

SPAPANEL WALL LINING SYSTEM



Appraisal No. 905 (2016)

BRANZ Appraisals

Technical Assessments of products for building and construction.



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Product

Spapanel is a pre-finished wall lining that incorporates panels finished with high pressure decorative laminates.

Scope

- 2.1 Spapanel has been appraised for use as a non-structural wall lining in new or existing buildings, for the following:
 - wet areas such as bathrooms, showers or laundries where moisture-resistant materials are required; and,
 - domestic hygiene areas where easy-to-clean surfaces are required; and,
 - other areas where low maintenance pre-finished wall lining systems are specified.

Building Regulations

New Zealand Building Code (NZBC)

3.1 In the opinion of BRANZ, Spapanel, 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. Spapanel meets the requirements for loads arising from self-weight and impact [i.e. B1.3.3 [a] and [j]]. See Paragraphs 8.1 - 8.3.

Clause B2 DURABILITY: Performance B2.3.1 (b), 15 years, and B2.3.1 (c), 5 years. Spapanel meets this requirement. See Paragraphs 9.1 and 9.2.

Clause E3 INTERNAL MOISTURE: Performance E3.3.4, E3.3.5 and E3.3.6. Spapanel meets or contributes to meeting these requirements. See Paragraph 13.1 and 13.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Spapanel meets this requirement and will not present a health hazard to people.

Clause G3 FOOD PREPARATION AND THE PREVENTION OF CONTAMINATION: Performance G3.3.2 (a) and (b). Spapanel will contribute to meeting this requirement. See Paragraph 14.1.



Product Information

Description

4.1 **Spapanel Wall Lining System** - is an adhesive fixed, decorative high-pressure laminate finished panel with Hydrolock joints and aluminium jointers for lining wet areas and other areas where an easy clean hygienic finish is required.

Spapanel Panels - are plywood cored panels with a decorative high-pressure laminate finish on one side and a plain laminate on the rear. The panels are $2400 \text{ mm} \times 1200 \text{ mm} \times 11 \text{ mm}$ thick with an effective cover of 1181.5 mm.

Soudal Silirub 2/S Silicone Sealant - is a neutral cure, elastic one-component silicone based sealant. It is supplied in 300 ml cartridges, coloured white and clear.

Holdfast FixAll 220 MS Sealant - is a high performance MS based adhesive sealant. It is supplied in 425 qm cartridges or 600 ml sausages, coloured white.

Holdfast Soudaseal 240 FC - is a neutral cure elastic, single component joint and adhesive MS sealant. It is supplied in 290 ml cartridges, coloured white.

Screws - Stainless steel or yellow passivated counter sunk 3.5 mm x 25 mm woods screws.

Accessories - Spapanel Aluminium Jointer Sections:

- Type A Internal corner
- · Type B External corner
- Type C End cap
- · Type D Mid joint
- Type X Base profile

Accessories - Spapanel PVC Sections:

Base Seal Trim

Handling and Storage

- 5.1 Spapanel panels are supplied for shipping strapped on pallets overwrapped with a waterproof covering.
- 5.2 Long-term storage of Spapanel panels must be under cover, away from direct sunlight and high temperatures, on evenly spaced bearers to keep them flat and dry. Panels must be lifted and not dragged off the stack.

Technical Literature

6.1 Refer to the Appraisal listing on the BRANZ Website for details of the current Technical Literature for Spapanel. The Technical Literature must be read in conjunction with this Appraisal. All aspects of design, use, installation and maintenance contained within the scope of this Appraisal and the Technical Literature must be followed.

Design Information

General

7.1 Spapanel panels are impervious to moisture and are resistant to water. The panels are primarily intended for use as wall linings in wet areas and domestic kitchens.

Installation Information

- 7.2 Spapanel can be fixed directly over:
 - · new timber framing;
 - · existing timber framing (after removal of existing linings);
 - · new or existing linings;
 - timber battens fixed over new or existing concrete or concrete masonry.



Wet Areas

- 7.3 Wet areas are spaces where sanitary fixtures and sanitary appliances are located such as bathrooms, toilets, laundries and kitchens. The two general categories of wet areas are as follows:
 - 1. 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 splash such as enclosed showers, unenclosed shower zones and showers over baths.
- 7.4 Spapanel may be used in both wet area categories described above. Installation of the panels on these areas must be in accordance with the Technical Literature.

Framing and supports

- 7.5 Timber framing studs shall be at maximum 400 mm centres noting that panel joint centres are 1181.5 mm.
- 7.6 Nogs/dwangs must be at 600 mm maximum centres. Blocking 140 x 45 mm is required at the base of walls to support waterproofing, flashing and flooring upstands. Timber battens shall be fixed to concrete and masonry walls at the same centres as for timber framing.
- 7.7 A combination of Spapanel jointers and adhesive are used to hold the panels in place. Mechanical fasteners are generally not required to fix the panels. Continuous support must be provided at all panel edges, including around 'cut-outs' for plumbing fixtures and other services. Wall fixtures must only be fixed directly to the underlying supports.

Structure

Mass

8.1 The mass of Spapanel panels is approximately 7.6 kg/m².

Bracing

8.2 Spapanel must not be used for bracing applications.

Impact

8.3 Spapanel panels will withstand typical soft body impacts normally expected in areas where the product will be used. The panels may be damaged by hard body impacts such as hammer blows.

Durability

9.1 With normal maintenance, Spapanel will meet the performance requirements of NZBC B2.3.1 [b], 15 years, when used in wet areas, and NZBC B2.3.1 [c], 5 years, in other areas, as given in Table 1 of Acceptable Solution B2/AS1.

Serviceable Life

9.2 If properly maintained, Spapanel will remain serviceable for at least 15 years. This statement assumes that mouldings and flanges to wall mounted plumbing or sanitary fixtures are detailed to minimise the passage of moisture behind the panels, especially in critical areas such as around baths, shower trays, wash basins and sinks.

Maintenance

- 10.1 Cleaning must be carried out using a soft cloth lubricated with non-abrasive mild detergent or soap solutions. Solvents may be used to clean any stains, but must be washed off immediately. Abrasive cleaners must not be used. See the Technical Literature for more information.
- 10.2 Mouldings, flashings and sealants used around baths, urinals, shower trays, wash basins, sinks or domestic hygiene areas must be maintained in a serviceable condition in order to ensure joints are impervious to moisture.



Prevention of Fire Occurring

11.1 Separation or protection must be provided to Spapanel from heat sources such as fire places, heating appliances, flues and chimneys. Part 7 of NZBC Acceptable Solutions C/AS1 - C/AS6 and NZBC Verification Method C/VM1 provide methods for separation and protection of combustible materials from heat sources.

Control of Internal Fire and Smoke Spread

12.1 Spapanel panels have been tested in accordance with AS/NZS 3837: 1998 and have a Group Number of 3. Refer to Table 4.1 of NZBC Acceptable Solutions C/AS2 - C/AS6 to determine where Spapanel panels may be used according to their Group Number. No applied finishes are to be used over Spapanel panels. There is no internal surface finish requirements for Spapanel panels when they are used in buildings with a SH Risk Group classification.

Internal Moisture

- 13.1 Spapanel panels are impervious to moisture, and can be easily cleaned.
- 13.2 Spapanel is a sheet lining finished with decorative high-pressure laminate meeting the requirements of NZBC Acceptable Solution E3/AS1 Paragraph 3.1.2 (g), with impervious joints meeting the requirements of NZBC Acceptable Solution E3/AS1 Paragraph 3.2.1 (a).

Food Preparation and Prevention of Contamination

14.1 Spapanel, when installed in accordance with the requirements of this Appraisal and the Technical Literature, is 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.

Installation Information

General

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

Preparation

- 15.2 Existing wall framing must be sound, free of borer (or similar insect infestations) and decay. Damaged framing must be replaced.
- 15.3 Care must be taken with the layout of all framing and supports, in order to ensure that framing will be at appropriate positions for the fixing of jointers.
- 15.4 Existing concrete and masonry substrates must be sound and capable of holding the fixings for battens.
- 15.5 Existing linings maybe removed or, if sound, retained. If the linings are removed, damaged framing must be replaced and vertical supports provided at maximum 400 mm centres where they do not exist.
- 15.6 All supporting substrates (concrete, masonry, new framing or existing framing and linings) must form a basis for providing a true and level surface for Spapanel. The procedures for fixing Spapanel are the same for both new and retro-fitting applications.

System Installation

- 15.7 It is recommended that the installer dry fit each sheet before final fixing to ensure good fit.
- 15.8 It is critical to allow expansion clearance between the extrusion and the panel being installed to allow for future movement. See the Technical Literature for details.
- 15.9 If the panel needs holding in place while the adhesive cures, a screw can be installed through the "groove" edge of the Hydrolock joint.



Basis of Appraisal

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

Tests

- 16.1 A series of tests has been carried out on Spapanel panels by others for durability and material properties. These have been reviewed by BRANZ and found satisfactory.
- 16.2 The water penetration resistance of the Spapanel Hydrolock Joint has been tested by BRANZ. Tests exposed joints in different orientations to 3000 wetting and drying cycles in a Q-Panel Q-Fog salt spray chamber.

Other Investigations

- 17.1 An assessment of the durability of Spapanel Wall Lining System has been made by BRANZ technical experts.
- 17.2 Site inspections of Spapanel have been undertaken by BRANZ.

Quality

- 18.1 The quality of the manufacture of the Spapanel panels has been assessed as meeting the requirements of ISO 9001 certification. This has been reviewed by BRANZ and found to be satisfactory.
- 18.2 The manufacture of Spapanel has not been examined by BRANZ. Details regarding the quality and composition of the materials used were obtained by BRANZ and found to be satisfactory. BRANZ undertakes an ongoing review of product quality on an inwards good basis.
- 18.3 Quality of materials, components and accessories supplied by AB Building Products is the responsibility of AB Building Products.
- 18.4 The quality of installation on site of components and accessories supplied by AB Building Products is the responsibility of the installer.

Sources of Information

- AS/NZS 3837: 1998 Method of testing for heat and smoke release rates for materials and products using an oxygen consumption calorimeter.
- Ministry of Business, Innovation and Employment Record of Amendments for Compliance Documents and Handbooks.
- The Building Regulations 1992.





In the opinion of BRANZ, the Spapanel Wall Lining System is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to AB Building Products, 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. AB Building Products:

- 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 AB Building Products.
- 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.
- BRANZ provides no certification, guarantee, indemnity or warranty, to AB Building Products or any third party.

For BRANZ

Chelydra Percy Chief Executive

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