

Technical Data Sheet Lexshield™

Product Description / Use:

Self-adhered air and vapour barrier membrane for use in roofs. Cross-laminated, high density polyethylene film-backed with a proprietary high tack adhesive.

Compatible with most fluid applied air barriers and insulation adhesives.

Air barrier uses:

- Cavity walls
- As a transition membrane for flashing window and door openings

Air & vapour control layer (AVCL) use:

- Flat roofs

Features & Benefits:

Excellent air and vapour barrier properties - Surpasses the industry's most rigorous air and vapour resistance tests.

Flexible - Remains leak-free, even when subjected to differential expansion and contraction forces or minor cracking in the underlying substrate.

Tear & puncture resistant - high density film used provides excellent resistance to accidental cuts and tears during installation.

No primer required - Super tacky adhesive formulation sticks well to virtually any surface; mechanical fastening is not required at plane or direction changes.* ²⁾

** When installing Lexshield on porous/fibrous surfaces, a test strip should be done to ensure if a primer is required for proper adhesion of membrane.*

Apply in cold temperatures - Can be applied in temperatures as low as -20°C (-4°F).**

*** When installing Lexshield™ in temperatures below 0 °C, a test strip should be done to ensure if a primer is required for proper adhesion of membrane.*

Seals Around Fasteners - Lexshield™ self-seals around screw and nail penetrations***

**** Penetrated by numerous roofing screws into 22 ga. steel deck, Lexshield™ showed no leakage after 24 hours submersion under 25mm of water. Full test procedures and results available from MOY Technical Services.*

Economical:

Lexshield's™ state-of-the-art technology offers improved benefits over traditional air & vapour barrier systems at a lower installed cost.



Technical Data Sheet Lexshield™

Approved Substrates:

For proper adhesion, surfaces must be reasonably smooth, clean, dry and free of all loose dirt, dust, debris, mold, mildew, corrosion, loose or flaky coatings, greases, oils, frost or dew. Subject to the above, the following substrates are approved for use with Lexshield™:

- Concrete: Poured-in-place or pre-cast ¹⁾
- Block & Brick: Smooth surface concrete blocks or clay bricks, with flat or slightly concave mortar joints.
- Gypsum: Gypsum boards, Dens-Deck Prime
- Glass
- Wood: Plywood, OSB, etc. that is dry, structurally sound and rot free ²⁾
- Metals: Corrosion, oil and grease free steel, aluminium, copper, zinc, etc.
- Painted and Stained Surfaces, provided paint and/or stain has completely dried and is well adhered to the substrate.
- For other surfaces not on this list, consult with MOY Technical Services.

¹⁾ Fully cured for a minimum of 28 days, floated finish.

²⁾ Substrate must be primed in regions of high humidity. Consult manufacturer for further geographical guidance.

Certification:



Technical Properties:

Properties	Test Method	Typical Results
Thickness		0.26 mm (10-mil)
Air Permeance, @75 Pa P.D.* @ 300 Pa P.D.*	ASTM E2178-03	0.0023 L/s/m ² 0.0074 L/s/m ²
Moisture resistance factor	EN 1931	500,700 μ
Vapour resistance	EN 1931	425 MN.s/g
Water vapour diffusion - equivalent air layer thickness Sd	EN 1931	85 m
Tensile Strength at Break	ASTM D-882	49 kPa (7100 psi)
Elongation at Break, min	ASTM D-882	100%
Toyo Impact (Spherical Head)	ASTM D-781 VSF Mtd	130 kg-cm (728 lb-in)
Puncture Propagation Resistance	ASTM D-2582	4.0 kg (8.8 lbs)
Tongue Tear Resistance	ASTM D-1938	2.5 kg (5.5 lbs)
Graves Tear Resistance	ASTM D-1004	3.1 kg (6.8 lbs)

Technical Data Sheet Lexshield™

<u>Adhesive Strength</u> 180° Adhesive Peel Strength tested to stainless steel test panel After 20 minutes After 24 hours After 6 weeks @ 22°C (72°F) After 1 week @ 70°C (158°F) After 1 week @ 35°C (95°F) 95% RH		212 g/cm (19 ozf/in) 313 g/cm (28 ozf/in) 413 g/cm (37 ozf/in) 480 g/cm (43 ozf/in) 379 g/cm (34 ozf/in)
Shear Strength, 2.2psi (0.32 kPa) @ 22°C (72°F)		6 hours
Lap Strength, after 24 hours	180° peel	190 g/cm (17 ozf/in)
Min. Application Temperature		-20°C (-4°F)
Service Temperature Range		-40° to 93°C (-40° to 200°F)
Flame Spread Index	ASTM E84	5
Smoke Development Index	ASTM E84	5

Average of five samples at indicated Pressure Difference (P.D.). Minimum Air Barrier requirement is maximum 0.02 L/s/m² air leakage @ 75 Pa pressure difference.

** Qualifies as a Type I vapour retarder in accordance with CAN/CGSB-51.22-M89.

Limitations:

Lexshield™ should not be used in applications where the membrane would be subjected to standing water or hydrostatic pressure (Lexshield™ may be used as a temporary roof membrane if the seams are sealed with a compatible lap sealant or waterproof sealing tape. Since the effective application of a sealant or a waterproof tape is beyond our control, MOY Materials assume no responsibility for leaks, consequential damages or failure of the product to perform as desired in this application).

While possessing some UV inhibitors, Lexshield™ is not meant for long-term direct exposure to sunlight or UV radiation. Maximum direct exposure should not exceed 16 weeks.

Delivery form:

Roll size: 137.2cm wide x 68.58m long. Weight: 18kg/roll.
Other roll sizes may be offered subject to stock availability, consult Moy Materials Ltd.

Storage:

Cool, dry, in sealed original containers; for more information see Safety Data Sheet.

Shelf life:

They can be stored for up to 12 months in cool, dry conditions.

Disposal:

Information for this product is given in the Safety Data Sheet.

MOY Materials Ltd has taken care to ensure that the information provided in the literature is correct and up to date. However, it is not intended to form any part of a contract or provide a guarantee. Purchasers/intending purchasers should contact MOY Technical to check whether there have been any changes to the information since publication of the literature. Please ensure you have read the hazard labels and material safety data sheet before using this product.