

CertaSpray® Open Cell Foam

PRODUCT DESCRIPTION

Basic Use: CertaSpray Open Cell Foam is a two-component water blown spray foam. When CertaSpray A-side open cell is mixed with CertaSpray B-side open cell under pressure in a 1:1 volumetric ratio, they react and expand into a low density, open cell foam with an in-place core density of 0.45 - 0.65 pcf.

Benefits: CertaSpray Open Cell Foam provides thermal insulation for the interior of buildings and reduces air infiltration through the building envelope.



Applications: The open cell low density foam can be spray-applied into open wall cavities, perimeter joists, cathedral ceilings, garage ceilings, attics and crawlspaces. Product can be installed up to 12" thick in ceilings and walls when covered with a code-approved 15-minute thermal barrier. Product is meant for interior applications. Product must be finished according to local code, and must be applied by a qualified applicator.

Composition and Materials: CertaSpray Open Cell Foam is a low density, MDI-based polyurethane semi-rigid foam.

Limitations: Foam Plastic Insulation: CertaSpray Open Cell Foam is defined by the building codes as a foam plastic insulation.

Thermal Barrier: Many building codes require that foam plastic insulation be covered with an approved 15-minute thermal barrier. Consult local building code officials to ensure the application meets local building codes and regulations.

Vapor Retarder: The low density foam described in this specification sheet is not a vapor retarder. Check local building code for climate-specific vapor retarder requirements.

Lightiures: The National Electrical Code prohibits installation of any insulation over or within 3" (76 mm) of recessed light fixtures, unless approved insulated ceiling (IC) light fixtures are used.

Maximum Use Temperature: CertaSpray foam should not be in contact with equipment or materials that have operating temperatures greater than 180°F.

INSTALLATION

All application surfaces must be free of oil, grease, dust and debris. Surfaces must be dry prior to application of spray foam. Excess humidity may cause poor adhesion, and result in product failure. To avoid overspray, product should not be applied when conditions are windy.

Substrate temperature must reach 40°F prior to application.

The final product yield is dependent on spray conditions and spray techniques.

Typical End Use Properties: The thermal performance values depicted in the chart are achieved at the thickness specified when installed as recommended.

CAUTION: CertainTeed recommends that you consult an HVAC expert and comply with guidelines established by applicable building codes prior to using any closed or open cell spray foam insulation product in an attic retrofit application. If not installed correctly, adding spray foam to a vented attic may significantly impair the performance of the HVAC system and may cause other damage to the building. CertainTeed will not assume any liability or responsibility for any personal injury or property damage occurring as a result of the improper installation of spray foam insulation that is not in accordance with the instructions accompanying the product, that is not in conformance with any applicable building codes, or that is contrary to the advice given by a duly qualified HVAC expert.

Product Name	CertainTeed CertaSpray® Open Cell Foam
Manufacturer	CertainTeed Corporation
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Website	www.certainteeted.com/insulation

TECHNICAL DATA

Applicable Standards

- ICC-ES, AC- 377 (ESR-2668)

PHYSICAL AND MECHANICAL PROPERTIES*

PROPERTY	TEST METHOD	RESULT
Core Density, pcf	D1622	0.45-0.65
Thermal Resistance at 75°F, (h-ft ² -°F)/Btu	C518	3.7
Open Cell Content, %	D2842	> 95%
Compressive Strength, psi	D1621	2.4
Tensile Strength, psi	D1623	3.1
Water Absorption, % by volume	D2842	> 60%
Dimensional Stability, 75°F/95% RH, 28 Days, vol%	D2126	< 5%
Water Vapor Transmission, perm-inch	E-96	33
Air Permeability, at 5-1/2" thickness, L/s/m ²	E283	0.013
Fungi Resistance	C1338	Pass, with no growth

* The typical properties were obtained on samples produced with a Gusmer/Graco H25 spray machine using an air-purged Fusion spray gun. The foam was sprayed at a thickness of approximately 6". Please see *Recommended Processing Conditions* for additional information.

FIRE PERFORMANCE**

	TEST METHOD	RESULT
Flame Spread Index, 6***	ASTM E84	< 25
Smoke Index, 6***	ASTM E84	< 450
≤ 12" in ceilings	AC 377 Appendix X	Meets requirements
≤ 8" in wall	AC 377 Appendix X	

** The results of the test method may not be indicative of real-life fire performance. All plastic insulation must be separated from the interior building by an approved thermal barrier of 1/2" gypsum wallboard or equivalent thermal barrier material as required by the building code.

HANDLING AND STORAGE

Storage: It is recommended that CertaSpray-B and CertaSpray-A drums should be stored between 55-80°F. Keep containers tightly closed and store in a dry, well-ventilated area protected from freezing, rain, direct sunlight and excess heat. The storage life of B-side is up to 6 months and A-side up to 12 months when stored according to the recommended conditions.

Handling: When opening the drums, loosen the cap slowly to release pressure in the drum. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing aerosols, vapor or mist. Wash skin thoroughly after handling.

The Material Safety Data Sheet (MSDS) for CertaSpray-A and CertaSpray-B open cell must be read before using this product.

HEALTH AND SAFETY

The health and safety information in this data sheet does not contain sufficient detail for safe handling in all cases. For detailed safety and health information refer to the MSDS for this product.

AVAILABILITY AND COST

Distributed and sold throughout the United States. For availability and cost contact your local Territory Manager, contractor or distributor, or call CertainTeed Sales Support Group in Valley Forge, PA at 800-233-8990.

WARRANTY

Refer to CertainTeed's Lifetime Limited Warranty for CertaSpray® Foam Insulation (30-50-012).

MAINTENANCE

No maintenance required.

TECHNICAL SERVICES

Technical assistance can be obtained either from the local CertainTeed sales representative, or by calling CertainTeed Sales Support Group in Valley Forge, PA at 800-233-8990.

CHEMICAL PROPERTIES

	CERTASPRAY A	CERTASPRAY B
Viscosity at 25°C, cps	150-250	175
Specific Gravity at 25°C, g/ml	1.23	1.10

EMERGENCY CALLS:

CertainTeed Emergency Response Center
800-424-9300

CHEMTREC—Spills, Leak, Fire
800-424-9300 (in USA and Canada)



RECOMMENDED PROCESSING CONDITIONS

	VALUE
Preheater Temperature, °F	120- 145
Hose Temperature, °F	≤ 135
Pressure, psi	1100-1500
A/B Volumetric Ratio	1/1
Cream Time, sec	1-2
Tack-free Time, sec	4-10
# of Passes, Thickness Per Pass, inches	1 pass 6"

OPEN CELL THERMAL PERFORMANCE

THICKNESS		CONDUCTIVITY	AGED R-VALUE	
in	mm	BTU-in/h-ft ² -°F	(h-ft ² -°F)/BTU	(m ² -°C)/W
1	25	0.2695	3.7	0.65
1.5	38	0.2691	5.6	0.98
2	51	0.2686	7.4	1.31
2.5	64	0.2682	9.3	1.64
3	76	0.2677	11.2	1.97
3.5	89	0.2673	13.1	2.31
4	102	0.2668	15.0	2.64
4.5	114	0.2668	16.9	2.97
5	127	0.2668	18.7	3.30
5.5	140	0.2668	20.6	3.63
6	152	0.2668	22.5	3.96
7	178	0.2668	26.2	4.62
8	203	0.2668	30.0	5.28
9	229	0.2668	33.7	5.94
10	254	0.2668	37.5	6.60
11	279	0.2668	41.2	7.26
12	305	0.2668	45.0	7.92

Tested in accordance with ASTM C518 and/or C177 at 75°F (24°C) mean temperature.

*Aged 90 days at 140°F.

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