Plasti·Fab® EPS PRODUCT SOLUTIONS

Better building ideas from PFB™

BULLETIN NO.	214
ISSUED:	March 27, 2014
REPLACES:	June 4, 2013

Product Information Bulletin

PlastiSpan®, PlastiSpan HD & PlastiSpan 25 Insulation
Material Property Data Sheet - CAN/ULC-S701-11 - Types 1, 2 and 3

CAN/ULC-S701-11, ***Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering*** is the National Standard of Canada for moulded expanded polystyrene (EPS) insulation. The table below provides material properties for Plasti-Fab insulation meeting CAN/ULC-S701, Type 1 (***PlastiSpan*** insulation), Type 2 (***PlastiSpan HD*** insulation) and Type 3 (***PlastiSpan 25*** insulation).

Material Property	Test Method[1]	Units	CAN/ULC-S701[2]		
			Type 1	Type 2	Type 3
Thermal Resistance *Minimum per 25 mm (inch)*	ASTM C518	$m^2 \cdot °C/W$ ($ft^2 \cdot h \cdot °F/BTU$)	0.65 (3.75)	0.70 (4.04)	0.74 (4.27)
Compressive Resistance[3] *Minimum @ 10% Deformation*	ASTM D1621	kPa (psi)	70 (10)	110 (16)	170 (25)
Flexural Strength *Minimum*	ASTM C203	kPa (psi)	170 (25)	240 (35)	300 (44)
Water Vapour Permeance[4] *Maximum*	ASTM E96	$ng/(Pa \cdot s \cdot m^2)$ (Perms)	300 (5.2)	200 (3.5)	130 (2.25)
Water Absorption[5] *Maximum*	ASTM D2842	% By volume	6.0	4.0	2.0
Dimensional Stability *Maximum, 7 Days @ 70 ± 2°C (158 ± 4°F)*	ASTM D2126	% Linear Change	1.5	1.5	1.5
Limiting Oxygen Index *Minimum*	ASTM D2863	%	24	24	24

1. The test methods used to determine material properties in the above table provide a means of comparing different types of cellular plastic thermal insulation. They are intended for use in specifications, product evaluations and quality control. They do not predict end-use product performance.
2. PlastiSpan insulation properties are third party certified under a quality listing program administered by Intertek Testing Services and are listed by the Canadian Construction Materials Centre (CCMC) under evaluation listing numbers 12424-L (Type 1), 12425-L (Type 2) and 12426-L (Type 3).
3. The minimum compressive resistance of PlastiSpan 25 (Type 3) insulation exceeds the requirement for CAN/ULC-S701, Type 3.
4. WVP values quoted are maximum values for 25-mm (1-inch) thick samples with natural skins intact. Lower values will result for thicker materials.
5. The water absorption laboratory test method involves complete submersion under a head of water for 96 hours. The water absorption values above are applicable to specific end-use design requirements only to the extent that the end-use conditions are similar to test method requirements.