

Thermakraft* COVERTEK 401

Self-supporting synthetic roof and wall underlay

Kingspan Thermakraft Covertek 401 is an affordable lightweight roof and wall underlay designed to keep water out and allow moisture to escape. Covertek 401 is a more affordable option if your project does not require a fire-retardant underlay. It is stable, shrink resistant, easy to handle and easy to install.

Covertek 401 comes in four roll sizes:

| Covertek 401 | 1350mm wide | 18.6m long | 25m² coverage* | |
|--------------|-------------|------------|----------------|--|
| Covertek 401 | 1350mm wide | 37m long | 50m² coverage* | |
| Covertek 401 | 1350mm wide | 55m long | 75m² coverage* | |
| Covertek 401 | 2700mm wide | 33.4m long | 90m² coverage* | |

^{*} **Note:** m² 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 or profiled metal roof cladding.
- Suitable for timber or steel framed buildings.
- Self-supporting in roof pitch application greater than or equal to 10 degrees (Refer to installation guide)
- Will provide temporary weather protection during construction (maximum 7 days), same day coverage recommended.
- Covertek 401 may be installed during adverse conditions (rain/snow) without affecting durability or performance.
- Suitable for use under dark coloured roofs.

Wall Application

- Can be used with timber and steel framing, either direct or in conjunction with an 18mm minimum drained cavity.
- Suitable with absorbent (e.g. timber, brick or fibre cement) or non-absorbent wall claddings (e.g. metal or plastic).
- Suitable with masonry veneer in accordance with NZBC Acceptable Solution E2/AS1 or NASH Building Envelope Solutions.
- Is suitable for use in Wind Zones of NZS 3604 up to and including 'Very High' when used as a 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 some temporary weather protection during construction (maximum 60 days for wall application).

General

- Covertek 401 is NOT 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 a well ventilated area. Recommended minimum 7 days.
- Tear resistant and strong.

Limitations

- Must NOT be exposed to the weather or UV for more than 7 days as a roof underlay and 60 days as a wall underlay.
- Must NOT be used under translucent sheeting.

Compliance

Roof Application

- The scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1, with regards to building height and floor plan area.
- Situated in NZS3604 Wind Zones up to, and including, 'Extra High' (ROOF ONLY).
- Refer BRANZ Appraisal No 943 (2021) for full details.

Wall Application

- 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.
- Or within the scope limitations of NASH Building Envelope Solutions, Paragraph 1.1 for steel framed buildings.
- Refer BRANZ Appraisal No 943 (2021) for full details.

Durability

Contributes to meeting the Performance Requirements of NZBC Clauses B2, Durability (B2.3.1 (a) 50 years, B2.3.1 (b) 15 years and B2.3.2), E2 External Moisture E2.3.2), and F2 Hazardous Building Materials 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 not left exposed for more than 60 days (wall).
- Is installed by or under guidance of Licensed Building Practitioners.
- Is compatible with cladding system used.*
- * **Note:** specifiers and product users must test for roof cladding system compatibility with the underlay before installation.

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.

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- 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 to the NZ Metal Roof and Wall Cladding Code of Practice (COP) 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 Metal Roof and Wall Cladding COP).

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**.

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 (NZS2295) Roof and Wall underlay Properties | Absorbency | Vapour Resistance | pH of Extract | Shrinkage | Water Resistance | Air Resistance |
|---|------------|----------------------|------------------|-----------|---------------------|-------------------|
| Property Performance Requirement | ≥ 150gsm | ≤ 7 MN.s/g | ≥ 5.5 and ≤ 8 | | ≥ 100mm | ≥ 0.1 MN. s/m3 |
| Property Performance | Pass | Pass | Pass | Pass | Pass | Pass* |

* Note: Can be used as an air barrier.





0800 806 595 www.thermakraft.co.nz

Thermakraft and Ausmesh products are brought to you by Kingspan Insulation NZ Limited.

