**Insulation**New Zealand

# Installation Guide

# STEICO

Rigid wood fibre insulation boards for roof and walls



- Manufactured with wood fibres
- Water vapour permeable
- Ideal for new builds
- STEICO Rigid Insulation Boards store carbon
- Can reduce thermal bridging
- Available in tongue and groove edges for ease of installation
- STEICO Rigid Insulation Boards are produced in accordance to EN 13171:2012+A1:2015





# STEICO Product Description



STEICO Rigid Insulation Boards are made using wood fibres. The wood fibres undergo either the wet process or the dry process to form boards.

#### The product range includes:

- STEICO Universal
- STEICO Universal Dry

#### STEICO Universal

STEICO Universal is made using the wet process, where soaked wood fibres are formed into boards meaning the wood's own lignin binds the boards. These panels have higher density and more strength compared to boards made using the dry process.

#### STEICO Universal Dry

STEICO Universal Dry is made using the dry process, where the wood fibres are dried before forming boards, meaning a binder is added. These boards are lighter compared to STEICO Universal.



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## STEICO

## Installation Instructions

- The surface of all STEICO Rigid Insulation Boards is covered by a fine layer of lignin and fibre abrasion which is absorbed by draining water and may lead to marking on building components such as windows, plaster etc.
   To prevent this, install roof underlay and roof cladding as soon as possible.
- If draining water is likely to mark other building components, a controlled drainage of water should be installed.
- The printing on the board indicates the OUTWARD face of installation. The sanded side of the Rigid Insulation Board faces INWARDS. But both sides of the STEICO board drains water.

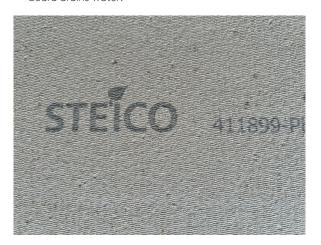


Figure 1. Image showing printed face of STEICO Universal Dry board

- A roof or wall underlay is required over the STEICO boards and should be installed using mechanical fixings.
- Once the roof or wall underlay is installed, follow the exposure time for the roof or wall underlay. For example, Thermakraft Covertek 403 has 7 days exposure as a roof underlay.
- The minimum required roof pitch is 3° and a roof underlay is to be installed immediately. A counter batten system is then installed to act as a roof ladder for trafficability.
- STEICO Rigid Insulation Boards are tread-resistant in the areas of support but in general must NOT be walked on.
- Before installing STEICO Rigid Insulation Boards the barges and eaves board must be applied to the roof structure.
- If a blunt joint is chosen between the barge and eaves board and STEICO Rigid Insulation Boards a watertight connection must be ensured between the board and the water conducting over the barge and eaves board. This connection is to be protected by a roof underlay.

#### Cutting

- STEICO Universal 22 mm can be cut with a suitable knife or a saw.
- STEICO Universal Dry 40 and 60mm can be cut with an electric saw.
- Use appropriate PPE such as dust mask and safety glasses when cutting STEICO Rigid Insulation Boards.
- Ensure STEICO Rigid Insulation Boards are cut to neatly abut other components or other boards.

#### Installation onto Roofs

- Rafters are to be maximum 900mm centres. Start
  installing the first row from the bottom left of the roof.
  The STEICO Rigid Insulation Boards are installed
  horizontally. The tongue points upwards and the
  printing faces to the outside.
- 2. Fix boards with screws or nails as a temporary hold until counter batten system is installed. Ensure there is enough space left for fixing the counter batten system.
- 3. Lay in an offset for the second row. For STEICO Universal 22mm thick, an offset ('A' in fig. 2 below) of 600mm is recommended, for all other thicknesses, an offset of at least 250mm is recommended. Ensure boards are well fitted together.

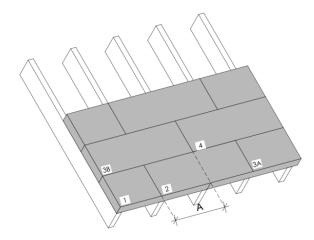


Figure 2. Offset between the rows of STEICO installed on the roof

4. STEICO boards will need to be cut to size to reach the roof ridge or roof apex. A mitre cut can be done so that the STEICO boards can meet at the ridge.

## **STEICO**

# Installation Instructions

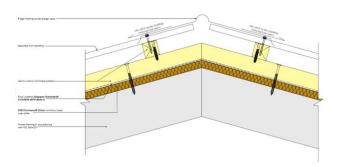


Figure 3. Mitre cut on the STEICO boards meeting at roof ridge

- Lay Thermakraft roof underlay horizontally with a minimum 150mm overlap. Fix using mechanical fixings, these are temporary fixings, until the counter batten system is installed.
- 6. Install counter batten system for trafficability as the STEICO is installed. The screws for the counter batten system form the permanent fixings for the STEICO boards and for the roof underlay. Make sure to refer to the cladding manufacturers guidance.

#### Installation onto Walls

- Wall studs are to be maximum 600mm centres. Start installing the first row from the bottom left of the wall. The STEICO Rigid Insulation Boards are installed horizontally. The tongue points upwards and the printing faces to the outside.
- Fix boards with screws or nails as a temporary hold until structural battens are installed. Ensure there is enough space left for fixing the structural battens.
- 3. Lay in an offset for the second row. For STEICO Universal 22mm thick, an offset ('A' in the diagram below) of 600mm is recommended, for all other thicknesses, an offset of at least 250mm is recommended.

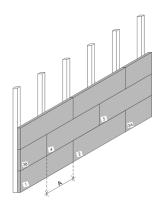


Figure 4. Offset between rows of STEICO on the walls

- 4. Lay Thermakraft wall underlay (e.g. Watergate Plus) horizontally with a minimum 150mm overlap. Fix using mechanical fixings, these are temporary fixings, until the structural battens are installed.
- 5. Windows openings should be cut from the STEICO Rigid Insulation Boards and left covered by the wall underlay until windows are ready to be installed. The join between two STEICO boards should not coincide with the edge of the window as per standard practice.
- Install structural battens on top of the STEICO boards, make sure to refer to the cladding manufacturers guidance. The screws for the structural battens form the permanent fixings for the STEICO boards and for the wall underlay.

Project specific fixing information is available through Kingspan Technical technical@kingspaninsulation.co.nz or call 0800 806 595.

#### Handling and Storage

Ideally, boards should be stored inside a building. If, however, outside storage cannot be avoided, then the boards should be stacked clear of the ground and covered with a polythene sheet or weatherproof tarpaulin. Boards that have been allowed to get wet should NOT be used.



#### **Product Warranty**

Standard Kingspan Insulation Warranty applies. Refer to Kingspan Insulation Warranty statement for further details. This is available online at <a href="mailto:kingspaninsulation.co.nz">kingspaninsulation.co.nz</a>; or call us on **0800 806 595**; or email <a href="mailto:info@kingspaninsulation.co.nz">info@kingspaninsulation.co.nz</a>

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