

# DuPont™ Styrofoam™ Brand Scoreboard ST-100 Insulation

Easy-to-Use, Scored Insulation for Foundations and Above Grade Walls

## FEATURES/BENEFITS

### Description

DuPont™ Styrofoam™ Brand Scoreboard ST-100 Insulation\* is a grey, extruded polystyrene foam insulation board that is scored longitudinally on 16" and 24" centers, making it easy to size to commonly used widths, cut and install. It has excellent insulating characteristics, high resistance to water and water vapor, exceptional compressive strength and long-term durability.

Styrofoam™ Brand Scoreboard™ ST-100 Insulation is designed for use in exterior cavity wall and foundation applications. Like all Styrofoam™ Brand Extruded Polystyrene products, Styrofoam™ Brand Scoreboard ST-100 resists moisture to deliver a stable R-value\*\* over the long term.

### Available Sizes

Available sizes, R-values and edge treatments for Styrofoam™ Brand Scoreboard ST-100 Insulation can be found in Table 1.

### Sustainable Solutions

Styrofoam™ Brand Scoreboard ST-100 Insulation uses BluEdge™ technology. Styrofoam™ Brand Scoreboard ST-100 Insulation is designed to be compliant with U.S. state HFC regulations where sold. It uses enhanced level of sustainable blowing agents, and BluEdge™ flame retardant technology. It is hydrochlorofluorocarbon (HCFC) free with zero ozone depletion potential and Styrofoam™ Brand Scoreboard ST-100 Insulation is reusable in many applications. Styrofoam™ Brand insulation products produced in North America contain an average of 20% pre-consumer recycled content certified by UL Environment Inc.

**TABLE 1: Sizes, R-values and Edge Treatments for Styrofoam™ Brand Scoreboard™ ST-100 Insulation**

Nominal Board Thickness <sup>(1)</sup> (in.)	R-Value <sup>(2)</sup>	Board Size (ft.)	Edge Treatment
0.75	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

<sup>1</sup> Not all product sizes are available in all regions. Additional product sizes are available by custom order. Consult your DuPont sales representative about other sizes and lead-time requirements.

<sup>2</sup> 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).

## PROPERTIES

DuPont™ Styrofoam™ Brand Scoreboard ST-100 Insulation exhibits physical properties as indicated in Table 2 when tested as represented. Review all instructions and Safe Handling document on [BeyondBlue.DuPont.com](https://www.beyondblue.dupont.com) before use. Please contact DuPont at 1-866-583-2583 when additional guidance is required for writing specifications that include this product.

**TABLE 2: U.S. Physical Properties of Styrofoam™ Brand Scoreboard ST-100 Insulation**

Property and Test Method	Value
Thermal Resistance per inch, ASTM C518 @ 75°F mean temp., ft <sup>2</sup> ·h·°F/Btu, 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.	0.1
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 for both foam core and finished product	Class A
Flame Spread	25
Smoke Developed	<450

<sup>1</sup> R means resistance to heat flow. The higher the R-value, the greater the insulating power.

<sup>2</sup> Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first. Since Styrofoam™ Extruded Polystyrene Foam Insulations are visco-elastic materials, adequate design safety factors should be used to prevent long-term creep and fatigue deformation.

<sup>3</sup> Based on 1" thickness.

<sup>4</sup> This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

## TESTING

### Applicable Standards

Styrofoam™ Brand Scoreboard ST-100 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
- **D696** – Standard Test Method for Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer
- **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

### Notice

Styrofoam™ Brand Scoreboard™ ST-100 Insulation complies with the following codes:

- Meets IBC/IRC requirements for foam plastic insulation; see ICC-ESR 4755
- Underwriters Laboratories, Inc. (UL) Classified, see Classification Certificate D369

### Warranty

In the United States, a 50-year thermal limited warranty is available on Styrofoam™ Insulation products 1.5 inches and greater. For thickness less than 1.5 inches, other warranties may apply. Visit [building.dupont.com/warranties](https://building.dupont.com/warranties) or contact your DuPont representative for details.

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## HANDLING

**WARNING: For Professional Use Only** – Read and follow the entire Handling section and the Safe Handling document on [BeyondBlue.DuPont.com](https://www.beyondblue.dupont.com) carefully before use. The information below is designed to protect the user and allow for safe use and handling of Styrofoam™ Brand products.

### Precautionary Statements

- **DuPont™ Styrofoam™ Brand Scoreboard ST-100 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 the **Safe Handling document** on [BeyondBlue.DuPont.com](https://www.beyondblue.dupont.com), call DuPont at 1-866-583-2583 or contact your local building inspector.
- A light-colored, opaque protective covering should be used if excessive solar exposure is expected. Exposure to ultraviolet radiation in sunlight for several weeks will cause the surface of **Styrofoam™ Brand Scoreboard ST-100** to become yellow and dusty.
- 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.
- Follow all applicable federal, state, local and employer regulations.

### Disposal

Dispose of any residual Styrofoam™ Brand product, coated debris, or solvent in accordance with applicable federal, state, and local government regulations.



**For more information visit  
[styrofoam.com](http://styrofoam.com)  
or call 1-833-338-7668**

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**WARNING:** Rigid foam insulation does not constitute a working walkable surface or qualify 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 DuPont can give assurance that mold will not develop in any specific system.