



SYNTHETIC ROOF UNDERLAY

Ideal for workshops & unlined sheds, where a white finish is required

Covertex 405 is a fire retardant, absorbent and breathable synthetic self-supporting roof and wall underlay. Constructed using a microporous water resistant film sandwiched between two layers of spun-bonded polyolefin. Designed as a means of managing condensation, water vapour transfer and water ingress in roof and wall applications.

ADVANTAGES

Roof

- » Suitable with masonry tile roof cladding.
- » Suitable with metal tile and profiled metal roof cladding.
- » Roof pitches 10° or greater Covertex 405 may be run vertically or horizontally without support.*
- » Roof pitches below 10° Covertex 405 may be run horizontally without support.
- » Must be supported* if run vertically below 10°. Minimum roof pitch 3°.
- » Will provide temporary weather protection during construction (roofs 7 days), same day coverage recommended.
- » May be installed in rain.
- » May be run to any length.
- » Suitable for use under dark coloured roofs.
- » Has a 150mm lap line printed on each edge.
- » Can be used on roofs up to and including NZS 3604 Extra High wind zones.

General

- » Is fire retardant*.
- » Unaffected by LOSP treated timber.
- » Recyclable with no VOC's.
- » Tear resistant and strong.



*Refer technical specifications



Thermakraft Covertek 405

Fire Retardant | Breathable | Absorbent | Non Woven | Underlay

INSTALLATION PROCEDURES

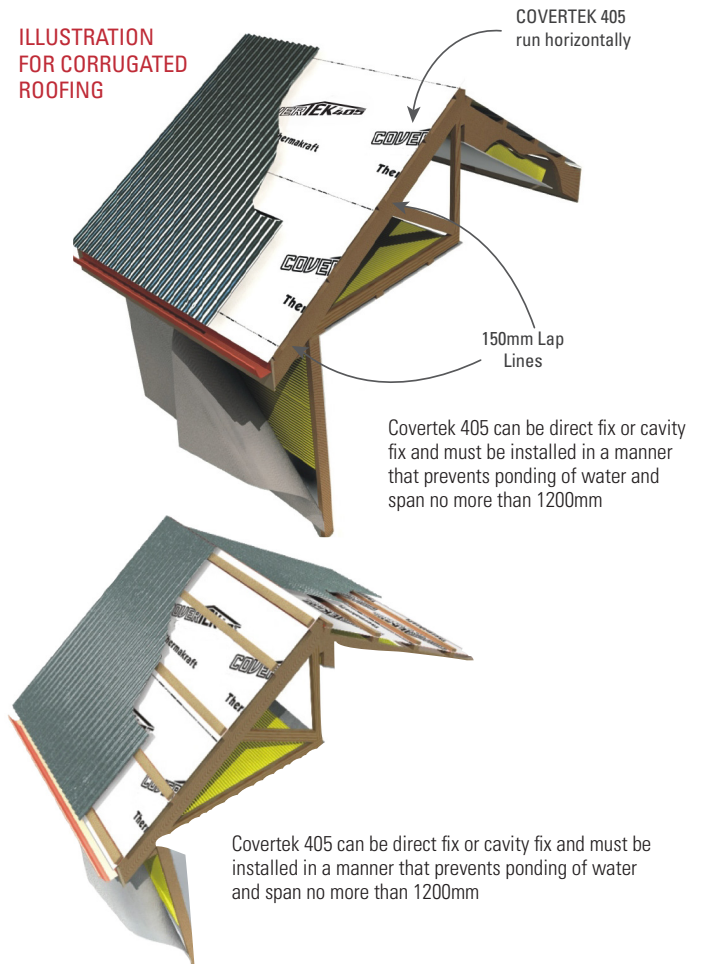
LONG-RUN METAL ROOFING / VERTICAL OR HORIZONTAL INSTALLATION METHOD

1. Fix using stainless steel 8-12mm staples or 20mm flat head clouts, or appropriate proprietary fastenings.
2. Between 3° and 5° pitched roofs, Thermakraft recommends supporting Covertek 405 on Thermakraft Safety Mesh 300mm x 150m, or hexagonal netting 50mm or 75mm, and or, Thermastrap 201. Fix horizontally at 300mm centres.
3. If required to achieve a lap seal (refer to NZ Metal Roofing Code of Practice 4.3.8 and 4.3.9), use Thermakraft Aluband window sealing tape.
4. Covertek 405 may be unwound to the full length from the gutter to the ridge. However, when ridge ventilation is required Covertek 405 must be terminated at the ridge purlin to allow a free passage of air.
5. Flue penetrations must have a minimum distance of 50mm from Covertek 405 (refer to NZ Metal Roof and Wall Cladding Code of Practice 4.3.8).
6. Covertek 405 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.

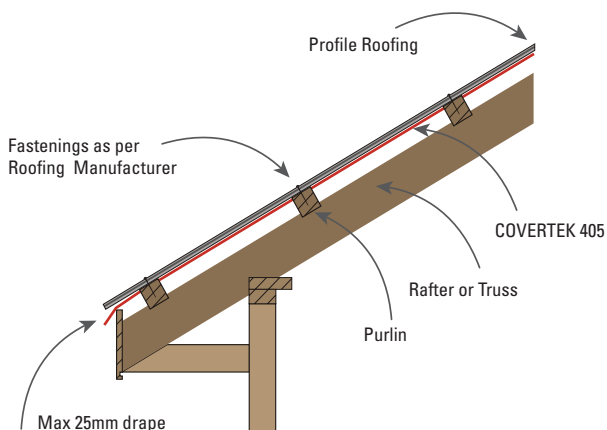
NOTE: Do not use Aluband on penetrations where Polybutene water pipes have been installed. Refer Pipe Manufacturers for instructions on sealing penetrations.

NOTE: Commercial Buildings may require the use of Thermakraft Safety Mesh under Covertek 405. Covertek 405 can be installed above the battens or purlins for profiled metal roof claddings and otherwise in accordance with NZBC E2/AS1.

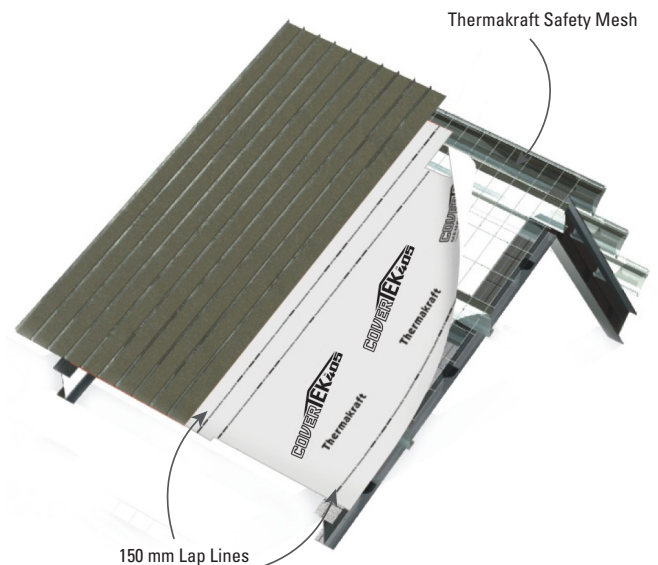
ILLUSTRATION FOR CORRUGATED ROOFING



LONG-RUN METAL ROOFING Wooden Construction



LONG-RUN METAL ROOFING Steel Construction



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INSTALLATION PROCEDURES

HORIZONTAL FIX

1. Covertek 405 upper sheet lapped over lower sheets (shiplap) to ensure water is shed to the outer face.

NOTE: Covertek 405 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.

CONCRETE / METAL TILE ROOFING

1. Covertek 405 must be laid over rafters prior to fixing the tile battens. The maximum span between rafters for Covertek 405 is 1200mm. Masonry tile roofs with pitches less than 17° must have antiponding boards in accordance with E2/AS1 Paragraph 8.2.5.
2. Installed Covertek 405 may be laid over the top of the antiponding boards and draped into the gutter by no more than 25mm. Antiponding boards must be treated in accordance with NZS 3604.

NOTE: Where overlap occurs under Tile Battens, minimum overlap may be reduced to 75mm.

CONCRETE / METAL TILE ROOFING

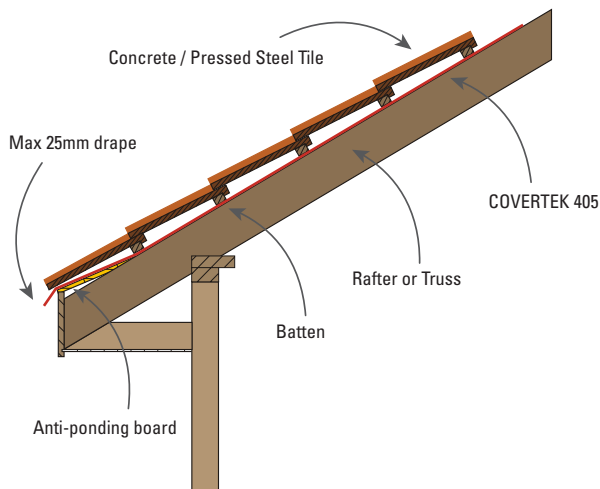
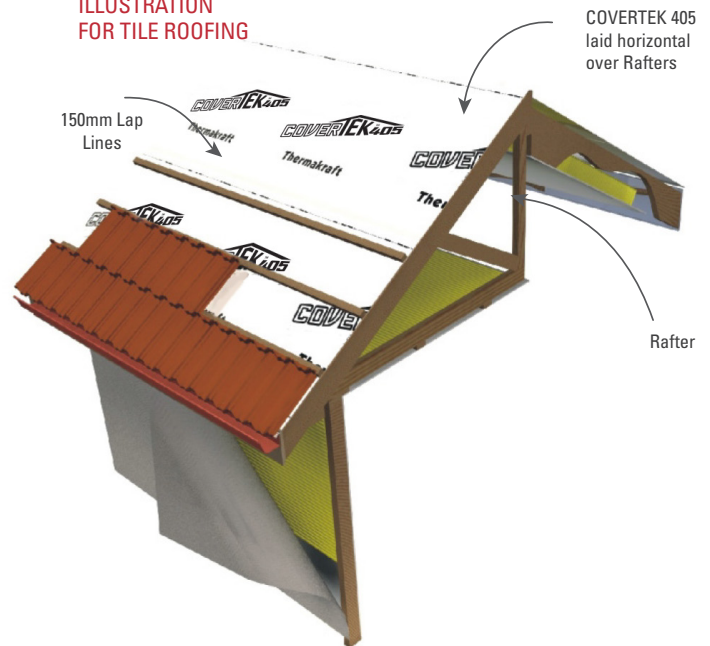
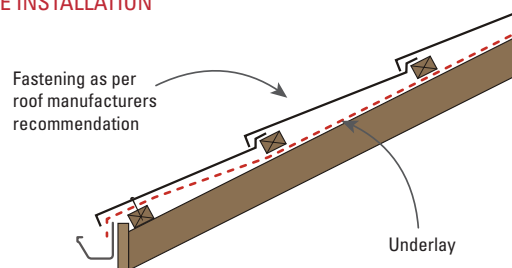


ILLUSTRATION FOR TILE ROOFING



METAL TILE INSTALLATION



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TECHNICAL SPECIFICATION

Can be used as an underlay on timber and steel framed buildings within the following scope:

- » The scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1, with regards to building height and floor plan area; and,
- » With masonry tile roof cladding; and
- » With metal tile and profiled metal roof cladding; and,
- » Situated in NZS3604 Wind Zones up to, and including Extra High (ROOF ONLY).
- » Roof pitches 10° or greater Covertek 405 may be run vertically or horizontally without support. At very low pitches support is recommended.*
- » Roof pitches below 10° Covertek 405 may be run horizontally without support, if run vertically it must be supported.* Minimum roof pitch 3°.
- » Refer BRANZ Appraisal No 743 (2011) for full details.

Flammability Index

Thermakraft Covertek 405 Underlay has an AS 1530 Part 2 Flammability Index of not greater than 5 and therefore meets the requirements of NZBC Acceptable Solutions C/AS2 to C/AS6, 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.

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), C3 Fire affecting areas beyond the fire source C3.4 (c) E2 External Moisture, and F2 Hazardous Building Materials F2.3.1/C, 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.

Table 1: NZBC E2/AS1 underlay requirements

NZBC E2/AS1 TABLE 23 (NZS2295) WALL UNDERLAY PROPERTIES	PROPERTY PERFORMANCE REQUIREMENTS	PROPERTY PERFORMANCE
Absorbency	≥ 150gsm	Pass
Vapour Resistance	≤ 7 MN.s/g	Pass
pH of Extract	≥ 5.5 and ≤ 8	Pass
Water Resistance	≥ 100mm	Pass
Air Resistance	≥ 0.1 MN.s/m ³	

Roll Dimensions

WIDTH (MM)	LENGTH (M)	M ²
1250	20	25
1250	40	50

Made to length also available.

M² is the roll size for actual coverage, allow for laps and joins.

*The NZMRN CoP v.2.2 (an alternative solution) advises 8° as the minimum pitch for self-support underlays. Thermakraft products are suitable for installation within this guidance.

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 additional details and latest specifications www.thermakraft.co.nz



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