



Say Goodbye to XPS & Hello to X-Grade GX



Designers can be confident the thermal properties do not degrade over time since X-Grade GX has a stable R-value that will last the life of the structure



Extremely environmentally friendly since the insulating cells simply contain air, leading to zero global warming potential



An incorporated wax matrix enhances the natural water resistance of the product, assuring it can withstand repeated exposure to moisture



Compared to competing rigid insulation products, X-Grade GX offers the highest vapor permeance, allowing the maximum drying potential



Available in 10, 15 and 25 psi, to customize a solution for your load bearing application, with no thermal compromise

R10 Product Comparison

GX SERIES			
Property & Test Method	Dow Styrofoam®	Owens Corning Foamular®	ThermalStar X-Grade® GX
Thermal Resistance ASTM C518			
Product R-value at 75°F Mean Temperature*	R10	R10	R10
Compressive Strength, ASTM D1621 psi, min.	25 psi	25 psi	25 psi
Size	48 x 96	48 x 96	48 x 96 scored
Material	Polystyrene	Polystyrene	Polystyrene-Graphite
Flexural Strength ASTM C203 psi, min. per ASTM C578	50	50	50
Water Absorption ASTM C272 % by volume, max.	0.3	0.1	1.1
Water Vapor Permeance, ASTM E96, at R10 thickness	0.7	0.5	1.5
Long-term Maximum Use Temp °F, max.	165°F	165°F	165°F
Water Affinity	Hydrophobic	Hydrophobic	Hydrophobic

* All R10 ThermalStar X-Grade GX grades (10, 15, 25 psi) are manufactured at 2.12"

ThermalStar®
Rigid Insulation



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Property & Test Method	Dow Styrofoam®	Owens Corning Foamular®	GX SERIES
			X-Grade® GX
Preserved Against Termite Degradation per Code Requirements in SC, GA, FL, AL, MS, LA, TX & CA*	Not Available	Not Available	Standard
Gas Inside Insulating Cells (per SDS)	Tetrafluoroethane (HFC 134a)	Proprietary Blend (HFC 134a)	Air
GreenGuard Schools & Children	No	Certified	Tested = 0
Global Warming Potential (GWP)	1430	1430	0
Burning Characteristics			
ASTM E84 Flame Spread and Smoke Developed	<25**, <450***	<25**, <450***	<5**, <25***
NFPA 285 Approval—Cementitious Claddings	Yes	Yes	Yes
Warranties			
Thermal Warranty	50 Years	Limited Lifetime	Limited Lifetime
Physical Warranty	50 Years	Limited Lifetime	Limited Lifetime
Termite Resistance Warranty	None	None	Limited Lifetime
ASTM Product Alternates			
	IV	IV	IX
Alternate 15 psi Compressive ASTM C578 Type	X	X	II
Non-Load Bearing Alternates			
Alternate 10 psi Compressive ASTM C578 Type	Not Available	Not Available	I

* IBC 2603.8, IRC R318.4 requires foam plastic below grade or under slab be protected from termite attack in very heavy infestation areas

** Code requires flame spread rating of 75 maximum

*** Code requires smoke development rating of 450 maximum

