



FOAMULAR[®] Extruded Polystyrene (XPS) Insulation

Guide Specifications

PROJECT ENGINEER RESPONSIBILITY: This is a general specification guide, intended to be used by experienced construction professionals, in conjunction with good construction practice and professional judgment. This guide is to aid in the creation of a complete building specification that is to be fully reviewed and edited by the engineer. Sections of this guide should be included, edited, or omitted based on the requirements of a specific project. It is the responsibility of both the specifier and the purchaser to determine if a product or system is suitable for its intended use. Neither Owens Corning, nor any of its subsidiary or affiliated companies, assume any responsibility for the content of this specification guide relative to actual projects and specifically disclaim any and all liability for any errors or omissions in design, detail, structural capability, attachment details, shop drawings or other construction related details, whether based upon the information provided by Owens Corning or otherwise.

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FOAM BOARD INSULATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Provide FOAMULAR[®] extruded polystyrene rigid board insulation.

1.2 REFERENCES

- A. Materials shall meet the property requirements of one or more of the following specifications as applicable to the specific product or end use:
 - 1. American Society for Testing of Materials (ASTM):
 - a. ASTM C 578: Standard Specification for Rigid Cellular Polystyrene Thermal Insulation.
 - b. ASTM C 518: Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
 - c. ASTM E 84: Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. International Code Council Evaluation Service (ICC-ES), Evaluation Report.

1.3 SUBMITTALS

- A. Product Data: Submit data on product characteristics, performance criteria, and limitations, including installation instructions.
- B. Sustainable Design: Submit manufacturer's sustainable design certifications as indicated.
- C. Warranty: Submit documentation for limited product warranty. [___ years or lifetime].

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain exterior building insulation through one source from a single manufacturer.
- B. Each insulation board must be labeled with manufacturer's name, product brand name, ASTM material specification reference, and identification of the third party inspection agency used for building code qualification.



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1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original packaging.
- B. Store and protect products in accordance with manufacturer's instructions. Store in a dry area and protect from water, direct sunlight, flame, and ignition sources. Do not install insulation that has been damaged or wet.
 - 1. In the event the board insulation becomes wet, wipe dry prior to installation.

Note to Specifier: For proper fire protection of plastic foam in storage, consult the National Fire Protection Association (NFPA) standards or the authority having jurisdiction.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Owens Corning Insulating Systems, LLC, Toledo, OH 43659; www.owenscorning.com.

2.2 FOAM PLASTIC BOARD INSULATION

- A. Extruded Polystyrene Board Insulation: Comply with ASTM C 578, Type [X, 15 psi minimum compressive strength, 1.30 lb/cu. ft. (21 kg/cu. m)] [IV, 25 psi minimum compressive strength, 1.55 lb/cu. ft. (26 kg/cu. m)] [VI, 40 psi minimum compressive strength, 1.80 lb/cu. ft. (29 kg/cu. m)] [VII, 60 psi minimum compressive strength, 2.20 lb/cu. ft. (35 kg/cu. m)] [V, 100 psi compressive strength, 3.00 lb/cu. ft. (48 kg/cu. m)].
 - 1. Thermal Resistance: (180 day real-time aging as mandated by ASTM C578, measured per ASTM C 518 at mean temperature of 75F): [R-5.0, 5.6] per inch of thickness, with 90% lifetime limited warranty on thermal resistance.
 - 2. Blowing Agent Formulation: Zero ozone depleting.
 - 3. Edge Condition: [Square, Tongue & Groove, Ship-Lap].
 - 4. Surface Burning Characteristics (ASTM E 84): Flame spread less than 25, smoke developed less than 450, certified by independent third party such as Underwriters Laboratories (UL).
 - 5. Indoor Air Quality: Compliance certified by independent third party such as GREENGUARD Indoor Air Quality Certified[®] and/or GREENGUARD Children and Schools CertifiedSM.
 - 6. Recycled Content: Minimum 20%, certified by independent third party such as Scientific Certification Systems.
 - 7. Warranty: Limited lifetime warranty covering all ASTM C578 physical properties.
 - 8. Panel Size: Provide [1/2", 3/4", 1"] thick by 4 ft. wide by 8 ft. long.

PART 3 - EXECUTION [Not Used]

END OF SECTION

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