
Standard Specification for Expanded and Extruded Foam Board (Polystyrene)

AASHTO Designation: M 230-07 (2024)

Technically Revised: 2007

Reviewed but Not Updated: 2024

Technical Subcommittee: 4e, Joints and Bearings



**American Association of State Highway and Transportation Officials
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1. SCOPE

- 1.1. This specification covers expanded and extruded polystyrene board used for lightweight fill or highway pavement insulation applications.

2. REFERENCED DOCUMENTS

- 2.1. *ASTM Standards:*
- C177, Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus
 - C272/C272M, Standard Test Method for Water Absorption of Core Materials for Sandwich Constructions
 - C303, Standard Test Method for Dimensions and Density of Preformed Block and Board-Type Thermal Insulation
 - C518, Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
 - C578, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation
 - D1621, Standard Test Method for Compressive Properties of Rigid Cellular Plastics
 - D1622/D1622M, Standard Test Method for Apparent Density of Rigid Cellular Plastics
 - D2863, Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index)

3. GENERAL REQUIREMENTS

- 3.1. The expanded polystyrene board shall be formed by the expansion of polystyrene base resin in an extrusion process. The board shall be homogeneous and shall consist of a continuum of closed cells.

4. PHYSICAL PROPERTIES

- 4.1. The board shall conform to the requirements prescribed in Table 1 when tested by the procedures specified in Section 6.
- 4.2. Design data should specify both the required compressive strength and thickness. (Normal manufacturing processes and distribution systems allow for 105-kPa, 170-kPa, 275-kPa, 415-kPa,