



BRANZ Appraised
Appraisal No. 1287 [2025]

ELEPHANT PLASTERBOARD® WET AREA SYSTEMS

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EPB PLASTERBOARD WET AREA SYSTEMS

March 2025

BRANZ Appraisals

Technical Assessments of products for
building and construction.



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Product

- 1.1 Elephant Plasterboard® Wet Area Systems are for use as interior lining for timber and steel-framed walls and ceilings in wet areas such as bathrooms, laundries, kitchens and toilets where a water-resistant lining material is desirable.

Scope

- 2.1 Elephant Plasterboard® Wet Area Systems have been appraised for use as a wet area wall and ceiling lining in buildings within the following scope:
- on timber-framed walls and ceilings within the scope limitations on NZS 3604; or,
 - on steel-framed walls and ceilings within the scope limitations of NASH Standard Part 2, or,
 - on timber and light gauge steel-framed walls and ceilings subject to specific design.

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, Elephant Plasterboard® Wet Area Systems, if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet or contribute to meeting the following provisions of the NZBC:

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Elephant Plasterboard® Wet Area Systems meet the requirements for loads arising from self-weight and impact [i.e. B1.3.3 (a) and (j)]. See Paragraph 9.1.

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years and B2.3.2. Elephant Plasterboard® Wet Area Systems meet these requirements. See Paragraph 10.1.

Clause E3 INTERNAL MOISTURE: Performance E3.3.4 and E3.3.5. Elephant Plasterboard® Wet Area Systems meet these requirements. See Paragraphs 13.1-13.3.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Elephant Plasterboard® Wet Area Systems meet this requirement.



Technical Specification

4.1 The following products are supplied by Elephant Plasterboard [NZ] Ltd:

EPB AquaSmart®

- EPB AquaSmart® is a paper-bound, modified gypsum-plaster core sheet lining material. The sheets are available in sheet thicknesses, widths and sheet weights as described in Table 1. The sheets are available in lengths from 2.4 m up to 4.8 m. One or both edges are recessed for the application of stopping compounds. The face paper of EPB AquaSmart® is ivory in colour. Sheets are marked in multiple locations with a Product Identifier Code - see Table 1.

Table 1: Product Details

Product	Product Identifier Code	Thickness [mm]	Edge Type ⁽¹⁾	Width [mm]	Nominal Weight [kg/m²]
EPB AquaSmart®	A10	10	TE/TE	1,200	8.3
EPB AquaSmart® Horizontal	A10	10	TE/SE	1,200	8.3
EPB AquaSmart®	A13	13	TE/TE	1,200	11.6

Note [1]: TE/TE: Tapered both edges. TE/SE: Tapered one edge, square the other.

4.2 System components and accessories for use with Elephant Plasterboard® Wet Area Systems, which are supplied by the building contractor are:

Screws

- 25 and 32 mm x 6 g drywall, gold-passivated, bugle head, coarse thread screw with an 8 mm head for fixing to timber framing.
- 25 mm x 6 g drywall, gold-passivated, bugle head, self-tapping screw with an 8 mm head for fixing to steel framing

Adhesive

- Adhesive for adhering plasterboard to timber and steel framing must comply with AS 2753.

Jointing Compounds and Tapes

- Jointing compounds and jointing tapes must comply with ASTM C475 as specified in AS/NZS 2859.

Corner Beads

- Corner Beads must comply as set out in AS/NZS 2589.
- Steel Corner Angle - minimum 32 x 32 x 0.55 mm galvanised metal angle.

Waterproofing

- A waterproofing system complying with AS/NZS 4858. Waterproofing systems have not been assessed and are outside the scope of this Appraisal.

Finishes

- Finishes such as tiling, flexible sheet vinyl, paints and wallpapers have not been assessed and are outside the scope of this Appraisal.

Handling and Storage

5.1 The best results are achieved when Elephant plasterboard is treated as a finishing material and protected from damage. Sheets must be stacked flat and kept dry at all times. Refer to the Technical Literature for limits on the stack height. Sheets must be carried on edge and not dragged.

5.2 All accessories must be kept dry.

Technical Literature

- 6.1 This Appraisal must be read in conjunction with:
- EPB Plasterboard Wet Area Systems, dated March 2025.
 - EPB Plasterboard Installation Guide, dated March 2025.
- 6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

Design Information

General

- 7.1 Elephant Plasterboard® Wet Area Systems provide a water-resistant lining as a base for finishing systems in wet areas such as bathrooms, toilets, laundries and kitchens. The typical finishes are ceramic tiles and flexible sheet vinyl to walls, and paint and wallpaper to walls and ceilings.
- 7.2 Elephant Plasterboard® Wet Area Systems have not been assessed for use in the following situations and are therefore outside the scope of this Appraisal:
- bracing applications,
 - where a fire resistance rating [FRR] is required,
 - where an acoustic rated system is required,
 - in areas of high humidity [above 90% RH] or continually wet areas such as group showers, steam rooms or swimming pools,
 - installed over a vapour barrier,
 - applied directly to masonry, concrete or solid plaster,
 - applied over other sheet lining materials,
 - used externally of the building envelope.
- 7.3 Elephant AquaSmart® plasterboard must not be exposed to temperatures of 50°C or greater for prolonged periods. Refer to appliance and fitting manufacturer's for installation details.

Wet Areas

- 7.4 Wet areas are spaces where sanitary fixtures and sanitary appliances are located such as bathrooms, toilets, laundries and kitchens. There are two general categories of wet areas as follows:
- **Water Splash** – These are areas subject to intermittent splashing of water such as around baths, vanities, tubs and sinks.
 - **Shower Areas** – These are areas subject to frequent and heavy water splash such as enclosed showers, unenclosed shower zones and showers over baths.
- 7.5 Both the above wet area categories must be finished with surfaces and joints that are impervious and easily cleaned. In addition, shower areas must be waterproofed. This can be achieved using proprietary rigid shower lining systems, flexible vinyl shower wall finishes, or tiling. Tiled shower areas must include a wet area waterproofing membrane system under the tiles.

Tiling

- 7.6 Elephant Plasterboard® Wet Area Systems are suitable as a substrate for tiling up to the following weights:
- 10 mm EPB AquaSmart® – up to 26 kg/m².
 - 13 mm EPB AquaSmart® – up to 40 kg/m².
- [Note: Most ceramic and porcelain wall tiles weigh less than 26 kg/m².]*

Framing

- 8.1 Timber wall framing behind Elephant Plasterboard® Wet Area Systems must be treated as required by NZBC Acceptable Solution B2/AS1.

8.2 Supporting framing must comprise one of the following subject to the minimum sizes, dwang centres and all other frame requirements of the Elephant Plasterboard® Wet Area Systems Technical Literature:

- Timber framing must be designed and constructed in accordance with NZS 3604 or be to a specific design using NZS 3603 and AS/NZS 1170.
- Steel framing must be designed and constructed in accordance with NASH Standard Part Two or be to a specific engineering design meeting the requirements of the NZBC, with studs at maximum 600 mm centres.

8.3 Refer to Paragraph 15.2 regarding recommended moisture content of timber framing.

Structure

Impact Resistance

9.1 Elephant Plasterboard® Wet Area Systems provide adequate resistance to soft body impacts expected in areas where the product will be used.

Durability

Serviceable Life

10.1 Elephant Plasterboard® Wet Area Systems have a serviceable life of at least 15 years as a fully protected shower or water splash lining. As a general wall and ceiling lining, Elephant Plasterboard® Wet Area Systems will have a serviceable life in excess of 50 years. The ability of Elephant plasterboards to remain durable is dependent on being protected and remaining dry in service, and being maintained in accordance with this Appraisal.

Maintenance

- 10.2 The building must be maintained weathertight and all lining systems protected from internal and external moisture.
- 10.3 Finishes to water splash and shower areas, including tiles, grout, waterproof membranes, sealants and flexible sheet vinyl must be checked to ensure the integrity of the system is maintained. They must be repaired or replaced if necessary. When repairing or replacing finishes, the Elephant plasterboard substrate must be checked for defects and repaired or replaced, as required.
- 10.4 For flexible sheet vinyl, particular attention must be paid to joints, especially at corners. Checks should be made to ensure the vinyl has not been punctured. Where damage has occurred, repairs must be made immediately.
- 10.5 Impact damage to Elephant plasterboard, resulting in small holes and cracks, may be patched, stopped and finished. For larger areas of damage, expert advice on repair must be sought from Elephant Plasterboard [NZ] Ltd.

Prevention of Fire Occurring

11.1 Separation or protection must be provided to Elephant Plasterboard® Wet Area Systems from heat sources such as fire places, heating appliances and chimneys. Part 7 of NZBC Acceptable Solution C/AS1 and NZBC Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

Fire Affecting Areas Beyond the Fire Source

Internal Surface Finishes

12.1 EPB AquaSmart® has a Material Group Number of 1-S without an applied finish. When an applied finish is used over Elephant AquaSmart®, the Material Group Number must be obtained from the manufacturer or supplier of the finish product or system, for the complete lining system. Refer to NZBC Acceptable Solution C/AS1, Paragraph 4.2 or NZBC Acceptable Solution C/AS2, Paragraph 4.17.1 and Table 4.3 to determine where the sheets may be used according to its Group Number.

Internal Moisture

- 13.1 When installed in accordance with this Appraisal, Elephant Plasterboard® Wet Area Systems will provide wall surfaces adjacent to sanitary fixtures and sanitary appliances that are impervious and easily cleaned.
- 13.2 The construction methods in the Technical Literature meet the internal moisture requirements of the NZBC Acceptable Solution E3/AS1.
- 13.3 To minimise internal condensation, adequate levels of ventilation and thermal resistance must be provided to all spaces where moisture may be generated.

Installation Information

Installation Skill Level Requirement

- 14.1 Installation of Elephant Plasterboard® Wet Area Systems must be in accordance with the instructions given in this Appraisal and the Technical Literature. Where the installation is Restricted Building Work (RBW), the installation must be completed by, or under the supervision of, a Licenced Building Practitioner with the relevant License Class.

General

- 15.1 Elephant Plasterboard® Wet Area Systems must be installed in accordance with the Technical Literature. For inspection, reference must be made to the Technical Literature.

Framing

- 15.2 To achieve an acceptable decorative finish, the walls must not be lined unless the moisture content of the timber framing is less than 18%. Elephant Plasterboard (NZ) Ltd recommends a moisture content of 8-18% where buildings are to be air conditioned or centrally heated.

Cutting

- 15.3 EPB AquaSmart® is easily cut by scoring the face paper with a sharp short-bladed trimming knife and then snapping the plasterboard away from the cut face and cutting the back paper, or by sawing. Use of a metal straight edge facilitates clean, straight cuts. Cut edges can be tidied up by using a knife. Paper dags should be removed.

Fixing Sheets

Non-Tiled Wall Areas

- 16.1 Elephant Plasterboard® Wet Area Systems may be installed vertically or horizontally. Sheets are fixed with drywall screws at 300 mm centres around the perimeter of the sheet, and with adhesive on all intermediate studs. Adhesive must not be used under fasteners. A 5-10 mm gap must be left between the floor and the bottom of the sheet.

Tiled Wall Areas

- 16.2 Control joints must be provided at maximum 4 m centres.
- 16.3 Internal corners in shower areas must be reinforced with a minimum 32 x 32 x 0.55 mm galvanised metal angle prior to lining the walls.
- 16.4 EPB AquaSmart® may be installed vertically or horizontally. Sheets are fixed with drywall screws at 100 mm centres to the perimeter of wall and to all intermediate studs. Adhesive must not be used in place of screws.

Ceilings

- 16.5 Supports of timber or steel battens or ceiling joists must be at maximum 450 mm centres for 10 mm thick EPB AquaSmart®, or 600 mm centres for 13 mm thick EPB AquaSmart®.
- 16.6 EPB AquaSmart® sheets must be fixed with drywall screws at 300 mm centres around the perimeter of the ceiling and at 600 mm centre along supports with adhesive placed at 200 mm centres between the screws.

Penetrations and Sealants

- 17.1 All cut-outs for pipe penetrations must be made neatly using a hole saw. Cut-outs should be made approximately 12 mm diameter greater than the pipe.
- 17.2 A bead of sealant must be placed to the full thickness of the plasterboard sheet around all pipe penetrations, at bath rims and preformed shower bases and where an impervious junction is required at the floor/wall line.
- 17.3 In tiled areas, a bead of sealant 6 mm wide must also be placed to the full thickness of the tiles where the above situation occurs. The sealant manufacturer's Technical Literature must be followed for installation.

Jointing and Finishing

- 18.1 Jointing and finishing must be carried out in accordance with the Technical Literature.
- 18.2 Tiled shower areas must incorporate a waterproofing membrane over Elephant Plasterboard® Wet Area Systems Waterproofing membranes are outside the scope of this Appraisal and must otherwise be specified and approved.

Health and Safety

- 19.1 Dust resulting from the sanding of stopping and finishing compounds may be a respiratory irritant, and the use of a suitable respirator is recommended:

Basis of Appraisal

The following is a summary of the technical investigations carried out:

Tests

- 20.1 EPB AquaSmart® have been assessed for the following properties:
 - dimensional properties;
 - flexural strength;
 - nail pull resistance;
 - edge and field hardness;
 - water resistance; and
 - humidified deflection.
- 20.2 Cone calorimeter tests to ISO 5660 have been carried out by BRANZ.

Other Investigations

- 21.1 An assessment of the durability of the systems was made by BRANZ technical experts and found to be satisfactory.
- 21.2 Site inspections were carried out by BRANZ to assess the practicability of installation of the systems, and to view completed installations.
- 21.3 The Technical Literature has been examined by BRANZ and found to be satisfactory.

Quality

- 22.1 The manufacture of EPB AquaSmart® has not been examined by BRANZ, but the details regarding the quality and composition of the materials used were obtained and found to be satisfactory. BRANZ undertakes an ongoing review of product quality on an inwards goods basis.
- 22.2 Elephant Plasterboard [NZ] Ltd is responsible for the quality of the product supplied.
- 22.3 The quality of the application and finish on-site is the responsibility of the installation, stopping and finishing contractors.
- 22.4 Designers are responsible for the design of buildings.
- 22.5 Building owners are responsible for maintenance in accordance with the instructions of Elephant Plasterboard [NZ] Ltd.



Sources of Information

- AS/NZS 1170:2002 Structural design actions - General principles.
- AS/NZS 2588:2018 Gypsum plasterboard.
- AS/NZS 2589:2017 Gypsum linings - Application and finishing.
- AS/NZS 4858:2004 Wet area membranes.
- ISO 5660-1:2002 Reaction-to-fire tests - Heat release, smoke production and mass loss rate - Part 1: Heat release rate [cone calorimeter method].
- NASH Standard Part Two: 2019 Light steel-framed buildings.
- NZS 3603:1993 Timber Structures Standard.
- NZS 3604:2011 Timber-framed buildings.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.



In the opinion of BRANZ, **Elephant Plasterboard® Wet Area Systems** are fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided they are used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Elephant Plasterboard [NZ] Ltd**, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

1. This Appraisal:
 - a) relates only to the product as described herein;
 - b) must be read, considered and used in full together with the Technical Literature;
 - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
 - d) is copyright of BRANZ.
2. **Elephant Plasterboard [NZ] Ltd:**
 - a) continues to have the product reviewed by BRANZ;
 - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
 - c) abides by the BRANZ Appraisals Services Terms and Conditions;
 - d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
 - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and workmanship;
 - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
 - c) any guarantee or warranty offered by **Elephant Plasterboard [NZ] Ltd**.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to **Elephant Plasterboard [NZ] Ltd** or any third party.

For BRANZ



Claire Falck
Chief Executive
Date of Issue:
15 May 2025