



BEAL Appraisal Certificate



APPRAISAL #: IL2230

EXPIRY DATE: 31 July 2024

The Premier Building Products Standard and Water-resistant Gypsum Boards



Product

- 1.1 The Premier Building Products 10 & 13mm Standard and Water-resistant Gypsum Boards, are a new alternative range for the New Zealand market, used typically for general and wet-area linings in buildings.
- 1.2 The PBP Standard and Water-resistant Gypsum boards comprise a sandwich of paper facings over a gypsum core, with two beveled edges to allow for the creation of a monolith surface ready for decorative finishing.
- 1.3 The PBP Gypsum boards are to be used and installed by suitably trained and experienced tradespersons, within the scope and limitations described in the Appraisal-holder's Technical and Installation Manual.

NZ Building Regulations

- 2.1 In the opinion of BEAL, the PBP Standard and Water-resistant Gypsum boards, when designed, installed and maintained in accordance with the statements and conditions of this Appraisal Certificate, will meet the following provisions of the New Zealand Building Code:

Clause B1 MECHANICAL PROPERTIES

The PBP Standard and Water-resistant Gypsum boards meet the requirements of Performance B1.3.3 (a) and (j). (Refer para 6.3)

Clause B2 DURABILITY

The PBP Standard and Water-resistant Gypsum boards will meet the requirements of Performance B2.3.1(b). (Refer para 6.4)

Clause E3 INTERNAL MOISTURE

The PBP Water-resistant Gypsum boards will meet this requirements of Performances E3.3.4, E3.3.5 and E3.3.6. (Refer para 6.5)

Clause F2 HAZARDOUS BUILDING MATERIALS

The PBP Standard and Standard and Water-resistant Gypsum boards will not present a health hazard to people. (Refer para 6.6)

- 2.2 The PBP Standard and Standard and Water-resistant Gypsum boards have been appraised as an 'Alternative Solution' in terms of compliance with the New Zealand Building Code.



Applicant: **Premier Building Products Ltd.**

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Scope and Limitations

3.1 The Premier Building Products (PBP) Standard and Water-resistant Gypsum Boards are a range of Standard and Water-resistant Gypsum products incorporating 10 mm and 13 mm thick boards of standard sizes used for general and wet area linings, suited for residential housing, light commercial and commercial buildings. The products are also suitable for adhering ceramic tiles to. Refer S5.1

3.2 The design and construction of all supporting substructures and framing shall be to the timber framing requirements of NZS3604 or NASH Standards 1 and 2 for light gauge steel framing, are to specific design and are therefore the responsibility of the owner/building designer.

3.3 PBP Water-resistant Gypsum Boards require a Building Code compliant waterproofing membrane applied over them in order to meet the performance requirement of clause E3.3.4, E3.3.5 and E3.3.36.

3.4 The owner of the building is responsible for the proper design, installation and maintenance of the installed waterproofing membrane, in accordance with the PBP Warranty - www.premierbuildingproducts.co.nz.

Technical Literature

4.1 The Premier Building Products (PBP) Standard and Water-resistant Gypsum Board Technical and Installation Manual **Ver 1.2** must be read in conjunction with this Appraisal. All aspects of design, use, installation and maintenance contained within the technical literature and scope of this Appraisal Certificate must be followed.

4.2 For a copy of this Technical Literature please contact Premier Building Products Ltd. at www.premierbuildingproducts.co.nz or the BEAL website

Technical Details

5.1 The PBP Standard and Water-resistant Gypsum boards can be installed over a well-designed, sound built structure that is in compliance with the NZBC and the project specification.

Board sizes supplied by PBP are:

10mm - 1,200mm x 2,400mm

13mm - 1,200mm x 2,400mm

5.2 Refer to the (PBP) Standard and Water-resistant Gypsum Boards Technical and Installation Manual Ver 1 for the method of installation.

5.3 Ceramic tiles may be adhered over a compatible waterproofing membrane as per the table below:

Stud Centre (mm)	Fixing Centre (mm)	Board thickness (mm)	Maximum tile weight (Kg/m ²)
600	150	10	26
600	150	13	40

Handling and Storage

5.4 All components must be stored inside, in a well ventilated area, up off concrete floors, kept dry, out of direct sunlight and away from freezing conditions.

5.5 The PBP Standard 10mm Gypsum Board has the

following bracing capacities when used on one side of the framing;

Minimum length (m)	BU/m W	BU/m EQ
0.4	11.5	14.9
1.2	30.3	34.8

5.6 When the Gib HandiBrac® hold-down system is used in conjunction with PBP Standard 10mm Gypsum Board, and the fixing centres are adjusted to 50, 100, 150, 225, 300mm maximum from each corner and 150mm thereafter around the perimeter of the bracing element, with 300mm maximum spacing to intermediate studs, the following bracing capacities for 1,200mm wide sheets, when used on one side of the framing are:

Minimum length (m)	BU/m W	BU/m EQ
1.2	75	64

Advice for designers

General

6.1 The PBP Standard and Water-resistant Gypsum Boards are available in thicknesses of 10mm and 13mm to suit the required application. They are suited for use for general building and construction including residential housing, light commercial and commercial buildings.

6.2 Before any installation can be carried out, it is essential that the intended framing and have been constructed in accordance with the relevant Standard(s).

Structure - Clause B1.3.3 (a) and (j)

6.3 The installed PBP Standard and Water-resistant Gypsum boards have good flexural properties required to meet clauses B1.3.3 (a) and (j).

Durability - Clause B2.3.1(b)

6.4 The PBP Standard and Water-resistant Gypsum boards when installed in accordance with this Appraisal Certificate, protected by a compatible and compliant protective coating system, subject to normal conditions of environment, use, and good housekeeping maintenance, are expected to have a serviceable life of at least 15 years. Note the requirement under 3.4.

Internal Moisture - Clauses E3.3.3, E3.3.5 & E3.3.6

6.5 The PBP Water-resistant Gypsum boards, when protected by a compatible and compliant protective waterproof membrane, subject to normal conditions of environment, use, and good housekeeping maintenance, will meet this requirement.

Hazardous Building Materials - Clause F2

6.6 The PBP Standard and Water-resistant Gypsum boards will not present a health hazard to people using the building.

Installation Requirements

Installation Skill Requirement

7.1 The PBP Standard and Water-resistant Gypsum Boards must be installed by suitably trained and experienced tradespersons.

Health and Safety

7.2 The safe use and handling of the PBP Standard and Water-resistant Gypsum boards are explained in the PBP technical literature.

Basis of this Appraisal

BEAL use the 'compliance verification procedure' to demonstrate compliance with the relevant clauses of the NZBC based on a risk analysis procedure. The following is a summary of the technical investigations carried out:

Assessments

8.1 The following assessments of the PBP Standard and Water-resistant Gypsum boards have been undertaken by BEAL:

A review of the test data and technical literature supplied by Premier Building Products Ltd.

In-service History

8.2 The PBP Standard and Water-resistant Gypsum boards has been in use for over 10 years overseas, in a wide range of conditions.

Quality

8.3 The manufacture of the PBP Standard and Water-resistant Gypsum boards is managed by way of a manufacturing quality plan which has been viewed by BEAL and found to be satisfactory.

8.4 The quality of the PBP Standard and Water-resistant Gypsum boards supplied by Premier Building Products Ltd. To the New Zealand market is managed through the use of a Building Product Quality Plan.

8.5 The Premier Building Products Ltd. Building Product Quality Plan, is based on ensuring continuous conformance with the quality requirements from purchase to supply to the merchants.

8.6 Premier Building Products Ltd.'s Building Product Quality Plan is reviewed and audited at least annually by BEAL or appointed agent.

8.7 Designers are responsible for the substructure design, and building contractors are responsible for the quality of construction of the substructure or new substrate in accordance with the instructions of the substrate manufacturer and this Appraisal Certificate.

8.8 Building owners are responsible for the maintenance of the PBP Standard and Water-resistant Gypsum boards in accordance with the manufacturer's instructions and this Appraisal Certificate.

Sources of Information

- The Building Regulations 1992, 15 November 2021.
- NZS 3604:2011 Timber Framed Buildings.
- AS/NZS2588:2018, Gypsum Plasterboard
- NASH Standards 1 and 2 covering light gauge steel framing.
- The Premier Building Products Ltd. Technical and Installation manual ver 1.
- The Premier Building Products Ltd. Building Product Quality plan ver 1.
- Test Report 220415166GZU-001 from Intertek dated 13 May 2022 reporting the conformance of 10mm thick Water-resistant Gypsum Board with AS/NZS2588: 2018 - including water resistance.
- Test Report 220628009SHF-004 from Intertek dated 18 July 2022 reporting the conformance of 13mm thick Water-resistant Gypsum Board with AS/NZS2588: 2018 - including water resistance.

- Test Report 220628009SHF-001 from Intertek dated 15 July 2022 reporting the conformance of 10mm thick Standard Gypsum Board with AS/NZS2588: 2018 - including water resistance.
- Test Report 220628009SHF-002 from Intertek dated 15 July 2022 reporting the conformance of 13mm thick Standard and Water-resistant Gypsum Board with AS/NZS2588: 2018 - including water resistance.
- BEAL Test Report TR221017-1 Fixing Shear Resistance testing dated 18 October 2022.
- BEAL Test Report TR230117-1/2/3 for P21 bracing tests

Concluding statement

9.1 In the opinion of BEAL, the PBP Standard and Water-resistant Gypsum boards are fit for purpose and will comply with the NZBC to the extent specified provided that it is used, designed, installed and maintained in accordance with the manufacturer's instructions and this Appraisal Certificate.

The Appraisal Certificate is issued only to Premier Building Products Ltd., and is valid until further notification, subject to the conditions of this Appraisal.

Conditions of Appraisal

10.1. This appraisal Certificate:

- Relates only to the PBP Standard and Water-resistant Gypsum boards as described herein;
- Must be read, considered and used in full, together with the current version of the Technical Literature
- Does not address any legislation, regulations, codes or standards, not specifically named herein;
- Is copyright of BEAL

10.2 The Appraisal Certificate holder continues to meet the quality requirements of the Premier Building Products Ltd. Building Product Quality Plan and has the plan audited and Appraisal certificate revalidated by BEAL on an annual basis.

10.3 Premier Building Products Ltd. shall notify BEAL and obtain approval of any changes of the product specification or quality assurance prior to product being marketed including any trade literature, web site info or the like.

10.4 BEAL makes no representation as to:

- The nature of individual examples of, batches of, or individual installations of the product, including methods and workmanship;
- The presence or absence of any patent or similar rights subsisting in the product or any other product;
- Any guarantee or warranty offered by the Appraisal Certificate holder.

10.5 BEAL's verification of the building product or system complying with one or more of the above-mentioned criteria is given on the basis that the criteria used were those that were appropriate to demonstrate compliance with the NZBC at the date of this Appraisal Certificate. In the event that the criteria is withdrawn or amended at a later date, this Appraisal may no longer remain valid.

10.6 Any reference in this Appraisal Certificate to any other publication shall be read as a reference to the version of publication specified in this Appraisal Certificate.

Authorised Signatory,



C R Prouse Senior Building Scientist
BEAL (Building Element Assessment Laboratory Limited)
 Ver 2.4 Updated 24th February 2023.