Membranes





Thermakraft[®] Covertek[®] 407

Self-supporting Roof Sarking



- Medium duty roof sarking to keep your building dry, safe and thermally efficient
- Self-supporting
- NCC compliant
- Roof sarking for both residential and commercial Class 1 and Class 10 buildings
- Suitable for Class 2 to Class 9 buildings constructed with timber and steel framing in accordance with the BCA
- For use with masonry tile, metal tile and profiled metal roof cladding
- BRANZ Appraised
- Fire retardant





Product Data

Product Description

Constructed using a microporous water-resistant film sandwiched between two layers of spun-bonded polyolefin Kingspan Thermakraft Covertek 407 is fire retardant, absorbent and breathable. Kingspan Thermakraft Covertek 407 is designed as a means of managing condensation, water vapour transfer and water ingress in the most trying conditions including applications where roof pitch is 3 degrees and above.

Kingspan Thermakraft Covertek 407 comes in one standard roll size:

Product Code	Width	Length	Coverage
CT4071250040	1250mm wide	40m long	50m² coverage*

Cut to Length available – Contact your Kingspan Insulation representative.

* m² is the roll size for actual coverage, allow for laps and joins.

Scope of Use

Kingspan Thermakraft Covertek 407 can be used as a roof sarking on both residential and commercial buildings within the following scope.

- Class 1 and Class 10 buildings; and,
- Class 2 to Class 9 buildings subjected to specific weathertightness design; and,
- Constructed with timber and steel framing in accordance with BCA; and,
- With masonry tile, metal tile and profiled metal roof cladding; and,
- Situated in non-cyclonic wind zones up to, and including N3.
- Building designers are responsible for the building design and for the incorporation of Kingspan Thermakraft Covertek 407 roof sarking into their design in accordance with the declared properties and the instruction of Kingspan Insulation.
- Self-supporting Refer to installation instructions section regarding underlay support requirements.
- Not suitable for roof pitch less than 3 degrees.
- Will provide temporary weather protection during construction (maximum 28 days), same day coverage recommended.

General

- Low Flammability Index when tested to AS 1530.2:1993.
- 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

- Cannot be used as a wall wrap.
- Must not be exposed to the weather or UV for more than 28 days.
- Must not be used under translucent sheeting.

Compliance

Kingspan Thermakraft Covertek 407 is an alternative solution in terms of BCA compliance. Refer to BRANZ Appraisal No. 904 [2021] for further details. When Kingspan Thermakraft Covertek 407 roof sarking is used, installed and maintained in accordance with the statements and conditions outlined in Kingspan Insulation literatures and BRANZ appraisal, the product will contribute to meeting the following provisions of the BCA:

- BCA Volume 1 Class 2 to Class 9 Buildings Part F1 – Damp and Weatherproofing
- BCA Volume 2 Class 1 and Class 10 Buildings Part 2.2 - Damp and Weatherproofing

Full BCA compliance details can be found in BRANZ Appraisal No. 904 [2021].

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.
- Occupancy activities which have high moisture loading on conditioned spaces.
- Ceiling penetrations and entry of warm air into roof cavities.
- 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.

Durability

Kingspan Thermakraft Covertek 407 is expected to have a serviceable life equal to that of the roof cladding provided:

- It is not damaged.
- Installed in accordance with installation guide.
- Is not left exposed to the weather or UV for more than 28 days.
- Is compatible with roof cladding system used.*
- * Specifiers and product user must test for roof cladding system compatibility with the underlay before installation.

Installation Instructions

Application Method

Corrugated roofing:

Kingspan Thermakraft Covertek 407 can be direct fix or cavity fix and must be installed in a manner that prevents ponding of water and span no more than 1200mm.



Figure 1. Kingspan Thermakraft Covertek 407 direct fix.



Figure 2. Kingspan Thermakraft Covertek 407 cavity fix.

Long run metal roofing:



Figure 3. Wooden construction.



Long-run metal roofing/vertical or horizontal installation method

- Fix using stainless steel 8-12mm staples or 20mm flat head clouts, or appropriate proprietary fastenings on timber framed structure. Fixing at 300mm centres.
- Refer to table below to determine underlay support requirements.

		Underlay Support Required		
Roof Pitch	Span	Horizontally Installed	Vertically Installed	
≥ 10°	> 1200mm	Yes	Yes	
	≤ 1200mm	No	No	
< 10° (Min 3°)	> 1200mm	Yes	Yes	
	≤ 1200mm	No	Yes	

• Kingspan Thermakraft Covertek 407 upper sheet lapped over lower sheets (shiplap) to ensure water is shed to the outer face.

Note: Kingspan Thermakraft Covertek 407 can move downwards. To prevent this, it must be 'captured' by the fastenings at each purlin. Horizontal fix must not be used on purlin distance greater than 1100mm to allow for 150mm laps.

- Must be laid firmly (tight/taut) without creases. All laps either vertical or horizontal must be a minimum of 150mm lap.
- When sarking support is required, Kingspan recommend using Kingspan Ausmesh Roof Safety Mesh.

Note: Commercial Buildings may require the use of Safety Mesh under Kingspan Thermakraft Covertek 407. Kingspan Thermakraft Covertek 407 can be installed above the battens or purlins for profiled metal roof claddings and otherwise in accordance with BCA.

- If required to achieve a lap seal, use Kingspan Thermakraft Aluband or Kingspan Thermakraft White General Purpose Tape.
- Kingspan Thermakraft Covertek 407 will provide temporary weather protection during construction (maximum 28 days), same day coverage recommended. Do not over expose the product for more than 28 days.
- Kingspan Thermakraft Covertek 407 may be unwound to the full length from the gutter to the ridge. However, when ridge ventilation is required Covertek 407 may be terminated or slit at the ridge purlin to allow a free passage of air.
- Kingspan Thermakraft Covertek 407 must not overhang the gutter line by more than 25 mm, or if eaves flashings are used, terminate on the upper side of the flashing.
- Flue penetrations must have a minimum distance of 50mm from Kingspan Thermakraft Covertek 407.

Figure 4. Steel construction.

Installation Instructions

 Kingspan Thermakraft Covertek 407 must be free of tears and punctures, fit tightly and be lap taped around all penetrations (except flue penetrations), to provide drainage for any condensation, or surface water from leaks.

Note: Do not use Kingspan Thermakraft Aluband on penetrations where Polybutene water pipes have been installed. Refer pipe manufacturers for instructions on sealing penetrations.

Concrete/metal tile roofing:

Tile roofing



Figure 5.



Figure 6.

Metal tile installation



Figure 7.

- Kingspan Thermakraft Covertek 407 must be laid over rafters prior to fixing the tile battens. The maximum span between rafters for Covertek 407 is 1200mm. Antiponding boards are recommended for Masonry tile roofs.
- Installed Kingspan Thermakraft Covertek 407 may be laid over the top of the antiponding boards and draped into the gutter by no more than 20mm.

Kingspan Thermakraft Covertek 407 must be installed by a competent tradesperson.

Application Tips

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.

Product Data

Property Performance

Properties AS/NZS 4200.1:2017	Moisture Shrinkage AS/NZS 4201.3:1994	Surface Water Absorbency AS/NZS 4201.6:1994	Water Vapour Resistance ASTM E96 Part B - 2016	Resistance to Water Penetration AS/NZS 4201.1:1994	Emittance AS/NZS 4201.5:1994	Flammability AS 1530.2:1993
Property Performance Requirement	≤ 0.5%	≥ 100 g/m2	≤ 7 MN s/g	≥ 100mm		≤ 5
Actual Property Performance	Pass	Pass	Pass	Pass		Pass
Classification					Non-reflective	Low
AS/NZS 4200.1:2017						

Properties - Edge Tear Resistance (Finch) and Tensile Strength AS/NZS 4200.1:2017	Actual Property Performance	Classification AS/NZS 4200.1:2017
Edge Tear Resistance (Finch) AS/NZS 4200.1:2017	Machine direction (average) > 247 N	Extra Heavy
	Cross direction (average) > 92 N	Extra Heavy
Tensile Strength	Machine direction (average) > 9.6 kN/m	Medium
AS 1301.448s:1991	Cross direction (average) > 4.0 kN/m	Extra Light

Other Information

Handling and Storage

Kingspan Thermakraft Covertek 407 must be handled with care to prevent damage such as tearing and roll deformation.

The product must be stored under cover well away from direct moisture, rainfall contact and sunlight (UV). Care should be taken not to stack other materials on top of the product.

Product Warranty

Standard Kingspan Insulation Warranty applies. Refer to Kingspan Insulation Warranty Statement for further details. This is available online at thermakraft.com.au or call 1300 247 235.

Contact Details

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