

SPFA gets calls regularly from customers, designers, architects and others looking for straight answers to their questions on SPF. Here are two of the questions received recently that our panel of experts addressed:



How do I find a reputable contractor?

The first place to start when searching for a contractor is to find an SPFA-member contractor. The SPFA Member Directory can be found on the SPFA website at www.sprayfoam.org/members/. If you cannot find an SPFA member contractor in your area, contact one of the SPFA Supplier members using this directory. They have an extensive list of contractor customers they can provide in your area.

Once you have identified a few local contractors, contact them to determine if they are experienced in roofing applications and/or insulation applications. While the equipment used for high pressure SPF roofing and insulation is the same and the SPF chemicals are very similar, the application techniques are different. In many cases SPF roofing systems are installed by low-slope roofing

contractors that specialize in commercial building applications. Roofing contractors in many cases do not install SPF insulation. Similarly, SPF insulation contractors do not often install SPF roofing. Check with the contractors to determine if they offer roofing, insulation or both types of installation services.

After confirming the contractor can do the work, ask if the applicators are experienced and have been trained by the SPF suppliers. Most suppliers offer two or three day equipment and material training courses for applicators to assure they know how to install their specific products. Some contractors are also accredited by SPFA. In addition to supplier training, SPFA-accredited contractors go through additional training in building science, SPF safety and project management. Most importantly,

SPFA-accredited contractors require that each accredited applicator have three different installations independently inspected for quality. To assure that the work is done safely, the ACC Center for the Polyurethanes Industry (CPI) website has several guidance documents prepared for building and homeowners at www.spraypolyurethane.org/Main-Menu-Category/Consumers.aspx

In all cases, SPF contractors should always install SPF using manufacturers' installation instructions, follow the SPFA best-practices guidelines defined in the SPFA Technical Documents library, and perform the installation using chemical safety procedures using guidelines from CPI.



Do you have a reference for fire performance and certifications of various commercial foams?

SPF, like many building products, is a combustible material. To assure occupant safety, all foam plastics, including SPF, must meet building code requirements in the jurisdiction where they are installed. Local building code requirements are identical to or closely based on model building codes. For SPF in commercial buildings, the International Building Code addresses foam plastics in Section 2603. Similar requirements for foam plastics in residential buildings can be found in Section R316 of the International Residential Code.

Both model building codes require that SPF must undergo certain fire tests before it can be used in a building. Depending on the application, the list can be extensive. All SPF products must have a surface burning test performed

(ASTM E84) to measure flame spread and smoke developed. Certain applications require foam plastics to be tested using large-scale or room corner fire tests. The model codes are somewhat complex when it comes to fire testing requirements, and we won't go into more detail here.

Once the necessary fire tests are determined for an application, the manufacturer of the product must have these tests performed by a third-party laboratory, using specific test protocols defined by organizations like ASTM, UL, NFPA and Factory Mutual. The results from these tests can be provided to the code official for approval of the product. However, many code officials are not familiar with the details of these tests, and may not accept the data.

An easier way for a code official to accept the test data is to have an evaluation report for the product in hand. These evaluation reports, prepared by product evaluation organizations like ICC-ES or IAPMO, have experienced engineers on staff that review third party fire test data and compare them to building code requirements. These evaluation organizations then write an evaluation report that certifies proper testing has been done and the product, when installed as described, will meet the model building codes.

Evaluation reports, along with fire test data from third-party independent laboratories, with references to applicable sections of the building code, can assure that a product has been properly tested and meets code requirements. ○