Sprayed Polyurethane Foam Roofing System

Meets or Exceeds Building Code Requirements:

Underside Roof Assembly Fire-Tested and Rated for Building Code Compliance by Underwriters Laboratories Inc.

The roofing system commercial builders want now has the fire-resistance ratings they need.

When commercial builders see the many advantages of a Sprayed Polyurethane Foam roofing system — such as energy-efficient insulation and wind uplift protection — they want it on their buildings. Now they can have it. The SPF roofing system assembly has fire-resistance ratings that meet or exceed building code requirements for most every type of commercial structure and type of occupancy.

Architects and Engineers: Specify a Sprayed Polyurethane Foam roofing system in your plans — Design No. P733, as described in the Underwriters Laboratories Inc. Fire Resistance Directory. Regional fire-safety requirements may vary, so please check your local building code for compliance.

Fire-tested at Underwriters Laboratories

The Sprayed Polyurethane Foam roofing assembly was tested for fire resistance in accordance with the UL263 testing method. Initially, a series of small-scale fire tests were done to qualify individual polyurethane foam manufacturers and to derive data for use in conjunction with the full-scale assembly test at Underwriters Laboratories Inc. Based on analysis of the full-scale test results, UL promulgated the P733 fire-resistance design with hourly ratings shown here.

See the back of this sheet for more information on the ratings and design assembly components.

Other Qualities of the Roofing System

- 5.8 - 6.2 R value
- Resists wind uplift
- Rigid, durable
- Monolithic surface
- Elastomeric coating
- Aggregate covering

Now every building — hospitals, schools, offices, industrial facilities — can gain the added protection of a Sprayed Polyurethane Foam roofing system.

Spray Polyurethane Foam Alliance
Sprayed Polyurethane Foam Roofing Assembly
Design No. P733
Underwriters Laboratories Inc.
Fire Resistance Directory

FIRE RESISTANCE DESIGN RATINGS
Restrained Assembly - 1, 1-1/2, 2 or 3 Hrs
Unrestrained Assembly - 1, 1-1/2, 2 or 3 Hrs
Unrestrained Beam - 1, 1-1/2, 2 or 3 Hrs
Tested in accordance with UL263 testing method. These hourly fire resistance ratings meet or exceed the required ratings of roofing assemblies for the majority of commercial buildings and types of occupancy. Specific fire-resistance rating requirements based on occupancy and proximity to other structures vary according to local building codes. Check the building code regulations in your area to ensure compliance.
Contact Underwriters Laboratories Inc. for a listing of Sprayed Polyurethane Foam manufacturers that have been classified by UL.

WIND UPLIFT RESISTANCE AND STRUCTURAL QUALITY
Excellent
According to Underwriters Laboratories Inc., the direct application of Sprayed Polyurethane Foam to steel deck and plywood deck demonstrated uplift load resistance (160-165 psf) without any sign of delamination or other damage to the foam.
Sprayed Polyurethane Foam results in a highly rigid, monolithic (continuous) roof surface with no joints or seams, which helps SPF roofing systems resist wind uplift.

For additional information, contact:
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GLOSSARY OF TERMS
Fire resistance - The property of materials or their assemblies that prevent or retard the passage of excessive, hot gases or flames under conditions of use.
Fire-resistance rating - The time in hours, or incremental fractions of hours, that materials or their assemblies will resist fire exposure as determined by the fire tests specified in building codes.
Restrained - A building that, through design, is reinforced to resist movement under fire conditions so that it is less likely to fail structurally during a fire.
Unrestrained - A building that, by design, is free to move under fire conditions. Generally, many building code jurisdictions treat all buildings as unrestrained, which has more stringent temperature limitations than restrained designs.


This brochure was developed to aid specifiers in choosing spray applied polyurethane foam systems. The information provided herein, based on current customs and practices of the trade, is offered in good faith and believed to be accurate, but is made WITHOUT WARRANTY, EITHER EXPRESS OR IMPLIED, AS TO FITNESS, MERCHANTABILITY, OR ANY OTHER MATTER. SPFA DISCLAIMS ALL LIABILITY FOR ANY LOSS OR DAMAGE ARISING OUT OF ITS USE. Individual manufacturers and contractors should be consulted for specific information. Nominal values that may be provided herein are believed to be representative, but are not to be used as specifications nor assumed to be identical to finished products. SPFA does not endorse the products or processes of any individual manufacturer, or the services of any individual contractor.