

# ASTM C578

## Specification for Rigid, Cellular Polystyrene Thermal Insulation

			Density (pcf)						
Classification		Type XI	Type I	Type VIII	Type II	Type IX	Type XIV	Type XV	
Nominal Density		0.75	1.00	1.25	1.50	2.00	2.50	3.00	
Density, min. lb/ft <sup>3</sup>		0.75	0.90	1.15	1.35	1.80	2.40	2.85	
Property	Units	ASTM Test							
<b>Thermal Resistance</b> R Values (at 75° F)	per inch thickness	--	3.1	3.8	3.9	4.2	4.4	4.5	4.6
<b>Strength Properties</b> Compressive (10% def)	psi	D1621	5	10	15	20	25	40	60
Flexural	psi	C203	10	25	30	35	50	60	75
<b>Moisture Resistance</b> Absorbtion (vol.)	%	C272	3.0	3.0	2.0	2.0	1.0	1.0	1.0
Capillarity	--	--	none	none	none	none	none	none	none
<b>Coefficient of Thermal Expansion</b>	In./.(in.) (F)	D696	0.000035	0.000035	0.000035	0.000035	0.000035	0.000035	0.000035
<b>Maximum Service Temperature</b> Long Term Intermittent	°F	--	167 180	167 180	167 180	167 180	167 180	167 180	167 180
<b>Oxygen Index</b>	%	D2863	24	24	24	24	24	24	24
<b>Dimensional Stability</b>	% Change	C303	Max 2.0	Max 2.0	Max 2.0	Max 2.0	Max 2.0	Max 2.0	Max 2.0



**POLYMOLDING**

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