

# DATA SHEET

## LEGERFIT TYPE II (1,5 HD) AND TYPE III



### DESCRIPTION

The Legerfit system consists of a factory-laminated LEGERTOIT or LEGERPENITE TYPE II (1.5) or TYPE III insulation panel, plus a RETRO-FIT 1/2 in Johns Manville panel.

### 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.

### PRODUCT DATA

#### Dimensions

> 4' x 4' (1219 mm x 1219 mm)

#### EVALUATION

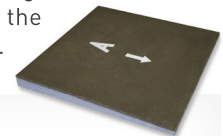


Legerlite insulation:

- > Certified INTERTEK ETL SEMKO
- > Conforms to CAN/ULC-S701 standards
- > Conforms to CAN/ULCS-126M DISIGN C7,C12
- > Conforms to *Association des maîtres couvreurs du Québec* standards
- > CCMC # 13526-L

### INSTALLATION

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



### 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 PROPERTIES	IMPERIAL	METRIC	ASTM TEST	CAN/ULC TYPE 2 (1.5 HD)	TYPE 2 (1.5) NOMINAL VALUE	CAN/ULC TYPE 3	TYPE III NOMINAL VALUE
<b>Thermal resistance:</b> R-value at 75°F (24°C) for 1 in (25 mm) thickness	hr.ft <sup>2</sup> °F / BTU	m <sup>2</sup> °C / W	C-518 C-177	4.17 min. (0.73 min.)		4.2 min. (0.74 min.)	4.3 (0.74)
Compressive strength (min.) at 10% distortion	psi	(kPa)	D-1621	20.4 (140)	+/- 20 (137.89) for 1.5"	20.4 (140)	+/- 75 (525) for 1.5"
Bending strength (min.)	psi	(kPa)	C-203	43.6 (300)	+/- 43 (296.47) pour 1.5"	43.6 (300)	+/- 38 (262) for 1.5"
<b>Dimensional stability:</b> % of linear change (max.)	%	%	D-2126	1.5	+/- 0.4 %	1.5	+/- 0.20%
Coefficient of thermal expansion (max.)	in/in/°F	(mm/mm/°C)	D-696	3.5x10 <sup>-5</sup> (6x10 <sup>-5</sup> C <sup>-1</sup> )	-	3.5x10 <sup>-5</sup> (6x10 <sup>-5</sup> C <sup>-1</sup> )	-
Water vapor permeability (max.)	Perm-inch	(ng/Pa.s.m <sup>2</sup> )	E-96	3.5 (200)	+/- 2.5	2.25 (130)	+/- 0.65
Water absorption (max.)	%	%	D-2842	3	+/- 1.60% for 1.5"	2	+/- 1.25% for 1.5"
<b>Effective temperature range:</b>							
> Continuous	°F	(°C)	-	167 (75)	-	167 (75)	-
> Intermittent	°F	(°C)	-	180 (82.2)	-	180 (82.2)	-
Flame spread rating	-	-	(CAN/ULC S102.2 M)	< 140	-	< 140	-
Generated smoked				< 380	-	< 325	-
Capillarity				Nil	-	Nil	-

### PRODUCT DATA RETRO-FIT JOHNS MANVILLE :

#### Dimensions

> 4' x 4' (1219 mm x 1219 mm)

#### EVALUATION

- Johns Manville RETRO-FIT:
- > Conforms to ASTM C 728 tests
  - > Validated by UL for class A design

PHYSICAL PROPERTY	VALUE	TEST METHOD
Max. water absorption in % by volume - 2h	3.5	ASTM C 209
Compressive strength		
> 5% distortion	241 kPa (35 lb/psi)	ASTM C165
> 10% distortion	345 kPa (50 lb/psi)	
Laminar tensile strength	33.8 kPa (4.9 lb/psi)	ASTM C 209
Bending strengt	414 kPa (60 lb/psi)	ASTM C 203
Product density	176-224 kg/m <sup>3</sup> (11-14 lb/ft <sup>3</sup> )	ASTM C 209
Max. linear expansion	0.5%	ASTM C 209 ASTM D1067

THICKNESS		CONDUCTANCE (C-VALUE)		RESISTANCE (R-VALUE)	
in	mm	Btu/(hr.ft <sup>2</sup> . °F)	W/m <sup>2</sup> . °C	(hr.ft <sup>2</sup> °F)/Btu	m <sup>2</sup> . °C/W
1/2	12.5	0.76	4.3	1.32	0.23