

DESCRIPTION & USE

LEXCAN HI-TUFF TPO FLEECE-BACKED CA MEMBRANE is a premium, heat weldable, thermoplastic polyolefin (TPO) single ply roofing membrane for new construction and re-roofing applications. This membrane consists of two plies, internally reinforced with a fully encapsulated fabric scrim and is enhanced with a polyester fleece backing.

HI-TUFF TPO FLEECE-BACKED CA MEMBRANE meets or exceeds the requirements of ASTM D 6878.

FEATURES & BENEFITS

Polyester Fleece Backing - Provides significant benefits in terms of strength, durability, adhesion and waterproofing.

Optimized TPO Formulation - Provides outstanding UV resistance, heat-aging properties, ozone resistance, cool roof reflectivity and overall weather resistance.

Reliable Heat-Welded Seams - Thermofused, molecularly bonded seams offer high strength and superior reliability.

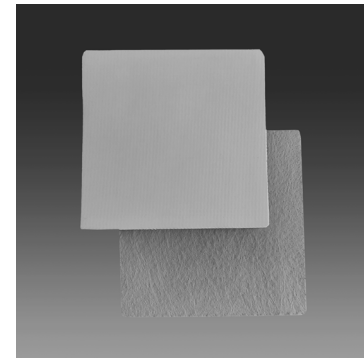
Super Strong - The fully encapsulated fabric reinforcement provides high breaking and tearing strengths.

TECHNICAL DATA

*MD=Machine Direction **XMD=Cross-Machine Direction

Physical Properties	ASTM Test Method	Standard for ATSM D 6878 (Min)	2.92 mm - (115-mil)		3.43 mm - (135-mil)	
			MD*	XMD*	MD*	XMD*
Breaking Strength, min lbf (N):	D 751	220 (976)	499 (2,220)	450 (2,002)	545 (2,424)	508 (2,260)
Elongation at Break, min %:	D 751	15	29	27	33	33
Tearing Strength, min lbf (N):	D 751	45 (200)	91 (404)	146 (649)	64 (285)	185 (823)
Factory Seam Strength, min, lbf (N):	D 751	66 (290)	171 (761)		171 (761)	
Thickness, min, in.:	D 751	+/- 10% from Nominal	0.060 (Nominal)		0.080 (Nominal)	
Thickness Over Scrim, min, in. (mm):	D 7635	0.015	0.027 (0.686)		0.033 (0.84)	
Water Absorption, max %:	D 471	3.0	0.08		0.42	
Brittleness Point, max, - 40°C (- 40°F):	D 2137	No Cracks	Pass		Pass	
Ozone Resistance:	D 1149	No Cracks	-		Pass	
Properties after Heat Aging @ 116°C (240°F):	D 573	Pass/Fail	Pass		Pass	
Breaking Strength, % (after aging):	D 751	90	> 90	> 90	> 90	> 90
Elongation, % (after aging):	D 751	90	> 90	> 90	> 90	> 90
Tearing Strength, % (after aging):	D 751	60	> 60	> 60	> 60	> 60
Weight Change, max, % (after aging):	D 751	± 1.0	0.25		0.25	
Linear Dimensional Change, max, % (after 6 hrs 70°C (158°F):	D 1204	± 1.0	<0.2		<0.1	
Accelerated Weathering, min:	G151 & G155	10,080 kj/m ² • nm @ 340 nm (4,000 hrs @ 0.70 W)	10,080 kj/m ² (4,000 hrs)		10,080 kj/m ² (4,000 hrs)	
Cracking (@7x magnification):	G155	No Cracks	Pass		Pass	

Note: All Data represents tested values.



Energy Saving - Studies have shown that a light-coloured roof surface can significantly reduce air conditioning costs in the Summer and contribute to reducing a local urban heat island effect.

Chemical Resistant - HI-TUFF TPO FLEECE-BACKED CA MEMBRANE is able to withstand prolonged exposure to numerous industrial wastes and chemicals, including some oils and greases. Contact Lexcan to verify the resistance of the membrane to a particular chemical before proceeding with an installation.

Proven Performance - HI-TUFF TPO FLEECE-BACKED CA MEMBRANE have been installed on thousands of projects and in successful use since the 1990s.

TECHNICAL DATA

*MD=Machine Direction **XMD=Cross-Machine Direction

Supplemental Testing

Physical Properties	ASTM Test Method	Standard for ATSM D 6878 (Min)	2.92 mm - (115-mil) Result	3.43 mm - (135-mil) Result
Dynamic Puncture:	D 5635	N/A	Pass @ 27.5 Joules	Pass @ 35 Joules
Static Puncture:	D 5602	N/A	Pass @ 20 kg (44 lb)	Pass @ 20 kg (44 lb)
Impact Resistance of Bituminous Roofing Systems:	D 3746	N/A	-	Pass - minor indentations
Reflectance:	C 1549	N/A	78%	78%
Emittance:	C 1371	N/A	0.87	0.87

ENERGY & THE ENVIRONMENT

Standard			Reflectivity	Emissivity
CCRC®	White	Initial	0.77	0.87
		3 Yr. Aged	0.70	0.86
	Tan	Initial	0.67	0.87
		3 Yr. Aged	0.62	0.90
	Grey	Initial	0.35	0.87
		3 Yr. Aged	0.34	0.90
CA Title 24	White	Pass	0.77	0.87
	Tan	Pass 3 Yr. Aged	SRI=75	
LEED® (SRI)	White	Initial	95	
		3 Yr. Aged	85	
	Tan	Initial	81	
		3 Yr. Aged	75	
	Grey	Initial	39	
		3 Yr. Aged	37	
Recycled Content		Post-consumer	0%	
		Post-industrial	5%	

The LEED® Solar Reflectance Index (SRI) is calculated per ASTM E1980.

APPROVALS & COMPLIANCES





FLEECE-BACKED CA MEMBRANE



PACKAGING & COVERAGE

2.92 mm (115-mil)

Roll Width	Roll Length	Roll Coverage
3.05 m (10')	30.48 m (100')	92.9 m ² (1000 ft ²)

Available colours: White, Grey* and Tan*

*Grey and Tan are special order only.

3.43 mm (135-mil)

Roll Width	Roll Length	Roll Coverage
3.05 m (10')	15.24 m (50')	46.45 m ² (500 ft ²)

Available colours: White, Grey* and Tan*

*Grey and Tan are special order only.

PRODUCT COMPATIBILITY

HI-TUFF TPO FLEECE-BACKED CA MEMBRANE is compatible with the following Application Methods:

- Fully Adhered
- Mechanically Fastened

INSTALLATION

HI-TUFF TPO FLEECE-BACKED CA MEMBRANE is installed by professional roofing contractors trained and approved by LEXCAN. Refresher seminars are regularly held to update contractors on the latest techniques and developments. Refer to HI-TUFF TPO application guides and detail drawings for instructions.

WARRANTY

Superior installation quality and long-term performance is guaranteed with comprehensive LEXGUARD warranty packages. To provide the best assurance of a quality installation, projects are normally inspected both during installation and after completion by a LEXCAN technical representative.



SINGLE PLY ROOFING SYSTEMS

Ontario & Western Canada 1.800.268.2889

Quebec & Atlantic Canada 1.800.363.2307