

## OMEGA LIGHT ROOF UNDERLAY



#### Appraisal No. 1266 (2024)

#### **BRANZ Appraisals**

Technical Assessments of products for building and construction.



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## **Product**

Omega Light Roof Underlay is a vapour permeable synthetic roof underlay for use under roof claddings.

## Scope

- Omega Light Roof Underlay is suitable for use as a self-supporting roof underlay on buildings within the following scope:
  - Class 1 and Class 10 buildings; and,
  - Class 2 to 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 masonry, metal tile and profiled metal 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 the incorporation of Omega Light Roof Underlay into their design in accordance with the declared properties and the instructions of Siegware Australia Pty Ltd.

## **Building Regulations**

#### National Construction Code (NCC)

3.1 In the opinion of BRANZ, Omega Light Roof Underlay, if used, designed, 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 Requirement F3P1 and Deemed-to-Satisfy Provision F3D3. Omega Light Roof Underlay contributes to meeting these requirements. See Paragraphs 13.1 and 13.2.

#### NCC 2022 Volume Two - Building Code of Australia

**Part H2 DAMP AND WEATHERPROOFING:** Performance H2P2. Omega Light Roof Underlay will contribute to meeting this requirement. See Paragraphs 13.1 and 13.2.





## **Technical Specifications**

- 4.1 Omega Light Roof Underlay is a vapour permeable synthetic roof underlay. It is supplied in rolls either 1.5 or 3.0 m wide and 50 m long, coloured dark grey on the top surface with a light grey underside.
- 4.2 Accessories used with Omega Light Roof Underlay 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 framing.

## Handling and Storage

5.1 Handling and storage of the product, 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 under cover, in clean, dry conditions and must not be crushed.

### **Technical Literature**

- 6.1 This Appraisal must be read in conjunction with:
  - PDBL MA OM LIGHT SK EN-1
- 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**

- 7.1 Omega Light Roof Underlay is suitable for use at roof pitches 3° and above. When used at pitches less than 10°, Omega Light Roof Underlay can be installed horizontally or vertically when fully supported by a corrosion resistant roof sarking support. At pitches 10° and greater, Omega Light Roof Underlay can be installed horizontally or vertically, spanning no greater than 1,200 mm between supports.
- 7.2 Omega Light Roof Underlay provides a degree of temporary weather protection during the 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.
- 7.3 Omega Light Roof Underlay is intended for use as an alternative to conventional kraft paper roof underlays, which are fixed over timber or steel-framed roofs to limit the entry of wind into the roof cavity, and to assist in the moisture management of the roof cladding system.
- 7.4 Omega Light Roof Underlay must not be exposed to the weather or ultraviolet (UV) light for a total of more than 7 days before being covered by the roof cladding.
- 7.5 Omega Light Roof Underlay is deemed to be a satisfactory sarking material for the weatherproofing of roofs in accordance with NCC Volume One, Deemed-to-Satisfy Provision F3D3 and NCC Volume Two. Section H2P2 for roofs.
- 7.6 Refer to Table 1 for details of the material properties of Omega Light Roof Underlay and the relevant AS/NZS 4200.1 classifications.

#### Table 1: Omega Light Roof Underlay Properties

AS/NZS 4200.1 Properties [MD = machine direction] [CD = cross direction]	Property Performance Requirement	Actual Property Performance	AS/NZS 4200.1 Classification
Shrinkage	≤ 0.5%	Pass	Not Applicable
Absorbency	≥150 g/m²	Pass	High
Vapour Barrier	≤7MN s/g	Pass	Low
Water Barrier	≥100 mm	Pass	High
Tensile Strength MD		5.1 kN/m	Unclassified
Tensile Strength CD		2.8 kN/m	Unclassified
Edge Tear Resistance MD	≥ 90 N	260 N	Extra Heavy
Edge Tear Resistance CD	≥ 90 N	146	Extra Heavy
Flammability	≤ 5	Pass	Low

#### Structure

Omega Light Roof Underlay is suitable for use on buildings situated in non-cyclonic wind zones up to, and including, N3.

#### Durability

#### Serviceable Life

Provided it is not exposed to the weather or 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 cladding remains weather-resistant, Omega Light Roof Underlay is expected to have a serviceable life equal to that of the cladding.

#### Flammability

10.1 Omega Light Roof Underlay is less than 1 mm in thickness and has an AS 1530 Part 2 flammability index of less than 5 and therefore has a flammability index classification of low, in accordance with AS/NZS 4200.1.

#### Heating Appliances, Fireplaces, Chimneys and Flues

11.1 Omega Light Roof Underlay must be separated from fireplaces, heating appliances, flues and chimneys in accordance with the requirements of the NCC for the protection of combustible materials.

#### **Bushfire Prone Areas**

Australian Standard AS 3959 is cited as a means of demonstrating compliance for Bushfire Prone Areas. This standard specifies in Clause 3.10 that where sarking is required, that it shall have a flammability index of not more than 5. Omega Light Roof Underlay meets this requirement.

#### Damp and Weatherproofing

- 13.1 Roof claddings installed over Omega Light Roof Underlay must meet the performance requirements of the NCC, e.g. Deemed-to-Satisfy roof claddings covered by the NCC or roof claddings covered by a valid BRANZ Appraisal.
- Omega Light Roof Underlay, when installed in accordance with the Technical Literature and this Appraisal, will assist in the total cladding system's compliance with the Damp and Weatherproofing performance clauses of the NCC.



### Installation Information

### Installation Skill Level Requirement

14.1 Installation must always be carried out in accordance with the Omega Light Roof Underlay Technical Literature and this Appraisal, by competent tradespersons with an understanding of roof sarking installation.

#### Sarking Installation

- Omega Light Roof Underlay must be fixed to all framing members at a maximum 300 mm centres with large-head clouts 20 mm long, 6-8 mm staples, self-drilling screws, or proprietary sarking fixings. The sarking must be pulled taut over the framing before fixing.
- 15.2 Omega Light Roof Underlay may be installed horizontally or vertically at roof pitches 3° and above (refer to Paragraph 7.1 for further guidance). It must extend from the ridge and overhang the fascia board by 20-25 mm. Vertical laps must be no less than 150 mm wide. Horizontal laps must also be no less than 150 mm, with the direction of the lap ensuring that water is shed to the outer face of the underlay. End laps must be made over framing and be no less than 150 mm wide.
- 15.3 When fixing the product in windy conditions, care must be taken due to the large sail area created by wide roll widths.
- Any damaged areas of Omega Light Roof Underlay, such as tears, holes or gaps around service penetrations, must be repaired. Damaged areas can be repaired by covering with new material lapping the damaged area by at least 150 mm and taping, or by taping small tears.

#### Inspections

15.5 The Technical Literature must be referred to during the inspection of the Omega Light Roof Underlay installations.

## **Basis of Appraisal**

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

#### Tests

- 16.1 The following tests have been carried out on the Omega Light Roof Underlay in accordance with AS/NZS 4200.1: resistance to dry delamination, resistance to wet delamination, shrinkage, folding endurance, tensile strength, edge tear resistance, resistance to vapour transmission, resistance to water penetration and surface water absorbency. A range of these tests were completed before and after the Omega Light Roof Underlay was exposed to UV light.
- 16.2 The flammability index of Omega Light Roof Underlay has been evaluated in accordance with AS/NZS 1530.2.

#### Other Investigations

- 17.1 A durability opinion has been given by BRANZ technical experts.
- 17.2 An evaluation of the expected performance of Omega Light Roof Underlay in direct contact with metal roof cladding has been completed by BRANZ.
- 17.3 The practicability of installation of Omega Light Roof Underlay has been assessed by BRANZ and found to be satisfactory.
- 17.4 The Technical Literature, including installation instructions, has been examined by BRANZ and found to be satisfactory.



### Quality

- 18.1 The manufacture of Omega Light Roof Underlay has not been examined by BRANZ, but details of the methods adopted for quality control and the control and the quality of the materials used, have been obtained and found to be satisfactory.
- 18.2 The quality of supply to the market is the responsibility of Siegware Australia Pty Ltd.
- 18.3 Building designers are responsible for the design of the building, and for the incorporation of the roof sarking into their design in accordance with the instructions of Siegware Australia Pty Ltd.
- 18.4 Quality of installation is the responsibility of the installer in accordance with the instructions of Siegware Australia Pty Ltd.

### Sources of Information

- AS 1530.2:1993 Test for flammability of materials.
- AS 3959:2018 Construction of buildings in bushfire-prone areas.
- AS/NZS 4200.1:2017 Pliable building membranes and underlays.
- National Construction Code 2022, Australian Building Codes Board.





In the opinion of BRANZ, Omega Light Roof Underlay 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 Siegware Australia Pty 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. Siegware Australia Pty 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 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 Siegware Australia Pty 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.
- BRANZ provides no certification, guarantee, indemnity or warranty, to Siegware Australia Pty Ltd or any third party.

For BRANZ

Claire Falck

Chief Executive

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04 March 2024