

LEGERPAN TYPE I AND TYPE II

Data sheet



Description:

The Legerpan system consists of a factory-laminated LEGERTOIT or LEGERPENTE TYPE I or TYPE II insulation panel, plus a Louiseville Specialty Products SECURPAN panel.

Product data:

WIDTH AND LENGTH

- 4' x 4' (1219 mm x 1219 mm)

INSTALLATION

Insulation panels can be applied hot or cold, as needed, using bitumen cooled to 225°F or fixed to the surface mechanically.

PERMANENT R-VALUE GUARANTEE

The thermal resistance of this type of insulation is permanent due to its cellular structure which contains only stabilized trapped air. EPS performance does not diminish over time.

EVALUATION

LEGERLITE INSULATION:

- Certified INTERTEK ETL SEMKO
- Conforms to CAN/ULC-S701-01 standards
- Conforms to CAN/ULCS-126M DSIGN C7,C12
- Conforms to *Association des maîtres couvreurs du Québec* standards

PHYSICAL PROPERTIES	IMPERIAL	METRIC	ASTM Test	EPS Type 1	EPS Type 2	EPS Type 2 (1.5 HD)
Thermal resistance: R-value at 75°F (24°C) for 1 in (25 mm) thickness	$\frac{\text{h}\cdot\text{pi}^2 \text{ hre}^\circ\text{F}}{\text{BTU}}$	$\frac{\text{m}^2 \cdot ^\circ\text{C}}{\text{W}}$	C-518 C-177	3.7 min. (0.70 min.)	4.0 min. (0.70 min.)	4.17 min. (0.73 min.)
Compressive strength (min.) at 10% distortion	psi	(kPa)	D-1621	10.2 (70)	16 (110)	20.4 (140)
Bending strength (min.)	psi	(kPa)	C-203	25 (170)	35 (240)	43.6 (300)
Dimensional stability: % of linear change (max.)	%	%	D-2126	1.5	1.5	1.5
Coefficient of thermal expansion (max.)	in/in/°F	(mm/mm/°C)	D-696	3.5×10^{-5} ($6 \times 10^{-5} \text{ C}^{-1}$)	3.5×10^{-5} ($6 \times 10^{-5} \text{ C}^{-1}$)	3.5×10^{-5} ($6 \times 10^{-5} \text{ C}^{-1}$)
Water vapor permeability (max.)	Perm-inch	(ng/Pa.s.m ²)	E-96	5.25 (300)	3.5 (200)	
Water absorption (max.)	%	%	D-2842	6	4	3
Effective temperature range						
Continuous	°F	(°C)	-	167 (75)	167 (75)	167 (75)
Intermittent	°F	(°C)	-	180 (82.2)	180 (82)	180 (82.2)
Flame spread rating	-	-	(CAN/ULC S102,2 M)	<115	<140	<140
Generated smoked						<380
Capillarity						Nil



NOTES: EPS beads should be considered flammable when subjected to a source of intense heat or a constant strong flame. They are vulnerable to petroleum-based solvents and prolonged exposure to ultraviolet radiation.

Properties	Norms	SECURPAN results
Density (specific mass)	ASTM D-1037	14.5 lb/ft ³ (232 kg/m ³)
Transverse load	ASTM D-209	9.0 lb (40 N)
Tensile strength perpendicular to surface	ASTM D-209	761 lb/ft ² (min) 36.5 kPa (min)
Tensile strength parallel to surface	ASTM C-209	187 lb/ft ² (min) 1.29 mPa (min)
Water absorption	ASTM C-209	3.5 %
Linear expansion	ASTM C-209	0.10 %
Compressive strength 10% distortion	ASTM C-165	34.8 lb/in ² (min)
Compressive strength 25% distortion	ASTM C-165	51 lb/in ² (min)
R-value	ASTM C-518	1.55 (1/2")
Flame spread	ULC S-102 ULC S-102.2	15 20
Smoke development	ULC S-102 ULC S-102.2	25 25

Data sheet: SECURPAN

WIDTH AND LENGTH

- 4' x 4' (1219 mm x 1219 mm)

EVALUATION

SECUREPAN FROM LOUISEVILLE SPECIALTY PRODUCTS:

- Conforms to CAN/ULC-S706 standards
- Approved class 1 by FM 4470