

# Foam Plastic (Spray Foam Insulation)

1. Packages and containers of foam plastic insulation and foam plastic insulation components delivered to the job site shall bear the label of an approved agency showing the manufacturer's name, the product listing, product identification, and information sufficient to determine that the end use will comply with the requirements.

## Thermal Barrier

1. Foam plastic insulation shall be separated from the interior of a building by an approved **thermal barrier** of not less than 1/2-inch gypsum wallboard, 23/32-inch wood structural panel. Alternatively, it may be separated by a material that is tested in accordance with, and meets the acceptance criteria, of both the Temperature Transmission Fire Test and the Integrity Fire Test of NFPA 275.
2. The **thermal barrier** is not required where the foam plastic in a roof assembly or under a roof covering is installed in accordance with the code and the manufacturer's instructions and is separated from the interior of the building by tongue-and-groove wood planks or wood structural panel sheathing that is not less than 15/32 inch thick bonded with exterior glue, identified as Exposure 1, and with edges supported by blocking or tongue-and-groove joints or an equivalent material. The smoke-developed index for roof applications shall not be limited.

## Attics

The thermal barrier is not required where all of the following apply:

- a) Attic access is required
- b) The space is entered only for purposes of repairs or maintenance.
- c) The foam plastic insulation has been tested (see *specific approval*) or the foam plastic insulation is protected against **ignition** using one of the following **ignition barrier** materials:

1 1/2-inch-thick mineral fiber insulation.

1/4-inch-thick wood structural panels.

3/8-inch particleboard.

1/4-inch hardboard.

3/8-inch gypsum board.

Corrosion-resistant steel having a base metal thickness of 0.016 inch

1 1/2-inch-thick cellulose insulation

1/4-inch fiber-cement panel, soffit or backer board.

The **ignition barrier** is not required where the foam plastic insulation has been tested (see *specific approval*)

## Crawl spaces

The **thermal barrier** is not required where all of the following apply:

- d) Crawl space access is required
- e) The space is entered only for purposes of repairs or maintenance.
- f) The foam plastic insulation has been tested (see *specific approval*) or the foam plastic insulation is protected against **ignition** using one of the following ignition barrier materials:
  - 1 1/2-inch-thick mineral fiber insulation.
  - 1/4-inch-thick wood structural panels.
  - 3/8-inch particleboard.
  - 1/4-inch hardboard.
  - 3/8-inch gypsum board.
  - Corrosion-resistant steel having a base metal thickness of 0.016 inch.

### *Specific approval*

Foam plastic not meeting the above requirements shall be specifically approved on the basis of one of the following approved tests:

- A. NFPA 286 — while meeting the following criteria:
  - 1. During the 40 kW exposure, flames shall not spread to the ceiling.
  - 2. The flame shall not spread to the outer extremity of the sample on any wall or ceiling.
  - 3. Flashover, as defined in NFPA 286, shall not occur.
  - 4. The peak heat release rate throughout the test shall not exceed 800 kW.
  - 5. The total smoke released throughout the test shall not exceed 1,000 m<sup>2</sup>.
- B. FM 4880,
- C. UL 1040
- D. UL 1715
- E. Fire tests related to actual end-use configurations. Approval shall be based on the actual end-use configuration and shall be performed on the finished foam plastic assembly in the maximum thickness intended for use. Assemblies tested shall include seams, joints and other typical details used in the installation of the assembly and shall be tested in the manner intended for how it was used.

If complying with the thermal/ignition barrier by means of the *Specific approval* requirement(s), the following documentation shall be provided at time of insulation inspection:

- 1. Project permit number
- 2. Project location
- 3. Insulation Product Used/Proposed
- 4. Intumescent Product Used/Proposed
- 5. ESR (Evaluation Service Report) for the insulation product
- 6. ESR (Evaluation Service Report) for the intumescent product (showing compatibility with insulation)
- 7. SPECIFIC locations the product or products are applied
- 8. Any other information that the County may deem necessary