

Product Information Bulletin

PlastiSpan® 40 Insulation - ASTM C578, Type XIV Material Properties

PlastiSpan® 40 insulation is a rigid, closed-cell foam plastic insulation that meets the requirements for expanded polystyrene (EPS) insulation manufactured to ASTM C578¹. Table 1 provides material properties for **PlastiSpan 40** insulation meeting ASTM C578, Type XIV as noted.

PlastiSpan 40 Insulation Properties		Units	ASTM Test	Type XIV
Nominal Density		pcf	C303	2.50
Compressive Resistance ² <i>Minimum @10% strain</i>		psi	D1621	40.0
R-value ³ <i>per inch thickness at mean temperature</i>	40 °F	ft ² •hr•°F	C518	4.8
	75 °F	Btu		4.4
Water Vapor Permeance <i>Maximum</i>		Perm	E96	2.5
Flexural Strength <i>Minimum</i>		psi	C203	60
Dimensional Stability <i>Maximum</i>		% linear change	D2126	2.0
Water Absorption ⁴ <i>Maximum</i>		% by volume	C272	2.0
Oxygen Index <i>Minimum</i>		volume %	D2863	24
Density <i>Minimum</i>		pcf	C303	2.40
Flame Spread Index <i>Maximum</i>			E84	<25
Smoke-Developed Index <i>Maximum</i>				<450

Sustainability

As part of its commitment to quality and ongoing sustainability initiatives, Plasti-Fab maintains **GREENGUARD Gold Certification** for **PlastiSpan 40** insulation with UL Environment, an independent global safety science organization. The **GREENGUARD Gold Certification** mark on **PlastiSpan 40** insulation gives assurance that insulation designed for use in indoor spaces meets strict chemical emissions limits, which contribute to the creation of healthier interiors.

¹ **PlastiSpan 40** insulation properties are third party certified under a quality listing program administered by Intertek to ASTM C578, **Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation**.

² Compressive resistance at 10 percent strain is not intended for design use when **PlastiSpan 40** insulation will be used to support structural compressive loads. See Plasti-Fab Product Information Bulletin No. 305 for additional information.

³ For additional information on thermal resistance requirements refer to ASTM C578.

⁴ ASTM Test Method C272 water absorption requires 24 hours submersion of specimen under water. 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 requirements stated in the test method.