

Submittal Sheet



FOAMULAR® 404, 604, 404 RB & 604 RB

Extruded Polystyrene Insulation



Physical Property Data

Property	Test Method	Product/Values			
		FOAMULAR 404	FOAMULAR 604	FOAMULAR 404 RB	FOAMULAR 604 RB
R-value ⁽¹⁾ @ 75°F mean temperature	C 518	10 ⁽¹⁾	10 ⁽¹⁾	9.5	9.5
Compressive strength, (psi), min. value (lb/in ²)	D 1621	40	60	40 ⁽²⁾	60 ⁽²⁾
Water absorption, (% by volume), max.	C 272	0.05	0.05	0.05	0.05
Dimensional stability, (% linear change), max.	D 2126	2.0	2.0	2.0	2.0
Linear coefficient of thermal expansion, (in./in./°F), max.		2.7x10 ⁻⁵	2.7x10 ⁻⁵	2.7x10 ⁻⁵	2.7x10 ⁻⁵
Flame spread	E 84 ⁽³⁾	5	5	5	5

(1) Based on 2" thickness.

(2) Foam core property; see design load recommendations at right.

(3) These laboratory tests are not intended to describe the hazard presented by this material under actual fire conditions.

Description

FOAMULAR 404 and FOAMULAR 604 extruded polystyrene insulations are specially designed for use in Protected Roof Membrane Assemblies (PRMA), where the insulation is placed directly over the membrane. The compressive strength of FOAMULAR insulation provides the integrity needed for long-term roof performance.

Extruded polystyrene is the only type of insulation recommended for PRMA applications. Owens Corning offers four specific types of FOAMULAR insulation for this use: FOAMULAR 404 & 604; and FOAMULAR 404 RB & 604 RB. Both the 404 RB and 604 RB feature drainage channels running the length of the panel.

These are superior extruded polystyrene products, but it isn't just product performance itself that causes them to be specified in most PRMA applications. It's also the strong support provided by Owens Corning in system design and installation, as well as rapid product delivery from a national network of manufacturing facilities and distribution centers.

Uses

With a minimum of 40 psi compressive strength, FOAMULAR 404 insulation meets the needs of many PRMA applications. For even greater strength, specify the 60 psi compressive strength

of FOAMULAR 604 insulation. Both products feature rain channels on all four bottom edges to promote drainage below the insulation.

FOAMULAR 404 RB and FOAMULAR 604 RB insulation products are used when the insulation is to be placed directly beneath paving stones. In addition to providing strong support for the PRMA roof, these products offer excellent drainage characteristics because they're manufactured with channels that are cut in the surface of the foam the entire length of each panel. Coupled with the standard bottom-side rain channels, the top side channels help drain moisture away from the underside of the paver to protect it from freeze/thaw cycle damage.

As a bonus, FOAMULAR 404 RB and FOAMULAR 604 RB insulation products can eliminate the need for pedestals beneath the pavers which results in significant savings in labor and materials.

Features and Benefits

Protection

FOAMULAR 404 and 604 insulation products protect the roof membrane from physical damage, thermal stress and UV exposure in PRMA systems.

Paver Support

Designed for use directly with pavers, FOAMULAR 404 RB and 604 RB insulation products provide the support necessary for pavers while maintaining the drainage necessary to prevent moisture accumulation at the foam-paver interface.

Compressive Strength

High compressive strength – choose 40 or 60 psi.

Moisture Resistance

Outstanding moisture resistance gives long-term thermal performance.

R-Value

Superior R-value of 5 per inch of product thickness.

Installation

Tough, lightweight panels handle, hoist and install quickly and easily.

Warranty

15-year Owens Corning thermal warranty combines with membrane manufacturers' warranties for assured performance.

Caution: This product will ignite if exposed to fire of sufficient heat and intensity. This product should be installed in accordance with applicable building codes.

Note: All products described here may not be available in all geographic markets. Consult your local sales representative for more information.

FOAMULAR® 404, 604, 404 RB & 604 RB

Thermal Overlay Warranty

In PRMA, Owens Corning warrants not only the thermal performance of FOAMULAR insulation, but also the wind performance of the insulation, retention fabric and ballast materials. Contact Owens Corning for warranty program details.

Standards & Codes Compliance

- Underwriters Laboratories, Inc., Classification Certificate U-197
- BOCAI 91-54
- ICBO 3628
- SBCCI PST & ESI 9727

Maximum Design Load Recommendation, PSI

FOAMULAR Product	Dead Load	Live Load
404	1,910	1,150
404 RB	1,110	660
604	2,880	1,720
604 RB	1,660	1,000

Properties of Foam Core Meet ASTM C 578

Product	Type X	Type IV	Type VI	Type VII
FOAMULAR 404 & 404 RB	X	X	•	
FOAMULAR 604 & 604 RB	X	X	X	•

- Commonly specified
- X Also meets

Product Data

	FOAMULAR 404	FOAMULAR 604
Material	Extruded polystyrene closed-cell foam panel with continuous skin on face and back surface. FOAMULAR insulation is produced by Owens Corning's patented HYDROVAC® process technology under conditions of strict quality control.	
Thermal resistance*	R=5.0 at 75°F mean temperature and 1" thickness (hr x ft ² x °F/Btu). (R-value is the resistance of heat flow through a material. The higher the R-value, the greater the insulating power.)	
Sizes	1", 1 1/2", 2", 2 1/2", 3", 3 1/2", 4" thick; 2' wide; 8' long	1 1/2", 2", 3" thick; 2' wide; 8' long
Edges	Rain channeled on all bottom edges.	
Weight	Approximately 200 lb/1,000 ft ² for 1" thickness.	
Packaging	Shipped in units with two stretch-wrap bands per bundle. If long-term storage or exposure to the elements is expected, special packaging can be arranged.	

	FOAMULAR 404 RB	FOAMULAR 604 RB
Material	Extruded polystyrene closed-cell foam panel with drainage channels cut into top side. FOAMULAR insulation is produced by Owens Corning's patented HYDROVAC® process technology under conditions of strict quality control.	
Thermal resistance*	R=9.5 at 75°F mean temperature and 2" thickness (hr x ft ² x °F/Btu). (R-value is the resistance of heat flow through a material. The higher the R-value, the greater the insulating power.)	
Sizes	1 1/2", 2", 3" thick; 2' wide; 8' long	1 1/2", 2", 3" thick; 2' wide; 8' long
Edges	Rain channeled on all bottom edges.	
Weight	Approximately 200 lb/1,000 ft ² for 1 1/2" thickness.	
Packaging	Shipped in units with two stretch-wrap bands per bundle. If long-term storage or exposure to the elements is expected, special packaging can be arranged.	

*Assuming a linear relationship to the volume of polystyrene lost during fabrication.



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