



# TRUE FOLD™ EXTRUDED POLYSTYRENE FOAM INSULATION

## 1. PRODUCT NAME

TRUE FOLD™ Extruded Polystyrene Foam Insulation

## 2. MANUFACTURER

True Seal  
15 Allstate Parkway, 6th Floor  
Markham, ON L3R 5B4  
1-888-824-4455  
[www.true-seal.com](http://www.true-seal.com)

## 3. PRODUCT DESCRIPTION

TRUE FOLD™ Insulation is an extruded polystyrene fanfolded foam board with square edges. Poly-coated kraft facers make TRUE FOLD™ Insulation compatible with plasticized membranes. Lightweight, easy-to-cut TRUE FOLD™ Insulation provides high compressive strength as well as moisture and puncture resistance.

## BASIC USE

TRUE FOLD™ Insulation is designed specifically for installation over an existing roofing membrane in roof re-cover applications with a new ballasted or light-colored mechanically attached sheet membrane.

## SIZE

Butt Edge  
Width and length: 4' x 50' (1.2 m x 15.2 m)  
fanfold boards folded every 2'(600 mm)  
Thickness: 3/8" (9.5 mm)

## 4. TECHNICAL DATA

### APPLICABLE STANDARDS

TRUE FOLD™ Insulation meets IBC/IRC requirements for foam plastic insulation. Applicable ASTM standards include:

- C518 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- D1621 - Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- E96 - Standard Test Methods for Water Vapor Transmission of Materials
- D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer
- D2842 - Standard Test Method for Water Absorption of Rigid Cellular Plastics
- C203 - Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation

## • PHYSICAL PROPERTIES

TRUE FOLD™ Insulation exhibits physical properties indicated in Table 1 when tested as represented.

## ENVIRONMENTAL DATA

TRUE FOLD™ Insulation is hydrochlorofluorocarbon (HCFC) free with zero ozone-depletion potential. TRUE FOLD™ Insulation is reusable in many applications.

## FIRE PROTECTION

TRUE FOLD™ 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 True Seal at 1-888-824-4455 or contact your local building inspector.



**TABLE 1: PHYSICAL PROPERTIES OF TRUE FOLD™ 3/8" INSULATION**

PROPERTY AND TEST METHOD	VALUE
Thermal Resistance at 3/8" (9.5 mm), ASTM C518 @ 75°F (24°C) mean temp., ft <sup>2</sup> • h • °F/Btu (m <sup>2</sup> • °C/W), R-value (RSI) <sup>(1)</sup> , min.	1.5 (0.26)
Compressive Strength <sup>(2)</sup> , ASTM D1621, psi (kPa), min.	15 (105)
Water Absorption, ASTM C272 (ASTM D2842), % by volume, max.	0.3
Maximum Use Temperature, °F (°C)	165 (74)

(1) R means resistance to heat flow. The higher the R-value or RSI (R-value Système International), the greater the insulating power.  
(2) At 10% deformation or at yield, whichever occurs first.

**TABLE 2: PHYSICAL PROPERTIES OF TRUE FOLD™ 1/2" INSULATION**

PROPERTY AND TEST METHOD	VALUE
Thermal Resistance at 1/2", ASTM C518 @ 75°F (24°C) mean temp., ft <sup>2</sup> • h • °F/Btu, R-value (RSI) <sup>(1)</sup> , min.	R2.5
Minimum Compressive Strength (5)	31.5
Density, ASTM D1622	
Fresh, foam core only, min.	2.2
Fresh, foam core, max.	2.7
Flame Spread <sup>(2)(3)</sup> , ASTM E84	0#
Smoke Developed <sup>(4)</sup> , ASTM E84	10#

(1) R means resistance to heat flow. The higher the R-value or RSI, the greater the insulating power.  
(2) This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.  
(3) Installed in a thickness, or stored in an effective thickness, as indicated, for a density of 2.5 pcf.  
(4) Flame spread and smoke developed recorded while material remained in original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread classification of 10 and smoke developed classification of 450 to over 500  
(5) Compressive strength is measured at 10 percent deformation or at yield, whichever occurs first.



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## 5. INSTALLATION

TRUE FOLD™ Insulation boards can be installed over the old roof's entire surface - on top of the existing membrane.  
Install ballasted or light-colored mechanically attached sheet membrane on top of TRUE FOLD™ Insulation.  
Contact a local True Seal representative for more specific instructions.

## 6. AVAILABILITY

TRUE FOLD™ Insulation is distributed through an extensive network.  
For product availability or for the name of your local True Seal sales representative, call: 1-888-824-4455

## 7. WARRANTY

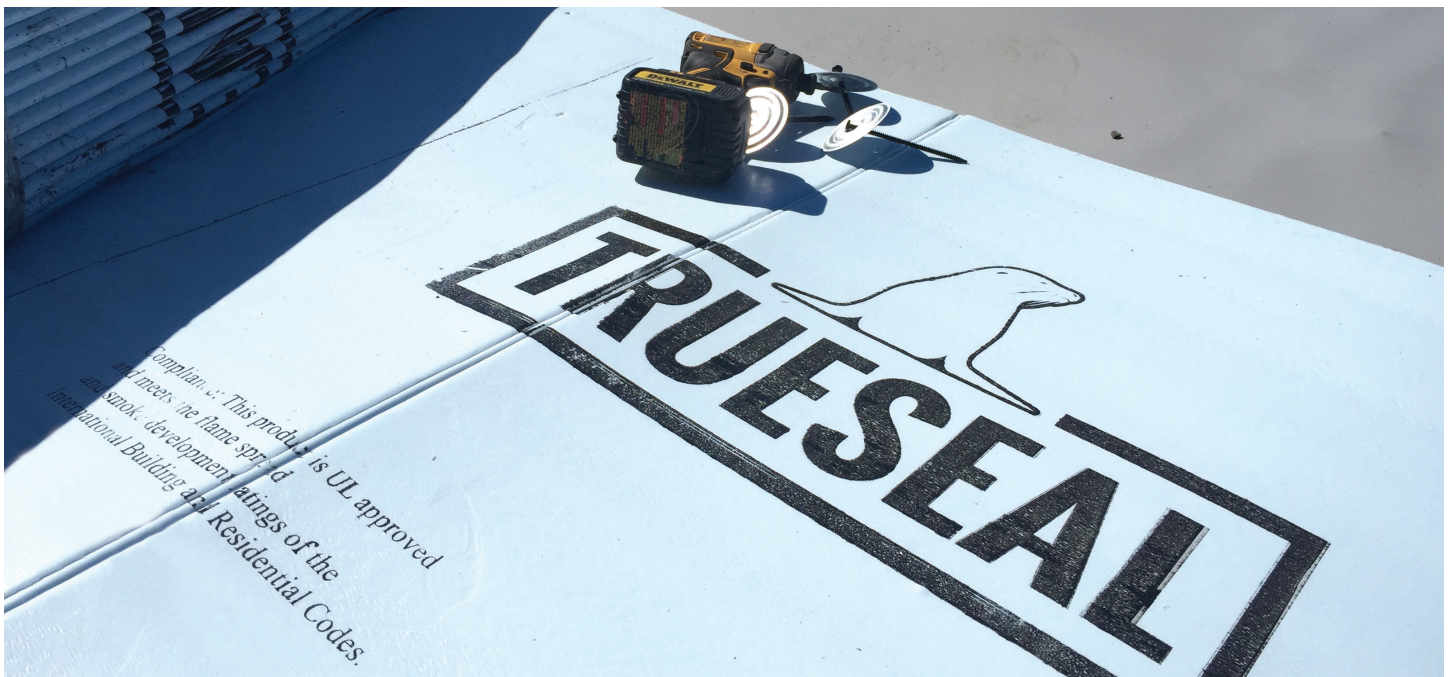
Not applicable.

## 8. MAINTENANCE

Not applicable.

## 9. TECHNICAL SERVICES

Dow can provide technical information to help address questions about using TRUE FOLD™ Insulation.  
Technical personnel are available to assist with any insulation project.  
For technical assistance, call:  
1-888-824-4455



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**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 True Seal at 1-888-824-4455 or contact your local building inspector. In an emergency, call 1-888-824-4455.

**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 True Seal can give assurance that mold will not develop in any specific system.