



## STYROFOAM™ BRAND SCOREBOARD™ EXTRUDED POLYSTYRENE FOAM INSULATION

### 1. PRODUCT NAME

STYROFOAM™ Brand  
SCOREBOARD™ Extruded  
Polystyrene Foam Insulation

### 2. MANUFACTURER

The Dow Chemical Company  
Dow Building Solutions  
200 Larkin  
Midland, MI 48674  
1-866-583-BLUE (2583)  
Fax 1-989-832-1465

[www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com)

### 3. PRODUCT DESCRIPTION

STYROFOAM™ Brand SCOREBOARD™ Insulation is an extruded polystyrene foam insulation board that is scored longitudinally on 16" and 24" centers, making it easy to size to commonly used widths. STYROFOAM™ Brand SCOREBOARD™ Insulation has excellent insulating characteristics, high resistance to water and water vapor, exceptional compressive strength and long-term durability.

### BASIC USE

STYROFOAM™ Brand SCOREBOARD™ Insulation is designed for use in exterior cavity wall and foundation applications. Like all STYROFOAM™ Brand Extruded Polystyrene products, STYROFOAM™ Brand SCOREBOARD™ Insulation resists moisture to deliver a stable R-value\* over the long term.

### 4. TECHNICAL DATA

#### APPLICABLE STANDARDS

STYROFOAM™ Brand SCOREBOARD™ Insulation meets ASTM C578, Type IV – 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
- C203 – Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation
- D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging

#### CODE COMPLIANCES

STYROFOAM™ Brand SCOREBOARD™ Insulation complies with the following codes:

- Meets IBC/IRC requirements for foam plastic insulation; see ICC-ES NER-699, 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.

#### PHYSICAL PROPERTIES

STYROFOAM™ Brand SCOREBOARD™ Insulation exhibits the properties and characteristics indicated in Table 2 when tested as represented.

Exposure to ultraviolet radiation in sunlight for several weeks will cause the surface of STYROFOAM™ Brand SCOREBOARD™ Insulation to become yellow 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™ Brand SCOREBOARD™ Insulation is hydrochlorofluorocarbon (HCFC) free with zero ozone-depletion potential. STYROFOAM™ Brand SCOREBOARD™ Insulation is reusable in many applications.

**TABLE 1: SIZES, R-VALUES AND EDGE TREATMENTS FOR STYROFOAM™ BRAND SCOREBOARD™ EXTRUDED POLYSTYRENE FOAM INSULATION**

| NOMINAL BOARD THICKNESS <sup>(1)</sup> , IN | R-VALUE <sup>(2)</sup> | BOARD SIZE, FT | EDGE TREATMENT |
|---|------------------------|----------------|----------------|
| .75   | 3.8                    | 4 x 8          | Square Edge    |
| 1.0   | 5.0                    | 4 x 8          | Square Edge    |
| 1.5   | 7.5                    | 4 x 8          | Square Edge    |
| 2.0   | 10.0                   | 4 x 8          | Square Edge    |
| 2.5   | 12.5                   | 4 x 8          | Square Edge    |
| 3.0   | 15.0                   | 4 x 8          | Square Edge    |

(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 ft<sup>2</sup>•h•°F/Btu. R-value determined by ASTM C518 using the aging process in ASTM C1289 (90 days @ 140°F).

**FIRE PROTECTION**

STYROFOAM™ Brand SCOREBOARD™ Insulation is combustible; protect from high heat sources. A protective barrier or thermal barrier may be required as specified in the appropriate building code. For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector.

**5. INSTALLATION**

STYROFOAM™ Brand SCOREBOARD™ Insulation is easy to handle, cut and install. Visit [www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com) or contact a local Dow representative for more specific instructions.

**6. AVAILABILITY**

STYROFOAM™ Brand SCOREBOARD™ 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**

A limited warranty is available that covers the thermal retention of STYROFOAM™ Brand SCOREBOARD™ Insulation. Refer to the Dow warranty certificate for complete details.

**TABLE 2: PHYSICAL PROPERTIES OF STYROFOAM™ BRAND SCOREBOARD™ EXTRUDED POLYSTYRENE FOAM INSULATION**

| PROPERTY AND TEST METHOD   | VALUE                  |
|--|------------------------|
| Thermal Resistance per inch, ASTM C518 @ 75°F mean temp., ft <sup>2</sup> •h•°F/Btu, min., R-value <sup>(1)</sup> , min. | 5.0                    |
| Compressive Strength <sup>(2)</sup> , ASTM D1621, psi, min.  | 25                     |
| Water Absorption, ASTM C272, % by volume, max.   | 0.3                    |
| Water Vapor Permeance <sup>(3)</sup> , ASTM E96, perm, max.  | 1.5                    |
| Maximum Use Temperature, °F  | 165                    |
| Coefficient of Linear Thermal Expansion, ASTM D696, in/in•°F   | 3.5 x 10 <sup>-5</sup> |
| Flexural Strength, ASTM C203, psi, min.  | 50                     |
| Dimensional Stability, ASTM D2126, % linear change, max.   | 2.0                    |
| Surface Burning Characteristics, ASTM E84,   |                        |
| Flame Spread <sup>(4)</sup>  | 15                     |
| Smoke Developed  | 165                    |

(1) 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 safety factors should be used to prevent long-term creep and fatigue deformation.  
 (3) Based on 1" thickness.  
 (4) This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

**8. MAINTENANCE**

Not applicable.

**9. TECHNICAL SERVICES**

Dow can provide technical information to help address questions when using STYROFOAM™ Brand SCOREBOARD™ Insulation. Technical personnel are available to assist with any insulation project. For technical assistance, call 1-866-583-BLUE (2583).

**10. FILING SYSTEMS**

- [www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com)
- [www.sweets.com](http://www.sweets.com)

[www.dowbuildingsolutions.com](http://www.dowbuildingsolutions.com)

**Technical Information**  
 1-866-583-BLUE (2583)  
**Sales Information**  
 1-800-232-2436

**IN THE U.S.**  
 THE DOW CHEMICAL COMPANY  
 200 Larkin  
 Midland, MI 48674

Dow has manufactured STYROFOAM™ Brand Extruded Polystyrene Foam Insulation for use in construction and specialty applications for more than 60 years. Its dense closed-cell structure gives STYROFOAM™ Brand Extruded Polystyrene Foam Insulation excellent moisture resistance, long-term thermal performance and compressive strength. STYROFOAM™ Brand Extruded Polystyrene Foam Insulation is reusable in many applications.

NOTICE: No freedom from any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. Dow assumes no obligation or liability for the information in this document. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DOW. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

CAUTION: This product is combustible. Protect from high heat sources. A protective barrier or thermal barrier may be required as specified in the appropriate building code. For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400.

**WARNING: Rigid foam insulation does not constitute a working walkable surface or quality as a fall protection product.**

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.

