



BRANZ Appraised

Appraisal No. 1053 [2019]

SHOWERWELL TILE SAFE SHOWER SYSTEM

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BRANZ Appraisals

Technical Assessments of products for building and construction.



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Product

- 1.1 The Showerwell Tile Safe Shower System is a preformed shower base and shower wall lining system to be used as substrates for ceramic or stone tile internal wet area showers.

Scope

- 2.1 The Showerwell Tile Safe Shower System is appraised for use as a preformed shower base and wall lining system for wet areas of buildings:
 - On floor substrates of concrete, plywood and compressed fibre cement sheet; and
 - On timber wall framing with wet area wall lining; and
 - When protected from physical damage by ceramic or stone tiles; and
 - Where floors are designed and constructed such that deflections do not exceed 1/360th of the span; and,
 - There being no control or movement joints in the shower areas.
- 2.2 The ceramic or stone tile finish and the tile adhesive are outside the scope of this Appraisal.
- 2.3 The Showerwell Tile Safe Shower System must be installed by trained applicators, approved by Showerwell Home Products Ltd.

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, Showerwell Tile Safe Shower System, 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 B2 DURABILITY: Performance B2.3.1 [b] 15 years and B2.3.2. The Showerwell Tile Safe Shower System meets these requirements. See Paragraph 9.1.

Clause E3 INTERNAL MOISTURE: Performance E3.3.3. The Showerwell Tile Safe Shower System contributes to meeting this requirement. See Paragraphs 12.1 - 12.4.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. The Showerwell Tile Safe Shower System meets this requirement and will not present a health hazard to people.



Technical Specification

4.1 The Showerwell Tile Safe Shower System consists of the following components:

Showerwell Tile Safe Shower System - Tray and Wall

- The Showerwell Tile Safe Shower System tray is made from a high density polyurethane foam with a polymer mortar/fibreglass top layer. It is supplied in various dimensions. It is waterproofed with a BRANZ Appraised waterproofing membrane in the factory.
- The Showerwell Tile Safe Shower System wall liner is made from a high impact ABS sheet.

Showerwell Tile Safe Shower System - Accessories

- Waste system covered by a WaterMark certification.
- Manufacturer specified adhesive to adhere the ABS liner to the wall.
- Manufacturer specified sealant to seal the perimeter of the ABS liner against the wall.
- Construction adhesive to adhere the showerbase to the floor.

4.2 Accessories used with the Showerwell Tile Safe Shower System which are supplied by the building contractor, such as tile adhesive and tiles, are outside the scope of this Appraisal:

Handling and Storage

5.1 The Showerwell Tile Safe Shower System is supplied in cardboard boxes. It must be stored inside, in dry conditions, out of direct sunlight and extremes of temperature. Care must be taken to avoid damage to the edges, ends and surfaces of the components. The Showerwell Tile Safe Shower System tray must always be carried on edge.

Technical Literature

6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for the Showerwell Tile Safe Shower 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

General

- 7.1 The Showerwell Tile Safe Shower System is designed as a tile substrate for interior showers fixed over new or existing floors to provide a waterproofed surface for the direct adhesion of ceramic tiles.
- 7.2 Once the prefabricated shower tray and the ABS liner are fixed in place, tiles may be directly adhered and grouted to provide an impervious and easily cleaned surface.

Substrates

Structure

- 8.1 Timber framing systems must comply with NZS3604, with joist spans reduced by approximately 20% of those set out in NZS3604, or floor framing systems to a specific engineering design complying with the NZBC.
- 8.2 Existing floors must be inspected and be of good condition and have equivalent performance to a new floor.
- 8.3 If present, mould or fungal growth on the wall or floor substrate should be treated prior to fixing the Showerwell Tile Safe System. Showerwell Home Products Ltd should be consulted for suitable anti-fungal products.
- 8.4 All floors, new and existing, will be structurally suitable for tiling when the maximum deflection of the floor joists is 1/360th of the span.
- 8.5 The Showerwell Tile Safe Shower System is capable of resisting a uniformly distributed load of 1.5 kN/m² with minimal deflection.



- 8.6 The level of resistance to concentrated loads will depend upon the size and strength of the tiles used to cover the Showerwell Tile Safe Shower System components.

Wet Area Wall Linings

- 8.7 Plasterboard wall linings must be manufactured to comply with AS/NZS 2588 and be suitable for use in internal wet areas.
- 8.8 Fibre Cement sheet must be manufactured to comply with the requirements of AS 2908.2 and must be specified by the manufacturer as being suitable in wet areas.

Durability

Serviceable Life

- 9.1 The Showerwell Tile Safe Shower System will be durable for at least 15 years, provided the tiling system is maintained to ensure the components remain dry in service. Tiles, tile adhesive, and grout have not been assessed and are outside the scope of this Appraisal.

Maintenance

- 10.1 No maintenance of the Showerwell Tile Safe Shower System will be required provided significant substrate movement does not occur and the tile finish remains intact. Regular checks must be made of the tiled areas to ensure they are sound and will not allow moisture to penetrate. Any cracks or damage must be repaired immediately by repairing the tiles, grout and sealant.
- 10.2 Drainage outlets must be maintained to operate effectively, and the tile finishes must be kept clean.

Prevention of Fire Occurring

- 11.1 Separation or protection must be provided to the Showerwell Tile Safe Shower 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.

Internal Moisture

- 12.1 Surfaces must be finished with ceramic or stone tile finishes. A means of Code Compliance to NZBC Clause E3.3.3 is given in NZBC Acceptable Solution E3/AS1, Paragraph 3.1.1 [b].
- 12.2 Further design guidance on waterproofing wet areas, including waterproofing junctions, can be obtained from AS 3740 and the BRANZ Good Practice Guide - Tiling.
- 12.3 The Showerwell Tile Safe Shower bases are supplied with appropriate falls which must be maintained during the tiling process.
- 12.4 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

- 13.1 Installation of the floor and wall substrates for the Showerwell Tile Safe Shower System must be completed by or under the supervision of Licensed Building Practitioners with the relevant Licence Class.
- 13.2 The Showerwell Tile Safe Shower System must be installed by trained applicators, approved by Showerwell Home Products
- 13.2 Installation of the System must always be carried out in accordance with the Showerwell Tile Safe Shower System Technical Literature and this Appraisal.



Preparation

- 14.1 The substrate of the existing floor must be clean, level and structural sound.
- 14.2 The relative humidity of concrete substrates must be 75% or less before installation of the Showerwell Tile Safe Shower System components. The concrete can be checked for dryness using a hygrometer as set out in BRANZ Bulletin No. 585.
- 14.3 The floor must be free of dirt, dust and grease before installing prefabricated shower tray.

System Installation

- 15.1 It is recommended that the installer dry fit the components of the Showerwell Tile Safe Shower System before final fixing to ensure a good fit.
- 15.2 The pre-fabricated shower tray must be adhered with a construction adhesive to the flooring substrate.
- 15.3 The installation of the Showerwell Tile Safe Shower System must be in accordance with the instructions given within the Showerwell Home Products Ltd Technical Literature and this Appraisal.

Tiling

- 15.4 Tiling must be carried out using a flexible tile adhesive in accordance with the tile adhesive manufacturer's instructions.
- 15.5 Tiling must be undertaken in accordance with AS 3958.1 and BRANZ 'Good Practice Guide - Tiling'

Health and Safety

- 16.1 Safe use and handling procedures for the Showerwell Tile Safe Shower System is provided in the Technical Literature. The materials must be used in conjunction with the relevant Material Safety Data Sheet.

Basis of Appraisal

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

Tests

- 17.1 The following testing of the Showerwell Tile Safe Shower System has been undertaken by the following organisations:
 - Ponding Test carried out by SGS Industrial, Auckland.
 - Wear test of the shower tray carried out by SGS Industrial, Auckland.Test methods and results have been reviewed by BRANZ and found to be satisfactory.

Other Investigations

- 18.1 An assessment was made of the durability of the Showerwell Tile Safe Shower System by BRANZ technical experts.
- 18.2 Site inspections were carried out by BRANZ to assess the practicability of installation.
- 18.3 The Technical Literature for the Showerwell Tile Safe Shower System has been examined by BRANZ and found to be satisfactory.

Quality

- 19.1 The manufacture of the prefabricated shower tray of the Showerwell Tile Safe Shower System has been examined by BRANZ, including methods adopted for the quality control. Details of the manufacturing processes, and quality and composition of the raw materials used were obtained and found to be satisfactory.
- 19.2 The quality of supply to the market is the responsibility of Showerwell Home Products Ltd.
- 19.3 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of the framing systems and substrates.



19.4 The quality on site is the responsibility of the Licenced Building Practitioner.

19.5 Building owners are responsible for the maintenance of the tile finish in accordance with the instructions of Showerwell Home Products Ltd.

Sources of Information

- AS 3740 – 2010 Waterproofing of wet areas within residential buildings.
- AS 3958.1: 2007 Guide to the installation of ceramic tiles.
- AS/NZS 1170: 2002 Structural design actions.
- AS/NZS 2908.2: 2000 Cellulose-cement products – flat sheet.
- AS/NZS 2269: 2012 Plywood – Structural
- NZS 3101: 2006 The design of concrete structures.
- NZS 3602: 2003 Timber and wood-based products for use in building.
- NZS 3604: 2011 Timber-framed buildings.
- NZS 4229: 2013 Concrete masonry buildings not requiring specific engineering design.
- BRANZ Bulletin No. 585. Measuring Moisture in Timber and Concrete.
- Good Practice Guide – Tiling (3rd Edition), BRANZ, 2015.
- Acceptable Solutions and Verification Methods for New Zealand Building Code Internal Moisture Clause E3, Ministry of Business, Innovation and Employment, Second Edition 28 February 1998 (Amendment 6, 01 January 2017).
- Ministry of Business, Innovation and Employment Record of amendments – Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.



In the opinion of BRANZ, the **Showerwell Tile Safe Shower System** is 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 **Showerwell Home Products 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. **Showerwell Home Products 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 **Showerwell Home Products 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 **Showerwell Home Products Ltd** or any third party.

For BRANZ

Chelydra Percy

Chief Executive

Date of Issue:

14 June 2019