

Product Information Bulletin

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

PlastiSpan® insulation is a rigid, closed-cell insulation that meets or exceeds requirements for expanded polystyrene (EPS) insulation manufactured to CAN/ULC-S701, **Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering**. The table below provides material properties for **PlastiSpan** insulation, **PlastiSpan HD** insulation and **PlastiSpan 25** insulation meeting CAN/ULC-S701, Type 1, Type 2 and Type 3, respectively.

Material Properties	Test Methods ¹	Units	CAN/ULC-S701 Types ²		
			1	2	3
Thermal Resistance <i>Minimum per 25 mm (inch)</i>	ASTM C518	m ² ·°C/W (ft ² ·h·°F/BTU)	0.65 (3.75)	0.70 (4.04)	0.74 (4.27)
Compressive Resistance ³ <i>Minimum @ 10% Deformation</i>	ASTM D1621	kPa (psi)	70 (10)	110 (16)	170 (25)
Flexural Strength <i>Minimum</i>	ASTM C203	kPa (psi)	170 (25)	240 (35)	300 (44)
Water Vapour Permeance ⁴ <i>Maximum</i>	ASTM E96	ng/(Pa·s·m ²) (Perms)	300 (5.2)	200 (3.5)	130 (2.25)
Water Absorption ⁵ <i>Maximum</i>	ASTM D2842	% By volume	6.0	4.0	2.0
Dimensional Stability <i>Maximum, 7 Days @ 70 ± 2 °C (158 ± 4 °F)</i>	ASTM D2126	% Linear Change	1.5	1.5	1.5
Limiting Oxygen Index <i>Minimum</i>	ASTM D2863	%	24	24	24
Surface Burning Characteristics <i>Classification or Rating</i>	CAN/ULC S102.2	Flame Spread	290		
		Smoke Developed	Over 500		

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. Material properties are third party certified under a quality listing program administered by Intertek 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** 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.