Protecting Spray Foam in Your Home with Fire-Protective Intumescent Coatings

SPFA
FOAM-IT-RIGHT®
Visit sprayfoam.org

SPFA-159

PEACE OF MIND STARTS WITH PROTECTION

Proper installation of spray polyurethane foam goes beyond just excellent R-value. Choosing a properly-tested intumescent coating is about meeting code and protecting your family, your investment, and your future. Don't leave fire safety to chance. Insist on code-compliant solutions and verified products.

WHY IT MATTERS

Spray foam insulation offers superior energy efficiency; however, it's important to properly protect the foam with an approved fire protective coating to meet fire safety requirements. That's why building codes generally require foam plastic insulations be separated from the interior spaces by a thermal barrier. The requirement for a thermal barrier is typically met by ½" gypsum board on walls and ceilings and ¾" plywood subfloors. In some attics and crawlspaces, codes permit foam plastic insulation to be covered by an ignition barrier.[1] There are several ignition barriers listed in the code but, many of these are not practical for installation in attics and crawlspaces. As an alternative to these materials, qualified intumescent coatings may be used to meet thermal and ignition barrier requirements. Intumescent coatings are a modern, code-compliant solution for protecting foam and other combustible materials in these areas: they expand when exposed to heat, forming a protective char layer that delays ignition of the foam.

CODE REQUIREMENTS FOR SPRAY FOAM INSULATION

International Residential Code and International Building Code:

- **In general, foam plastic insulation must be separated from interior, occupied spaces by a thermal barrier or from interior, unoccupied spaces by an ignition barrier.**
- **The most common thermal barrier is ½" gypsum board.**
- **Approved intumescent coatings may be used in lieu of code-prescribed thermal barriers and ignition barriers in attics and crawlspaces.**

RAMIFICATIONS OF NON-COMPLIANCE

Failing to meet code requirements can lead to:

- **Code violations and stop-work orders.**
- **Fines and penalties from local building departments.**
- **Insurance claim denials in the event of fire.**
- **Legal liability for builders, contractors, and homeowners.**
- **Loss of occupancy permits or resale complications.**

If a fire occurs and the spray foam is not protected per code, insurers may refuse coverage, and homeowners could be held liable for damages.

[1] *Some spray foam products meet thermal and ignition barrier requirements without coatings or coverings, as stated in the code compliance documentation for the product.*

INSPECTIONS & INSURANCE IMPLICATIONS

- Building inspectors will often verify that thermal barrier or ignition barrier assemblies meet code-approved standards.
- Code compliance reports document product compliance and required testing.
- Insurance providers may request documentation of code-compliant fire protection. Missing or incorrect installation can result in higher premiums or denied claims.

Spray foam must be installed per building code requirements, even if the installation is not subject to inspection by a code official.

WHAT HOMEOWNERS SHOULD DO

- **Ask for documentation that your spray foam insulation is protected from fire in accordance with the code, which may include application of approved intumescent coatings.**
  - **Obtain an Insulation Installation Certificate from the contractor listing the code compliant products.**
- **Decline waivers from contractors that exclude thermal and ignition barrier provisions. Compliance with these requirements is mandated by building codes and cannot be waived.**

For more information, see SPFA's TechDoc SPFA-126 Thermal and Ignition Barriers for Spray Polyurethane Foam Insulation.

The documents are FREE to SPFA Members and can be accessed through the Member InfoHub. Non-members may purchase the TechDocs from the SPFA Store. sprayfoam.org/technical-documents/

SPFA FOAM-IT-RIGHT®

About the SPFA

Founded in 1987, the Spray Polyurethane Foam Alliance (SPFA) is the voice, and educational and technical resource for the spray polyurethane foam industry. The Alliance is a 501(c)6 trade association comprised of contractors, manufacturers, and distributors of polyurethane foam, related equipment, and protective coatings, inspections, surface preparations, and other services. The organization supports the best practices and the growth of the industry through a number of core initiatives, including: educational programs and events; a Professional Certification Program; technical services and publications; federal and state advocacy; and networking opportunities.

Visit sprayfoam.org