CavityComplete® CMU Wall System

Product Data Sheet

FOAMULAR® CW25 Polystyrene (XPS) Rigid Foam Insulation

Energy-Saving, Moisture-Resistant XPS Insulation

Cavity Wall Insulation, CW25:

ASTM C578 Type IV, 25 psi minimum

Description

Designed for masonry cavity wall applications, FOAMULAR® extruded polystyrene (XPS) insulation is virtually impervious to moisture. This moisture-resistant property—along with its high R-value, light weight, competitive price and wide range of sizes—makes it ideal for use in a cavity wall system. Pre-cut 16" wide boards yield fast, labor-saving installation.

Key Features

- Excellent long-term stable insulating performance of R-5[1] per inch.
- Exceptional moisture resistance, long-term durability
- Limited lifetime warranty[2]—maintains 90% of R-value and covers all ASTM C 578 properties
- GREENGUARD Gold Certified
- The only XPS foam with certified recycled content—certified by SCS Global Services to contain a minimum 20% recycled content
- Will not corrode, rot or support mold growth
- Zero ozone depletion potential with 70% less global warming potential than our previous formula
- Reusable
- Lightweight, durable rigid foam panels are easy to handle and install
- Easy to saw, cut or score

Technical Information

This product is combustible. A protective barrier or thermal barrier is required as specified in the appropriate building code. All construction should be evaluated for the necessity to provide vapor retarders.

FOAMULAR® insulation can be exposed to the exterior during normal construction cycles. During that time some fading of color may begin due to UV exposure, and, if exposed for extended periods of time, some degradation or “dusting” of the polystyrene surface may begin. It is best if the product is covered within 60 days to minimize degradation. Once covered, the deterioration stops, and damage is limited to the thin top surface layers of cells. Cells below are generally unharmed and still useful insulation.

Standards, Codes Compliance

- Meets ASTM C578 Type IV
- UL Classified. A copy of UL Classification Certificate U-197 is available at www.owenscorning.com
- See UL Evaluation Report ER8811-01 at www.ul.com/erdirectory
- Meets California Quality Standards; HUD UM #71A
- Compliance verification by RADCO (AA-650)

Certifications and Sustainable Features of FOAMULAR® XPS insulation

- FOAMULAR® XPS insulation is reusable
- FOAMULAR® XPS insulation is made with a zero ozone depletion formula
- Certified by SCS Global Services to contain a minimum of 20% recycled content
- Certified to meet indoor air quality standards under the stringent GREENGUARD Indoor Air Quality Certification Program, and the GREENGUARD Gold Certification
- Approved under the Home Innovation Research Labs NGBS Green Certification Program
- Utilizing FOAMULAR® XPS Insulation can help builders achieve green building certifications including the Environmental Protection Agency’s ENERGY STAR®, the National Association of Home Builders’ National Green Building certification, and the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED®) certification
- FOAMULAR® XPS insulation may qualify for The Buy American provision of the American Recovery and Reinvestment Act (ARRA)

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.sustainability.owenscorning.com.

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Warranty

FOAMULAR® XPS insulation limited lifetime warranty maintains 90% of its R-value for the lifetime of the building and covers all ASTM C 578 properties. See actual warranty for complete details, limitations and requirements at www.foamular.com or www.owenscorningcommercial.com.

Notes

1. R means the resistance to heat flow; the higher the R-value, the greater the insulating power.
2. See actual warranty for complete details, limitations and requirements.

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

For more information on the Owens Corning family of building products, contact your Owens Corning dealer, call 1-800-GET-PINK®, or access our web sites: www.foamular.com and www.owenscorning.com.

Typical Physical Properties[1]

FOAMULAR® CW25 Extruded Polystyrene Insulation

Property	Test Method[2]	CW25
Thermal Resistance[3], R-Value minimum, hr•ft²•°F/Btu @ 75°F (24°C) mean temperature @ 40°F (4.4°C) mean temperature	ASTM C 518	 5.0 5.4
Compressive Strength[4], minimum psi	ASTM D 1621	25.0
Flexural Strength[5], minimum psi	ASTM C 203	50
Water Absorption[6], maximum % by volume	ASTM C 272	0.10
Water Vapor Permeance[7], maximum perm	ASTM E 96	1.10
Dimensional Stability, maximum % linear change	ASTM D 2126	2.0
Flame Spread[8, 9]	ASTM E 84	5
Smoke Developed[8, 9, 10]	ASTM E 84	45-175
Oxygen Index[8], minimum % by volume	ASTM D 2863	24

1. Properties shown are representative values for 1" thick material, unless otherwise specified.
2. Modified as required to meet ASTM C 578
3. 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 marked R-value. Follow the manufacturer's instructions carefully. If a manufacturer's fact sheet is not provided with the material shipment, request this and review it carefully. R-values vary depending on many factors including the mean temperature at which the test is conducted, and the age of the sample at the time of testing. 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. The R-value for FOAMULAR® XPS insulation is provided from testing at two mean temperatures, 40°F and 75°F, and from two aging (conditioning) techniques, 180 day real-time aged (as mandated by ASTM C 578) and a method of accelerated aging sometimes called "Long Term Thermal Resistance" (LTTR) per CAN/ULC S770-03. The R-value at 180 day real-time age and 75°F mean temperature is commonly used to compare products and is the value printed on the product.
4. Values at yield or 10% deflection, whichever occurs first.
5. Value at yield or 5%, whichever occurs first.
6. Data ranges from 0.00 to value shown due to the level of precision of the test method.
7. Water vapor permeance decreases as thickness increases.
8. These laboratory tests are not intended to describe the hazards presented by this material under actual fire conditions.
9. Data from Underwriters Laboratories Inc.® classified. See Classification Certificate U-197.
10. ASTM E 84 is thickness-dependent, therefore a range of values is given.

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Product and Packaging Data

FOAMULAR® CW25 Extruded Polystyrene Insulation

Material

Extruded polystyrene closed cell foam panel with integrated continuous skins on face and back surfaces.

Packaging

Shipped in poly-wrapped units with individually wrapped or banded bundles.

Thickness (in)	Product Dimensions Thickness (in) x Width (in) x Length (in)"	Pallet (Unit) Dimensions (typical) Width (ft) x Length (ft) x Height (ft)	Square feet per Pallet	Board feet per Pallet	Bundles per Pallet	Pieces per Bundle	Pieces per Pallet	Edges
CW-15								
1"	1 x 16 x 96	4 x 8 x 8	3,072	3,072	12	24	288	
1-1/2"	1.5 x 16 x 96	4 x 8 x 8	2,048	3,072	12	16	192	Square
2"	2 x 16 x 96	4 x 8 x 8	1,536	3,072	12	12	144	
2-1/2"	2.5 x 16 x 96	4 x 8 x 8	1,152	2,880	12	9	108	
3"	3 x 16 x 96	4 x 8 x 8	1,024	3,072	12	8	96	
CW-25								
1"	1 x 16 x 96	4 x 8 x 8	3,072	3,072	12	24	288	
1-1/2"	1 1/2 x 16 x 96	4 x 8 x 8	2,048	3,072	12	16	192	Square
2"	2 x 16 x 96	4 x 8 x 8	1,536	3,072	12	12	144	
2-1/2"	2.5 x 16 x 96	4 x 8 x 8	1,152	2,880	12	9	108	
3"	3 x 16 x 96	4 x 8 x 8	1,024	3,072	12	8	96	

1. Product availability and lead times vary by region and by product. Consult your local Owens Corning sales representative for availability and lead times.

The CavityComplete® Concrete Masonry Unit (CMU) Wall System excludes the masonry veneer and concrete masonry units. A detailed list of the components is available at www.CavityComplete.com.

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