



BRANZ Appraised

Appraisal No. 632 [2012]

PINK® BATTS® SNUGFLOOR® UNDERFLOOR INSULATION

Appraisal No. 632 [2012]

This Appraisal replaces BRANZ
Appraisal No. 632 [2008].

Amended 04 September 2017



BRANZ Appraisals

Technical Assessments of
products for building and
construction.



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Product

- 1.1 Pink® Batts® SnugFloor® insulation is a resin bonded glasswool thermal insulating material for use in timber framed floors. It is available in two R-values, R1.6 and R2.6, and two widths to fit floor joist spacings.

Scope

- 2.1 Pink® Batts® SnugFloor® has been appraised for use as a thermal insulating material for timber framed floors in new or existing domestic and commercial buildings.

Building Regulations

New Zealand Building Code [NZBC]

- 3.1 In the opinion of BRANZ, Pink® Batts® SnugFloor® 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 (a) not less than 50 years and B2.3.1 (b) 15 years. Pink® Batts® SnugFloor® meets these requirements. See Paragraph 8.1.

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

Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 (a) and H1.3.2 E. Pink® Batts® SnugFloor® will contribute to meeting these requirements. See Paragraphs 14.1 and 14.2.

Technical Specification

4.1 Pink® Batts® SnugFloor® is a resin bonded fibrous glasswool insulation manufactured from recycled and virgin glass and cured urea extended phenolic resin. Pink® Batts® SnugFloor® is available as set out in Table 1.

Table 1: Pink® Batts® SnugFloor® product table

R-value	Nominal Thickness [mm]	Width [mm]	Length [mm]	Nett Area [m ²]	Density [kg/m ³]
1.6 ¹	70	480	1220	9.4	13.9
1.6 ¹	70	580	1220	11.3	13.9
2.6 ¹	110	480	1220	8.8	13.3
2.6 ¹	110	580	1220	10.6	13.3

¹ Pink® Batts® SnugFloor® products that have the Environmental Choice license.

- 4.2 Pink® Batts® SnugFloor® is pink in colour and is baled in pink polythene bags with labelling in compliance with AS/ NZS 4859.1.
- 4.3 Accessories used with Pink® Batts® SnugFloor®, which are supplied by the insulation installer, are plastic strapping and stainless steel or plastic staples.

Handling and Storage

- 5.1 Pink® Batts® SnugFloor® must be stored under cover and in dry conditions. Heavy objects must not be stacked on the packs. The packs must be stored in an orientation that avoids excessive compression of the product.
- 5.2 In general, insulation products are sensitive to the length of time they are stored in compression packaging. Product that does not recover to its nominal thickness may not achieve the stated R-value.

Technical Literature

- 6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for Pink® Batts® SnugFloor®. 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 Pink® Batts® SnugFloor® is intended for use as a thermal insulation to meet the requirements of NZBC. Pink® Batts® SnugFloor® R-values of 1.6 m²C/W and 2.6 m²C/W are designed to meet the minimum schedule method R-values of NZBC Verification Method H1/VM1 or NZBC Acceptable Solution H1/AS1. Greater construction R-values can be achieved where specific design is used. For construction R-values, refer to the BRANZ House Insulation Guide. Product R-values and dimensions are given in Table 1.
- 7.2 Pink® Batts® SnugFloor® thermal resistance [R-value] has been determined by testing to AS/NZS 4859.1, which is an acceptable method in NZBC Acceptable Solution H1/AS1.
- 7.3 Pink® Batts® SnugFloor® is designed to be friction-fitted in new and retrofit installations and must be supported with plastic strapping. The sections are supplied two widths to suit floor joist spacing.
- 7.4 Pink® Batts® SnugFloor® is suitable for use under floors which have an "enclosed perimeter foundation" as defined by NZS 4246. Where the subfloor area is not enclosed and subject to wind such as in pole houses and raised floors the insulation shall be protected by a suitable lining material.

- 7.5 Pink® Batts® SnugFloor® may also be suitable for use under floors where the perimeter foundation is enclosed by vertical or horizontal slats. Refer to Tasman Insulation New Zealand for site specific information.
- 7.6 The building envelope must be constructed to ensure that the insulation remains dry during installation and throughout the life of the building.
- 7.7 The clearance requirements for downlights must be met and reference made to the manufacturers instructions and NZS 4246. See Paragraphs 10.1 - 10.3.

Durability

Serviceable Life

- 8.1 Where the building is maintained so that the provisions of NZBC Clauses E2 and E3 are met and the insulation is not crushed or exposed to conditions that will diminish its thermal performance [e.g. moisture], Pink® Batts® SnugFloor® is expected to have a serviceable life of at least 50 years. Support accessories must also be selected according to the required serviceable life.

Maintenance

- 9.1 Insulation that has become damp must be removed and the cause of dampness repaired. Cavities must be clean and dry before fitting new insulation of an equivalent thermal rating. NZS 4246 gives guidance on thermal insulation maintenance due to water damage.

Prevention of Fire Occurring

- 10.1 Pink® Batts® SnugFloor® is considered a non-combustible material and need not to be separated from heat sources such as fire places, heating appliances, flues and chimneys. However, when used in conjunction with, or attached to heat sensitive materials, the heat sensitive material must be separated from fireplaces, heating appliances, flues and chimneys in accordance with the requirements of Part 7 of NZBC Acceptable Solutions C/AS1 to C/AS6 and NZBC Verification Method C/VM1.

Downlights

- 10.2 Recessed luminaires shall be of type and be installed in accordance with NZBC Acceptable Solution C/AS1 to C/AS6, Section 7.4.
- 10.3 Insulation materials must maintain a clearance of 100 mm to undefined recessed luminaires in existing buildings.

Control of Internal Fire and Smoke Spread

- 11.1 Pink® Batts® SnugFloor® meets the requirements of AS 1530.1 and is defined as non-combustible. Unless foamed plastics building materials are also used as part of the wall or ceiling construction, there are no internal surface finish requirements in Risk Group SH in accordance with NZBC Acceptable Solution C/AS1. Refer to NZBC Acceptable Solutions C/AS2 to C/AS6 for the specific internal surface finish requirements for walls or ceilings in other Risk Groups.

External Moisture

- 12.1 The total building envelope must be weathertight and comply with the requirements of NZBC Clause E2 to ensure that the insulation remains dry in use.
- 12.2 The moisture content of the construction materials at the time of installing and enclosing the insulation must meet the requirements of NZBC Acceptable Solution E2/AS1 Paragraph 10.2[a], or a lower moisture content if required by the flooring manufacturer.

Internal Moisture

- 13.1 Buildings must provide an adequate combination of thermal resistance, ventilation and space temperature to all habitable spaces, bathrooms, laundries and other spaces where moisture may be generated or may accumulate. This does not apply to Communal Non-residential, Commercial, Industrial, Outbuildings or Ancillary buildings.

Energy Efficiency

- 14.1 Pink® Batts® SnugFloor® will contribute to meeting the requirements of NZBC Clause H1 Performance H1.3.1(a) and H1.3.2 E by compliance with NZBC Verification Method H1/VM1 or NZBC Acceptable Solution H1/AS1. Refer to Paragraphs 7.1 - 7.7.
- 14.2 Pink® Batts® SnugFloor® R-values have been determined by BRANZ testing to AS/NZS 4859.1 and are given in Table 1.

Installation Information

Installation Skill Level Requirements

- 15.1 Installation of Pink® Batts® SnugFloor® must be completed by an installer with an understanding of insulation installation.

General

- 16.1 Installation of Pink® Batts® SnugFloor® must be in accordance with the Technical Literature and this Appraisal. NZS 4246 should be used as a guide for installing insulation in residential buildings.
- 16.2 Pink® Batts® SnugFloor® must be installed only when the building is enclosed and when the construction materials have achieved the required maximum moisture content or less.
- 16.3 Pink® Batts® SnugFloor® must be released from the packaging and allowed to re-loft prior to installation. The time to loft will depend upon the length of time the product has been packaged and stored.
- 16.4 Pink® Batts® SnugFloor® is installed by friction-fitting the insulation between floor joists, and then supporting it with plastic strapping. The installation is critical so that the potential for gaps and convective heat loss is reduced. Pink® Batts® SnugFloor® Technical Literature must be referred to for installation details.
- 16.5 A minimum 100 mm gap must be maintained between Pink® Batts® SnugFloor® and plumbing, pipe work fittings. This gap will also ensure that there is adequate access for servicing.
- 16.6 The clearance requirements for heating appliances, light fittings and downlights must be followed. Refer also to NZS 4246.

Inspections

- 16.7 The Technical Literature and NZS 4246 must be referred to during the inspection of Pink® Batts® SnugFloor® installations.

Health and Safety

- 17.1 Refer to the Technical Literature and NZS 4246 for guidance on health and safety requirements such as personal protective clothing and installation hazard assessment.

Basis of Appraisal

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

Tests

- 18.1 BRANZ has carried out thermal resistance testing of Pink® Batts® SnugFloor® in accordance with AS/NZS 4859.1.
- 18.2 Tests have been carried out in accordance with AS 1530.1. Pink® Batts® SnugFloor® is not deemed combustible according to the test criteria. The results have been reviewed by BRANZ technical experts.

Other Investigations

- 19.1 An assessment of the durability of Pink® Batts® SnugFloor® has been made by BRANZ technical experts.
- 19.2 The manufacturer's Technical Literature has been reviewed by BRANZ and found to be satisfactory.
- 19.3 Site inspections have been undertaken by BRANZ to assess the practicability of installation.

Quality

- 20.1 The manufacture of Pink® Batts® SnugFloor® has been examined by BRANZ, including methods adopted for quality control. Details of the manufacturing processes, and quality and composition of the raw materials used were obtained and found to be satisfactory.
- 20.2 Pink® Batts® SnugFloor® products have been assessed for their environmental impact by the New Zealand Ecolabelling Trust and comply with the requirements of the Environmental Choice Specification, Licence No 2504017 - Thermal [resistive type] Building Insulants. The products that have the Environmental Choice license are noted in Table 1.
- 20.2 Tasman Insulation New Zealand Ltd is responsible for the quality of the product supplied.
- 20.3 Quality of installation of the product on site is the responsibility of the installer.
- 20.4 Quality of maintenance of the building to ensure the insulation material remains dry is the responsibility of the building owner.

Sources of Information

- AS 1530.1: 1994 Combustibility test for materials.
- AS/NZS 4859.1: 2002 Materials for the thermal insulation of buildings.
- NZS 4246: 2016 Energy efficiency – Installing bulk thermal insulation in residential buildings.
- BRANZ House Insulation Guide, Fifth Edition 2014.
- Acceptable Solutions and Verification Methods for New Zealand Building Code Energy Efficiency Clause H1, Ministry of Business, Innovation and Employment, Fourth Edition Amendment 3, 1 January 2017.
- Ministry of Business, Innovation and Employment Record of Amendments - Acceptable Solutions, Verification Methods and Handbooks.
- The Building Regulations 1992.

Amendments

Amendment No. 1, dated 09 September 2015.

This Appraisal has been amended to update the Appraisal text, removing the use of SnugFloor® Support Wires and to update clause changes as required by the introduction of NZBC Fire Clauses C1 to C6 Protection from Fire and A3 Building Importance Levels.

Amendment No. 2, dated 04 February 2016.

This Appraisal has been amended to update the Appraisal Holders contact details.

Amendment No. 3, dated 29 March 2017.

This Appraisal has been amended to update the Product Range in Table 1 and the cover image.

Amendment No. 4, dated 04 September 2017.

This Appraisal has been amended to include the suitability for Pink® Batts® SnugFloor® to be used where the perimeter foundation is enclosed by vertical or horizontal slats.



In the opinion of BRANZ, **Pink® Batts® SnugFloor® Underfloor Insulation** 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 **Tasman Insulation New Zealand 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. **Tasman Insulation New Zealand 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 **Tasman Insulation New Zealand 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 **Tasman Insulation New Zealand Ltd** or any third party.

For BRANZ



Pieter Burghout

Chief Executive

Date of Issue:

08 June 2012