

Appraisal No. 1070 (2025)

VSHIELD™ ROOF UNDERLAYMENT



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This Appraisal replaces BRANZ Appraisal No. 1070 (2020)

BRANZ Appraisals

Technical Assessments of products for building and construction.



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Product

1.1 VShield™ Roof Underlayment is a range of synthetic building underlays (sarkings) for use under asphalt shingle roof cladding. The underlays consist of a woven base scrim, a non-woven scrim on the exposed side and an anti-slip coating on the sheathing side.

Scope

- 2.1 VShield™ Roof Underlayment has been appraised for use as roof underlays on buildings within the following scope:
 - · Class 1 and Class 10 Buildings; and,
 - Class 2 and Class 9 Buildings subject to specific weathertightness design; and,
 - constructed with timber or steel framing in accordance with the National Construction Code [NCC]; and,
 - · with timber sheathing in accordance with the NCC; and,
 - · with asphalt shingle roof cladding; and,
 - situated in non-cyclonic Wind Zones up to, and including, N3.
- 2.2 Building designers are responsible for the building design and for incorporation of VShield™ Roof Underlayment into their design, in accordance with the declared properties and the instructions of Veer Plastics Private Limited.

Building Regulations

National Construction Code (NCC)

3.1 In the opinion of BRANZ, VShield™ Roof Underlayment, 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 NCC:

NCC 2022 Volume One - Building Code of Australia

Part F3 ROOF AND WALL CLADDING: Performance F3P1. VShield™ Roof Underlayment contributes to meeting this requirement. See Paragraphs 13.1 and 13.2.

NCC 2022 Volume Two - Building Code of Australia

Part H2 DAMP AND WEATHERPROOFING: Performance H2P2. VShield™ Roof Underlayment contributes to meeting this requirement. See Paragraphs 13.1 and 13.2.

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Technical Specification

- 4.1 VShield™ Roof Underlayment is a range of synthetic building underlays for use under asphalt shingle roof cladding. The underlays consist of a woven base scrim, a non-woven based scrim on the exposed side and an anti-slip coating on the sheathing side. VShield™ Roof Underlayment is an alternative to the ASTM D226, Type I and II roof underlayments specified in Chapter 15 of the International Building Code and Chapter 9 of the International Residential Code.
 - VShield™ Supreme is 180 gsm and coloured grey on the exposed side and black on the sheathing side.
 - VShield™ Gold is 125 gsm and coloured green on the exposed side and black on the sheathing side
 - VShield™ Plus is 100 gsm and coloured black on both sides.
 - VShield™ SafeDeck is 85 qsm and coloured black on both sides.

VShield™ Roof Underlayment is also provided in custom colours on the exposed and sheathing sides.

Accessories

- 4.2 Accessories used with VShield™ Roof Underlayment, which are supplied by the installer are:
 - Fixings- stainless steel staples, clouts, screws or proprietary underlay fixings, or other temporary fixings to attach the roof underlay to the sheathing.
 - Plywood sheathing minimum 15 mm thick, grade DD or better plywood complying with AS/NZS 2269. Minimum treatment requirements are: untreated plywood for ventilated truss roof cavities above 10° and H3 treated plywood for all closed cavity roofs, skillion roofs and roofs 10° and below. H3 treated plywood must also be used where the plywood edge is unprotected at the eaves. Concealed plywood edges at the eaves do not need to be treated.

Handling and Storage

Handling and storage of the products, whether on-site or off-site, is under the control of the installer. The rolls must be protected from damage and weather. They must be stored on end, under cover, in clean dry conditions and must not be crushed.

Technical Literature

- 6.1 This Appraisal must be read in conjunction with:
 - Technical Data Sheets for VShield™ Supreme, VShield™ Gold, VShield™ Plus and VShield™
 SafeDeck, all dated 4 September 2018.
- 6.2 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 and Steel Framing

7.1 Timber and steel roof framing must be provided in accordance with the requirements of the NCC and the asphalt shingle roof cladding manufacturer.

Substrate

- 7.2 Where LOSP treated plywood is used, the solvents must be allowed to evaporate off for at least one week before installation of the shingle underlayment.
- 7.3 Rafters or trusses must be at a maximum 900 mm centres for 15 and 17 mm thick plywood. (Note: Plywood manufacturer's Technical Literature must be referred to for confirmation of minimum plywood thickness and grades relative to roof pitch and framing centres.)



- 7.4 The plywood face grain must be laid at right angles to supports. The sheets must be laid with staggered joints in a brick bond pattern.
- 7.5 Tongue-and-groove plywood edges must be butt-jointed with no gaps between the sheet edges. Square plywood edges must have a 2-3 mm gap between the sheet edges.

General

- 7.6 VShield™ Roof Underlayment is intended for use as an alternative to conventional kraft paper roof underlays to assist in the moisture management of the asphalt shingle roof cladding system.
- 7.7 The material also provides a degree of temporary weather protection during early construction. However, the product will not make the roof weathertight and some wetting of the underlying structure is always possible before the roof cladding is installed. Hence, the entire building must be closed in and made weatherproof before moisture sensitive materials such as ceiling linings and insulation materials are installed.
- 7.8 VShield™ Roof Underlayment is suitable for use in residential and commercial roofs under asphalt shingles. The product must be laid over a plywood substrate.

Structure

8.1 VShield™ Roof Underlayment is suitable for use on buildings situated in non-cyclonic Wind Zones up to, and including, N3.

Durability

Serviceable Life

9.1 Provided it is not exposed to the weather or ultraviolet (UV) light for a total of more than 7 days, and provided the roof cladding is maintained in accordance with the cladding manufacturer's instructions and the roof cladding remains weather-resistant, VShield™ Roof Underlayment is expected to have a serviceable life equal to that of the roof cladding.

Outbreak of Fire

10.1 VShield™ Roof Underlayment must be protected or separated from fireplaces, heating appliances, chimneys and flues in accordance with the requirements of NCC Volume One, Part G2, Performance G2P1, and NCC Volume Two, Part H7, Performance H7P3.

Damp and Weatherproofing

- 11.1 Asphalt roof claddings installed over VShield™ Roof Underlayment must meet the requirements of the NCC, e.g. Deemed-to-Satisfy roof claddings covered by the NCC, or roof claddings covered by a valid BRANZ Appraisal.
- 11.2 VShield™ Roof Underlayment, when installed in accordance with the Technical Literature and this Appraisal, will assist in the total cladding systems compliance with the Damp and Weatherproofing performance clauses of the NCC.

Installation Information

Installation Skill Level Requirement

12.1 Installation must always be carried out in accordance with the Technical Literature and this Appraisal, by competent tradespeople with an understanding of roof underlay installation.

Substrate Installation

- 13.1 Plywood and framing must have a maximum moisture content of 18% at the time of installation of the roofing shingles.
- 13.2 The plywood must be designed and installed in accordance with the plywood manufacturer's instructions.

Inspections

13.3 The Technical Literature must be referred to during inspections of VShield™ Roof Underlayment installations.



Basis of Appraisal

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

Tests

14.1 The following test has been carried out on VShield™ Roof Underlayment: resistance to water penetration in accordance with AS/NZS 4201.4.

Other Investigations

- 15.1 A durability opinion has been given by BRANZ technical experts.
- 15.2 The practicability of installation of VShield™ Roof Underlayment has been assessed by BRANZ and found to be satisfactory.
- 15.3 The Technical Literature, including installation instructions, has been examined by BRANZ and found to be satisfactory.

Quality

- 16.1 The manufacture of VShield™ Roof Underlayment has not been examined by BRANZ, but details regarding the quality and composition of the materials used were obtained by BRANZ and found to be satisfactory.
- 16.2 The quality of supply to the market is the responsibility of Veer Plastics Private Limited.
- 16.3 Building designers are responsible for the design of the building and for the incorporation of the roof underlay into their design in accordance with the instructions of Veer Plastics Private Limited.
- 16.4 Quality of installation is the responsibility of the installer in accordance with the instructions of Veer Plastics Private Limited

Sources of Information

- AS/NZS 4201.4:1994 Pliable building membranes and underlays Methods of test Resistance to water penetration.
- National Construction Code 2022, Australian Building Codes Board.



In the opinion of BRANZ, VShield™ Roof Underlayment 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 Veer Plastics Private 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. Veer Plastics Private 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 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 Veer Plastics Private 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.
- BRANZ provides no certification, guarantee, indemnity or warranty, to Veer Plastics Private Limited or any third party.

For BRANZ

Claire Falck Chief Executive

Date of Issue:

29 July 2025