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Product Information Bulletin

BULLETIN NO. 349
ISSUED: March 10, 2017
REPLACES: December 3, 2012

PlastiSpan® EFS Insulation - USA Applications

The bulletin provides material properties and manufacturing requirements for ***PlastiSpan***® EFS insulation manufactured to ASTM E2430[1] for use in exterior insulation and finish systems (EIFS) for use in exterior insulation and finish systems (EIFS).

Table 1 – PlastiSpan EFS Insulation Properties

Material Properties	ASTM Test Method	Units	Values[2]	
Density *Minimum*	C303 or D1622	pcf	0.90	
Thermal Resistance[3] *Minimum*	C177 or C518	ft^2•hr•°F/BTU	75 °F	3.60
		ft^2•hr•°F/BTU	40 °F	4.00
Water Vapour Permeance[4] *Maximum*	E96	perms	5.0	
Dimensional Stability *Maximum*	D2126	% linear change	2.0	
Water Absorption *Maximum*	C272	% by volume	4.0	
Flexural Strength *Minimum*	C203	psi	25	
Compressive Resistance *Minimum @ 10% Deformation*	C165 or D1621	psi	10	
Limiting Oxygen Index *Minimum*	D2863	% volume	24	
Additional Material Properties for PlastiSpan EFS Insulation				
Water Absorption *Maximum*	C272	% by volume	2.0	
Dimensional Stability *Maximum*	D2126	% linear change	0.5	
Tensile Strength *Minimum*	D1623	psi	15	

[1] ***PlastiSpan EFS*** insulation material properties are third party certified to requirements of ASTM E2430, ***Standard Specification for Expanded Polystyrene ("EPS") Thermal Insulation Boards for Use in Exterior Insulation and Finish Systems ("EIFS")***, under a quality listing program administered by Intertek. Intertek Code Compliance Research Report CCRR-1072 confirms compliance with the 2009, 2012 and 2015 International Codes.
[2] Material properties meet or exceed requirements for ASTM C578, Type I and are third party certified under a quality listing program administered by Intertek Testing Services.
[3] Values are minimum per 1-inch of thickness at mean temperatures of 75 °F and 40 °F.
[4] Values are maximum for 1-inch thick samples with natural skins intact. Lower values will result for thicker materials.

The dimensions, dimensional tolerances and block aging for ***PlastiSpan® EFS*** insulation meet requirements specified in ASTM E2430, ***Standard Specification For Expanded Polystyrene ("EPS") Thermal Insulation Boards For Use In Exterior Insulation and Finish Systems ("EIFS")*** as detailed in Tables 2 and 3 below.

Table 2 - Dimensions and Dimensional Tolerances

Standard Dimension per ASTM E2430		
Length	48 inches	
Width	24 inches	
Thickness	3/4 inch to as specified	
Dimensional Tolerances ASTM E2430		
Length	±1/16 inch	
Width	±1/16 inch	
Thickness	Minimum: 3/4 inch	+1/16 inch
	Maximum: As specified	±1/16 inch
Squareness	When measured on the large flat face from one corner to the opposing corner, dimensional variations shall not exceed 1⁄32 inch in 12 inch	
Edge Trueness	When measured with a straight edge, edges shall not deviate more than 1⁄32 inch in 12 inch	
Face Flatness	When measured across the face with a straight edge, maximum deviation from the straight edge shall not exceed more than 1⁄32 inch	

Table 3 - Block Aging Requirements Prior to Cutting

Storage Condition	Average Temperature	Minimum Storage Period
Low Pentane (<4.5% pentane) Raw Materials and Vacuum Mould Technology		
Plant Aging	Ambient Temperature 68 °F and RH	12 Days
Full Pentane (nominal 6% pentane) Raw Materials and Vacuum Mould Technology		
Plant Aging	Ambient Temperature 68 °F and RH	18 Days
Full Pentane (nominal 6% pentane) Raw Materials and Non-Vacuum Mould Technology		
Plant Aging	Ambient Temperature 68 °F and RH	42 Days
Heat Aging	Elevated Temperature 140 °F	5 Days

The flame spread index and smoke developed index for ***PlastiSpan® EFS*** insulation are determined in *accordance* with ASTM E84 (UL723). Flame spread and smoke developed classifications are third party certified under a quality listing program administered by Intertek Testing Services are provided in Table 4 below.

Table 4 - Flame-Spread Rating and Smoke Developed Classification

Material Properties	ASTM E84
Flame Spread Index	20
Smoke Developed Index	300