

## Building Codes

Fullback® Thermal Support Systems currently meet or exceed all the specifications and requirements set forth by the various model building codes.

However, because its insulated siding products are now being sold to the new construction market, Progressive is working with the respective code bodies to achieve specific approval of its Fullback Thermal Support Systems. These approvals are all expected by the year's end.

Expanded polystyrene (EPS) isn't just foam insulation. It's an innovative building material that enhances the design and structural integrity of many building projects. Since the 1950s, EPS has been recognized as a mainstream insulation material, and over the past decade, new applications using EPS have exploded. Today EPS serves as a powerful design element, and the EPS industry uses highly sophisticated processes and technologies to manufacture cost-effective products.

EPS insulation products have been the subject of extensive research and evaluation for more than 30 years.

### ASTM C578-00 Insulation Industry Standards

The American Society of Testing and Materials (ASTM) has developed the Standard Specification for Rigid Cellular Polystyrene Insulation, Thermal Insulation, C578. This guide provides EPS manufacturers, such as Progressive Foam Technologies, as well as specifiers, with the types, properties, dimensions, sampling and test procedures, and ordering instructions for EPS foam insulation. The table below indicates the minimal requirements for each classification. Specifiers utilize this information to accurately determine the type of EPS needed to meet the required energy codes. Thus, manufacturers can easily provide the appropriate product without confusion or problems.

### Molded Product Properties

Modified expanded polystyrene will comply with the following standards when molded in accordance with manufacturer's recommendations.

## ASTM C578

### Standard Specifications for Preformed, Cellular Polystyrene Thermal Insulation

Property	Units	Type	XI	I	VII	II	IX
		ASTM Test	Value				
Thermal Resistance	Min R for 1 inch Thickness	C177 C518					
@ 25°F (-3.9°C)			3.45	4.20	4.40	4.60	4.80
40°F (-4.4°C)			3.30	4.00	4.20	4.40	4.60
75°F (-23.9°C)			3.10	3.60	3.80	4.00	4.20
110°F (-43.4°C)			2.90	3.25	3.45	3.65	3.85
Compressive Resistance at Yield or 10% Deformation	min psi	D1621	5.0	10.0	13.0	15.0	25.0
Flexural Strength	min psi	C203	10.0	25.0	30.0	40.0	50.0
Water Vapor Permeability	max perm-in	E96	5.0	5.0	3.5	3.5	2.0
Water Absorption	% by Vol Max	C272	4.0	4.0	3.0	3.0	2.0
Dimensional Stability	max %		2.0	2.0	2.0	2.0	2.0
Oxygen Index	min %	D2863	24.0	24.0	24.0	24.0	24.0
Density	min lbs/sq ft	C303	0.70	0.90	1.15	1.35	1.80

Progressive's Fullback Thermal Support System is a rigid expanded polystyrene (EPS) product. Its thermal insulation properties are guaranteed for the long term. The closed cellular structure does not contain CFCs, HCFCs or HFCs. It is chemically inert to a wide range of chemicals. It has no food value and will not attract insects, parasites or animal and plant life.

