

## Product Information Bulletin

### PlastiSpan® HD Insulation - ASTM C578, Type II Material Properties

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

PlastiSpan HD Insulation Properties		Units	ASTM Test	Type II
<b>Nominal Density</b>		pcf	C303	1.50
<b>Compressive Resistance</b> <sup>2</sup> <i>Minimum @10% deformation</i>		psi	D1621	15.0
<b>R-value</b> <sup>3</sup> <i>per inch thickness at mean temperature</i>	40 °F	ft <sup>2</sup> •hr•°F	C518	4.6
	75 °F	Btu		4.2
<b>Water Vapor Permeance</b> <i>Maximum</i>		Perm	E96	3.5
<b>Flexural Strength</b> <i>Minimum</i>		psi	C203	35
<b>Dimensional Stability</b> <i>Maximum</i>		% linear change	D2126	2.0
<b>Water Absorption</b> <sup>4</sup> <i>Maximum</i>		% by volume	C272	3.0
<b>Oxygen Index</b> <i>Minimum</i>		volume %	D2863	24
<b>Density</b> <i>Minimum</i>		pcf	C303	1.35
<b>Flame Spread Index</b> <i>Maximum</i>			E84	<25
<b>Smoke-Developed Index</b> <i>Maximum</i>				<450

#### Sustainability

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

<sup>1</sup> **PlastiSpan HD** 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**.

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

<sup>3</sup> For additional information on thermal resistance requirements refer to ASTM C578.

<sup>4</sup> 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.