



DRISTUD FRU38 ROOF UNDERLAY

FIRE RETARDANT, SELF-SUPPORT, SYNTHETIC UNDERLAY

OVERVIEW

DriStud FRU38 is a heavy duty, fire retardant, vapour permeable, self-supporting synthetic roof underlay. It can also be used as a wall underlay.

Once installed, this underlay serves as a secondary protective layer for roof framing, enhancing weather resistance. Additionally, it provides 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 (50m²)
- 2500mm x 40.0m (100m²)

REV 4.0 SEPTEMBER 2024

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SCOPE OF USE

FRU38 roof underlay is designed for use in lined buildings and dwellings, including residential, commercial, and office roofs.

LIMITATIONS OF USE

FRU38 should only be installed in areas where it is not exposed to UV or reflected UV light and must be kept away from fumes. DriSpace voids the warranty for unlined structures.

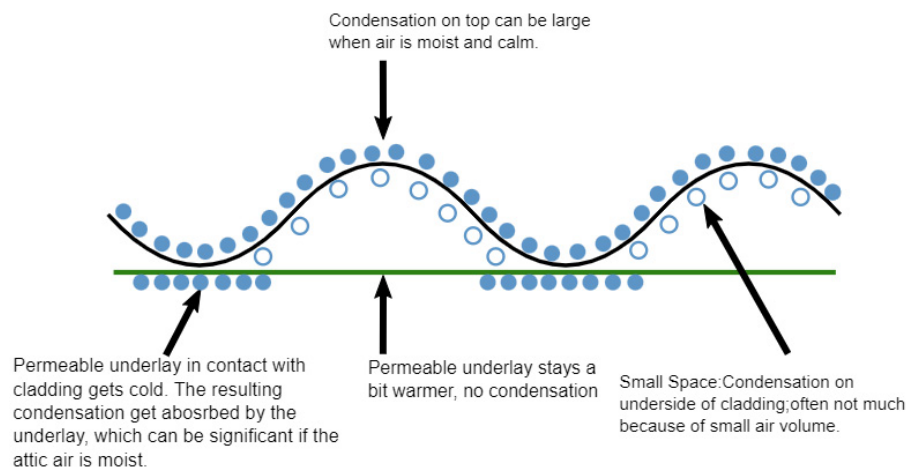
For further details, refer to the MRM code of practice or consult with industry experts or designers.

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 separate 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 [DriSpace Moisture Management Design Guide](#) for more passive roof ventilation details.

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



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ROOF UNDERLAY APPLICATIONS

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. When overlapping is unavoidable with both vertical and horizontal applications; a minimum lap of 150mm is required. Upper sheets must be lapped over the lower sheets to ensure water is shed to the outer face of the underlay. DriStud FRU38 must not span more than 1.2m between adjacent supports.

INSTALLATION

DriStud FRU38 will provide temporary weather protection for up to 21 days, we suggest the roof cladding is installed the same day where possible. DriStud FRU38 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 FRU38 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 roofs pitch is less than 10° self-support roof underlays can be installed horizontally and vertically. Horizontal installation is recommended over vertical installation where possible. For vertical installation under 10° pitch roof, DriStud FRU38 must be installed over a supporting netting or equivalent system on a minimum side lap of 150 mm.

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 FRU38 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 20-30 mm into the gutter.

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ROOF UNDERLAY APPLICATIONS

LONG RUN PROFILED METAL ROOF CLADDING

DriStud FRU38 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 separated from the roof cladding using 10mm VBI0 ventilation and drainage batten or Drainage mat to defer the 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.

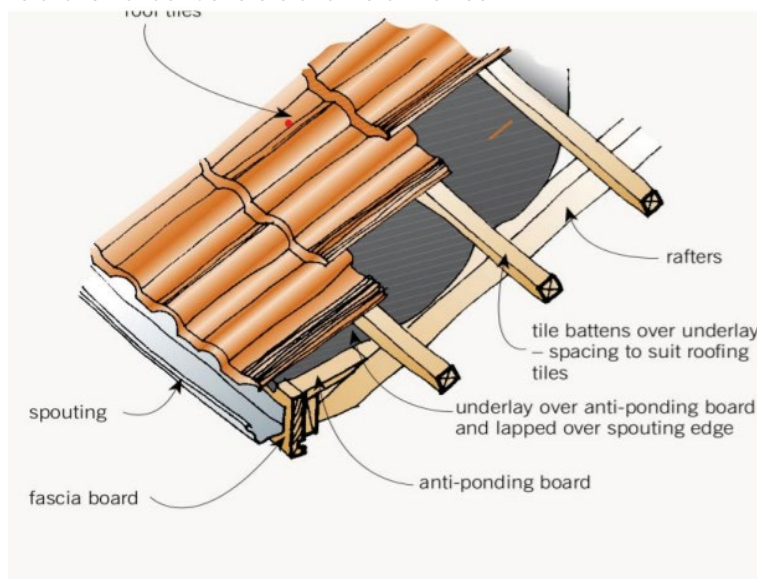
WARM ROOF DESIGN RECOMMENDATIONS: USED IN CONJUNCTION WITH PIR INSULATION

- DriStud FRU38 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 FRU38 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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WALL UNDERLAY APPLICATIONS

DriStud FRU38 is designed to be installed as a secondary protective weather resistant layer over exterior framing in accordance with NZBC, E2/AS1. When installing DriStud FRU38 the framing may either be timber or steel with absorbent and non-absorbent wall claddings direct fixed to framing.

WIND ZONES

DriStud FRU38 has been assessed as suitable for Wind Zones up to and including "Very High" when used as a flexible underlay and suitable for "Extra High" Wind Zones when used over a rigid wall underlay as defined in Table 5.4, NZS 3604:2011.

UV EXPOSURE

DriStud FRU38 can be exposed to UV for 21 days.

OVERLAPS/ SUPPORT

DriStud FRU38 can be installed horizontally and vertically with the printed side facing out. Horizontal laps should be overlapped no less than 75mm and vertical laps no less than 150mm. If possible, vertical laps should be over framing members or other solid backing. When horizontal laps are required, the upper sheet must overlap the bottom one to allow for moisture to run off. Where a drained cavity is to be installed, cavity battens in accordance with E2/AS1 are acceptable. Use VB20 vented battens as non-structural cavity battens. DriStud FRU38 must be installed in accordance with paragraph 9.7.1, E2/AS1.

FIXING FOR WALL UNDERLAYS MASONRY VENEER

The fixing should be suitable for the permanent installation of the wall underlay without any assistance from the cladding. Where the fixings are temporary, and the permanent installation relies on the cladding to hold the wall underlay on:

1. Fixing to timber framing – secure DriStud FRU38 to framing using clouts (>20mm) or staples (>8mm galvanized) at no greater than 300mm centres.
2. Fixing to steel framing – DriStud FRU38 can be secured to framing using double sided pressure sensitive tape or tek screws or similar as a temporary means of fixing until battens are installed.
3. Fixing to Rigid Air Barriers – Staples (>8mm galvanized) or double sided tape can be used as a temporary means of fixing. Fix the tape ends securely, particularly at any openings or doors or windows or use fasteners such as galvanized Little Grippers around each opening to be cut out.
4. Stud Spacing/Batten Spacing greater than 450mm: Install DriStud FRU38 underlay as above and use 75mm galvanized mesh (AS/NZS 4534) or polypropylene tape at 300mm centres fixed horizontally and drawn taut before installing the cavity battens. As an alternative solution, if insulation sheet such as EPS or XPS is fixed to external framing and the sheet prevents insulation bulging out to the cavity, then polypropylene tape or mesh is not required.

INSTALLATION AROUND DOORS AND WINDOWS

The installer shall treat all wall openings (windows, electrical metres, etc) by cutting and folding the DriStud FRU38 underlay as per the WANZ guide to window installation (E2.AS1 Amendment 6). All other penetrations to be sealed as E2/AS1.

- Cover all openings with DriStud FRU38 underlay until the windows and doors are ready for installation.
- Ensure that the framing is dry and free from debris before applying the FRU38 underlay and dress into all sides of the openings. Cut underlay at 45° away from the corner. Fold the flaps tightly into the opening at secure to the framing on all sides. Trim off excess underlay after fixing.
- Install DriStud Cool Window Flashing Tape over the bottom sill trimmer and ensure it is a minimum of 200mm wider than the opening.
- Fit the flexible flashing tape to the inner edge with the outside edge extending a minimum of 100mm up each jamb.
- Ensure the tape is securely adhered to the underlay on all surfaces and fits tightly into each corner.
- Cut two more pieces of tape at least 200mm long to fit into each of the upper corners. Ensure the timber framing is covered.

REPAIRS

If torn or punctured, cover over the damaged area with additional wrap with a minimum of 150mm overlap. Tape small tears or rips.

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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.drisspace.co.nz for more information on warranty and disclaimer.

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