

# INSUL DRAIN™

A FOAMULAR® Extruded Polystyrene Insulation Product



**Insul-Drain is a FOAMULAR extruded polystyrene product that incorporates the features of insulation, drainage and protection board in a single product. It's easy to install, without the need for special tools or equipment, and the product's superior compressive strength and long-term moisture resistance properties mean years of reliable performance on below grade foundation walls even under extremely harsh conditions.**

**INSULATION** FOAMULAR's superior R-value of 5 per inch of product thickness, outstanding moisture resistance for long-term performance, and tough compressive strength, enhance the benefits of INSUL-DRAIN by providing energy efficiency to the foundation wall. Tongue and groove edges permit easier board alignment and help seal joints between boards. A horizontal channel on the top edge also aids in proper positioning of the INSUL-DRAIN panels.

**DRAINAGE** A network of drainage channels, cut into one side of the INSUL-DRAIN board, allows ground water to drain away from the vertical foundation wall while providing a flow path for soil gases to vent upward. A durable, non-woven filtration fabric, overlapping the board on three sides, prevents soil from clogging the channels. The fabric also overlaps the adjacent boards, as well as the top and bottom edge, for total system performance. The product's 4' x 8' size covers a greater area faster than comparable products.

**PROTECTION** High compressive strength and resistance to moisture penetration give INSUL-DRAIN outstanding durability below-grade. Year after year, the product will keep performing without crumbling or disintegrating. This makes INSUL-DRAIN extremely effective as a protection board for the waterproofing membrane.

## PRODUCT DATA

**Material:** Extruded polystyrene closed-cell foam panel with fabricated drainage channels and a non-woven filtration fabric on one side.

**Sizes:** 1, 1½, 2¼ in. thick, 4 ft. wide, 7, 8 ft. long

**Edges:** Tongue and Groove

**Weights:** 165 (1 in.), 240 (1½ in.), 350 (2¼ in.) approx. lb./1000 ft.<sup>2</sup>

**Compliance with Standards:** Compliant with the following building code sections: BOCA I 2603, ICBO 1713, SBCCI 717. Foam core meets ASTM C578 specifications and is UL Classified.

**Packaging:** Shipped in units with two stretch-wrap bands per bundle. See below:

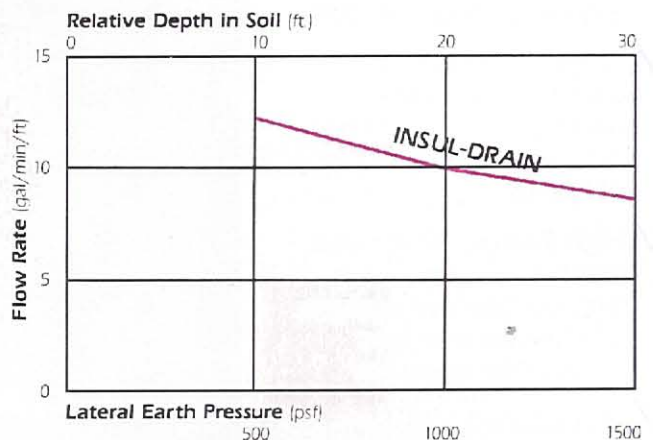
INSUL-DRAIN	1"	1½"	2¼"
Pieces Per Bundle	12	8	6
Bundles Per Unit	8	8	7
Sq. Ft. Per Bundle	384	256	192
Pieces Per Unit	96	64	42
Sq. Ft. Per Unit	3072	2048	1344

## FOAMULAR Physical Properties

Product Property	INSUL-DRAIN		
	1"	1½"	2¼"
R-Value, min. °F x ft. <sup>2</sup> x h/Btu <sup>(1)</sup>	4.4	6.9	10.6
Compressive Strength, min. (lb./ft. <sup>2</sup> ) <sup>(2)</sup>	3600	3600	3600
Flow Rate, min. (gal./min./ln. ft.)	12.0	12.0	12.0

(1) At 75°F. (2) Minimum foam core value. The bearing surface of the product should be considered when designing for specific applications. (3) 12 gpm per ln. ft. of width (tested at a uniform load of 500 psf for 300-hour duration according to ASTM D4716).

## INSUL-DRAIN Flow Rate Testing\*



\*Testing performed by Westinghouse Environmental and Geotechnical Services, Inc. according to ASTM Test Method D-4716 Standard Test Method for Constant Head Hydraulic Transmissivity (In-Plane Flow) of Geotextiles and Geotextile Related Products. The time duration of the test was 300-hours.