognised engineering principles and are based upon use of the following documents:

- 1. AS1684 2021 SAA National Timber Framing Code
- 2. AS1720.1 2010 SAA Timber Structures Code Part 1 Design Methods

When installed in accordance with the manufacturer's specification using Paslode 32x2.7mm nails, 7mm saveBOARD panels will comply with the requirements of the Building Code of Australia. The certified design properties (derived from full scale testing) for walls up to 2.4m in height, constructed of timber framing of grade JD5 (MGP10) or better, (using 2400 x 2400, and 2 / 2400 x 450 panels as detailed in the UQ test report) are as follows, when such loads are determined in accordance with AS1170 (parts 1 - 4):

Type 1 panels: 150/150/300 – WITHOUT tie down rods: minimum racking resistance of 3.4 kN/m

nailing pattern and nominal fixings of the bottom plate to the floor or slab are similar to Detail (g),
 Table 8.18, Parts 2 and 3, AS1684.

Type 2 panels: 80/150/300 – WITH M12 tie down rods: minimum racking resistance of 5.2 kN/m

- M12 tie-down rods at each end of the braced wall, with anchors rated to 13kN at 1200mm c/c maximum spacings, and
- nailing pattern similar to Method A, Detail (h), Table 8.18, Parts 2 and 3, AS1684.

Type 3M panels: 40/80/300 – WITHOUT tie down rods: minimum racking resistance of 6.0 kN/m

• nailing pattern and anchors rated to 13kN at 1200mm maximum spacings similar to Method B, Detail (h), Table 8.18, Parts 2 and 3, AS1684.

Type 4 panels: 80/150/300—WITHOUT tie down rods, 2/ 450mm wide panels (discrete, not joined) with M10 coach bolts in each panel corner: minimum racking resistance of 2.2 kN/m

nailing pattern and nominal fixings of the bottom plate to the floor or slab are similar to Detail (g),
 Table 8.18, Parts 2 and 3, AS1684.

Product substitution is permitted for panel products of equivalent or lesser bracing capacity. This includes plywood (9mm F8; 7mm F11; 6mm F14; 4.5mm F27) and hardboard (4.5mm) products noted in Table 8.18 of AS 1684 – 2021 (Parts 2 and 3). 7mm saveBOARD panels can also be used for short panels in accordance with AS1684 Section: 8.3.6.5, with capacity as noted for Type 4 panels.

It is noted that Bureau Veritas Certification in compliance with the CodeMark Certification Scheme undertakes product verification and Third Party Auditing of factory production control of the saveBOARD panels.

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