

PRODUCT TECHNICAL STATEMENT

Product Description saveBOARD betterBRACE is a semi vapour permeable structural composite panel made from 100% recycled materials.

The core of the product is made from shredded and compressed composite packaging.

saveBOARD does not use glues, resins or other such biological or environmentally harmful products. During construction, or in-service use saveBOARD does not create harmful dust, vapours, or other potentially harmful Volatile Organic Compounds (VOC's).

betterBRACE is designed for use with timber or steel framing and is finished with a moisture-resistant fibreglass facer on one side and a recycled paper facing on the internal side¹.

betterBRACE is manufactured in New Zealand for exclusive use in New Zealand & Australia. Please refer to the saveBOARD Product Assurance Supplier Statement for compliance with relevant performance clauses of New Zealand & Australian Building Codes/Permits.

Panel sizes are as follows:

- 2450 mm x 1200 mm x 10 mm
- 2750 mm x 1200 mm x 10 mm
- 3000 mm x 1200 mm x 10 mm

Custom cut length between 2400-3100mm available

For use a rigid air barrier and structural bracing when installed in accordance with the saveBOARD Installation Guide.

Scope of Use As a rigid air barrier for use in residential to multi-story construction. Designed for use in Extra High wind zones and in specific engineering design projects. Finished with an external moisture resistant Fiberglass facing material; it is an alternative to traditional building underlays or rigid air barriers.

Warranty 15 years
Limitations / Disclaimer Exposure 90 days
 Wind Zone Extra High or to Specific Engineered Design (S.E.D)

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| Compliance with the New Zealand Building Code | saveBOARD betterBRACE specified as a rigid air barrier and installed in accordance with betterBRACE Installation Guide, contributes to meeting the following provisions of the NZ Building Code: |
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¹ Boards can be made available with fibreglass facers to both sides.

B1 Structure

Clause B1 Structure: Performance

B1.3.1, B1.3.2, B1.3.3(a,b,f,h), B1.3.4(d)

saveBOARD betterBRACE has demonstrated appropriate structural properties through independent analysis.

The product has been assessed as an: ALTERNATIVE SOLUTION – Equivalent to (verification method B1/VM1). Material structural performance parameters are established through the Oculus Engineering NZBC Compliance Statement and Scion test results (August 2021).

*(Please refer to www.saveBOARD.nz for current test certification)

B2 Durability

Clause B2 Durability: Performance B2.3.1(a)

saveBOARD betterBRACE is manufactured to meet the requirements of the NZBC Clause B2 Durability.

The product has been assessed as an: ALTERNATIVE SOLUTION – Equivalent to (Acceptable Solution B2/AS1, 3.2.1). Compliance has been verified through analysis of US compliance testing; supported by an independent verification for use in NZ by Oculus Architectural Engineering, and Independent Laboratory testing by SCION.

If saveBOARD is appropriately stored and used in accordance with good building practices and the betterBRACE Installation Guide, it will comply with the requirements of the NZBC B2.

betterBRACE achieves NZBC B2 Durability requirements as part of a combined system reliant upon other building products.

C3 Fire affecting areas beyond the fire source

Clause C3 Fire: Performance

saveBOARD betterBRACE is manufactured to meet the requirements of the NZBC Clause C3.4 Fire.

The product has been assessed as an: ALTERNATIVE SOLUTION – Equivalent to (Acceptable Solution CVM2/AS1, 3.2.1). Compliance has been verified through US compliance testing.

Clause C3 Fire - Spread of flame Group Number

saveBOARD has been tested and independently verified as **Material Group Number 3** in accordance with AS/NZ 3837:1998. Compliance has been verified through US and NZ compliance testing supported by an independent verification for use in NZ by Oculus Architectural Engineering.

E2 External moisture

Clause E2 External Moisture: Performance

saveBOARD betterBRACE when used as rigid air and installed as per the saveBOARD Installation Guide will meet the performance requirements of E2.3.2 (contributes to), E2.3.7

E3 Internal moisture saveBOARD betterBRACE when used as rigid air and installed as per the saveBOARD Installation Guide will meet the performance requirements of E3.2 , E3.3.1 (contributes to)

F2 Hazardous building materials **Clause F2 Hazardous Building Materials: F2.3.1**

saveBOARD betterBRACE meets the requirement of NZBC F2 and the performance requirement of F2.3.1. No harmful chemical treatment is used in the manufacturing process. It does not present a health hazard to people (during construction and building use). No harmful dust or gases are released.

H1 Energy efficiency **Clause H1 Energy Efficiency: H1.3**

saveBOARD betterBRACE when used as rigid air and installed as per the saveBOARD Installation Guide will meet the performance of H1.3.1, (contributes to) H1.3.2E. (contributes to)

| saveBOARD betterBRACE Properties | |
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| Thickness | 10mm |
| Width, Standard | 1200mm (1220mm special) |
| Length, Standard | 2450mm (Up to 3100mm special) |
| Pieces Per Pallet | 35 |
| Density, Nominal kg/m3 | 850 |
| Density Nominal kg/m2 | 8.5 |
| Compressive Strength ASTM D2394 | 3990 psi |
| Fire- Resistance UL 790 – ASTM E108 | Class A |
| Fire Group Number – AS3837 | 3 |
| Flute Span ability ASTM E661 | 17" |
| Mould Resistance – ASTM D3273 | 10 |
| VOC Emissions - ASTM D5116 | <0.003 mg/m2/hr |
| Formaldehyde Emission ASTM D5116 | <0.013 mg/m2/hr |
| Permeability – ASTM E96 | 12.5 |
| Fastener Pull-Resistance | 525 lbf |
| Wind Uplift Resistance – FM 4471 | FM 1-90 |
| Water Absorption (Immersion) % Max – ASTM C473 | 3.9 |
| Water Absorption (Surface) % Max – ASTM C473 | 2.8 |
| Acoustic ASTC34-3001 | 30Db |

Quality Assurance

saveBOARD's Quality Assurance process and records are independently audited by a third-party product appraisal organisation.

The Third-party organisation have demonstrated/accredited knowledge of the Building Code and building science, and carry out appropriate sample analysis and reporting on;

- Regular inspections, testing and monitoring of properties to ensure the product conforms during manufacturing.
- Periodic inspections, observations to ensure the product continues to meet the performance requirements when in use.

Sustainability

No raw materials are extracted to use in the manufacture of saveBOARD product. All saveBOARD product is manufactured in New Zealand or Australia from 100% locally sourced and recycled composite packaging and soft plastics

Every panel of betterBRACE will divert approximately 25kgs of waste from landfill

No water, glues, resins or additives are used in the production process.

The embodied carbon (calculated Cradle to Gate) of betterBRACE .85Mj/kg, 0.11kgCO₂/kg material

betterBRACE has a DECLARE label and is deemed suitable for use in Living Building Challenge

Product Stewart Program- site off cuts can be returned to saveBOARD to be reused in the manufacture of new product

End of Life - saveBOARD product can be returned at End of Life to be reused in the manufacture of new product

VOC and formaldehyde free. No toxic or harmful dust or vapours are created during installation of saveBOARD products

saveBOARD is a member of the NZGBC

Greenstar waste diversion credits

Installation Requirements

saveBOARD betterBRACE used as a rigid air barrier must be installed in accordance the NZBC saveBOARD betterBRACE Installation Guide or details provided by a Licensed Building Practitioner.

Check all jointing tapes, building wraps, sealants and cladding are compatible with saveBOARD betterBRACE

Installation information

The installation guide can be found on the saveBOARD website www.saveboard.nz in written or video instructions

Service Life

saveBOARD betterBRACE will continue to satisfy the relevant performance requirements of the NZBC for 50 years if all the

requirements set out in this Product Technical Statement and the specific design parameters of the project are met.

Maintenance Requirements

If the membrane or metal roof product is properly maintained and inspected saveBOARD betterBRACE will not normally require maintenance as the substrate of a roofing system.

Product Support

All documents relating to compliance, case studies, specification, installation, maintenance and warranty can be found on the website www.saveboard.nz

saveBOARD has technical experts available to assist with any product enquiries. You can contact the team via the contact details on the website.

Legal Disclaimer

The information contained in this document is current as of August 2023 and is based on data available at the time of going to print. saveBOARD reserves the right to change the information contained in this document without prior notice. It is your responsibility to ensure that you have the most up to date information available. You can contact the team via the contact details on the website.

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