

## NON-FIRE RETARDANT, SELF-SUPPORT, SYNTHETIC ROOF UNDERLAY

## **OVERVIEW**

DriStud RU22 is a non-fire retardant, self-supporting synthetic roof underlays intended to be used as an alternative to conventional kraft based roof underlays.

Once installed, these underlays serve as a secondary protective layer for roof framing, enhancing weather resistance. Additionally, they provide an air-impermeable barrier behind the roof cladding. These layers play a crucial role in the internal moisture management systems for roofs and roof cavities.



## **ROLL SIZES**

1250mm x 40.0m (50m<sup>2</sup>)









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**SCOPE OF USE** 

RU22 & RU24 is designed for use in lined buildings and dwellings, including residential, commercial, and office roofs.

LIMITATIONS OF USE

For unlined structures, RU22 & RU24 should only be installed in areas where it is not exposed to UV or reflected UV light and must be kept away from fumes. The DriSpace warranty does not cover unlined structures with UV or fume exposure.

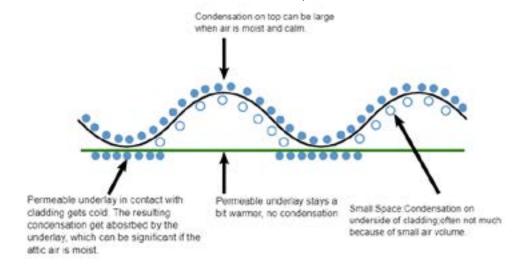
DriStud RU22 underlay must NOT be installed where Fire Retardant underlay is specified.

For further details, refer to the MRM code of practice or consult with industry experts or designers.

ROOF CAVITY CONDENSATION MANAGEMENT Inadequate passive roof ventilation can lead to moisture-related problems, including mould and mildew growth within the roof cavity. To ensure proper airflow, it is highly recommended to use proven VENT NZ systems. Additionally, it is advisable to seperate the underlay from the roof cladding with a 10mm VB10 ventilation and drainage batten or a drainage mat, to prevent condensation related dripping caused by dew point.

Refer to <u>DriSpace Moisture Management Design Guide</u> for more passive roof ventilation details.

MRM Code of Practice v24.03 - 10.11A Roof Cavity Condensation





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### **WIND ZONES**

Suitable in Wind Zones up to and including "Extra High" as defined in Section: 5, NZS 3604: 2011.

## OVERLAPS/ SUPPORT

Printed imagery on all DriStud Roof Underlays must be facing outward with the minimum number of overlaps as possible. A minimum lap of 150mm is required for both vertical and horizontal overlaps. Upper sheets must be lapped over the lower sheets to ensure water is shed to the outer face of the underlay. DriStud RU22 underlay must not span more than 1.2m between adjacent supports.

### **INSTALLATION**

DriStud RU22 underlay will provide temporary weather protection for up to 7 days and can be exposed to wet weather during installation. DriStud RU22 must be supported on netting or safety mesh if used:

- On roof pitches less than 10° with vertical installation.
- If the support spacing is greater than 1200mm.

### **FIXINGS**

DriStud RU22 underlay must be fixed at maximum 300mm centres to all framing members with either 6-8mm staples or 20mm long large head clouts, or proprietary underlay fixings. If metal roof cladding is directly fixed straight onto the underlay, its fixings can replace the underlay fixing requirements.

# ROOF PITCHES >10°:

If installing on a roof with a pitch greater than 10° then DriStud roof underlays may be installed either horizontally or vertically.

# ROOF PITCHES ≤10°:

If the roof pitch is less than 10° self-support roof underlays can be installed horizontally an vertically. Horizontal installation is recommended over vertical installation where possible.

For vertical installation under 10° pitch roof, DriStud RU22 underlay must be installed over a supporting netting or equivalent system on a minimum side lap of 150mm. The netting and underlays must be installed flat and taut to ensure condensation will drain to the gutter. If any doubts vertical laps are recommended to be sealed with 75mm wide DriStud Cool Window Flashing Tape or DriStud Joining Tape to ensure it.

As an alternative solution, DriStud RU22 underlay may run horizontally with the higher layers sitting on top of the lower layers down to roof pitches of minimum 3° without supporting netting. The underlay must be installed flat and taut to ensure condensation will drain to the gutter. At the eaves, the roof underlay should be laid over the top of the fascia and project 20–33mm into the gutter.



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LONG RUN
PROFILED METAL
ROOF CLADDING

DriStud RU22 underlay must be installed over the purlins by fixing to the purlins on both edges by the roof fastenings. For horizontal laying, underlay must fit tightly and be lap-taped around all penetrations to provide drainage for condensation, and be free of tears, rips, and punctures. The purlin spacing must be 150mm less than the width of the underlay. If it exceeds this spacing it must be laid vertically.

COLD ROOF DESIGN RECOMMENDATIONS: INSTALLED UNDER LONG RUN METAL ROOFING When roof underlays are in contact with roof cladding, it gets cold. Its absorbent properties effectively manage condensate. However, without passive ventilation it can lead to moisture issues including mould and mildew growth in the roof cavity. For tray roofs, it is highly recommended the underlay is seperated from the roof cladding using 10mm VB10 ventilation & drainage batten or Drainage Mat to defer dew point condensation from the roof cladding.

- Have a minimum air gap of 25mm between the underlay and any insulation.
- Use sufficient ventilation for air flow to minimize interstitial condensation.
- Use air gap between the metal cladding and synthetic underlays where condensation risks are high

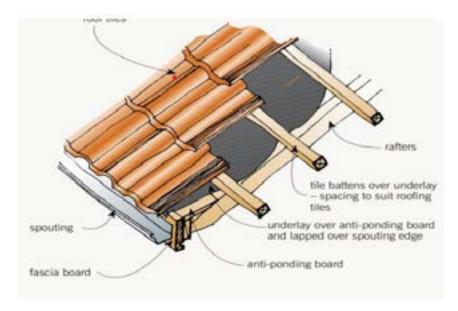
WARM ROOF DESIGN RECOMMENDATIONS: USED IN CONJUNCTION WITH PIR INSULATION

- DriStud RU22 has been designed to be installed directly on PIR insulation within warm roofing systems. There is no requirement for a 25mm air gap between the underlay and insulation when a correctly designed vapour control layer is used in the correct location within the warm roofing system.
- When a vapour control layer is not being used within a warm roofing system, a ventilation gap is required, since internal moisture may migrate into the roofing system.

CONCRETE AND METAL TILE ROOF CLADDING

DriStud RU22 must be installed under the battens but over the rafters/top truss chords. Anti-ponding boards should be installed at the eaves to prevent the underlay sagging with a minimum fall of 5°.

Installation Under Concrete and Metal Tile Roof





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#### WHO CAN INSTALL

Where DriStud roof underlays are used for new construction or in connection with a building consent the work should be undertaken or supervised by a Licensed Building Practitioner (LBP) where restricted building work applies. Alternatively, the installer shall have the suitable skills when installing DriStud roof underlays.

#### **SAFETY**

- The installer shall take all precautions to reduce work hazards.
- The installer of DriStud roof underlays is required to comply fully with Health and Safety in Employment Act 2002.
- Appropriate clothing, safety footwear and hand and face protection must be used in all cases.
- Safety scaffold and barriers must comply with the requirements of the Health and Safety in Employment Act 2002.

### **MAINTENANCE**

DriStud roof underlays do not require any maintenance but when exposed through removal or roof cladding, the underlays must be inspected, and any damaged areas repaired or replaced.

### **WARRANTY**

TCL Hunt Ltd warrants that all DriStud roof underlays will be free from manufacturing defects. Upon receiving DriStud roof underlays, it is recommended that a visual check is made. Where defects are observed, these will be replaced at the discretion of TCL Hunt, provided they are returned to point of purchase. If installed in accordance with TCL Hunt installation requirements, TCL Hunt warrants that DriStud roof underlays will comply all relevant provisions of the NZ Building Code. DriStud FRU38 roof underlay will have a serviceability life equal to that of the roof cladding provided that:

- The balance of the external wall is installed in accordance with the NZ Building Code, and,
- All necessary maintenance is undertaken in respect of the external wall system.

Please refer to DriSpace website www.drispace.co.nz for more information on warranty and disclaimer.

