

Installation Guide

THERMAKRAFT 213

Bituminous wall and roof underlay

Commonly referred to as "Building Paper" Thermakraft 213 is a kraft paper based bituminous building underlay suitable for use on roofs and walls in residential buildings. It is vapour permeable, meaning that liquid water from the outside is prevented from penetrating but water vapour from the inside can pass through and escape the building envelope. Thermakraft 213 is easy to install. It is water resistant, absorbent, breathable but NOT fire retardant.

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Application Method (Roofing)

Thermakraft 213 is a bituminous building underlay used on roofs in residential buildings.

- Thermakraft 213 can be used in direct fix or cavity fix for roof construction.
- Run NO longer than 10m.

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.
- Requires underlay support for all roof pitches
- Thermakraft 213 upper sheet lapped over lower sheets (shiplap) to ensure water is shed to the outer face.

Note: Thermakraft 213 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.
- When underlay support is required, Thermakraft recommend using AUSMESH Safety Mesh, AUSNET hexagonal netting or Thermastrap 201.
- Thermakraft 213 can be installed above the battens or purlins for profiled metal roof claddings and otherwise in accordance with NZBC E2/AS1.
- If required to achieve a lap seal (refer to NZ Metal Roofing Code of Practice), use Thermakraft Aluband window sealing tape or Thermakraft White General Purpose Tape.
- Thermakraft 213 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 in any roof applications.
- Thermakraft 213 may be unwound to the full length from the gutter to the ridge. However, when ridge ventilation is required Thermakraft 213 may be terminated or slit at the ridge purlin to allow a free passage of air.
- Thermakraft 213 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 Thermakraft 213 (refer to NZ Metal Roof and Wall Cladding Code of Practice 10.11.5).
- Thermakraft 213 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

- Thermakraft 213 must be laid over rafters prior to fixing the tile battens. The maximum span between rafters for Thermakraft 213 is 1200mm. Masonry tile roofs must have antiponding boards in accordance with NZBC E2/AS1 Paragraph 8.2.5.
- Installed Thermakraft 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.
- Do NOT Run Thermakraft 213 longer than 10m in length.

Application Method (Wall)

- Fix Thermakraft 213 underlay with the lap line printed side facing the exterior.
- Fix to all exterior walls from below bearers to the top plate. Pull the Thermakraft 213 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 Thermakraft 213 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 Thermakraft 213 underlay.
- It is recommended that the Thermakraft 213
 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.

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 When windows and doors are ready for installation, the Thermakraft 213 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.

Note: 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, Thermakraft 213 must not be left exposed to the weather or UV for a maximum of 28 days. Thermakraft 213 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.
- 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.
- For wall cavity systems where stud spacings are greater than 450mm centres, another means of restraint is required on the flexible underlay to prevent insulation bulge (refer to E2/AS1).
- Thermakraft 213 underlay must be installed by a licensed building practitioner.

25mm Thermakraft stud strap or Thermakraft at 300mm centres if required Wall framing shown as dashed lines 150mm overlap at stud

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 well ventilated area. Recommended minimum 7 days.

Handling and Storage

Thermakraft 213 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.