## **Technical Data Sheet**

# Styrofoam™ Deckmate™ Plus Tapered FA

## IB Roof Systems®

## **Product Description:**

An extruded polystyrene foam featuring smooth, high-density skins and a closed cellular structure. Designed with a positive slope for drainage, it has a higher compressive strength than other commonly used foam plastic insulations in order to provide additional membrane support for conventional low-slope roof applications. Designed for fully adhered roofing systems, Styrofoam™ Deckmate™ Plus FA Tapered boasts excellent insulating characteristics, low water absorption, and excellent compressive strength.

## Size/Packaging:

Available in 2<sup>3</sup> x 8<sup>3</sup> panels with standard slopes of 1/8<sup>3</sup> per foot or 1/4<sup>3</sup> per foot.

#### Features:

- · Specially designed smooth, high-density skins
- Hydrochlorofluorocarbon (HCFC) free with zero ozone depletion potential
- · Excellent insulating characteristics
- Hydrophobic nature of polystyrene provides high resistance to both water and water vapor
- · Excellent freeze-thaw resistance
- · Excellent compressive strength
- · Long-term durability
- · Reusable in many applications
- Covered component under the IB Total Systems Warranty

## **Application:**

The XPS rigid insulation boards can be installed over approved substrates, directly on structural steel decks or beneath an approved cover board or thermal barrier. **Note:** Requires use of approved cover board or non-polystyrene insulation board as top layer; or use of approved separation sheet between the IB membrane and polystyrene insulation. Refer to IB Specifications and Construction Details for additional installation instructions.

### Approvals:

- Meets or exceeds the requirements of ASTM C578 Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
- UL Standard 790 (ASTM E108) Roofing Systems Classification for various recover applications.
- FM Standard 4450

## **Limitations/Precautions:**

When stored outdoors, keep insulation boards covered with white plastic film or light-colored tarps to protect from weather and weighted down to prevent boards from being blown around by the wind. Store above standing water. Do not leave Styrofoam™ Deckmate™ Plus FA Tapered exposed to direct sunlight for more than 90 days. Consult manufacturer if exposure is expected to be longer than 90 days. **Caution**: Use a temporary white covering over dark membranes or immediately cover with pavers or stone to prevent excessive heat exposure to the foam board.



## STYROFOAM™ Brand Foam Insulation

Typical Physical Properties*		
Property	Test Method	Type IX
R-value <sup>1</sup>		
Resistance @75°F	ASTM C518	5.00
Compressive Strength, (psi,		
10% deformation) <sup>2</sup>	ASTM D1621	25
Flexural Strength (psi)	ASTM D203	50
Dimensional Stability <sup>3</sup>	ASTM D2126	2.0
Water Vapor Permeance		
(max perm, 1")4	ASTM E96	1.1
Water Absorption (max %		
vol)	ASTM C272	0.1
Coefficient of Linear		
Thermal Expansion, in/in•°F	ASTM D696	3.5 x 10-5
Flame Spread⁵	ASTM E84	
	(10 min.)	15
Smoke Development⁵	ASTM E84	
	(10 min.)	165
Surface Burning		
Characteristics for both		
foam core and finished	ASTM E84	
product	(10 min.)	
Flame Spread <sup>4</sup>		25
Smoke Developed⁴		<450

1R means resistance to heat flow. The higher the R-value, the greater the insulating power.
2Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first

<sup>3</sup>These numerical flame spread, and smoke developed ratings are not intended to reflect hazards presented by this or any other material under actual fire conditions

\*Based on 1 thickness. Tested at 158°F/97% RH/7 days

\*Physical properties shown are based on data provided by resin manufacturers, independent test agencies and insulation manufacturers.

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