1. PRODUCT IDENTIFICATION

Product Name	Verso Reflex Plus — Reflective Vapour Barrier
Other Names / Variants	Verso Reflex Plus Foil Vapour Barrier
Product Code	VRP75
Place of Manufacture	Poland (Overseas)

Product Description and Intended Use

Verso Reflex Plus is a four-layered, active vapour barrier manufactured from polypropylene combined with a low-diffusive polypropylene film and a metallic aluminium layer. One face presents a clean white finish; the other face is a high-quality aluminium foil. The product can be installed with either face toward the interior. It provides vapour control and reflects infrared radiation, contributing to thermal energy savings. Suitable for use in residential, commercial, and industrial buildings on timber-framed or steel-framed structures, primarily under profiled metal roof and wall claddings, and as an internal wall or ceiling vapour barrier. When exposed to the building interior it can be left unlined.

Supplied in rolls of 75 m² (1.5 m × 50 m). Weight: 77 g/m². Thickness: 0.50 mm (500 µm).

2. MANUFACTURER & IMPORTER DETAILS

Manufacturer

Legal Name	mdm NT sp. z o.o.
Trading Name	mdm NT
Address	ul. Sosnowiecka 75, 31-345 Krakow, Poland
NZBN	N/A (Overseas manufacturer)
Website	www.mdm-nt.pl
Contact	Via importer — E Built NZ Limited

Importer / NZ Distributor

Legal Name	E Built NZ Limited
Trading Name	EBuilt
NZBN	9429045948282
Address	1B/89 Ellice Road, Wairau Valley, Auckland 0629, New Zealand
Website	www.ebuilt.co.nz
Email	orders@ebuilt.co.nz
Phone	09 916 6750

3. RELEVANT NEW ZEALAND BUILDING CODE CLAUSES

NZBC Clause	Subject	Application
B2	Durability	B2.3.1(b) 15-year durability; B2.3.2
E2	External Moisture	E2.3.2 — contributes as part of the roof/wall cladding system when used under metal cladding
F2	Hazardous Building Materials	F2.3.1 — product contains no hazardous materials
H1	Energy Efficiency	Contributes to thermal performance via infra-red reflectance (designer to confirm H1 compliance for specific application)

Supporting Standards & Technical Documents

Document	Description
NZS 3604:2011	Timber-framed Buildings
NZBC Acceptable Solution E2/AS1	External Moisture — roof and wall cladding systems
NZ Metal Roof & Wall Cladding Code of Practice (COP)	Design and installation guidance for metal cladding applications
NASH Building Envelope Solutions	Applicable for steel-framed building applications
AS 1530.2:1993	Flammability testing (NZ fire compliance — Flammability Index = 1, tested by NZWTA June 2024)
EN 12311-2	Tensile properties testing
EN 12310-1	Tear resistance (nail shank) testing
EN 1928 Method A	Resistance to water penetration
EN 1931	Water vapour transmission — Sd value and vapour resistance
EN 1849-2	Mass per unit area and thickness
EN 1848-2	Dimensions — length, width, straightness
EN 13501-1	European reaction to fire classification (Class F — NZ equivalent: FI ≤ 5)
ASTM C 1371	Emissivity measurement

4. STATEMENT ON CONTRIBUTION TO COMPLIANCE

Verso Reflex Plus does not hold a BRANZ Appraisal. It provides a compliance pathway under Section 19 of the Building Act 2004 through the following means:

- NZBC Clause B2 (Durability): Demonstrated through European test standards (EN series) and the product's Technical Statement confirming 15-year serviceability when installed, covered, and maintained in accordance with installation instructions.
- NZBC Clause E2 (External Moisture): When used as part of the roof or wall cladding system in conjunction with profiled metal cladding, the product contributes to E2.3.2. The building designer is responsible for ensuring overall cladding system compliance.
- NZBC Clause F2 (Hazardous Materials): Confirmed by fire compliance testing to AS 1530.2:1993 (NZWTA Test Report No. 1516180.5, dated 4 June 2024) returning a Flammability Index of 1, well within the maximum of 5 permitted by NZBC C/AS2.

- NZBC Clause H1 (Energy Efficiency): The aluminium foil layer has a tested emissivity of 0.14 (ASTM C 1371), providing infra-red reflectance that may contribute to the building thermal envelope performance. Designers must assess H1 compliance for their specific application.

Physical Properties

Property	Test Standard	Value	Tolerance
Water penetration resistance	EN 1928 Method A	≥2 kPa	Requirements met
Tensile strength (MD)	EN 12311-2	≥130 N/50 mm	—
Tensile strength (CD)	EN 12311-2	≥90 N/50 mm	—
Elongation at break	EN 12311-2	≥30%	—
Tear resistance (MD)	EN 12310-1	≥65 N (nail shank)	—
Tear resistance (CD)	EN 12310-1	≥65 N (nail shank)	—
Water vapour transmission	Lyssy	1.50 g/(m²×24h)	±1.0
Sd value (vapour resistance)	EN 1931	8.0 m	–4 / +12
Water vapour resistance	EN 1931	0.74×10^{11} (m²·s·Pa)/kg	±50%
Emissivity	ASTM C 1371	0.14	±0.01
Flammability index	AS 1530.2:1993	1	—
European fire class	EN 13501-1	Class F (EN) / FI = 1 (NZ AS 1530.2)	—
Mass per unit area	EN 1849-2	77 g/m²	−10 / +10
Thickness	EN 1849-2	0.50 mm	−0.10 / +0.10
Roll length	EN 1848-2	50 m	−0 / +0.5
Roll width	EN 1848-2	1.50 m	−0.005 / +0.005

Note: *A Flammability Index of 1 (AS 1530.2:1993) exceeds NZBC C/AS2 requirements (maximum FI ≤5). The product may be left exposed to the building interior. European EN 13501-1 Class F applies to the exterior-exposed condition.*

5. LIMITATIONS ON USE

All Applications

- E2/AS1 building height and floor plan area limitations apply where the product is used as part of a cladding system.
- Must NOT be exposed to the weather or UV light for more than 7 days in any roof or wall application.
- Must NOT be used under translucent sheeting.
- Must be separated from heat sources (fireplaces, heating appliances, flues, chimneys) in accordance with NZBC C/AS1 and C/AS2.
- Must NOT be used under unlined exterior canopies or soffits (exposed exterior conditions).
- Not subject to a warning or ban under section 26 of the Building Act 2004 when used within stated scope.

Roof Applications

- For use under profiled metal roof cladding only where adequate ventilation and condensation control are provided.
- Suitable for all NZS 3604:2011 wind zones up to and including Extra High.
- Maximum unsupported horizontal span: 1,100 mm (to allow for 150 mm minimum laps at purlins). Larger spans require mesh or strap support (e.g. Kiwimesh, AUSMESH, AUSNET, hexagonal netting, or proprietary strapping).

- Refer to the NZ Metal Roof and Wall Cladding Code of Practice when used in direct contact with profiled metal roofing.

Wall and Internal Applications

- Suitable for all NZS 3604:2011 wind zones up to and including Extra High.
- LOSP-treated timber: allow a minimum of 7 days for solvent flash-off in a well-ventilated area before installation.
- Suitability in commercial or industrial environments where production activities could degrade the product must be assessed by the designer.

6. DESIGN REQUIREMENTS

- Building designers are responsible for specifying Verso Reflex Plus in accordance with E Built NZ Limited's installation instructions and the relevant product Technical Statement.
- Where used as part of a cladding system, it must only be used with roof or wall cladding systems that comply with NZBC E2/AS1 or hold a current BRANZ Appraisal or CodeMark Certificate.
- Designers must confirm compliance with NZBC Clause H1 for the specific building application when the product is specified to contribute to thermal performance.
- All lap seals where required per the NZ Metal Roof and Wall Cladding COP must be made using ViBest Reflex Foil Lapping Tape, ViBest SuperPro Flashing Tape, or another BRANZ-appraised lapping or window flashing tape.
- All penetrations through Verso Reflex Plus (pipes, services) must be sealed using a compatible BRANZ-appraised penetration seal (e.g. EBuilt Penetration Seal, BRANZ Appraisal No. 1171) or equivalent.
- Restricted Building Work (RBW) must be carried out by or under the direct supervision of a Licensed Building Practitioner holding the relevant licence class.

7. INSTALLATION REQUIREMENTS

Full installation procedures are available at www.ebuilt.co.nz/architect-downloads. The following are the key installation requirements.

General — All Applications

- Fix to all framing members using galvanised or stainless steel 8–12 mm staples, or 20 mm flat-head galvanised clouts, or proprietary fastenings at maximum 300 mm centres.
- For steel-framed structures, refer to the NZ Metal Roof and Wall Cladding Code of Practice for fixing types and requirements.
- Install firmly (taut and crease-free). All laps — horizontal or vertical — must be a minimum of 150 mm.
- The product can be installed with either the aluminium foil face or the white face toward the exterior.
- Damaged areas (tears, holes) must be repaired using ViBest SuperPro Flashing Tape before cladding is installed.

Roof Applications

- Upper sheets must lap over lower sheets by a minimum of 150 mm to shed any potential water ingress to the outer face.
- Each lap must be 'captured' by fixings at each purlin. Do not fix horizontally across spans exceeding 1,100 mm without underlay support.
- Where required by the NZ Metal Roof and Wall Cladding COP, lap seals must be formed using ViBest Reflex Foil Lapping Tape, ViBest SuperPro Flashing Tape, or another BRANZ-appraised tape.
- When underlay support is required, use Kiwimesh, AUSMESH Safety Mesh, AUSNET, hexagonal netting, strapping, or roof safety mesh above battens/purlins.

Internal Wall and Ceiling Applications

- Install with the aluminum face toward the building interior (room side) to maximise reflection of infra-red radiation and thermal insulation performance.
- Install horizontally (recommended) from the top of the wall or ceiling, working downward. Where installed parallel to the structure, tape all laps and joins with ViBest SuperPro Flashing Tape for a complete vapour seal.
- Fix using galvanised or zinc-coated staples 11–14 mm long. Fixings (staples) should be covered with ViBest SuperPro Flashing Tape to ensure airtightness (critical for buildings requiring a blower-door test).
- All connections with windows, roof hatches, and penetrations must be taped and sealed with a minimum 75 mm ViBest SuperPro Flashing Tape.
- Plasterboard or other internal linings can be fixed directly over Verso Reflex Plus, or a batten system can be used if required.

Note: Installation guide: Verso Reflex Plus Installation Guide (Jun 2018). Available at www.ebuilt.co.nz/architect-downloads

8. MAINTENANCE REQUIREMENTS

- No maintenance is required for Verso Reflex Plus itself once it is covered by the roof or wall cladding.
- Where left exposed as an internal lining, visually inspect annually for damage (tears, holes, delamination of foil layer) and repair using ViBest SuperPro Flashing Tape.
- The overlying roof or wall cladding must be maintained in accordance with the cladding manufacturer's instructions to ensure ongoing weathertightness and to allow the vapour barrier to achieve its full serviceable life.
- Serviceable life of Verso Reflex Plus is 15 years (B2.3.1(b)) when installed in accordance with the product Technical Statement, not damaged, and not exposed to UV/weather for more than 7 days.

Note: Maintenance guide: www.ebuilt.co.nz/architect-downloads

9. WARNING OR BAN — SECTION 26, BUILDING ACT 2004

Subject to warning or ban?	No — this product is not subject to any warning or ban under section 26 of the Building Act 2004.

10. DOCUMENT CONTROL

Version	1.0
Date	05 June 2026
Prepared by	E Built NZ Limited
Document Status	Issued for Use
Review Date	June 2027 (or upon material change to product specification or applicable standards)