

Product Information Bulletin

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-S701-11, **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 provides a minimum compressive resistance of 140 kPa (20 psi). The compressive resistance of **PlastiSpan 20** insulation makes it ideal for use in low temperature freezer floor applications where moderate loads are expected.

Material Property	Test Method	Units	Values ¹
Compressive Resistance² <i>Minimum @ 10% Deformation</i>	ASTM D1621	kPa	140
		(psi)	(20)
Compressive Modulus <i>Minimum</i>		kPa	5,000
		(psi)	(725)
Thermal Resistance <i>Minimum per 25 mm (1 inch)</i>	ASTM C518	m ² ·°C/W (ft ² ·h·°F/BTU)	0.70 (4.04)
Flexural Strength <i>Minimum</i>	ASTM C203	kPa (psi)	280 (40)
Water Vapour Permeance³ <i>Maximum</i>	ASTM E96	ng/(Pa·s·m ²) (Perms)	200 (3.5)
Water Absorption⁴ <i>Maximum</i>	ASTM D2842	% By volume	2.0
Dimensional Stability <i>Maximum, 7 Days @ 70 ± 2°C (158 ± 4°F)</i>	ASTM D2126	% Linear Change	1.5
Limiting Oxygen Index <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.