LEXFAST 3-in-1 Pre-Fabricated Panel

DESCRIPTION & USE

3-in-1 composite panel composed of HR-type Izolon insulation with integrated connection pieces laminated to a Lexcor Lexboard with a white 60-mil thick TPO membrane.

Light and resistant monolithic panel designed to accelerate the installation of roofing systems.

FEATURES & BENEFITS

Total thermal value guarantee - The Fransyl Izolon expanded polystyrene maintains its insulating properties and performance over time even if the product's molecular structure is deformed.

Increases onsite productivity - Simple and fast to install. One single panel covers 182.4 ft².

Monolithic panel - Shortens installation time and minimizes risks of movement within the system. The assembly's quality control is completed in a factory setting.

Hi-Tuff TPO membrane - Based on advanced polymerization technology that combines the durability and weather resistance of ethylene propylene (EP) rubber with the heat weldability of polypropylene.

Light - Manoeuvrable by 4 people

TECHNICAL DATA

LEXFAST - DIMENSIONS				
Dimensions ¹	Shiplap	Coverage per panel		
Width: 3.83′ (1.16 m) Length: 47.625′ (14.51 m)	Width: 5/8" (16 mm) Length: 2.5" (63.5 mm)	182.4 ft² (16.83 m²)		

¹ Other sizes available upon request

² Variable depending on the R-Value required

Thickness: Variable depending on the R-Value required Weight: +/- 240 lbs with 6" of HR insulation thickness



PHYSICAL PROPERTIES - IZ	OLON TYPE HR	
Thermal transmission	R-3.7	
(ASTM C518 C177), 1" (25 mm) thickness	(RSI-0.65)	
Water vapour permeability	2.66 perm	
(ASTM E96), 1" (25 mm) thickness	(152.2 ng/Pa⋅s⋅m ²)	
10% Compressive strength	> 93 kPa	
(ASTM D 1621), 1,5" (38 mm) thickness	(> 13.53 lbs/in ²)	
Flexural strength	209.8 kPa	
(ASTM C 203), 1,5" (38 mm) thickness	(30.52 lbs/in ²)	
Water absorption (ASTM D2842), 1,5" (38 mm) thickness	4.4 %	
Density	1 lb/ft ³	
(ASTM D 1621)	(16.01 kg/m ³)	
Flame spread (ASTM E84)	15	
Flame spread (CAN/ULC S-102.2)	115	
Dimensional stability (volume) (ASTM D 2126)	0.32%	
Dimensional stability (length and width)	> -0.54%	
(ASTM D 2126)	< 0.19%	

ULC evaluation results: C7 and C12 standard CAN/ULC S-126M

Meets requirements CAN/ULC-S701

FM Classification: Factory Mutual approved for products thereby identified

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COMMERCIAL BUILDING PRODUCTS

LEXCOR

Ontario & Western Canada 1.800.268.2889 Quebec & Eastern Canada 1.800.363.2307

continued on back

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PHYSICAL PROPERTIES - LEXBOARD				
Nominal thickness (C-209)	0.25 in (6.4 mm)			
Density (D-1622)	17.85 lb/ft ³ (0.29 g/cm ³)			
Thermal resistance (C-518)	R-1.2 (RSI 0.21)			
Water vapour permeability (ASTM E96)	< 1.00 perm (< 57.5 ng/Pa·s·m²)			
Water absorption (C-209)	2 %			
Compressive strength (D-1621)	1034			
Dimensional stability (D-2126)	< 0.6 %			
Tensile strength (C-1289 Type II, Class 4)	> 95 Kpa (> 2000 lbs/in²)			
Smoke development (E84) Complete10 min. evaluation	60			
Flame spread (E84) Complete10 min. evaluation	40			

Compliant with the following standards: ASTM C 1289, Type II, Class 4, Grades 1,2 and 3

LIMITATIONS

Lexfast must be stored in an elevated position and covered with waterproof tarps.

Lexfast bundles must be tied together solidly so that the wind does not lift the panels, which could damage them.

INSTALLATION

1. Make sure the panels are securely in contact on the vapour barrier, in parallel rows and with no deformations or empty spaces, perpendicular to the steel decking. Fill joints measuring more than 5 mm.

CHARACTERISTICS*

- 2. Panels must be fastened mechanically with Lexgrip screws and plates.
- 3. Membranes near securing plates must overlap (over the length of the membrane) as well as over 51 mm, minimum, at the end of the rolls (width of the membrane).
- 4. Hot weld the membrane sheets over, minimum, 38 mm with an automatic welding machine.

NOTE: The walls or parapets between basins are not required with this system.

Thickness tolerance Thickness over scrim	ASTM D 751 ASTM D 6878 Optical method	+15%,-10% 0.38 mm(0.015") Min.	± 10% 0.61 mm (0.024") Typ.
	(Average of 3 areas)		
Breaking strength	ASTM D-751 (Grab method)	976 N (220 lbf) Min.	1.1 kN (250 lbf) Min. 1.6 kN (360 lbf) Typ.
Tear strength 20.3 cm x 20.3 cm sample	ASTM D-751 (Proc. B method)	245 N (55 lbf) Min.	245 N (55 lbf) Min. 578 N (130 lbf) Typ.
Elongation at fabric break	ASTM D-751	15 % Min.	15 % Min. 25 % Typ.
Field seam strength (Peel test)	ASTM D-1876	No requirements	4.4 kN/m (25 lbf/in) Min.
			10.5 kN/m (60 lbf/in) Typ.
Brittleness point	ASTM D-2137	-40°C (40°F) Max.	-40°C (40°F) Max. -46°C (50°F) Typ.
Linear dimensional change 6 hours at 70°C (158°F)	ASTM D-1204	± 1.0% Max.	± 1.0% Max. - 0.2% Typ.
Water absorption 166 hours at 70°C (158°F)	ASTM D-471 Top surface only	± 3.0% Max.	± 3.0% Max. 2.0 Typ.
Water vapour permeance	ASTM E-96 Proc. B	No requirements	0.10 perms, Max. 0.05 Perms, Typ.
Ozone resistance 100 pphm, 168 hours	ASTM D-1149 No cracks 7x	Pass	Pass
Puncture resistance	FTM -101C Method 2031	No requirements	1.3 kN (300 lbf) Min. 1.6 kN (350 lbf) Typ.
Resistance to heat aging (32 weeks @ 115°C)	ASTM D-573		
Breaking strength Elongation Reinf. Tearing strength Weight change	Retained Retained Retained Retained	90% Min. 90% Min. 60% Min. ± 1.0% Max.	90% Min. 90% Min. 60% Min. ± 1.0% Max.

PHYSICAL PROPERTIES - LEXCAN HI-TUFF TPO MEMBRANE

ASTM D6878

REQUIREMENTS

60-mil

(1.5 mm)

TEST

METHOD

Lexcan TPO membrane meets and exceeds the requirements of ASTM D6878, Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing.

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