


EPS NO. 1027

SUBJECT: ELASTIC MODULUS

DATE: JANUARY 2018 (REVISED JANUARY 2019)

R-Shield® insulation is manufactured in compliance with ASTM C578, “Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation”. This standard covers the minimum requirements for flexural strength, compressive strength, and other select properties of polystyrene foam. Some engineered systems such as Structural Insulated Panels (SIPs), insulated concrete forms (ICF’s) and exterior insulation and finish systems rely on R-Shield as a key structural component.

R-Shield has conducted extensive tests to determine the elastic modulus of R-Shield products. Elastic modulus was determined in accordance with ASTM D1621, “Standard Test Method for Compressive Properties of Rigid Cellular Plastics”.

PRODUCT							
		100	130	150	250	400	600
Elastic Modulus, typical	psi	360	580	730	1090	1500	1860
ASTM D1621	(kPa)	(2500)	(4000)	(5000)	(7500)	(10300)	(12800)

Note: The values are based upon testing at laboratory conditions (72F/50%RH) under short term load durations as specified by the ASTM test method.