Dow® STYROFOAM™ Panel Core 20 Extruded Insulation

Dow® STYROFOAM® Panel Core 20 Insulation Board is a high performance insulation material that is used to wrap the entire building to keep interior temperatures more consistent. It helps to reduce thermal bridging at framing members and is easy to cut, rasp and place. It may be custom formed into various decorative shapes. Packaged in 144 board foot bundles, each bundle weights approximately 12 lbs (5.44 kg) and is available in flat or drainage configurations.

Features & Benefits
- Continuous Insulation for Wall Assemblies
- Easily cut into shapes for decorative trim
- Shaved Surfaces provide good bond for Master Wall® Base Coats & Adhesives
- Reduces air movement in wall
- Reduces life cycle CO2 emissions
- Controls dew point / moisture condensation in wall
- Long lasting, strong, stable
- HCFC Free
- 20% Pre-consumer Recycled Content

Availability
STYROFOAM™ Panel Core 20 Extruded Polystyrene Foam Insulation is available through select distributors and laminators or may be ordered direct from Dow. For more information, call 1-800-232-2436.

Packaging: 144 board foot bundles*

Board thickness:
- Maximum Recommended 2" (101mm)
- Minimum 3/4" (19.1mm)
- Drainage Board 1.5" (38.2 mm)+

Board width in field, max.: 24" (610mm)
Board length in field, max.: 48" (1219mm)

Technical Data
Meets or Exceeds ASTM C578
ASTM C578, Type X
- Minimum Density: 1.5pcf
- R-Value (U-Value) at 75°F (9°C): 5.0 (0.20)
- Compressive strength, min., PSI (kPa): 20.0 (138)
- Flexural Strength, min., PSI (kPa): 40 (276)
- Water Vapor Permeance of 1.00 in (25.2 mm) thickness, max., perm (ng/Pa.s.m²): 1.5 (86)
- Water absorption by total immersion, max., volume, %: 0.3
- Dimensional stability (change in dimensions), max., %: 2.0
- Oxygen index, min., volume, %: 24.0
- Flame spread, max.: 25.0
- Smoke development, max.: 450

For a full listing of approved manufacturers please reference the insulation board page at masterwall.com

Attachment Methods
Systems Shown: Rollershield Drainage EIFS with adhesive attachment (Left), Aggre-flex Drainage with mechanical attachment (Right)
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Application Procedure

Job Conditions - Follow directions on adhesive data sheets. Mechanical attachment of insulation boards may be performed at lower temperatures over a dry surface.

Temporary Protection – Provide temporary and permanent protection to prevent water entry behind the system.

Substrate Preparation – Applications must be to an approved substrate with a maximum variation tolerance of 1/4" in 10'-0" (6.4 mm in 3.05m). Contact Master Wall for approved substrates and recommended attachment methods.

Application

The Insulation Board can be easily cut using handsaws, power saws, sharp knives, or thermal cutting tools. Rasping of the Insulation Board is completed with 12 grit sandpaper, manually or with air or electric rasping machines.

Follow data sheet recommendations for adhering insulation board to approved substrates. For mechanical attachment, fasten the Insulation Board to the approved substrate using Wind-Lock Wind-Devil 2 or other approved plastic plates. See Master Wall System Details for more information. Fastening patterns shall be determined by the requirements of the geographical conditions of the area, local code requirements, and the performance of the fasteners, retainers and their test results in conjunction with the specified substrate and the thickness of insulation board specified for use. Minimum 1" (25.2 mm) thickness for mechanically attached systems.

Install insulation board on the wall according to specification requirements. For further information and details, see the Master Wall System Application Instructions.

Limitations

The minimum required thickness for insulation board in the Master Wall Aggre-flex EIF System and Rollershield Drainage CIFS® is ¾” (19.2 mm) at any location on the wall.

Insulation board shall not be used in interior applications.

Residential applications require a secondary water barrier with the option of flat insulation board with profiled water barriers or drainage insulation board. See Aggre-flex Drainage Details for insulation board construction. Product description information and basic uses etc.