

Product Information Bulletin

BULLETIN NO.	247
ISSUED:	August 22, 2017
REPLACES:	November 4, 2016

DuroSpan® Insulation - ASTM C578, Type I Material Properties

DuroSpan® insulation is a rigid, closed-cell foam plastic insulation that meets the requirements for expanded polystyrene (EPS) insulation manufactured to ASTM C578, Type I. The addition of a laminated film to the top and bottom surfaces of **DuroSpan** insulation provides a more durable product that is less susceptible to handling damage.

The reflective facer on **DuroSpan** insulation contains a thin layer of foil embedded within the film. The reflective facer does not increase the nominal R-value of **DuroSpan** insulation (for additional information see Plasti-Fab PIB 253 - Facts About Thermal Resistance of Reflective Insulation). The green face of **DuroSpan** insulation should be left exposed to make use of the markings on this face provided for easy cutting of insulation and/or spacing of interior framing as required.

DuroSpan Insulation Properties ¹		Units	ASTM Test	Type I
Nominal Density		pcf	C303	1.00
Compressive Resistance <i>Minimum @10% deformation</i>		psi	D1621	10.0
R-value <i>per inch thickness at mean temperature</i>	40 °F	$\frac{\text{ft}^2 \cdot \text{hr} \cdot ^\circ\text{F}}{\text{Btu}}$	C518	4.2
	75 °F			3.9
Water Vapor Permeance ² <i>Maximum</i>		Perm	E96	0.5
Flexural Strength <i>Minimum</i>		psi	C203	25
Dimensional Stability <i>Maximum</i>		% linear change	D2126	2.0
Water Absorption ³ <i>Maximum</i>		% by volume	C272	4.0
Oxygen Index <i>Minimum</i>		volume %	D2863	24
Density <i>Minimum</i>		pcf	C303	0.90
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 **DuroSpan** insulation with UL Environment, an independent global safety science organization. The **GREENGUARD Gold Certification** mark on **DuroSpan** 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 **DuroSpan** 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 The vapor permeance value provided above is a composite value for **DuroSpan** insulation with laminated films. Where water vapour permeance is a design issue, contact Plasti-Fab technical services for additional information.

³ 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.