# HYDRA ROOF SPECIFICATION



# SYSTEM DESCRIPTION

HYDRA Roof Underlay is a premium Tri-laminate, Synthetic, Fire Retardant, Absorbent, Breathable, Self-Supporting roof underlay. Suitable for all roofing types including concrete and clay tiles, pressed metal tiles and profiled metal roofing.

#### FEATURES/BENEFITS

• HYDRA Roof Underlay is a breathable, selfsupporting Tri-laminate synthetic underlay

• HYDRA Roof Underlay can be used in all wind zones including up to and including Extra High.

• HYDRA Roof Underlay is flame retardant with a Flammability Index of ≤5 as per AS1530 Part 2.

• HYDRA Roof Underlay can be exposed to direct UV for 14 days.

• HYDRA Roof Underlay offers GripSpot technology which provides a slip resistant walking surface.

• HYDRA Roof Underlay has HYDRY Technology which prevents moisture from penetrating the roof space at the same time helps release trapped moisture.

• HYDRA Roof Underlay is suitable with pressed metal & masonry tiles.

• HYDRA Roof Underlay is suitable with profiled metal roofing.

• HYDRA Roof Underlay is suitable on timber & steel frame.

• HYDRA is not affected by LOSP & other solvent based timber treatments. However, LOSP or other timber treatments must have sufficient time for the chemicals to flash off in a well-ventilated space before installation. Refer to industry standards.

• HYDRA Roof Underlay is BRANZ appraised #1071 (2019).

• HYDRA Roof Underlay forms part of the Marshall Weatherization System BRANZ appraised #621 (2020).

# INSTALLATION GUIDE Profiled Metal Roofing

HYDRA Roof Underlay must be fixed at maximum 300mm centres to all framing members with either large-head clouts 20mm long, 6-8mm stainless steel staples, self-drilling screws or proprietary underlay fixings.

HYDRA Roof Underlay must be laid taut without any creases, tears or punctures.

HYDRA Roof Underlay may be run horizontally with the direction of the lap ensuring that water is shed to the outer face of the underlay. The roof underlay must extend from the ridge and overhang the fascia board by 20-25mm or finish on top of the eaves flashing.

HYDRA Roof Underlay may be run vertically from the ridge to the gutter with no maximum run length. Where ridge ventilation is required, HYDRA must be terminated at the ridge purlin to permit the free passage of air.

Vertical or horizontal side laps must be no less than 150mm. End laps must be made over framing and be no less than 150mm wide.

If a lap seal is required use SUPER-STICK Building Tape.

When fixing HYDRA in windy conditions, care must be taken due to the large sail area created.

HYDRA will provide temporary weather protection during construction (maximum 14 days) however same day coverage is recommended.

Flue penetrations must have a minimum distance of 50mm from HYDRA Roof Underlay as per NZ Metal Roof & Wall Cladding Code of Practice 10.11.5

Any damaged areas of HYDRA Roof Underlay, such as tears, holes or gaps around service penetrations, must be repaired. Damaged areas can be repaired by covering with new material lapping the damaged area by at least 150mm and taping, or by taping small tears with SUPER-STICK Building Tape.



#### CONCRETE / METAL TILE ROOF

HYDRA must be laid over the rafters prior to the fixing of the tile battens. The maximum span between rafters is 1200mm. Masonry tile roofs with pitches <17<sup>o</sup> must have anti-ponding boards in accordance with E2/AS1 8.2.5 & figure 25. HYDRA is to be laid over anti-ponding boards and draped into the gutter by no greater than 20mm.

## **DESIGN CONSIDERATIONS**

HYDRA Wall Underlay is to be installed in accordance with HYDRA Roof Underlay Specification. NZBC Acceptable Solutions E2/AS1 para 8.0 – 8.4. NZMRM Roof and Wall Cladding Code of Practice. Metal Roof / Tile Manufacturer's specifications.

HYDRA Roof Underlay is to be installed under the direct supervision of a Licensed Building Practitioner or suitably qualified roofer.

HYDRA Roof Underlay must not be left exposed to direct sunlight or UV light during its serviceable life.

HYDRA Roof Underlay is not suitable under translucent roofing

To ensure proper roof ventilation it is recommended that there is a clear path for air to enter, travel and exit the roof cavity.

Consideration for air entry at soffits, over fascia or behind fascia vents. Ensure insulation doesn't block this pathway. Roof underlays are discontinuous at the apex by cutting or slitting the underlay and using a vented soft edge or vented ridge.

NOT to be used where it is exposed to prolonged direct, indirect or reflected UV such as under unlined canopies, carports, soffits & lean to designs. Warranties will be void for these applications.

Special attention is required when designing Skillion roofs or anywhere the accumulation of condensation presents an issue. HYDRA Roof Underlay is suitable on roof pitches greater than  $3^{\circ}$ .

HYDRA is not suitable on membrane roofs.

Roof Underlay support may be required in the form of strapping, mesh or safety mesh. Contact Marshall Innovation's for options.

## **ROOF UNDERLAY SUPPORT REQUIREMENTS**

		Roof Underlay Support Required	
Roof Pitch	Span	Horizontally	Vertically
		Installed	Installed
10º or more	>1200mm	YES	YES
	≤1200mm	NO	NO
Less than 10º.	>1200mm	YES	YES
(min 3º)	≤1200mm	NO	YES