

# STYROFOAM<sup>™</sup> Brand UTILITYFIT<sup>™</sup> XPS 15 PSI

Extruded Polystyrene Foam Insulation

# **1. PRODUCT NAME**

STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Extruded Polystyrene Foam Insulation

# 2. MANUFACTURER

The Dow Chemical Company Dow Building Solutions 200 Larkin Center, 1605 Joseph Drive Midland, MI 48674 1-866-583-BLUE (2583) Fax 1-989-8321465 www.insulateyourhome.com

#### 3. PRODUCT DESCRIPTION Basic Use

STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Extruded Polystyrene Foam Insulation is a versatile, utility-grade product manufactured for applications that require a high R-value<sup>\*</sup> and outstanding moisture resistance without the need for high compressive strength.

#### STYROFOAM<sup>™</sup> Brand UTILITYFIT<sup>™</sup> XPS 15 PSI Insulation is designed for use

when a Type X, or lower-compressive strength, product is needed. If the superior properties of a Type IV 25 psi product are not required, STYROFOAM<sup>™</sup> Brand UTILITYFIT<sup>™</sup> XPS 15 PSI Insulation is a good choice for your application.

# 4. TECHNICAL DATA

Applicable Standards

STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Insulation meets ASTM C578, Type X – Standard Specification for Rigid Cellular Polystyrene Thermal Insulation. Applicable standards include:

• C518 – Standard Test Method for Steady State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

- D1621 Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- C272 Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions
- E96 Standard Test Methods for Water Vapor Transmission of Materials
- D696 Standard Test Method for Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer

# **Code Compliances**

STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Insulation complies with the following codes:

- Meets IBS/IRC requirements for foam plastic insulation; see ICC-ES NER-699
- ICBO-ES ER-2257
- BOCA-ES RR 21-02
- Underwriters Laboratories, Inc. (UL) Classified, see Classification Certificate D369

Contact your Dow sales representative or local authorities for state and local building code requirements and related acceptances

**Extruded Polystyrene Foam Insulation** 

# **TYPICAL PHYSICAL PROPERTIES**

STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Insulation exhibits the physical properties characteristics indicated in Table 2 when tested as represented.

Prolonged exposure to ultraviolet radiation may cause the surface of STYROFOAM<sup>™</sup> Brand UTILITYFIT<sup>™</sup> XPS 15 PSI Insulation to become faded and dusty. A light-colored, opaque protective covering should be used if excessive solar exposure is expected. The surface degradation will have no measurable effect on the insulating value of the plastic foam unless the deterioration is allowed to continue until actual foam thickness is lost. Since the dust would impair the performance of adhesives and finishes, the dusty surface should be brushed off before these products are applied.

# **ENVIRONMENTAL DATA**

STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Insulation is manufactured with a zero ozonedepleting (ODP), no-VOC (volatile organic compound) foaming agent technology. STYROFOAM<sup>™</sup> Brand UTILITYFIT<sup>™</sup> XPS 15 PSI Insulation is reusable in many applications.

Nominal Board Thickness <sup>(1)</sup> , in .	R-value <sup>(2)</sup>	Board Size, FT	Edge Treatment	
1.0	5.0	2 × 8, 4 × 8, 4 × 9	Square Edge Tongue and Groove, Scoreboard	
1.5	7.5	2 × 8, 4 × 8, 4 × 9	Square Edge Tongue and Groove, Scoreboard	
2.0	10.0	2 × 8, 4 × 8, 4 × 9	Square Edge Tongue and Groove, Scoreboard	
3.0	15.0	2 × 8, 4 × 8, 4 × 9	Square Edge Tongue and Groove, Scoreboard	

TABLE 1: Sizes, R-values and edge treatments for STYROFOAM™ Brand UTILIYFIT™ XPS 15 PSI™

(1) Not all product sizes are available in all regions. Additional product sizes are available by custom order. Consult your Dow sales representative about other sizes and lead-time requirements.

(2) Aged R-value at 1" cured foam @ 75°F mean temperature. R-value expressed in ft2-h-°F/Btu. R-value determined by ASTM C518 using the aging process in ASTM C1289 (90 days @ 140°F).

#### **Fire Protection**

STYROFOAM<sup>™</sup> Brand UTILITYFIT<sup>™</sup> XPS 15 PSI insulation is combustible; protect from high heat sources. Local building codes may require a protective or thermal barrier. For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector.

#### **5. INSTALLATION**

Boards of STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Insulation are easy to handle, cut and install. Contact a local Dow representative or access the literature library at www.dowstyrofoam.com/ architect or www.insulateyourhome.com for more specific instructions.

#### **6. AVAILABILITY**

STYROFOAM<sup>™</sup> Brand UTILIYFIT<sup>™</sup> XPS 15 PSI<sup>™</sup> Insulation is manufactured in several locations across North America and is distributed through an extensive network. For more information, call 1-800-232-2436.

#### 7. WARRANTY

Not applicable.

#### **8. MAINTENANCE**

Not applicable.

#### 9. TECHNICAL SERVICES

Dow can provide technical information to help address questions when using STYROFOAM<sup>™</sup> Brand UTILITYFIT<sup>™</sup> XPS 15 PSI insulation. Technical personnel are available to assist with any insulation project. For technical assistance, call 1-866-583-BLUE (2583).

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#### **10. FILING SYSTEMS**

- www.dowstyrofoam.com/architect
- www.insulateyourhome.com
- www.sweets.com

#### TABLE 2: Typical Physical properties (U.S.) of STYROFOAM™ Brand UTILIYFIT™ XPS 15 PSI™ **Extruded Polystyrene Foam Insulation**

Property and Test Method	Value
Thermal Resistance per inch, ASTM C518 @ 75°F mean temp., $ft^2 \bullet h \bullet \circ F/Btu$ , R-value <sup>(1)</sup> , min.	5.0
Compressive Strength <sup>(2),</sup> ASTM D1621, psi, min.	15
Water Absorption, ASTM C272, % by volume, max.	0.3
Maximum Use Temperature, °F	165
Coefficient of Linear Thermal Expansion, ASTM D696, in/in•°F	3.5 × 10⁻⁵

(1) Values are consistent with the criteria of ASTM C578 and the FTC R-value rule (16 CFR Part 460), R means resistance to heat flow. The higher the R-value, the greater the insulating power.

(2) Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first. Since STYROFOAM™ Brand Extruded Polystyrene Foam Insulations are visco-elastic materials, adequate design safetyfactors should be used to prevent long-term creep and fatigue deformation. For static loads, 3:1 is suggested. For dynamic loads, 5:1 is suggested. Contact Dow for design recommendations





#### **The Dow Chemical Company**

Dow Building Solutions 200 Larkin • Midland, MI 48674

#### US

Technical Information: Sales Information:

1-866-583-BLUE (2583) 1-800-232-2436

#### dowbuildingsolutions.com

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#### **Dow Polyurethane Foam Insulation and Sealants**

(AUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C). For more information, consult (Material) Safety Data Sheet ((M)SDS) call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada. When air sealing buildings, ensure that combustion appliances, such as furnaces, water heaters, wood burning stoves, gas stoves and gas dryers are properly vented to the outside. See website: http://www.epa.gov/iaq/homes/hip-ventilation.html. In Canada wisit: http://archive.nrc-cnrc.gc.ca/eng/ibp/irc/bsi/83house-ventilation.html.

STYROFOAM<sup>TM</sup> Brand Spray Polyurethane Foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Read all the instructions and (M)SDS carefully before use. Wear protective clothing (including long sleeves), gloves, goggles and proper respiratory protection. Supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a P100 particulate filter is required to maintain exposure levels below ACGIH, OSHA, WEEL or other applicable limits. Provide adequate ventilation. Contents under pressure. STYROFOAM<sup>TM</sup> Brand SPF should be installed by a trained SPF applicator.

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplier including Dow can give assurance that mold will not develop in any specific system.