BRANZ Appraised

Appraisal No. 997 [2017]

PACBLD SIDING CAVITY SYSTEM

BRANZ Appraisals

Technical Assessments of products for building and construction.

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Product

1.1 The Pacbld Siding Cavity System is a cavity based fibre cement weatherboard wall cladding. It is designed to be used as an external cladding system for residential and light commercial type buildings where domestic construction techniques are used.

1.2 The Pacbld Siding Cavity System consists of Pacbld Siding weatherboard, which is a bevelbacked fibre cement weatherboard, fixed over timber battens to form a cavity. The cladding is finished with a latex paint system.

1.2 The cavity system incorporates a primary and secondary means of weather resistance (first and second line of defence) against water penetration by separating the cladding from the external wall framing with a nominal 20 mm cavity. The cavity allows for any occasional ingress of water that may get past the external skin to drain to the exterior of the building, and any remaining moisture to dry by evaporation.

Scope

2.1 The Pacbld Siding Cavity System has been appraised as an external wall cladding for buildings within the following scope:

- The scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
- With a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1, Table 2; and,
- Situated in NZS3604 Wind Zones up to and including Extra high.

2.2 Pacbld Siding weatherboard must only be installed horizontally on vertical surfaces.

2.3 The Pacbld Siding Cavity System is appraised for use with aluminium window and door joinery that is installed with vertical jambs and horizontal heads and sills. *[The Appraisal of Pacbld Siding Cavity System relies on the joinery meeting the requirements of NZS 4211 for the relevant Wind Zone.]*

Building Regulations

New Zealand Building Code (NZBC)

3.1 **In the opinion of BRANZ, the Pacbld Siding Cavity System if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet the following provisions of the NZBC:**

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. The Pacbld Siding Cavity System meets the requirements for loads arising from self-weight, wind, impact and creep [i.e. B1.3.3 (a), (h), (j) and (q)]. See Paragraphs 9.1 - 9.3.

Clause B2 DURABILITY: Performance B2.3.1 (b), 15 years and B2.3.2. The Pacbld Siding Cavity System meets these requirements. See Paragraphs 10.1 and 10.2.

Clause C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE: Performance C3.7. The Pacbld Siding Cavity System meets this requirement. See Paragraph 12.1.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. The Pacbld Siding Cavity System meets this requirement. See Paragraphs 14.1 - 14.5.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. The Pacbld Siding Cavity System meets this requirement and will not present a health hazard to people.

3.2 This is an Appraisal of an **Acceptable Solution** in terms of New Zealand Building Code compliance.

Technical Specification

4.1 Pacbld Siding weatherboards are bevelbacked weatherboards. The weatherboards are unpainted. They are 15 mm thick and are available 150 mm and 180 mm wide, in two lengths 3.0 m and 4.2 m.

4.2 Pacbld Siding weatherboards are manufactured of a cellulose-cement composite comprising wood fibre bonded tightly within a cementitious silicate matrix. A bevel is cut on the back of the weatherboard and the front bottom edge is chamfered. The weatherboards are manufactured to meet the requirements of AS/NZS 2908.2.

Accessories

4.3 Accessories used with the Pacbld Siding Cavity System which are supplied by Pacific Build Supply Limited are:

- **Rigid wall underlay** - medium density fibre cement sheet, complying with NZBC Acceptable Solution E2/AS1, Table 23, must be supplied by Pacific Build Supply Limited.
- **Pacbld Trim** – a 15 mm thick medium density fibre cement autoclaved sheet. Pacbld trim is available in two sizes 85 mm and 100 mm.
- **Pacbld back soaker** – Aluminium joiner back soaker flashing for use at vertical joints of weatherboards.
- **Internal corner flashings** – 50mm x 50mm 90° butt corner back flashing.
- **Pacbld Corner Soakers** –90° soakers preformed from either aluminum, stainless steel or copper for 150 mm and 180 mm Pacbld Siding weatherboards.
- **Pacbld Siding fixings** – all fixings shall be Grade 316 stainless steel. 75 mm x 3.15 mm jolt head nails. Pre-drill holes with masonry bit, hand nail and hand punch nails below surface. Or, 75 mm x 3.15 rosehead 316 grade nails for face fixing. Pre-drill holes with masonry bit, hand nail so that the rose head is flush with the board face.
- **Structural Batten fixings** - 65 x 2.8 mm stainless steel flat head nails.
- **Cavity battens (structural)** - nominal 50 mm wide by 25 mm thick (minimum finished size of 45 mm wide by 20 mm thick) SG6 grade timber treated to Hazard Class H3.2.
- **Cavity Closure** – PVC closure with upstands to comply with NZBC E2/AS1 clause 9.1.8.3.
- **Flexible Sealant** – Sikaflex® AT-Façade building sealant as per BRANZ Appraisal 613.
- **Flexible sill and jamb flashing tape** - flexible flashing tapes complying with NZBC Acceptable Solution E2/AS1 Paragraph 4.3.11, or flexible flashing tapes covered by a valid BRANZ Appraisal for use around window and door joinery openings.

4.4 Accessories used with the Pacbld Siding Cavity System which are supplied by the building contractor are:

- **Flexible wall underlay** – synthetic wall underlay complying with NZBC Acceptable E2/AS1, Table 23, or breather-type membranes covered by a valid BRANZ Appraisal or CodeMark for use as wall underlays.
- **Flexible wall underlay support** – 19 mm wide polypropylene tape to support flexible underlay between studs.
- **Window and door trim cavity air seal** - air seals complying with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.6, or self-expanding, moisture cure polyurethane foam air seals covered by a valid BRANZ Appraisal suitable for use around window, door and other wall penetration openings.
- **Aluminium joinery head flashings** - as supplied by the joinery manufacturer or contractor.
- **Internal Corner W flashings** - aluminium 90° internal W flashing with 50 mm minimum cover.
- **Scribers** – timber treated to Hazard Class H3.2 cut to suit the finished weatherboard profile, to be pre-primed prior to installation.

Paint System Specification

4.5 Paint systems are not supplied by Pacific Build Supply Limited and have not been assessed, therefore are outside the scope of this Appraisal.

4.6 All cut ends on the Pacbld Siding weatherboards are to be sealed on site with a primer suitable for the selected proprietary acrylic paint system.

4.7 All exposed faces, including top edges at sills and bottom edges of the Pacbld Siding weatherboard, trim and accessories must be finished with a latex exterior paint system complying with AS 3730.

Handling and Storage

5.1 Handling and storage of all materials supplied by Pacific Build Supply Limited or the contractor, whether on site of off site, is under the control of the building contractor. Pacbld Siding weatherboards are packed on pallets, they must be kept dry during transport. The weatherboards must be horizontally stacked on a flat surface and must always be sufficiently supported so that they do not sag. They must be kept dry at all time either by storing under cover or providing water covers to the stack, so they are stored in a dry ventilated space. The weatherboards must always be lifted from a stack by two people and then be carried on edge.

5.2 Accessories must be stored so they are kept clean, dry and undamaged. All accessories must be used within the maximum storage period recommended by the manufacturer.

Technical Literature

6.1 Refer to the Appraisal listing on the BRANZ website for details of the current Technical Literature for the Pacbld Siding Cavity System. The Technical Literature must be read in conjunction with this Appraisal. 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

Timber Treatment

7.1 Timber wall framing behind the Pacbld Siding Cavity System must be treated as required by NZBC Acceptable Solution B2/AS1.

Timber Framing

7.2 Timber framing must comply with NZS 3604 for buildings or parts of a building within the scope limitations of NZS 3604.

7.3 Timber framing must have a maximum moisture content of 24% at the time of the cladding application. *[If weatherboards are fixed to framing with a moisture content of greater than 24% problems may occur at a later date due to excessive timber shrinkage.]*

7.4 Timber wall framing must have a maximum moisture content of 18% before the weatherboards are painted.

General

8.1 Punchings in the cavity vent strip provide a minimum ventilation opening area of 1000 mm² per lineal metre of wall.

8.2 At ground level the bottom edge of Pacbld Siding weatherboards must be kept clear of paved surfaces, such as footpaths, by a minimum of 100 mm and unpaved surfaces by 175 mm in accordance with NZBC Acceptable Solution E2/AS1, Table 18. The ground clearances to finished floor levels as set out in NZS 3604 must be adhered to.

8.3 At balcony, deck or low pitch roof/wall junctions, the bottom edge of Pacbld Siding weatherboards must be kept clear of any adjacent surface, or above the top surface of any adjacent roof flashing by a minimum of 35 mm.

8.4 All external walls of buildings must have barriers to airflow in the form of interior linings with all joints stopped for wind zones up to and including Very High, and rigid underlays for buildings in the Extra High wind zone. Unlined gables and walls must incorporate a rigid wall underlay or an air barrier which meets the requirements of NZBC Acceptable Solution E2/AS1, Table 23. For attached garages, wall underlays must be selected in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.3.4.

8.5 Where cladding penetrations are wider than the cavity batten spacing, allowance must be made for airflow between adjacent cavities by leaving a minimum gap of 10 mm between the bottom of the vertical cavity batten and the flashing to the opening.

8.6 Where the system abuts other cladding systems, designers must detail the junction to meet their own requirements and the performance requirements of the NZBC. Details not included within the Technical Literature have not been assessed and are outside the scope of this Appraisal.

Interstorey Junctions

8.7 Inter-storey drained joints must be provided to limit continuous cavities to the lesser of 2-storeys or 7 metres in height, in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 9.1.9.4 (b).

Structure

Mass

9.1 The mass of the 150 mm wide Pacbld Siding weatherboard when installed on the wall is 25.3 kg/m² at equilibrium moisture content (EMC). The mass of the 180 mm wide Pacbld Siding weatherboard when installed on the wall is 24.4 kg/m² at equilibrium moisture content (EMC).The Pacbld Siding Cavity System is therefore considered a light wall cladding in terms of NZS 3604.

Impact Resistance

9.2 The Pacbld Siding Cavity System will resist impacts likely to be encountered in normal residential use. The likelihood of impact damage to the cladding when used in light commercial situations should be considered at the design stage, and appropriate protection such as the installation of bollards and barriers provided for vulnerable areas.

Wind Zones

9.3 The Pacbld Siding Cavity System is suitable for use in all Wind Zones of NZS 3604 up to, and including, Extra High where buildings are designed to meet the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 1.1.

Durability

10.1 The Pacbld Siding Cavity System meets the performance requirements of NZBC Clause B2.3.1 (b), 15 years for the Pacbld Siding weatherboards and flashings, and the performance requirements of NZBC Clause B2.3.1 (c), 5 years for the exterior paint system.

Serviceable Life

10.2 Pacbld Siding Cavity System installations are expected to have a serviceable life of at least 35 years provided the paint coating system is maintained in accordance with this Appraisal to ensure the Pacbld Siding weatherboards and fixings remain dry in service. The Pacbld Siding Cavity System must be painted within 3 months of fixing.

Maintenance

11.1 Regular maintenance is essential for the Pacbld Siding Cavity System to continue to meet the NZBC durability performance provision and to maximise their serviceable life.

11.2 Annual inspections must be made to ensure that all aspects of the cladding system, including the paint coating system, flashings and any sealed joints remain in a weatherproof condition. Any damaged areas or areas showing signs of deterioration which would allow water ingress must be repaired immediately. Sealant and paint coatings must be repaired in accordance with the sealant or paint coating manufacturer's instructions.

11.3 All exterior surfaces require an annual clean, a thorough soft wash with soapy water. Caustic based preparations should never be used. Paint systems must be recoated at approximately 7-15 yearly intervals in accordance with the paint manufacturer's instructions.

11.4 Minimum ground clearances as set out in this Appraisal must be maintained at all times during the life of the cladding. *(Failure to adhere to the minimum ground clearances given in this Appraisal and the Technical Literature will adversely affect the long term durability of the Pacbld Siding Cavity System.)*

Control of External Fire Spread

12.1 Pacbld Siding weatherboards have a peak heat release rate of less than 100 kw/m² and a total heat released of less than 25 MJ/m² in accordance with NZBC Acceptable Solution C/AS1, Table 5.1. The system is suitable for use on buildings with a SH Risk Group classification, at any distance to the relevant boundary. When Pacbld Siding is finished with a paint coating of not more than 1.0 mm in thickness, the exterior surface finishes requirements of NZBC Acceptable Solutions C/AS2 – C/AS6, Paragraph 5.8.1 do not apply in accordance with NZBC Acceptable Solutions C/AS2 – C/AS6, Paragraph 5.8.2 a).

Prevention of Fire Occurring

13.1 Separation or protection must be provided to the Pacbld Siding Cavity System 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.

External Moisture

14.1 The Pacbld Siding Cavity System, when installed in accordance with this Appraisal and the Technical Literature will prevent the penetration of moisture that could cause undue dampness or damage to building elements.

14.2 The cavity must be sealed off from the roof and sub-floor space to meet code compliance with Clause E2.3.5.

14.3 The Pacbld Siding Cavity System allows excess moisture present at the completion of construction to be dissipated without permanent damage to building elements to meet code compliance with Clause E2.3.6.

14.4 The details given in the Technical Literature for weather sealing are based on the design principle of having a first and second line of defence against moisture entry for all joints, penetrations and junctions. The ingress of moisture must be excluded by detailing joinery and wall interfaces as shown in the Technical Literature. Weathertightness details that are developed by the designer are outside the scope of this Appraisal and are the responsibility of the designer for compliance with the NZBC.

14.5 The Pacbld Siding Cavity System, where there is a designed cavity drainage path for moisture that penetrates the cladding, does not reduce the requirements for junctions, penetrations, etc to remain weather resistant.

Internal Moisture

15.1 Buildings must be constructed with an adequate combination of thermal resistance and ventilation, and space temperature must be provided to all habitable spaces, bathrooms, laundries and other spaces where moisture may be generated or may accumulate.

Water Vapour

15.2 The Pacbld Siding Cavity System is not a barrier to the passage of water vapour, and when installed in accordance with the Technical Literature and this Appraisal will not create or increase the risk of moisture damage resulting from condensation.

Installation Information

Installation Skill Level Requirements

16.1 Installation and finishing of the Pacbld Siding Cavity System must be completed by, or under the supervision of a Licensed Building Practitioner with the relevant License Class, in accordance with instructions given within the Pacbld Siding Cavity System Technical Literature and this Appraisal.

16.2 The Pacbld Siding Cavity System Q.A. checksheet must be completed during construction for every installation of the Pacbld Siding Cavity System.

System Installation

Building Underlay and Flexible Sill and Jamb Tape Installation

17.1 The selected building underlay and flexible sill and jamb tape system must be installed by the building contractor in accordance with the underlay and tape manufacturer's instructions prior to the installation of the cavity battens and the rest of the Pacbld Siding Cavity System. Flexible building underlay must be installed horizontally and be continuous around corners. Underlay must be lapped 75 mm minimum at horizontal joints and 150 mm minimum over studs at vertical joints. Rigid Wall Underlay must be installed in accordance with NZBC Acceptable Solution E2/AS1 and the Pacbld Siding Cavity System Technical Literature. Particular attention must be paid to the installation of the building underlay and sill and jamb tapes around window and door openings to ensure a continuous seal is achieved and all exposed wall framing in the opening is protected.

Cavity Battens

17.2 Structural cavity battens must be installed over the building underlay to the wall framing at maximum 600 mm centres where the studs are at 600 mm centres or at 400 mm centres when studs are at 400 mm centres. The battens must be fixed in place with 65 x 2.8 mm stainless steel flat head nails at 300 mm centres staggered either side of the batten line.

17.3 Where studs are greater than 400 mm centres, a building underlay support must be installed over the building underlay between the cavity battens at maximum 300 mm centres.

Pacbld Siding Cavity System Installation

17.4 Pacbld Siding weatherboards may be cut on site by power saw. Holes and cut-outs may be formed by drilling a number of holes around the perimeter of the opening required and tapping out the centre with a hammer, or by using a hole saw. Blades and drill bits should be tungsten carbide tipped.

17.5 Prior to cladding ensure all pipes and penetrations have been sealed as per E2/AS1, clause 9.1.9.3.

17.6 Weatherboards must be dry prior to installation. Before the weatherboards are installed, cut ends exposed to the exterior must be sealed with an acrylic sealer to provide a suitable surface for the sealant to adhere to.

17.7 The Pacbld Siding Cavity System must be installed starting at the bottom of the wall. A cant strip (H3.2 treated timber) must be fixed behind the bottom course of weatherboards to ensure the weatherboards are set at the correct angle. The cant strip must be continuous around the perimeter of the building. The bottom course of weatherboards must overhang the bottom plate by a minimum of 50 mm.

17.8 Before the weatherboards are installed, check the set out is correct and corner detail prepared to suit the selected option, e.g. external box corner, corner soaker. The necessary flashings, including window flashings, must be installed before commencing weatherboard fixing.

17.9 Join Pacbld Siding weatherboards with a Pacbld back soaker and continuous bead of Pacbld approved sealant. Leave proud, allow to cure and then thin off.

17.10 Pacbld Siding weatherboards must have a minimum lap of 30 mm, and should be set out so as near to a full board as possible will finish under and over windows and doors and at the top of the wall. A storey rod is recommended to keep all laps and cover consistent.

17.11 Pacbld Siding weatherboards must be pre-drilled and fixed to each stud using concealed fixings behind the lap of the boards.

17.12 Concealed fixing must be carried out using 75 x 3.15 mm 316 grade stainless steel nails. Nails must be fixed 20 mm from the top edge of the board and must be driven flush with the board surface. No gun nails are to be used.

17.13 Face nailing must be carried out using 75 x 3.15 mm 316 grade stainless steel jolt-head nails fixed 20 mm up from the bottom of the board and punched a maximum of 2 mm below the surface of the board, or 75 x 3.15 mm rosehead 316 grade stainless steel nails fixed so that the rose head is flush with the board face. No gun nails are to be used.

Aluminium Joinery Installation

17.14 Aluminium joinery and associated head and sill flashings must be installed by the building contractor in accordance with the Technical Literature. A 7.5 mm nominal gap must be left between the joinery reveal and the wall framing so a PEF rod and air seal can be installed after the joinery has been secured in place.

17.15 After installing the window and door joinery, Pacbld Trim, planted sills and scribers may be installed in accordance with the Technical Literature to provide additional weatherproofing for the joinery/weatherboard junction.

Inspections

17.16 The Technical Literature must be referred to during the inspection of Pacbld Siding Cavity System Installations. The Pacbld Siding Cavity System Q.A. checksheet must be completed during construction for every installation of the Pacbld Siding Cavity System.

Finishing

17.17 The paint coating manufacturer's instructions must be followed at all times for application of the paint finish. Pacbld Siding weatherboards and trim must be clean and dry before commencing painting.

Health and Safety

18.1 Cutting of Pacbld Siding weatherboards must be carried out in well ventilated areas, and a dust mask and eye protection must be worn.

18.2 When power tools are used for cutting, grinding or forming holes, health and safety measures as set out in the Technical Literature must be observed because of the amount of dust generated.

18.3 Safe use and handling procedures for Pacbld Siding weatherboards and the components that make up the cladding system are provided in the relevant manufacturer's Technical Literature.

Basis of Appraisal

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

Tests

19.1 The following testing has been completed by BRANZ:

- BRANZ expert opinion on NZBC E2 code compliance for Pacbld Siding Cavity System was based on evaluation of all details within the scope against E2/AS1, as stated within this Appraisal. The details contained within the Technical Literature have been reviewed, and an opinion has been given by BRANZ technical experts that the system will meet the performance levels of NZBC Acceptable Solution E2/AS1 for drained cavity claddings.
- Cone Calorimeter testing to determine the peak rate of heat release and total heat release of Pacbld Siding weatherboards was completed by BRANZ. The testing was carried out in accordance with AS/NZS 3837.

19.2 Pacbld Siding weatherboards have been tested by an accredited laboratory in accordance with AS/NZS 2908.2. The testing covered: soak-dry, bending strength, warm water soaking, heat/rain, freeze/thaw and apparent density. The test methods and results have been reviewed by BRANZ and found to be satisfactory.

19.3 Testing has been carried out by an accredited laboratory to determine the modulus of rupture and inter-laminar bond strength of carbonated and non-carbonated Pacbld Siding weatherboards. The test methods and results have been reviewed by BRANZ and found to be satisfactory.

Other Investigations

20.1 An expert judgement has been provided by BRANZ technical experts.

20.2 Site visits have been carried out by BRANZ to assess the practicability of installation, and to examine completed installations.

20.3 The manufacturer's Technical Literature has been examined by BRANZ and found to be satisfactory.

Quality

21.1 The quality management system of the manufacture of Pacbld Siding weatherboards has been assessed and registered as meeting the requirements of ISO 9001: 2015.

21.2 The manufacturer of Pacbld Siding weatherboards has a CE Declaration of Performance for the product to the requirements of EN12467 based upon testing that has been examined by BRANZ. Their factory production control is monitored by the notified body, in this case MPA NRW, Germany.

21.3 The quality of materials, components and accessories supplied by Pacific Build Supply Limited is the responsibility of Pacific Build Supply Limited..

21.4 Quality on site is the responsibility of the installer in accordance with the Pacbld Siding Cavity System manual. The Pacbld Siding Cavity System Q.A. checksheet must be completed during construction for every installation of the Pacbld Siding Cavity System.

21.5 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of the building underlay, cavity battens, Pacbld Siding weatherboards and accessories in accordance with the instructions of Pacific Build Supply Limited.

21.6 Sub trades are responsible for the installation of penetrations, flashing etc that are relevant to their trade in accordance with the Pacbld Siding Cavity System Technical Literature.

21.7 Building owners are responsible for the maintenance of the Pacbld Siding Cavity System in accordance with the instructions of Pacific Build Supply Limited.

Sources of Information

- AS 3730 Guide to the properties of paints for buildings.
- AS/NZS 2908.2: 2000 Cellulose-cement products - Flat sheet.
- AS/NZS 3837: 1998 Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter.
- NZS 3602: 2003 Timber and wood-based products for use in building.
- NZS 3604: 1999 Timber framed buildings.
- NZS 4211: 2008 Specification for performance of windows.
- Acceptable Solutions and Verification Methods for New Zealand Building Code External Moisture Clause E2, Ministry of Business, Innovation and Employment, Third Edition July 2005 (Amendment 7, 01 January 2017).
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- Pacific Build Supply website: www.pacbld.com
- The Building Regulations 1992.

BRANZ

In the opinion of BRANZ, the Pacbld Siding Cavity 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 Pacific Build Supply Limited, 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. Pacific Build Supply Limited:
   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 Pacific Build Supply Limited.
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 Pacific Build Supply Limited or any third party.

For BRANZ

Chelydra Percy
Chief Executive

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20 December 2017