

LEGERFIBRE TYPE I AND TYPE II

Data sheet



Description:

The Legerfibre system consists of a factory-laminated LEGERTOIT or LEGERPENTE TYPE I or TYPE II insulation panel, plus a BP ESGARD 1/2 in wood fiber 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 DESIGN 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	$\frac{h \cdot pi^2 \text{ hre}^\circ F}{BTU}$	$\frac{m^2 \text{ }^\circ C}{W}$	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} ($6 \times 10^{-5} \text{ }^\circ C^{-1}$)	3.5×10^{-5} ($6 \times 10^{-5} \text{ }^\circ C^{-1}$)	3.5×10^{-5} ($6 \times 10^{-5} \text{ }^\circ C^{-1}$)
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.

TEST	ASTM normalized testing methods	ESGARD 1/2"	
		Imperial	Metric
Thickness	-	0.50 inch	12.70 mm
Linear expansion	D-1037	0.50 %	0.5 %
Water absorption (2 h)	D-1037	3.75 % vol.	3.75 % vol.
Thermal resistance	C-518	1.63 R	0.29 RSI
Thermal conductivity	C-518	0.31 K	0.045 ksi
Transverse strength	C-209	10.93 psi	48.61 N
Parallel strength	C-209	223.94 psi	1544.00 kPa
Perpendicular strength	C-209	4.20 psi	28.96 kPa
Compressive strength at 10% distortion	C-165	18.6 psi	128.24 kPa
Modulus of rupture (MOR)	D-2164	237.4 psi	1636.81 kPa
Density	D-1037	15.00 lb/in ³	240.28 kg/m ³
Deflection	C-209	0.55 inch	13.97 mm

Data sheet: BP ESGARD

WIDTH AND LENGTH

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

EVALUATION

BP ESGARD WOOD FIBER:

- Conforms to CAN/ULC -S126-M86 design C2, C7, C12, C25
- Conforms to CAN/ULC -S107#CR771 classes A and C
- CCMC 03240-L (except 4' x 8' panels)