

INTERPRETATIVE BULLETIN C-5-76
FOAM PLASTIC INSULATION SHEATHING
MATERIALS - 3280.207(A)

Extruded expanded polystyrene foam plastic not to exceed one inch in thickness may be used within the cavity of walls or ceilings as sheathing or backer board for exterior coverings under the following conditions:

- (I) The sheathing shall have a minimum compression strength of 25 psi when tested as per ASTM-D 1621-64 and an average thermal conductivity (k factor) of 0.20 BTU-in/hr ft² °F at 75° F mean when tested as per ASTM-C518-70.
- (ii) A minimum of two inches of mineral fiber insulation is provided within the wall cavity and a minimum of four inches of mineral fiber insulation is provided in the ceiling cavity.
- (iii) An interior finish material is provided on exterior wall and ceiling surfaces with equivalent fire resistive properties to 5/16" gypsum board.
- (iv) A wall framing system consisting of 2" x 4" studs at 16" o.c. or equivalent when the sheathing is installed within the wall cavity.
- (v) A roof framing system consisting of roof trusses or equivalent framing members installed at a minimum spacing of 16" o.c.
- (vi) The sheathing shall not be placed in contact with heat sources such as chimneys, heater vents or other surfaces which provide long term exposure to temperatures above 150° F. Clearance from the sheathing to the heat source shall be provided in accordance with NFPA 89M, heat producing appliance clearances.
- (vii) A vapor barrier is provided on the warm side of the wall and ceiling cavity in accordance with subpart F of the standards.
- (viii) The sheathing is installed in accordance with the manufacturers installation instructions including the provision for controlling joint locations by either the use of tongue and groove sheathing or by placement of joints over structural framing members.