





RIGID FOAM INSULATION

Owens Corning® FOAMGLAS® S3 cellular glass insulation is a closed-cell, high-performance, rigid foam board specifically designed for building and roofing applications. It provides a unique combination of properties that offer an alternative to other types of building insulation. For use where high loads and equipment vibration are present.

Features



Hiah Compressive Strength



Non-Combustible¹



Waterproof²



Impermeable



Dimensionally Stable



Insect and Pest Resistant



Chemically Resistant



Zero Deflection

- 1 Unfaced only
- 2 Per ASTM D5385/C1306

Standards, Code Compliance

- UL (Underwriters Laboratories) Roof Deck Constructions, tested in accordance with UL 1256
- FM (Factory Mutual) Class 1 Roof Decks
- ASTM E108 Fire Classified Assemblies
- ASTM E119 Fire Resistance Rated Roof Assemblies
- UL and FM Wind Uplift Rated Assemblies
- S3 cellular glass material meets or exceeds all physical & thermal property requirements of ASTM C1902 Type III

Physical Properties³

PROPERTY	TEST METHOD	VALUE	
Composition	_	Inorganic; soda lime glass	
Density, minimum pcf (kg/m³)	ASTM C303	6.9 (110)	
Service Temperature, °F (°C)	-	-445 to 806 (-265 to 430) no load	
Water Absorption, maximum vol %	ASTM C240	0.1%	
Water Vapor Permeability, maximum perm-in (ng/Pa-s-m)	ASTM E96	0.005 (.007)	
Mold/Mildew Resistance	ASTM C1338	Pass	
Corrosion Resistance	ASTM C1617	Pass (steel, less than DI water)	
Hydrostatic Resistance, minimum equivalent water height in feet (meters)	ASTM D5385/ C1306	34.5 (10.5)	
Coefficient of Linear Thermal Expansion, maximum in/in/°F (mm/mm/°C)	ASTM E228	5.0 x 10 ⁻⁶ (9.0 x 10 ⁻⁶)	
Dimensional Stability,4 %, maximum @ 158°F/97% R.H. @ -40°F/ambient R.H. @ 200°F/ambient R.H.	ASTM D2126	1.0 1.0 1.0	
Compressive Strength (capped), minimum psi (kPa)	ASTM C165 Procedure A/ ASTM C240	130 (900)	
Flexural Strength, psi (kPa), minimum	ASTM C203	72.5 (500)	
Modulus of Elasticity, ksi (MPa), Approximate (v = 0.25) Perpendicular Parallel	ASTM C623	168 (1158) 199 (1372)	
Combustibility ¹	ASTM E136	Non-combustible	
Surface Burning Characteristics, ^{1,5} maximum Flame Spread Index Smoke Developed Index	ASTM E84	0 0	
Thermal Resistance ⁶ per inch @ 75°F (24°C) mean temperature ² , Hr-ft ² -°F/BTU (m ² -°C/W)	ASTM C518/ ASTM C177	3.0 (0.54)	

- 3 Properties shown are representative values for 1-inch-thick material unless otherwise specified. Cellular glass may exhibit different physical properties based upon thickness. Certain physical properties are listed by minimum and maximum values per ASTM C1902. For details on specific test methods, please contact Owens Corning at 1-800-6ET-PINK.

 4 Maximum change in any dimension.
- 5 These laboratory tests are not intended to describe the hazards under actual fire conditions. Verify
- compliance with all required applicable fire assemblies.

 6 R means the resistance to heat flow, the higher the value, the greater the insulation power. This insulation must be installed properly to get the market R-value. Follow the manufacturer's instructions carefully. The U.S. FTC requires the R-value of home insulation to be measured at 75°F mean temperature. R-value claims should always be compared at the same mean temperature. Because rigid foam plastic insulation products are not all aged in accordance with the same standards, it is useful to publish comparison R-value data.

Technical Information

FOAMGLAS® cellular glass insulation is an insulating material to be installed beneath a protective roof membrane in roof applications designed to meet required construction and service-loading conditions as determined by a licensed engineer or architect of record. See Owens Corning FOAMGLAS® Commercial Roofing Design Guide.

Availability

PRODUCT	R-VALUE	THICKNESS	WIDTH	LENGTH	COUNTRY OF ORIGIN
Unfaced Block	6-21	2"-7" in 0.5" increments	18"	24"	USA

Environmental and Sustainability

Owens Corning is a worldwide leader in building material systems, insulation, and composite solutions, delivering a broad range of high-quality products and services. Owens Corning is committed to driving sustainability by delivering solutions, transforming markets, and enhancing lives. More information can be found at www.owenscorning.com.

Disclaimer of Liability

Pittsburgh Corning, LLC shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Pittsburgh Corning, LLC liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing within (30) days from date it was or reasonably should have been discovered.

Notes

For additional information on FOAMGLAS® S3 insulation or systems, please contact Owens Corning at any of our worldwide offices or visit us at owenscorning.com/foamglas.

The information contained herein is accurate and reliable to the best of our knowledge. But, because Pittsburgh Corning, LLC has no control over installation workmanship, accessory materials, or conditions of application, NO EXPRESSED OR IMPLIED WARRANTY OF ANY KIND, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE as to the performance of an installation containing Owens Corning products. In no event shall Pittsburgh Corning, LLC be liable for any damages arising because of product failure, whether incidental, special, consequential, or punitive, regardless of the theory of liability upon which any such damages are claimed. Pittsburgh Corning, LLC provides written warranties for many of its products, and such warranties take precedence over the statements contained herein.



PITTSBURGH CORNING, LLC ONE OWENS CORNING PARKWAY TOLEDO, OH 43659 USA

1-800-GET-PINK® www.owenscorning.com/foamglas