

# EXOPERM™

## DURO 300

### FUSE

#### DIMENSIONS

1.5M × 30M = 45M<sup>2</sup> | 4' 11 1/16" × 98' 5 1/8" = 485 SF

#### TYPICAL USE CASES INCLUDE:

- Ventilated façades and rainscreen cladding backer
- External wall sheathing boards in exposed zones
- Pitched roofs beneath battens
- Modular and offsite factory installation
- Suitable for new build and retrofit projects requiring membranes capable of withstanding extended exposure before cladding installation

#### FEATURES AND BENEFITS:

- Triple-layer TPU fused construction for exceptional strength and stability
- Single-sided UV stabilisation for extended outdoor exposure before cladding installation
- Highly vapour open with reliable W1 water tightness
- Robust tensile and tear resistance for exposed sites and challenging climates
- Durable performance under prolonged UV and weathering
- Suitable for façades, roofs, modular and retrofit applications
- Fire safe: Classified B-s1, d0 according to EN 13501-1

#### FACADE & ROOF COMPATIBILITY

- Façades: Fully compatible with ventilated and closed-joint façade systems; ensures windtightness behind cladding rails and brackets. Supports healthy cavity ventilation while maintaining airtight performance.

Roofs: Suitable for pitched and low-pitched roofs beneath battens. Robust membrane resists wind uplift and temporary exposure during construction. Overlaps and seam detailing ensure reliable water shedding.

#### PACKAGING & STORAGE

- Store flat in original packaging in cool, dry conditions between +5 °C and +25 °C

Protect from prolonged UV exposure prior to installation

#### SAFETY & HANDLING

- Solvent-free, water-based adhesive
- Low VOC and safe for indoor environments
- Use standard PPE during application
- Keep out of reach of children



## TECHNICAL DATA SHEET

### PARTEL EXOPERM DURO 300 FUSE™ BREATHABLE TRIPLE LAYER TPU MONOLITHIC MEMBRANE

EXOPERM DURO 300 FUSE™ is a robust, premium breather membrane designed to provide long-term protection for walls and roofs, even in demanding environments. Engineered for strength, dimensional stability, and resilience, it performs reliably under challenging weather conditions and extended UV exposure.

This high-performance membrane combines exceptional tensile and tear resistance with outstanding vapour permeability, allowing buildings to breathe while maintaining airtight and watertight integrity. Its durable construction ensures consistent performance over prolonged temporary exposure, making it suitable for both new build and retrofit projects, as well as modular or offsite construction where membranes may be exposed before cladding or roofing is installed.

With reliable W1 water resistance, the membrane provides a secure barrier against rain and wind, while its vapour openness supports healthy indoor environments, reducing the risk of condensation and long-term moisture damage. EXOPERM DURO 300 FUSE™ delivers a robust, reliable envelope solution that enhances building longevity, performance, and durability.

Property	Standard	Value
Reaction to Fire	EN 13501-1	B-s1, d0
Water Resistance	EN 1928	W1 (before & after ageing)
Sd-value	EN ISO 12572	0.12 m
Air Permeability	EN 12114	> 2000 g/m <sup>2</sup> /24 h
Tensile Strength (MD / CD)	EN 12311-1	340 / 240 N/5 cm (before ageing) 320 / 220 N/5 cm (after ageing)
Elongation MD/CD	EN 12311-1	50% / 70% (before ageing) 40% / 60% (after ageing)
Tear Resistance (MD / CD)	EN 12310-1	220 / 240 N
Nail Tear Strength (MD / CD)	EN 12310-1	160 / 180 N
Temperature Resistance	EN 13859-2 EN 1109	-40 °C to +80 °C
UV Stability	EN 13859-2	4 months roof 6 months wall
Weight	EN 1849-2	300GSM G/M2+ _5%
Service Temperature Range		0°C to +50°C (temporary use)

\*MD = longitudinal CD = transversal

**Leeds Institute of Textiles & Colour**

SCHOOL OF DESIGN



**UNIVERSITY OF LEEDS**

# Testing Services Report

6 August 2025

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**Ref:** BMT004

**Services:**

Evaluating the snagging propensity of roofing membranes in buildings by roosting bats

**Procedure:**

The roof membrane samples were tested as-received on both the face and back (N=3). The procedure followed is as outlined in Essah et al., 2020<sup>1</sup> at 1,000 rotations. The test failure threshold was  $\geq 1$  loop/cm<sup>2</sup>.

**Sample:**

- Exoperm Duro Fuse external Class B wall membrane with 5000-hour UV

<sup>1</sup> Essah, E.A., Russell, S.J., Waring, S.D., Ferguson, J., Williams, C., Walsh, K., Dyer, S. and Raynor, R. 2020. Method for evaluating the snagging propensity of roofing membranes in buildings by roosting bats. *Building Research & Information*. 48(8), pp.886–898.

**Results:**

Following the modified pilling test for both sides of the membrane, Exoperm Duro Fuse showed no evidence of loop formation on either side.

Summary Table:

Sample	Side	Average loops/cm <sup>2</sup>			Comments	Overall Material Pass/Fail
		Sample A	Sample B	Sample C		
Exoperm Duro Fuse	Face	0	0	0	No loop formation observed due to surface coating	Pass
	Back	0	0	0	No loop formation observed due to surface coating	

Photos of representative control and snagged test specimens are provided in the following page.

**Tests conducted and report written by:**

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**Report reviewed and approved by:**

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 Director, LITAC

