DuPont™ Tyvek® Supro / Supro Plus Installation Guide – New Zealand

DuPont[™] Tyvek® Supro (2506B) is a Self-Supporting, Fire Retardant Synthetic Roof Underlay, made by laminating a spun-bonded high density polyethylene (HDPE) to a non-woven polypropylene sheet providing a strong weather resistant barrier with excellent water vapour permeability.

The DuPont[™] Tyvek® Supro (2506B) Plus has an integrated tape system for ease of in-situ edge sealing.

Suitable for the following applications where roof design, ventilation and climate conditions are considered;

- Residential roofing under profiled metal cladding, metal tiles, concrete tiles, clay tiles and asphalt shingles over steel or timber framing
- Residential wall applications under direct fixed absorbent and non-absorbent claddings
- Residential wall applications under wall cavity with absorbent and non-absorbent claddings
- Commercial roofing under profiled metal cladding, metal tiles, concrete tiles, clay tiles and asphalt shingles over steel or timber framing
- Commercial wall applications on direct fixed absorbent and non-absorbent claddings
- Commercial wall applications over wall cavity with absorbent and non-absorbent claddings
- Shed and farm buildings under profiled metal roof and wall cladding direct fixed over timber or steel frames.

Installation

DuPont[™] Tyvek® Supro shall be installed in accordance with New Zealand Building Code Compliance Document E2/AS1, NZMRM Roofing Code of Practice and must be;

- shingle lapped minimum 150mm when laid horizontally for roof pitches above 3°.
- supported when laid vertically between 3° and 10° roof pitches or unsupported above 10°.
- installed as to ensure water sheds to gutter.
- laid continuously or lapped 150mm over framing. There is no limit on the length of run.
- supported at purlin/rafter spans greater than 1200mm.
- secured adequately with galvanized or stainless steel staples, clouts or purlin screws at maximum 600mm centres.
- always laid with grey printed surface facing outwards and pulled taut under the cladding to prevent ponding of condensation.
- taped along seams with DuPont™ Tyvek® tape when run vertically at roof pitches between 3° and 10°. Alternatively use DuPont™ Tyvek® Supro Plus.
- sealed around penetrations to prevent water ingress into the roof or wall cavity.

- repaired by DuPont[™] Tyvek[®] tape if ripped or torn.
- discontinuous over the ridge where allowance for ridge venting is required.
- not permitted to be exposed to the elements after final cladding.
- finished 20-25mm beyond the valley or gutter edge, ensuring draining to the exterior.
- installed over gutter-flashing where there is likelihood of water ingress beyond gutter into the wall cavity.

Exposure

DuPont[™] Tyvek® Supro is designed for temporary weather protection during construction and as a secondary weather barrier in service. Do not expose the roof underlay for as long as necessary and no more than 30 days. Store DuPont[™] Tyvek® Supro out of direct sunlight, in a clean dry environment, sheltered from the weather.

Do not install DuPont™ Tyvek® Supro under translucent cladding or skylights.

DuPont[™] Tyvek® Supro is suitable for use under dark coloured roofs without support in horizontal installed applications above 3° and vertical applications above 10° roof pitches.

Treated timber

If installed over LOSP treated timber, ensure that timber is dry and solvent free.

Flammability

DuPont[™] Tyvek® Supro has a flammability index of less than 5 according to AS1530.2 and meets the requirements of AS/NZS4200.1 with a flammability index classification of low.

Condensation Management

Ensure that the building envelope design and construction adhere to sound condensation management principles, minimizing moisture ingress and maximizing drying capabilities of wall and roof cavities.

TECHNICAL PROPERTY	TEST METHOD	NZBC E2 REQUIREMENT	DUPONT™ SUPRO
		(NZS2295:2006)	2506B
SURFACE ABSORBENCY	AS/NZS4201:6	≥150gsm	*CodeMark
WATER RESISTANCE	AS/NZS4201:4	100mm/24hrs	Pass
WATER VAPOUR RESISTANCE	ASTM E96-B	-	<0.5Mn.s/g
SHRINKAGE	AS/NZS4201:3	< 0.5%	Pass
PH EXTRACT	AS/NZS1301.412S	5.5-8.0	Pass
FLAMMABILITY	NZS/AS1530.2	≤ 5	Pass
RESISTANCE TO UV / WEATHER EXPOSURE	ASTM G154	≥ 85% strength/7days	Pass
ABSORBENCY	Туре	R1/R2	*CodeMark
WIND SPEED	-	Extra High	Pass
WEIGHT / SIZE	-	-	145gsm / 1500mm
TENSILE STRENGTH	AS 1301.448		
MACHINE DIRECTION (K/NM)		> 9.5kN/m	6.3kN/m
 LATERAL DIRECTION (K/NM) 		> 6.okN/ m	5.okN/m
EDGE TEAR RESISTANCE	TAPPI T470		
 MACHINE DIRECTION (N) 		65N	305N
LATERAL DIRECTION (N)		65N	254N
BURST STRENGTH	AS2001.2.19	>200N	356N
FLAMMABILITY INDEX	AS/NZ 1530 Part 2	≤ 5	Pass
WIDTH			1500mm
LENGTH			50m
AREA		-	75m²
WEIGHT			145gsm
ROLL WEIGHT		-	11kg

Test results shown represent roll averages. Individual results may vary either above or below averages due to normal manufacturing variations while continuing to meet product specifications.

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