



**Thermakraft**  
**ONE WRAP**  
**SYSTEM**

10 Products - One system  
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## Installation Guide

# COVERTEK 403

### Non self-supporting roof and wall underlay

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.

### Product Usage

Covertek 403 is a synthetic roof and wall underlay designed as a means of managing condensation, and water ingress in roof applications. Constructed using a microporous water-resistant film sandwiched between two layers of spun-bonded polyolefin Covertek 403 is fire retardant, absorbent and breathable.

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# Installation Guide

## Roof Installation Guide

### Residential:

#### Roof Long-run metal/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. Fixing types and requirements for steel framed structure can be found in the MRM Code of Practice.
- Covertek 403 can be direct fix or cavity fix and must be installed in a manner that prevents ponding of water.
- Covertek 403 must be fully supported by Thermakraft Safety Mesh 300mm x 150mm, hexagonal netting or suitable strapping that satisfy the requirements of the MRM Code of Practice and NZBC.
- For roof pitches below 10°, Covertek 405 or 407 recommended.
- Covertek 403 upper sheet lapped over lower sheets (shiplap) to ensure water is shed to the outer face.

**Note:** Covertek 403 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 1200mm to allow for 150mm laps.

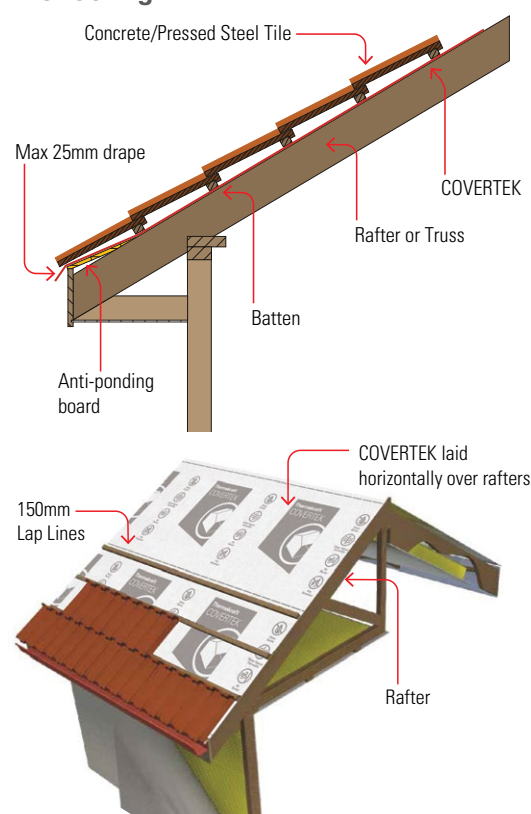
- Must be laid firmly (tight/taut) without creases. All laps either vertical or horizontal must be a minimum of 150mm lap.
- Covertek 403 will provide temporary weather protection during construction (maximum 7 days), same day coverage recommended. DO NOT over expose the product for more than 7 days.
- Covertek 403 may be unwound to the full length from the gutter to the ridge. However, when ridge ventilation is required Covertek 403 may be terminated or slit at the ridge purlin to allow a free passage of air.
- Covertek 403 must NOT overhang the gutter line by more than 20 mm, or if eaves flashings are used, terminate on the upper side of the flashing. More details can be found in the MRM Code of Practice.
- Flue penetrations must have a minimum distance of 50mm from Covertek 403 (refer to NZ Metal Roof and Wall Cladding Code of Practice 10.11.5).
- Covertek 403 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.

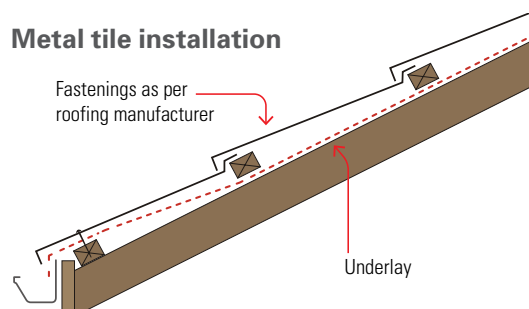
### Concrete/Metal tile roofing

- Covertek 403 must be laid over rafters prior to fixing the tile battens. The maximum span between rafters for Covertek 403 is 1200mm. Masonry tile roofs must have antiponding boards in accordance with NZBC E2/AS1.
- Installed Covertek 403 may be laid over the top of the antiponding boards and draped into the gutter by no more than 20mm. Antiponding boards must be treated in accordance with NZS 3604.
- Can be installed above the battens or purlins for profiled metal roof claddings and otherwise in accordance with NZBC E2/AS1.
- Covertek 403 must be installed by a licensed building practitioner.

#### Tile roofing

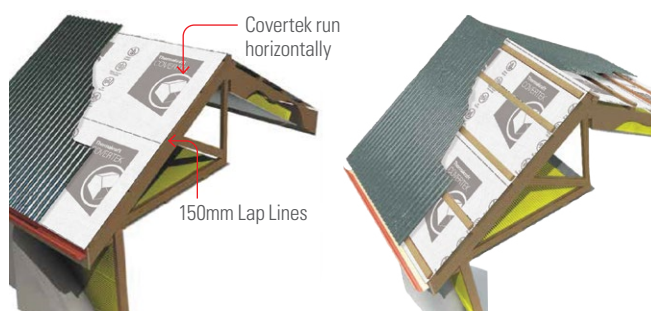


#### Metal tile installation



# Installation Guide

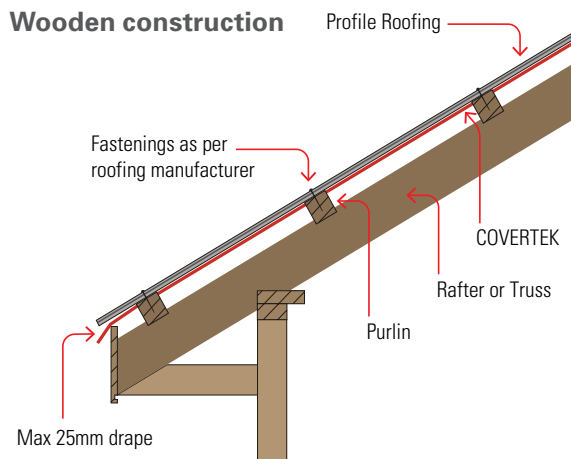
## Corrugated roofing:



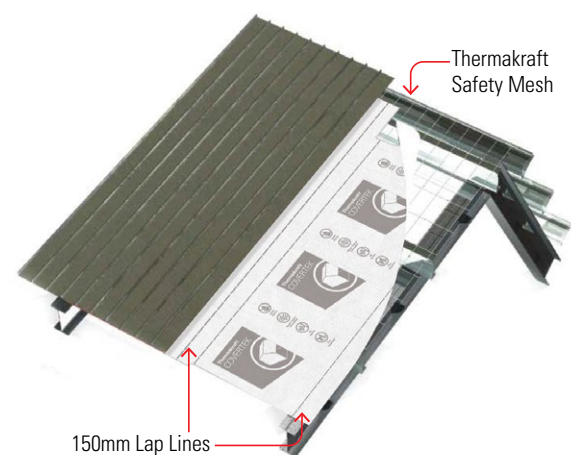
Covertek 403 can be direct fix or cavity fix and must be installed in a manner that prevents ponding of water and span no more than 1200mm.

## Long run metal roofing:

### Wooden construction



### Steel construction



## Wall Installation Guide

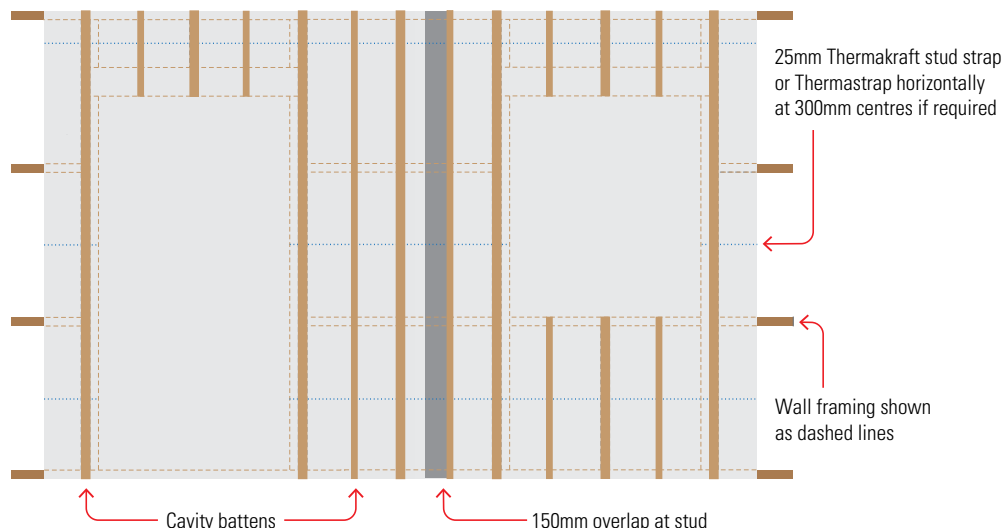
- Fix Covertek 403 underlay with printed side facing the exterior.
- Fix to all exterior walls from below bearers to the top plate. Pull the Covertek 403 underlay tight and fix securely to the frame with fasteners such as galvanized Little Grippers, 6mm-8mm staples or 20mm large head galvanized clouts at 300mm centres horizontally and vertically. Additional fasteners should be used around each opening to be cut out. Fixing types and requirements for steel framed structure can be found in the MRM Code of Practice.
- When fixing Covertek 403 underlay to Steel framing the same procedures applies, use adhesive spray or tape or flat head screws to fasten to the framing or thermal break, the exterior cladding fastenings will act as the permanent fixings.
- Cover all windows and door openings with Covertek 403 underlay.
- It is recommended that the Covertek 403 underlay is not cut and prepared for window installation until the arrival of the windows. minimum of 150mm lap is required at joins, all vertical laps must be made over studs. Horizontal laps to be laid ship lap style allowing water to be shed to the outer face of the membrane.
- When windows and doors are ready for installation, the Covertek 403 underlay covering the openings should cut at 45° and folded into the opening and securely fastened. Thermakraft window flashing tapes are recommended as the window flashing system.
- NB. In accordance with NZBC Acceptable Solution E2/AS1, wall underlay must be prevented from bulging into the drained cavity. Where stud spacing is greater than 450mm Thermakraft stud strap run horizontal at 300 centres is an acceptable means of prevention.
- Once installed, Covertek 403 must not be left exposed to the weather or UV for a maximum of 42 days. Covertek 403 underlays will provide temporary weather protection during construction allowing work to continue. Internal linings and insulation must not be installed until the exterior cladding is completed.
- Fastenings behind Brick Veneer Cladding must have an equivalent service life to that of Brick Veneer (50 years). Refer to NZS 3604.

Continued over...



## Installation Guide

- Make good any forced tears with Thermakraft window flashing tapes. Any large areas which require repair may be covered with a second layer of underlay, a lap of 150mm is required.
- Covertek 403 underlay must be installed by a licensed building practitioner.



### 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.

## Handling and Storage

Covertek 403 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 stack other materials on top of the product.

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