

# DATA SHEET

## LEGERFIBRE TYPE II (1.5 HD) AND TYPE III



### DESCRIPTION

The Legerfibre system consists of a factory-laminated LEGERTOIT or LEGERPENITE TYPE I or TYPE II insulation panel, plus a BP ESGARD 1/2 in wood fiber panel.

### VALEUR ISOLANTE PERMANENTE GARANTIE

La résistance thermique de l'isolant est permanente grâce à sa structure alvéolaire qui ne contient que de l'air occlus stabilisé. Le temps n'affecte pas le rendement de l'EPS.

### PRODUCT DATA

#### Dimensions

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

#### EVALUATION

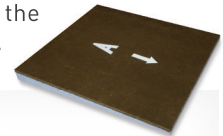
Legerlite insulation:

- > Certified INERTEK EtL SEMKO
- > Conforms to CAN/ULC-S701 standards
- > Conforms to CAN/ULCS-126M DSIGN C7,C12
- > Conforms to *Association des maîtres couvreurs du Québec* standards
- > Type I : CCMC # 12984-L
- > Type II : CCMC # 12836-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.

PROPRIÉTÉS PHYSIQUES	IMPERIAL	METRIC	ASTM TEST	CAN/ULC TYPE 2 (1.5 HD)	TYPE 2 (1.5) NOMINAL VALUE	CAN/ULC TYPE 3	TYPE 3 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] for 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 > Intermittent	°F °F	(°C) (°C)	- -	167 [75] 180 [82.2]	-	167 [75] 180 [82.2]	-
Flame spread rating	-	-	(CAN/ULC S102.2 M)	< 140	-	< 140	-
Generated smoked			5102.2M	< 380	-	< 325	-
Capillarity				Nil	-	Nil	-

### PRODUCT DATA : BP ESGARD

#### Dimensions

> 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)

TEST	ASTM NORMALIZED TESTING METHODS	ESGARD 1/2"	
		IMPERIAL	METRIC
Thickness	-	0.50 inch	12.70 mm
Linear expansion	D-1037	0.50%	0.50%
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	237.40 psi	1636.81 KPa
Density	D-1037	15.00 lb/in <sup>3</sup>	240.28 kg/m <sup>3</sup>
Deflection	C-209	0.55 inch	13.97 mm