

## **Thermakraft**

# COVERTEK 403

## Non self-supporting roof and wall underlay

Kingspan Thermakraft Covertek 403 is a fire retardant, light weight roof and wall underlay designed as a means of managing condensation, water vapour transfer and water ingress. Primarily developed as a roof underlay, Covertek 403 can also be used on walls if you are after a one stop solution. It is not self-supporting as a roof underlay and is a more affordable option where a supporting component is to be installed in the building.

#### Covertek 403 comes in three roll sizes:

| 1350mm wide | 18.6m long | 25m² coverage* |
|-------------|------------|----------------|
| 1350mm wide | 37m long   | 50m² coverage* |
| 1350mm wide | 56m long   | 75m² coverage* |

<sup>\*</sup> **Note:** m<sup>2</sup> is the roll size for actual coverage, allow for laps and joins.







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#### Scope of Use

#### **Roof Application**

- Suitable with masonry tile, metal tile and profiled metal roof cladding.
- Can be used on roofs up to and including NZS 3604:2011 'Extra High' wind zones.
- Covertek 403 requires underlay support (not selfsupporting).
- Will provide temporary weather protection during construction (maximum 7 days for roof application), same day coverage recommended.

#### **Wall Application**

- Can be used with timber and steel framing, either directly fixed or in conjunction with an 18mm minimum drained cavity.
- With absorbent wall claddings (e.g. timber, brick or fibre cement) or non-absorbent wall claddings (e.g. metal or plastic).
- Is suitable for use in all Wind Zones of NZS 3604:2011 up to, and including, 'Very High', when used as standalone flexible underlay, and 'Extra High' when used as a flexible underlay over a rigid wall underlay.
- Is suitable as an air barrier in unlined wall spaces.
- Will provide temporary weather protection during construction (maximum 42 days for wall application).

#### General

- Is fire retardant.
- Unaffected by LOSP or other solvent based treated timber. However, LOSP or other solvent based treated timber must have sufficient time for the solvent chemical to flash off in well ventilated area.
  Recommended minimum 7 days.
- Tear resistant and strong.
- Covertek 403 is not subject to a warning or ban under section 26 of the Building Act 2004 when used as per the product scope.

#### Limitations

- Cannot be exposed to the weather or UV for more than 7 days as a roof underlay and 42 days as a wall underlay.
- Can only be used as a Roof underlay on roofs of 10° pitch or greater.
- Must be used with underlay support products in roof application.
- Must not be used under translucent roof sheeting.
- Must NOT be left exposed in applications such as under unlined canopies, soffits and lean to designs.

#### Compliance

#### **Roof Application**

- Covertek 403 can be used as a roof underlay within the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1, with regards to building height and floor plan area.
- Refer to BRANZ Appraisal No. 917 and CodeMark certificate CMNZ30069 for full details.

#### Wall Application

- Covertek 403 can be used as a wall underlay within the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1, with regards to building height and floor plan area
- Refer to BRANZ Appraisal No. 917 and CodeMark certificate CMNZ30069 for full details.

#### Flammability Index

Covertek 403 Underlay has an AS 1530 Part 2:1993 Flammability Index of not greater than 5 and therefore meets the requirements of NZBC Acceptable Solution C/AS2, 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.

#### Durability

Meets the Performance Requirements of NZBC Clauses B2, Durability (B2.3.1 (a) 50 years, B2.3.1 (b) 15 years and B2.3.2), and F2.3.1, providing:

- It is not damaged.
- Is installed in accordance with instructions.
- Is not left exposed for more than 7 days (roof) same day coverage recommended.
- Is installed by or under guidance of Licensed Building Practitioners.
- Is compatible with cladding system used.\*
- \* **Note:** specifiers and product user must test for roof or wall cladding system compatibility with the underlay before installation.

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#### **Property Performance**

The following data represents the minimum pass rates required by the NZBC. This product tests well beyond the minimum standards. If you require actual performance results, please contact your local Kingspan Insulation representative.

| NZBC E2/AS1 Table 23<br>(NZS2295:2006) Roof Underlay | Absorbency | Vapour<br>Resistance | pH of<br>Extract | Shrinkage | Water<br>Resistance | Air<br>Resistance |
|--|------------|----------------------|------------------|-----------|---------------------|-------------------|
| Property Performance Requirement                     | ≥ 150gsm   | ≤ 7 MN.s/g           | ≥ 5.5 and ≤ 8    | ≤ 0.5%    | ≥ 100mm             | ≥ 0.1<br>MN.s/m3  |
| Property Performance                                 | Pass       | Pass                 | Pass             | Pass      | Pass                | Pass*             |

<sup>\*</sup> Note: Can be used as an air barrier.

#### Control of Condensation

In climatic regions where condensation risks are high, such as cold or high humidity areas, care needs to be taken in specifying the correct design and installation to prevent moisture build-up in the roof cavities.

Factors which adversely affect the condensation risk in roofing systems include:

- Humid, and/or cold climatic regions.
- Warm/Skillion roof construction.
- Low roof cavity air volume and restricted air movement.
- Omitting Vapour Control Layers.
- Ceiling penetrations and entry of warm air into roof cavities.
- Occupancy activities which have high moisture loading on conditioned spaces.
- Low pitched roof.
- Bulk insulation.
- Building structures ability to naturally dry construction moisture.

Skillion and Warm Roof Construction are particularly sensitive to moisture accumulation and the design and installation of roof construction needs to take into account the higher condensation risks. Refer MRM Code of Practice for details.

For passive ventilation of the roof space, it is recommended that all roof underlays are terminated at the ridge, and if not it should be slit or slotted to allow for passive ventilation. (For further information refer to the NZ MRM Roofing Code of Practice).

#### **Product Warranty**

Standard Kingspan Insulation Warranty applies. Refer to Kingspan Insulation Warranty statement for further details. This is available online at **thermakraft.co.nz** or call **0800 806 595**.

#### Recycling and Waste

All of our synthetic and foil underlays are fully recyclable through saveBOARD™ New Zealand. For a recycling site nearest you, please contact

info@kingspaninsulation.co.nz or visit us at thermakraft.co.nz.







#### 0800 806 595 www.thermakraft.co.nz

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