

This product Certificate is issued under Section 269 of the Building Act 2004 for:

Thermakraft Covertek 403 Plus Roof Underlay JAS-ANZ

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Product Description

Thermakraft Covertek 403 Plus Roof Underlay is a synthetic, fire retardant, absorbent, breathable building underlay for use under roof claddings. The product consists of a micro-porous water resistant film ultrasonically bonded between two layers of non woven spun-bonded polyolefin. Thermakraft Covertek 403 Plus Roof Underlay is coloured white on the top and bottom faces.

Product purpose and use

Thermakraft Covertek 403 Plus Roof Underlay has been assessed for use as a roof underlay on buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, (Amendment 8, 30 November 2018) Paragraph 1.1 with regards to building height and floor plan area; and,
- with either
 - o masonry tile roof cladding; or,
 - with metal tile roof cladding or
 - o profiled metal roof cladding; and,
- situated in NZS 3604-2011 Wind Zones up to, and including Extra High.

Thermakraft Covertek 403 Plus Roof Underlay is supplied in rolls 1.350 m wide x 18.6 m, 37.0 m and 55.0 m long. The product is printed with the Thermakraft Covertek 403 Plus logo repeated along the length of the roll. The rolls are wrapped in clear polythene film

Accessories used with Thermakraft Covertek 403 Plus 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.
- Roof underlay support polypropylene strap, or minimum 0.9 mm diameter galvanised steel wire mesh where required to support the roof underlay in accordance with NZBC Acceptable Solution E2/AS1, (Amendment 8, 30 November 2018), Paragraph 8.1.5.1. (Note: The mesh must be galvanised in accordance with AS/NZS 4534-2006.).

Certificate holder

| CodeMark Certification Body | Jen Hohas | 29/9/2016 | 1/7/2019 | 1/7/2022 | GM-CM30069- RevC |
|--|------------------------------------|---------------|-------------|-------------------------------|---------------------|
| Global-Mark Pty Ltd, Suite 4.07, 32 Delhi Road, North Ryde NSW 2113, Australia Tel: +61 (0)2 9886 0222 www.Global-Mark.com.au | Herve Michoux Managing Director | Date of issue | Last update | Date of next re-certification | Certificate Number |

The purpose of construction site audits is to confirm the practicability of installing the product; and to confirm the appropriateness and accuracy of installation instructions. In issuing this certificate, Global-Mark has relied on the independent expert and/or laboratory advise or reports. This certificate is issued by Global-Mark Pty Limited, an independent certification body accredited by the product certification accreditation body (JAS-ANZ) appointed by the Chief Executive of the Ministry of Business Innovation and Employment under the Building Act 2004. The Ministry of Business Innovation and Employment does not in any way warrant, guarantee, or represent that the building method or product the subject of this certificate conforms with the New Zealand Building Code, nor accept any liability arising out of the use of the building method or product. The Ministry of Business Innovation and Employment disclaims, to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages, and costs arising as a result of the use of the building method(s) or product(s) referred to in this certificate. This Certificate may only be reproduced in its entirety.

It is advised to check that this Certificate of Conformity is currently valid and not withdrawn, suspended or superseded by a later issue by referring to the Ministry of Business Innovation and Employment website, http://www.mbie.govt.nz/

New Zealand Building Code (NZBC) references the Building Code in force at the time of issuing the product certificate.

Certificate holder will notify Global-Mark Pty Ltd in accordance with Regulation 15 of the Building (Product Certification) Regulations 2008



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Thermakraft Limited

Compliance with the New Zealand Building Code (NZBC):

- Clause B2 DURABILITY: Performance B2.3.1(a), not less than 50 years, B2.3.1(b), 15 years and B2.3.2. Thermakraft Covertek 403 Plus Roof Underlay meets these requirements.
- Clause C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE: Performance C3.4 (c) Thermakraft Covertek 403 Plus Roof Underlay meets this requirement.
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. When used as part of the roof cladding system, Thermakraft
 Covertek 403 Plus Roof Underlay will contribute to meeting this requirement.
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Thermakraft Covertek 403 Plus Roof Underlay meets this requirement and will not present a health hazard to people.

Subject to the following conditions and limitations:

1. Maintaining the validity of BRANZ Appraisal No. 917 (2016) Amended 23 February 2017 Thermakraft Covertek 403 Plus Roof Underlay (the Appraisal) (refer to www.branz.co.nz).

Design and Installation Conditions:

1. General

Table 1: NZBC E2/AS1 (Amendment 8, 30 November 2018) Table 23 Requirements

| Roof Underlay Properties | Property Performance Requirement | Results |
|--------------------------|----------------------------------|---------|
| Absorbency | ≥ 150 g/m ² | Pass |
| Vapour Resistance | ≤ 7 MN s/g | Pass |
| Water Resistance | ≥ 100 mm | Pass |
| pH of Extract | ≥ 5.5 and ≤ 8 | Pass |
| Shrinkage | ≤ 0.5% | Pass |

Table 2: Mechanical Properties (Average)

| Roof Underlay Properties | Machine direction | Cross direction |
|--------------------------|-------------------|-----------------|
| Edge tear | 217 N | 104N |
| Tensile strength | 4.57 kN/m | 2.63 kN/m |



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Thermakraft Covertek 403 Plus Roof Underlay is intended for use as an alternative to conventional kraft paper roof underlays, which are fixed over timber or steel framed roofs in order to limit the entry of wind into the roof cavity, and to assist in the moisture management of the roof cladding system.

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.

Thermakraft Covertek 403 Plus Roof Underlay must not be exposed to the weather or ultra violet light for a total of more than 7 days before being covered by the roof cladding.

Thermakraft Covertek 403 Plus Roof Underlay is suitable for use under roof claddings on buildings as a roof underlay as called up in NZBC Acceptable Solution E2/AS1, (Amendment 8, 30 November 2018) Table 23. Refer to Table 1 and Table 2 for the material properties of Thermakraft Covertek 403 Plus Roof Underlay.

Thermakraft Covertek 403 Plus Roof Underlay is suitable for use at roof pitches 10° and above. At pitches 10° and above, Thermakraft Covertek 403 Plus Roof Underlay if supported by a corrosion resistant material can be installed vertically or horizontally and must span no greater than 300 mm in one direction. (Note: For roof pitches less than 10°, Thermakraft recommends the use of Covertek 407 Roof Underlay.)

2. Timber and Steel Framing

Timber and steel roof framing must be provided in accordance with the requirements of the NZBC and the roof cladding manufacturer.

3. Structure

Thermakraft Covertek 403 Plus Roof Underlay is suitable for use in all Wind Zones of NZS 3604-2011 up to, and including, Extra High.

4. Durability

Thermakraft Covertek 403 Plus Roof Underlay meets code compliance with NZBC Clause B2.3.1 (a), not less than 50 years for roof underlays used where the roof cladding durability requirement or expected serviceable life is not less than 50 years, e.g. behind masonry roof tile cladding, and code compliance with NZBC Clause B2.3.1 (b), 15 years for roof underlays used where the roof cladding durability requirement is 15 years.

5. Serviceable Life

Provided it is not exposed to the weather or ultra-violet 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, Thermakraft Covertek 403 Plus Roof Underlay is expected to have a serviceable life equal to that of the roof cladding.

6. Control of Internal Fire and Smoke Spread

Thermakraft Covertek 403 Plus Roof Underlay has an AS 1530 Part 2 – 1993 (including Amendment 1) flammability index of not greater than 5 and therefore meets the requirements of NZBC Acceptable Solutions C/AS2 to C/AS6 (July 2014), Paragraph 4.17.8 b), for the surface finish requirements of suspended flexible fabric used as an underlay to exterior cladding that is exposed to view in occupied spaces. It may therefore be used with no restrictions in all buildings.

7. Prevention of Fire Occurring

Separation or protection must be provided to Thermakraft Covertek 403 Plus Roof Underlay from heat sources such as fire places,



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heating appliances, flues and chimneys. Part 7 of NZBC Acceptable Solutions C/AS1 – C/AS6 Amendment 4 (1 January 2017) and NZBC Verification Method C/VM1 (Amendment 4 (1 January 2017) provide methods for separation and protection of combustible materials from heat sources.

8. External Moisture

Thermakraft Covertek 403 Plus Roof Underlay must only be used under roof claddings that meet the requirements of the NZBC, such as those covered by NZBC Acceptable Solution E2/AS1 (Amendment 8, 30 November 2018).

Thermakraft Covertek 403 Plus Roof Underlay, when installed in accordance with Thermakraft Covertek 403 Plus Synthetic Roof & Wall Underlay (J2902-04/16), will assist in the total cladding system's compliance with NZBC Clause E2.

9. Underlay Installation

Thermakraft Covertek 403 Plus Roof Underlay must be fixed at maximum 300 mm centres to all framing members with large-head clouts 20 mm long, 6-8 mm stainless steel staples, self drilling screws or proprietary underlay fixings. The membrane must be pulled taut over the framing before fixing.

Thermakraft Covertek 403 Plus Roof Underlay may be run vertically or horizontally at roof pitches greater than 10°. 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. To assist with achieving the correct lap dimension, Thermakraft Covertek 403 Plus Roof Underlay has a 150 mm lap line printed continuously along the top face.

When fixing the product in windy conditions, care must be taken due to the large sail area created.

Any damaged areas of Thermakraft Covertek 403 Plus 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.

10. Installation Conditions:

Shall be carried out by:

- A Licensed Building Practitioner with experience in roof cladding installation; or,
- By competent tradespersons with an understanding of roof underlay installation.

The installer shall also:

Comply with all relevant technical information relating to the products use, including information contained within Thermakraft Covertek 403 Plus Synthetic Roof & Wall Underlay (J2902-04/16) and the Appraisal.

End of record