

# Product Information Bulletin

# 344

**DuroFoam Plus  
Insulation -  
CAN/ULC-S701,  
Type 2 Material  
Properties**

## Product Information Bulletin

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### DuroFoam® Plus Insulation - CAN/ULC-S701, Type 2 Material Properties

**DuroFoam® Plus** Insulation is a rigid, closed-cell insulation that meets or exceeds requirements for expanded polystyrene (EPS) insulation manufactured to CAN/ULC-S701, Type 2 as per the table below. **DuroFoam Plus** insulation has laminated films on the top and bottom surfaces which results in a more durable product that is less susceptible to handling damage.

**DuroFoam Plus** insulation has a green facer with product identification and markings to assist with cutting insulation/spacing of fasteners for attachment to framing. The reflective facer on the opposite side contains a thin layer of foil embedded within the film. The reflective facer itself does not increase the nominal thermal resistance of **DuroFoam Plus** insulation. Additional information on wall systems using reflective insulation is provided in Plasti-Fab PIB 253.

| Material Property <sup>1</sup>  | Test Method       | Units   | Values         |
|---|-------------------|---|----------------|
| <b>Thermal Resistance</b><br><i>Minimum per 25 mm (inch)</i>                              | ASTM<br>C518      | m <sup>2</sup> •°C/W<br>(ft <sup>2</sup> •h•°F/BTU) | 0.70<br>(4.04) |
| <b>Compressive Resistance</b><br><i>Minimum @ 10% Deformation</i>                         | ASTM<br>D1621     | kPa<br>(psi)  | 110<br>(16)    |
| <b>Flexural Strength</b><br><i>Minimum</i>  | ASTM<br>C203      | kPa<br>(psi)  | 240<br>(35)    |
| <b>Water Vapour Permeance</b> <sup>2</sup><br><i>Maximum for 25-mm (1-inch) thickness</i> | ASTM<br>E96       | ng/(Pa•s•m <sup>2</sup> )<br>(Perms)                | 30<br>(0.5)    |
| <b>Water Absorption</b> <sup>3</sup><br><i>Maximum</i>                                    | ASTM<br>D2842     | % By volume   | 4.0            |
| <b>Dimensional Stability</b><br><i>Maximum, 7 Days @ 70 ± 2°C (158 ± 4°F)</i>             | ASTM<br>D2126     | % Linear Change                                     | 1.5            |
| <b>Limiting Oxygen Index</b><br><i>Minimum</i>  | ASTM<br>D2863     | %   | 24             |
| <b>Surface Burning Characteristics</b><br><i>Classification or Rating</i>                 | CAN/ULC<br>S102.2 | Flame Spread  | 290            |
|   |                   | Smoke Developed                                     | Over 500       |

- DuroFoam Plus** insulation properties are third party certified to CAN/ULC-S701, **Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering**, and listed by the Canadian Construction Materials Centre (CCMC) under evaluation listing number 12425-L (Type 2).
- Unfaced EPS insulation **maximum** vapour permeance is 200 ng/Pa•s•m<sup>2</sup> (3.5 perms). **DuroFoam Plus** insulation vapour permeance is significantly lower as a result of the laminated films. Where water vapour permeance is a design issue, contact Plasti-Fab technical services for additional information.
- The water absorption laboratory test method involves complete submersion under a head of water for 96 hours. The water absorption values above are applicable to specific end-use design requirements only to the extent that the end-use conditions are similar to test method requirements.