



BRANZ Appraised

Appraisal No. 1286 [2025]

SERATONE® AQUA PLUS® WALL AND CEILING LININGS

Appraisal No. 1286 [2025]



BRANZ Appraisals

Technical Assessments of products for building and construction.

Laminex
New Zealand®

Fletcher Building
Products Ltd t/a
Laminex New Zealand

810 Great South Road
Penrose
Auckland

Tel: 0800 303 606

Web: www.laminex.co.nz



BRANZ

BRANZ

1222 Moonshine Rd,
RD1, Porirua 5381
Private Bag 50 908
Porirua 5240,
New Zealand
Tel: 04 237 1170
branz.co.nz



Product

- 1.1 Seratone® AQUA PLUS® Wall and Ceiling Linings are pre-finished mineral composite panels.

Scope

- 2.1 Seratone® AQUA PLUS® has been appraised for use as non-bracing wall and ceiling lining systems in new or existing buildings, for the following: wet areas such as bathrooms where moisture-resistant materials are required; areas where hygiene is of particular importance and easy-to-clean surfaces are required; and other areas where low maintenance pre-finished wall and ceiling lining systems are specified.

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, Seratone® AQUA PLUS®, 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. Seratone® AQUA PLUS® meets the requirements for loads arising from self-weight and impact [i.e. B1.3.3 [a] and [j]]. See Paragraphs 9.1-9.3.

Clause B2 DURABILITY: Performance B2.3.1 [b] 15 years and B2.3.1 [c] 5 years. Seratone® AQUA PLUS® meets these requirements. See Paragraphs 10.1 and 10.2.

Clause E3 INTERNAL MOISTURE: Performance E3.3.4, E3.3.5 and E3.3.6. Seratone® AQUA PLUS® meets or contributes to meeting these requirements. See Paragraphs 14.1 and 14.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Seratone® AQUA PLUS® meets this requirement.

Clause G3 FOOD PREPARATION AND THE PREVENTION OF CONTAMINATION: Performance G3.3.2 [a] and [b]. Seratone® AQUA PLUS® will contribute to meeting these requirements. See Paragraph 15.1.

Technical Specification

Seratone® AQUA PLUS® Panels

- 4.1 Seratone® AQUA PLUS® panels are pre-finished wall and ceiling panels manufactured from mineral composite panels.
- 4.2 Seratone® AQUA PLUS® panels come with a 175 micron multi-layered paint system which is fully cured using ultraviolet (UV) light. The palette range is described in Table 1, below.

Table 1: Product Range

Finish	Colour Range					
Gloss	Polar	Shell	Canvas	Summit	Meteor	Mineral
Matte	Polar	Shell	Canvas	Summit	Meteor	-

- 4.3 Seratone® AQUA PLUS® panels are suitable for use in wet areas.
- 4.4 The panels are 4.5 mm thick, 2,400 x 900 mm, 2,400 x 1,200 mm or 2,700 x 1,200 mm in size, and have rounded edges which are covered with tape for temporary protection. The panels are manufactured to the following tolerances:
- length and width, ± 1 mm;
 - difference between the measured diagonals is no greater than 3 mm;
 - thickness, ± 0.2 mm.
- 4.5 On the back of the panels is a label giving the product type, pattern and colour, production date and batch number.

Accessories

- 4.6 Accessories used with the Seratone® AQUA PLUS® system that are supplied by Laminex New Zealand are:
- **Seratone® jointers** - aluminium jointers for joining Seratone® AQUA PLUS® panels, available as Professional or Standard.
- 4.7 Accessories used with the Seratone® AQUA PLUS® system that are supplied by others are:
- **Wallboard adhesive** - as per the Technical Literature.
 - **PVC mouldings** - for joining the Seratone® AQUA PLUS® panels in accordance with the Technical Literature.
 - **Silicone sealant** - used for sealing around the panels in accordance with the Technical Literature.
 - **Double sided tape** - double sided foam tape used for adhering Seratone® AQUA PLUS® panels to framing.

Handling and Storage

- 5.1 Seratone® AQUA PLUS® panels are supplied for shipping strapped on pallets overwrapped with a waterproof covering.
- 5.2 Long-term storage of Seratone® AQUA PLUS® panels must be under cover, away from direct sunlight to avoid fading, on evenly spaced bearers to keep them flat and dry. When stored outside, panels must be covered with breather-type waterproof material in a manner that allows air to circulate around the stack. Panels must be lifted and not dragged off the stack.

Technical Literature

- 6.1 This Appraisal must be read in conjunction with:
- Seratone Technical Installation Manual, dated December 2024.
- 6.2 All aspects of design, use, installation and maintenance of Seratone® AQUA PLUS® contained in the Technical Literature and within the scope of this Appraisal must be followed.

Design Information

General

- 7.1 Seratone® AQUA PLUS® wall and ceiling linings are impervious to moisture and are resistant to water, steam, typical hygienic cleaning chemicals and materials, and abrasion. The panels are primarily intended for use as wall or ceiling linings in wet areas such as bathrooms and kitchens. The panels are also intended for use in food processing areas, where the Building Code and health regulations require the use of water and chemical-resistant lining materials which are impervious, easily cleaned and maintained, and are capable of withstanding demanding hygienic cleansing operations. In wet and food processing areas, it is essential that sealant be used with jointers to ensure joints are impervious to moisture.
- 7.2 The systems may also be used in other areas to provide decorative pre-finished linings with a low maintenance requirement. The linings must not be used in areas listed in NZBC Acceptable Solution G3/AS1, Paragraph 2.2, such as electroplating and lead processing areas, or mortuaries.

Installation Information

- 7.3 The panels can be fixed directly over:
- new wall and ceiling timber framing;
 - existing wall and ceiling timber framing after removal of existing linings;
 - existing timber frame wall and ceiling linings;
 - battens which have been fixed to strapping covering new or existing concrete and masonry walls;
 - new or existing plasterboard;
 - new or existing fibre cement sheet.
- The panels should not be installed over existing wet area linings.
- 7.4 To complete the lining system, a combination of proprietary aluminium jointers and adhesives may be used to hold the panels in place. Alternatively, a combination of jointers, adhesives, and conventional painted timber-based cornice and skirting mouldings appropriate for the exposure may be used. When used with silicone sealant, the jointers are also intended to form moisture impervious joints [refer to the Technical Literature for more detail].
- 7.5 Detailing at shower trays must be either in accordance with the requirements of Laminex New Zealand and NZBC Acceptable Solution E3/AS1, or an alternative method meeting the requirements of NZBC Clause E3.
- 7.6 Joints between baths, basins, tubs, and the linings must be in accordance with the requirements of Laminex New Zealand and NZBC Acceptable Solution E3/AS1, or to another method meeting the requirements of NZBC Clause E3.
- 7.7 Nails must not be used to fix the panels in place. Wall fixtures must only be fixed directly to the underlying supports. In all applications, continuous support must be provided at all panel edges, including around 'cut-outs' for plumbing fixtures and other services. The exception to this rule is where the panel has a drip edge along the bottom. The panel must still be supported at the specified distance above the drip edge.

Wet Areas

- 7.8 Wet areas are spaces where sanitary fixture and sanitary appliances are located such as bathrooms, toilets, laundries and kitchens. There are two general categories of wet areas as follows:
1. **Water Splash** - These are areas subject to intermittent splashing of water such as around baths, vanities, tubs and sinks.
 2. **Shower Areas** - These are areas subject to frequent and heavy splash such as enclosed showers, unenclosed shower zones and showers over baths.
- 7.9 Seratone® AQUA PLUS® panels may be used in both the wet area categories described above. Installation of the panels on these areas must be in accordance with the Technical Literature.



Timber Framing and Supports

- 7.10 When fixed directly over new or existing wall framing, supports must be at 600 mm maximum centres. Nogs or dwangs must be at 600 mm maximum centres. In all buildings, timber framing for walls and ceilings must have a moisture content of less than 18%. Ceiling battens must be at 400 mm maximum centres. Battens must be a minimum of ex 50 x 50 mm, or 70 x 40 mm, machine gauged, H1.2 treated timber, and kiln dried to a moisture content of less than 18%.
- 7.11 Existing timber wall and ceiling framing must be sound, and free of borer (or similar insect infestations), and decay. Damaged framing must be replaced.
- 7.12 Care must be taken with the layout of all framing and supports, in order to ensure that framing timber will be at appropriate positions for the fixing of jointers. Around shower trays, baths, and spas, timber battens or packing must be a minimum of H1.2 preservative treated.

Concrete and Masonry Substrates

- 7.13 Existing concrete and masonry substrates must be sound, sealed, and capable of holding the fixings for strapping. New concrete and masonry substrates must also be sealed. Strapping must be spaced at maximum 600 mm vertical centres, and battens at maximum 600 mm horizontal centres. Strapping must be a minimum of H1.2 treated, sized as for ceiling battens, and fixed with 75 mm concrete/masonry nails at 300 mm maximum centres.

Other Materials

Jointers and Mouldings

- 8.1 In wet areas, the long-term integrity and serviceability of wall lining systems based on Seratone® AQUA PLUS® depend on the quality of the jointing systems specified and installed. Aluminium jointers or PVC mouldings selected for use by the designer or installer must form impervious joints, e.g. as described in NZBC Acceptable Solution E3/AS1, Paragraph 3.2.4 [a].

Wallboard Adhesives

- 8.2 Panels must be fixed with wallboard adhesives recommended by Laminex New Zealand.

Structure

Mass

- 9.1 The mass of Seratone® AQUA PLUS® panels is approximately 8.35 kg/m².

Bracing

- 9.2 Seratone® AQUA PLUS® wall and ceiling linings have not been appraised for bracing applications.

Impact

- 9.3 Seratone® AQUA PLUS® panels will withstand typical soft body impacts normally expected in areas where the product will be used. The panels will be damaged by hard body impacts such as hammer blows. The possibility of impacts damaging panels must be considered at the design stage, especially in public, institutional, or educational buildings which are prone to robust behaviour or vandalism. Laminex New Zealand must be consulted for advice on a suitable means of providing protection in these buildings. In hygiene areas, the surface finishes must also be protected from likely impact, and not be subject to chipping in order to comply with NZBC Acceptable Solution G3/AS1, Paragraph 2.1.4.

Durability

- 10.1 With normal maintenance, wall and ceiling lining systems based on Seratone® AQUA PLUS® panels will meet the performance requirements of NZBC B2.3.1 [b] 15 years when used in shower areas, and NZBC B2.3.1 [c] 5 years in other areas, as given in Table 1 of NZBC Acceptable Solution B2/AS1.



Serviceable Life

10.2 If properly maintained, Seratone® AQUA PLUS® wall and ceiling lining systems will remain serviceable for at least 15 years when used in any building area covered by this Appraisal. This statement assumes that the product is not subjected to the weather, excessive UV or sustained temperatures above 50°C, that mouldings and flanges to wall mounted plumbing or sanitary fixtures are detailed to prevent the passage of moisture behind the panels, especially in critical areas such as around baths, shower trays, wash basins and sinks. This statement also assumes that nails have not been used to fix the panels in place in wet areas.

Maintenance

- 11.1 Cleaning of Seratone® AQUA PLUS® must be carried out using a soft cloth lubricated with non-abrasive mild detergent or soap solutions. Solvents or abrasive materials must not be used. Refer to the Technical Literature for more information.
- 11.2 Mouldings or flashings used around baths, shower trays, wash basins or sinks must be maintained in a serviceable condition in order to ensure joints are impervious to moisture. Adhesive tapes must not be applied to the surfaces of Seratone® AQUA PLUS® panels.

Prevention of Fire Occurring

12.1 Separation or protection must be provided to Seratone® AQUA PLUS® panels from heat sources such as fireplaces, 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

- 13.1 Seratone® AQUA PLUS® has been tested in accordance with ISO 5660 and has a Group Number of 3. Refer to Table 4.3 of NZBC Acceptable Solution C/AS2 to determine where Seratone® AQUA PLUS® may be used according to its Group Number. If an applied finish is used over Seratone® AQUA PLUS®, the Group Number must be obtained from the manufacturer or supplier of the finish product or system, for the complete lining system.
- 13.2 There is no internal surface finish requirement for Seratone® AQUA PLUS® when it is used in buildings with an SH Risk Group classification.

Internal Moisture

- 14.1 Seratone® AQUA PLUS® panels are impervious to moisture, and can be easily cleaned.
- 14.2 Seratone® AQUA PLUS® panels can be used to form modular or multiple lining systems meeting the requirements of NZBC Acceptable Solution E3/AS1, Paragraph 3.1.2 d).

Food Preparation and Prevention of Contamination

15.1 Seratone® AQUA PLUS® wall and ceiling lining systems, when installed in accordance with the requirements of this Appraisal and the Technical Literature, are suitable for installing next to appliances and facilities as specified by NZBC Acceptable Solution G3/AS1, Paragraph 1.6 for wall linings in domestic facilities, and Paragraph 2.1.5 for wall linings in commercial and industrial facilities.

Energy Efficiency

16.1 When carrying out thermal design calculations on the building envelope, the R-value of Seratone® AQUA PLUS® may be taken as 0.02 m² °C/W [excluding surface resistances].

Installation Information

General

17.1 Installation must be in accordance with the instructions given in this Appraisal and the Technical Literature.



Preparation

- 17.2 Existing linings may be removed or, if sound, retained. Seratone® AQUA PLUS® panels should not be installed over existing wet area linings. If the linings are removed, damaged framing must be replaced and vertical supports provided at maximum 600 mm centres where they do not exist, and dwangs at maximum 600 mm centres. Seratone® AQUA PLUS® panels that are 900 mm wide will require vertical supports at 450 mm centres.
- 17.3 Sealed concrete and masonry surfaces must be covered by a grid of supporting strapping and battens.
- 17.4 All supporting substrates (new framing and battens, or existing framing and linings) must form a basis for providing a true and level surface for the lining system. The procedures for fixing the linings are the same for both new and retrofitting applications.

Fixing of Panels

- 17.5 Panels must be fixed in place in wet and food processing areas with joints formed by suitable aluminium jointers or plastic mouldings sealed with sealant. Sealant only joints are also acceptable. Recommended adhesives and sealants are given in the Technical Literature.
- 17.6 In dry areas, panels may also be fixed in place with adhesive and plastic mouldings or aluminium jointers.
- 17.7 Installation of the Seratone® AQUA PLUS® panels must be carried out in accordance with the instructions in the Technical Literature. Specific information is given for installations around showers and baths.

Basis of Appraisal

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

Tests

- 18.1 The following testing has been carried out on Seratone® AQUA PLUS® by BRANZ:
- water absorption and thickness swell;
 - impact resistance;
 - flexural testing;
 - shrinkage;
 - specular gloss;
 - cross hatch adhesion;
 - abrasion resistance;
 - heat resistance;
 - steam resistance;
 - stain and chemical resistance;
 - Taber abrasion index;
 - UV resistance.
- 18.2 The following testing has been carried out on Seratone® AQUA PLUS® by others and the results have been assessed by BRANZ:
- ISO 5660 testing;
 - density;
 - thickness;
 - Charpy unnotched impact strength;
 - tensile strength;
 - tensile modulus;
 - Shore hardness;
 - Vicat softening temperature;
 - determination of temperature of deflection under load;
 - adhesive performance.



Other Investigations

- 19.1 An assessment of the durability of Seratone® AQUA PLUS® was made by BRANZ technical experts.
- 19.2 Site inspections have been carried out by BRANZ to assess the practicability of installation and to examine completed installations.
- 19.3 The Technical Literature has been examined by BRANZ and found to be satisfactory.

Quality

- 20.1 The manufacture of Seratone® AQUA PLUS® panels has been examined by BRANZ and found to be satisfactory.
- 20.2 Quality of materials, components and accessories supplied by Laminex New Zealand is the responsibility of Laminex New Zealand.
- 20.3 The quality of installation on-site of components and accessories supplied by Laminex New Zealand is the responsibility of the installer.
- 20.4 Building owners are responsible for the maintenance of Seratone® AQUA PLUS® wall and ceiling linings in accordance with the instructions of Laminex New Zealand.

Sources of Information

- ISO 5660 Reaction-to-fire tests - Heat release, smoke production and mass loss rate.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.



BRANZ Appraised
Appraisal No. 1286 (2025)

BRANZ Appraisal
Appraisal No. 1286 (2025)
06 March 2025

SERATONE® AQUA PLUS® WALL
AND CEILING LININGS



In the opinion of BRANZ, **Searitone® AQUA PLUS® Wall and Ceiling Linings** 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 **Fletcher Building Products Ltd t/a Laminex New Zealand**, 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. **Fletcher Building Products Ltd t/a Laminex New Zealand**:
 - 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 quality of work;
 - 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 **Fletcher Building Products Ltd t/a Laminex New Zealand**.
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 **Fletcher Building Products Ltd t/a Laminex New Zealand** or any third party.

For BRANZ

Claire Falck
Chief Executive
Date of Issue:
06 March 2025