LEGERFIT TYPE I AND TYPE II
Data sheet

Description:

The Legerfit system consists of a factory-laminated LEGERTOIT or LEGERPENTE TYPE I or TYPE II insulation panel, plus a RETRO-FIT ½ in Johns Manville 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 75ºF (24ºC) for 1 in (25 mm) thickness	$\frac{h.pi^2\ hre°F}{BTU}$	$\frac{m^2\ °C}{W}$	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} ($6 \times 10^{-5}\ C^{-1}$)	3.5×10^{-5} ($6 \times 10^{-5}\ C^{-1}$)	3.5×10^{-5} ($6 \times 10^{-5}\ C^{-1}$)
Water vapor permeability (max.)	Perm-inch	(ng/Pa.s.m²)	E-96	5.25 (300)	3.5 (200)	
Water absorption (max.)	%	%	D-2842	6	4	3
Effective temperature range Continuous Intermittent	 °F °F	 (°C) (°C)	 - -	 167 (75) 180 (82.2)	 167 (75) 180 (82)	 167 (75) 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.

Physical property	Value	Test method
Max. water absorption in % by volume – 2h	3.5	ASTM C 209
Compressive strength 5% distortion	241 kPa (35 psi)	ASTM C 165
10% distortion	345 kPa (50 psi)	
Laminar tensile strength	33.8 kPa (4.9 psi)	ASTM C 209
Bending strength	414 kPa (60 psi)	ASTM C 203
Product density	176-224 kg/m³ (11-14 lb/in³)	ASTM C 209
Max. linear expansion	0.5 %	ASTM C 209/ ASTM D 1037

Thickness		Conductance (C-value)		Resistance (R-value)	
in	mm	Btu (hr.ft².˚F)	W/m².˚C	(hr. ft².˚F)/Btu	m².˚C/W
1/2	12.5	0.76	4.3	1.32	0.23

Data sheet: RETRO-FIT Johns Manville

WIDTH AND LENGTH

• 4' x 4' (1220 mm x 1220mm)

EVALUATION

JOHNS MANVILLE RETRO-FIT:
- Conforms to ASTM C 728 tests
- Validated by Ul for class A design