



BEAL Appraisal Certificate



APPRAISAL # C2203

EXPIRY DATE: 30 Nov 2023

The Premier Building Products' Fibre-cement Boards



Product

1.1 The Premier Building Products' Fibre-cement Boards, are a new alternative fibre-cement product range for the New Zealand market, used typically for the exterior cladding of buildings.

1.2 The PBP Fibre-cement boards are typically manufactured from sand, cement and cellulose (wood) fibre and are compliant with the Standard AS/NZS2908.2 Cellulose-cement products - Flat sheets.

1.3 The PBP Fibre-cement 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 Fibre-cement 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 Fibre-cement boards meet the requirements of Performance B1.3.3 (a) and (h) and B1.3.2. (Refer para 6.3)

Clause B2 DURABILITY

The PBP Fibre-cement boards will meet this requirement. (Refer para 6.4)

Clause C3 SPREAD OF FIRE

The PBP Fibre-cement boards will meet this requirement. (Refer para 6.5)

Clause E2 EXTERNAL MOISTURE

The PBP Fibre-cement boards will meet this requirement. (Refer para 6.6)

Clause F2 HAZARDOUS BUILDING MATERIALS

The PBP Fibre-cement boards will not present a health hazard to people. (Refer para 6.7)

2.2 The PBP Fibre-cement boards has been appraised as an 'Alternative Solution' in terms of compliance with the New Zealand Building Code.



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Scope and Limitations

3.1 The Premier Building Products' (PBP) Fibre-cement Boards are a range of Fibre-cement products incorporating 4.5mm, 6 mm and 9.5 mm thick boards of standard sizes used for general building and construction suited for residential housing, light commercial and commercial buildings.

3.2 The design and construction of all supporting substructures and framing not 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 and are outside the scope of this Appraisal Certificate.

3.3 PBP Fibre-cement boards are required to be designed and installed, according to the details and drawings described in the PBP technical literature.

3.4 The owner of the building is responsible for the proper maintenance of the installed products supplied by Premier Building Products and in accordance with the PBP Warranty.

Technical Literature

4.1 The Premier Building Products' (PBP) Fibre-cement Board Technical and Installation Manual **Ver 1** 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.

Technical Details

5.1 The PBP Fibre-cement boards can be applied over a well-designed, sound built structure that is in compliance with the NZBC and the project specification. Board sizes supplied by PBP are:

4.5mm – 2400 x 300, 2400 x 450, 2400 x 600, 2400 x 750, 1800 x 1200, 2400 x 1200, 2700 x 1200, 3000 x 1200

6.0mm – 1800 x 900, 1800 x 1200, 2400 x 1200, 2700 x 1200, 3000 x 1200

9.0mm – 2400 x 1200, 2700 x 1200, 3000 x 1200

5.2 Refer to the (PBP) Fibre Cement Boards Technical and Installation Manual Ver 1 for the method of construction.

Handling and Storage

5.3 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.

Advice for designers

General

6.1 The PBP Fibre Cement Boards are available in a range of thicknesses 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 a careful inspection of the intended framing and or substructures have been constructed in accordance with the relevant Standard(s).

Structure - Clause B1.3.3 (a), (h) & B1.3.2

6.3 The installed PBP Fibre-cement boards have sufficient mechanical performance to meet the relevant performance clauses.

Durability - Clause B2.3.1(b)

6.4 The PBP Fibre-cement boards when used 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, is expected to have a serviceable life of at least 15 years. Note the requirement under 7.1.

Spread of Fire - Clause C3

6.5 In-service history and spread of fire testing, show that the PBP Fibre-cement boards are non-combustible and not able to support the spread of fire.

External Moisture - Clause E2.3.2

6.6 The PBP Fibre-cement boards, when protected by a compatible and compliant protective coating system, subject to normal conditions of environment, use, and good housekeeping maintenance, will contribute to this requirement.

Hazardous Building Materials - Clause F2

6.7 The PBP Fibre-cement boards will not present a health hazard to people using the building.

Installation Requirements

Installation Skill Requirement

7.1 The PBP Fibre-cement boards must be installed by suitably trained and experienced tradespersons.

Health and Safety

7.2 The safe use and handling of the PBP Fibre-cement 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 Fibre-cement boards have been undertaken by BEAL:

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

Testing

8.2 The following testing of the PBP Fibre-cement boards have been undertaken by BEAL to verify performances in compliance with clause B1.3.3a):

- Fixing pull-through resistance testing;
- Fixing shear resistance testing.

In-service History

8.3 The PBP Fibre-cement boards have been in use for in excess of 10 years overseas, in a wide range of conditions.

Quality

8.4 The manufacture of the PBP Fibre-cement boards is managed by way of a manufacturing quality plan which has been viewed by BEAL and found to be satisfactory.

8.5 The quality of the PBP Fibre-cement boards supplied by Premier Building Products Ltd. is managed through the use of a Building Product Quality Plan.

8.6 The Premier Building Products Ltd. Building Product Quality Plan, based on ensuring continuous conformance with the quality requirements from purchase to supply to the merchants and suitably experienced and skilled tradespersons.

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

8.8 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.

8.9 Building owners are responsible for the maintenance of the PBP Fibre-cement boards in accordance with the manufacturer's instructions and this Appraisal Certificate.

Sources of Information

- The Building Regulations 1992, dated 15 November 2021.
- NZS 3604:2011 Timber Framed Buildings.
- 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 150109034GZU-001 from Intertek dated 29 April 2015 reporting the conformance of 20mm thick Fibre cement with AS/NZS1530.1 non-combustibility.
- Test Report 150109034GZU-002 from Intertek dated 29 April 2015 reporting the conformance of samples of 6, 8, 9, 12, 15 and 18mm thick Fibre-cement boards with AA/ NZS2908:2000.
- Test Report 150109034GZU-003 from Intertek dated 29 April 2015 reporting the absence of asbestos.
- Test Report TR220706-3, Fixing pull-through from BEAL Testing Services was completed to establish suitability for the specified wind zones.
- Test Report TR220706-4, Fixing shear resistance from BEAL Testing Services was completed to establish suitability for the specified wind zones.

Concluding statement

9.1 In the opinion of BEAL, the PBP Fibre-cement boards are fit for purpose and will comply with the NZBC to the extent specified provided that they are 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 the expiry date on the front of this Appraisal.

Conditions of Appraisal

10.1. This appraisal Certificate:

- Relates only to the Premier Building Products' Fibre-cement 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 - Director

BEAL (Building Element Assessment Laboratory Limited)
Version 1.2

