



## Pre-Cast Concrete Panel Insulation

### STYROFOAM™ Brand PANELMATE™ /PANELMATE™ Ultra Extruded Polystyrene Foam Insulation

#### PART 1 – GENERAL

**SPEC NOTE:** Following are suggested specification paragraphs to be used when specifying rigid board insulation as part of a unit masonry assembly under Section 04800. Insert the required paragraphs into the Section under the noted Articles, and make any required selections, such as board size, thickness, etc. Where selection is indicated with an [OR] statement, select the appropriate paragraph and delete the inappropriate statement. Delete all SPEC NOTE and [OR] statements prior to final printing.

**DISCLAIMER:** The insulation manufacturer has reviewed the product information contained in this short form specification and is responsible for its accuracy. The information is organized and presented to assist the specification writer working on a construction project to select the appropriate products and to save time in writing the project specification Section. The specification writer is responsible for product selection as well as the use and application of this information, and should contact the manufacturer to ensure that all options are available and that the associated specification information is valid and correct.

#### 2.1 MATERIALS

- A. Rigid Board Insulation: Extruded polystyrene board to CAN/ULC-S701, Type 2, rigid, closed cell type, with integral high density skins.
1. Thermal Resistance: Long term aged RSI value of 0.88 /25.4mm.
  2. Board Size: 600 x 2 400 mm, [50] mm thick.
  3. Compressive Strength: Minimum 110 kPa.
  4. Water Absorption: to ASTM D2842, 0.9% by volume maximum.
  5. Edges: [Square][Shiplapped].
  6. Water Vapour Permeance: to ASTM E96, 90 ng/Pas m<sup>2</sup> per 25.4 mm thickness.

7. Manufacturer and Product Name: STYROFOAM™ Brand Extruded Polystyrene Foam Insulation, Dow Chemical Canada ULC

[OR]

- A. Rigid Board Insulation: Extruded polystyrene board to CAN/ULC-S701, Type 3, rigid, closed cell type, with integral high density skins.
1. Thermal Resistance: Long term aged RSI value of 0.99 /25.4mm.
  2. Board Size: 600 x 2 400 mm, [25], [50] mm thick.
  3. Compressive Strength: Minimum 170 kPa.
  4. Water Absorption: to ASTM D2842, 0.7% by volume maximum.
  5. Edges: [Square][Shiplapped].
  6. Water Vapour Permeance: to ASTM E96, 90 ng/Pas m<sup>2</sup> per 25.4 mm thickness.
  7. Manufacturer and Product Name: STYROFOAM™ Brand PANELMATE™ Ultra Extruded Polystyrene Foam Insulation, Dow Chemical Canada ULC.
- B. [Adhesive: To CGSB 71-GP-24M, Type 1.]

#### 2.2 FABRICATION

**SPEC NOTE:** panel fabrication methods will vary among different manufacturers. The following paragraphs describe general fabrication issues, but specific paragraphs may need to be added depending on the nature of the fabricator's methods. Consider referring to the Canadian Precast/Prestressed Concrete Institute Resource Binder and verify fabrication techniques with the various precast insulated panel companies.

1. Place insulation boards in a method to maximize contact with substrate.
2. Stagger end joints of insulation boards. Butt edges and ends tight to adjacent insulation boards and to protrusions
3. Fit insulation boards neatly around internal panel connectors.

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