



## TOP MYTHS OF SPRAY POLYURETHANE FOAM & COATINGS ROOFING

During the last few decades, spray polyurethane foam (SPF) has grown in popularity and become the flat and low slope roofing material of choice for environmentally conscious consumers. Foam roofing is truly a highly quality, high performance product, but some commercial property owners remain on the fence about spray polyurethane foam (SPF) roofing. Unfortunately, there is a lot of misinformation out there regarding SPF roofs and we want to address some of the ‘myths’ that are out there:

### Myth #1:

#### **FOAM ROOFING IS TOO NEW AND NOT A PROVEN ROOFING MATERIAL**

**Reality:** The groundwork for polyurethane foam was done by Dr. Otto Bayer and his team in 1937 and began to be distributed commercially in 1954.

Initially polyurethane spray foam (SPF) was used in the 1960s for refrigeration and industrial insulation projects, although by the late 60s and early 70s polyurethane foam had evolved into exterior roofing applications. The earliest foam roofs are now around 50 years old. So, as a product, SPF has existed for the better part of a century, and it has been in use on roofing in applications for about half a century.

For most of the living world, foam roofing is indeed not new. Spray foam application is now prescribed for roofing and insulation needs all over the world and is applied with precision parameters for successful applications. The material is recognized by the National Building Code and has been proven to reduce penetrations to the building envelope.

### Myth #2:

#### **ALL SPF ROOFS ARE THE SAME**

**Reality:** We have been installing SPF roofs for over 30 years and have seen many contractors come and go. Our installers have over 75 years cumulative experience in spraying polyurethane foam. We are proud to be one of eight roofing companies in the United States and the only roofing company in Oklahoma that has the SPFA PCP accreditation and certification. Experience is key to SPF roofs!

### Myth #3:

#### **YOU CAN'T WALK ON A FOAM ROOF**

**Reality:** You CAN walk all over a spray foam roof. Both the Spray Polyurethane Foam Alliance (SPFA) and National Roofing Contractors Association (NRCA) assert that SPF roofs can sustain up to 50 pounds per square inch (PSI). A foam roof is capable of supporting a lot of weight, although, like other roofing types, any extremely sharp object could leave a hole that compromises the building envelope.



#### Myth # 4:

##### ***SPRAY FOAM ROOFING IS EXPENSIVE***

**Reality:** Sprayed polyurethane foam is actually one of the most affordable roofing and insulation solutions, especially when you consider the cost savings associated with choosing SPF. Rising oil prices over the last decade have driven up the costs of other flat roof alternatives, while the cost of foam roofing has remained fairly stable. Once you incorporate the savings associated with a durable, long-lasting material, the extended life provided by elastomeric coatings, and energy cost savings (see Texas A & M SPF Study), foam proves to be an extremely cost effective option. See our roofing system comparison chart for more information.

#### Myth # 5:

##### ***SPRAY FOAM ROOFS ARE NOT DURABLE AND WILL NOT LAST***

**Reality:** Research shows that successful roofing foam brands can last up to 50 years when applied and maintained with periodic re-coating. Foam roofing has already stood the test of time, and it's a fact; a foam roof can last the life of your building. The National Institute of Standards and Technology (NIST) examined buildings following Hurricane Katrina and found that buildings with SPF roofs performed remarkably well. Other studies support extremely high customer satisfaction and durability related to SPF materials.

#### Myth # 6:

##### ***FOAM BOARDS INSULATE AS WELL AS A SPRAYED FOAM ROOF***

**Reality:** Foam board roofs provide only a fraction of the benefits possible with sprayed foam roofing. Sprayed foam roofing is manufactured on site and is sprayed to perfectly conform to your roof as a single monolithic barrier to the elements. A foam board roof is full of seams which allow moisture and vapor transmission, which greatly reduces the insulation capacity. The closed cell structure of spray foam gives foam roofing one of the highest R-Values (thermal resistance) of any roofing materials on the market. Additionally, mechanically fastened roof systems can create thermal shorts at fastener locations, allowing heat transfer through the building envelope. Because spray foam is fully adhered and seamless, it eliminates thermal bridging caused by fasteners.

Texas A&M calculated the energy consumption of its buildings before and after the application of its spray foam roofing systems. According to the study of more than eight million square feet of SPF roofing, energy savings paid for the cost of Texas A&M's SPF roof applications in three to four years. (Cohen, S., "A Comparison of Built-Up and Foam Roofing Systems," Texas A&M University, 1993)

#### Myth # 7:

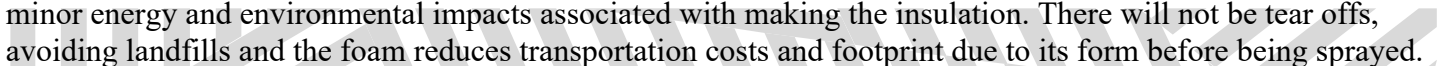
##### ***POLYURETHANE SPRAY FOAM IS TOXIC***

**Reality:** Polyurethane foam is really just a form of altered plastic with millions of tiny, trapped gas bubbles. Although the formulation is designed for roofing applications and optimized for the best combination of thermal resistance and durability, the base material is completely inert and are just as safe as the foam pillows you sleep on, the seat cushions inside your car or any water bottle you use.

#### Myth #8:

##### ***POLYURETHANE FOAM IS NOT 'GREEN' OR SUSTAINABLE***

**Reality:** New generations of polyurethane foams are continually being made and improved - some with renewable resource materials adding to its sustainability. Spray foam products save significant energy and prevent more environmental impacts during the life of the insulation in a building compared to the relatively minor energy and environmental impacts associated with making the insulation. There will not be tear offs, avoiding landfills and the foam reduces transportation costs and footprint due to its form before being sprayed.





**Myth # 9:**

**FOAM ROOFING ABSORBS WATER**

**Reality:** The Spray Polyurethane Foam (SPF) used in roofing applications is "closed cell". In other words, it is a plastic with millions of tiny, closed cells which are impenetrable by water. A block of SPF submerged under water will remain buoyant and dry indefinitely. For this reason, spray polyurethane foam is used in flotation docks and the hulls of sea vessels. SPF is not a sponge.

**Myth #10:**

**BIRDS WILL PECK AND DAMAGE A SPRAY FOAM ROOF**

**Reality:** It is common to see birds on top of any roof system. If the acrylic or silicone coating properly covers the foam, the birds will generally not bother the roof. Any slight surface imperfection, caused by birds or humans, usually will not cause a leak and can easily be repaired using compatible roof sealants or caulking materials.

**Myth #11:**

**SPF CAN ONLY BE APPLIED IN PERFECT WEATHER AND IS DIFFICULT TO APPLY CORRECTLY**

**Reality:** Sprayed polyurethane foam has been successfully installed all over the world, including every geographic region within the United States. The ideal temperature for the installation of an SPF system is between 40 and 100 degrees Fahrenheit — the same requirement as any other roofing application. A good SPF contractor, like Draper Construction, pays very close attention to moisture levels, temperature, humidity and wind factors.

**Myth #12:**

**SPF ROOFING SYSTEMS ARE DIFFICULT TO INSURE AND NOT WARRANTIED**

**Reality:** SPF roofing systems are fully insurable and tested extensively at independent laboratories. Extensive warranties of up to 20 years are also available. The system is UL and FM listed for a class A system and Energy Star Rated. In addition, SPF roof systems are renewable and transferrable. Once the original warranty is close to expiration, the roof system can be cleaned and a new topcoat can applied to extend/renew the warranty at a minimal cost of the original warranty system. This warranty can also be transferred to a new owner upon notification of sale of the property. Unlike many traditional roof systems that can allow water to migrate horizontally once the membrane is breached, closed-cell spray foam helps isolate moisture at the point of damage, reducing the risk of hidden leaks.

**Myth #13:**

**SPF ROOFING SYSTEMS DON'T HAVE MANUFACTURER'S SUPPORT FOR CONTRACTORS**

**Reality:** We work very closely with Everest Systems, one of our main SPF manufacturers, and have access to consulting and advisement on all of our projects. Utilizing the manufacturer's support and expertise as a part of our company's team, makes our SPF Roof Systems superior to all others in the marketplace.

