

# Product Information Bulletin

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## PlastiSpan® 20 Insulation Material Property Data Sheet

**PlastiSpan® 20** insulation is a closed cell expanded polystyrene (EPS) insulation that meets or exceeds the requirements of CAN/ULC-S701, **Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering**. The closed cell structure of **PlastiSpan 20** insulation resists water absorption so it will retain its R-value even in applications where severe temperature differentials occur.

**PlastiSpan 20** insulation minimum compressive resistance of 140 kPa (20 psi) makes it ideal to insulate low temperature freezer floors or for use in other applications where moderate loads are expected.

Material Property	Test Method	Units	Values <sup>1</sup>
<b>Compressive Resistance<sup>2</sup></b> <i>Minimum @ 10% Deformation</i>	ASTM D1621	kPa (psi)	140 (20)
<b>Compressive Modulus</b> <i>Minimum</i>		kPa (psi)	5,000 (725)
<b>Thermal Resistance</b> <i>Minimum per 25 mm (1 inch)</i>	ASTM C518	m <sup>2</sup> ·°C/W (ft <sup>2</sup> ·h·°F/BTU)	0.70 (4.04)
<b>Flexural Strength</b> <i>Minimum</i>	ASTM C203	kPa (psi)	280 (40)
<b>Water Vapour Permeance<sup>3</sup></b> <i>Maximum</i>	ASTM E96	ng/(Pa·s·m <sup>2</sup> ) (Perms)	200 (3.5)
<b>Water Absorption<sup>4</sup></b> <i>Maximum</i>	ASTM D2842	% By volume	2.0
<b>Dimensional Stability</b> <i>Maximum, 7 Days @ 70 ± 2 °C (158 ± 4 °F)</i>	ASTM D2126	% Linear Change	1.5
<b>Limiting Oxygen Index</b> <i>Minimum</i>	ASTM D2863	%	24

1. PlastiSpan 20 insulation properties meet or exceed requirements for CAN/ULC-S701, type 2.
2. PlastiSpan 20 insulation compressive resistance exceeds minimum requirement for CAN/ULC-S701, type 2.
3. WVP values quoted are maximum values for 25-mm thick samples with natural skins intact. Lower values will result for thicker materials.
4. The water absorption laboratory test method involves complete submersion under a head of water for 96 hours. The water absorption value above is applicable to specific end-use design requirements only to the extent that the end-use conditions are similar to test method requirements.