Fleece Backed Membrane Roofing

The RPC fleeceback system takes the best elements of the two best roofing systems on the market: combining the proven performance of EPDM membranes with the unsurpassed wind uplift resistance of polyurethane adhesives.

The history of Fleece-backed roofing
The concept is not new: Take a fleece-backed EPDM and fully-adhere it with a sprayed adhesive. With 40 million square feet already down, it’s pretty clear that the application method works. It’s true that on their own, fleece-backs aren’t revolutionary. They have been laying these membranes in hot asphalt with mixed results for some time. But what is special is all the things the latest generation, two component urethane adhesives, bring to the party.

First off, it will adhere both the membrane and the insulation. Each layer of spray applied adhesive, from 1/16 to 1/8 inch thick, also adds a little extra R-value to the roof assembly. When the adhesive expands, it effectively fills in gaps between the insulation boards, eliminating thermal bridging. This adhesive is so tenacious that with a peel-and-stick vapor retarder, a fleece-backed EPDM achieves a FM 1-990 rating. When you put together all the benefits of this system you can understand why architects and owners are choosing to install fleece Backed EPDM.

Sprayed Polyurethane Adhesives adhere the insulation board to the deck eliminating the need for mechanical fasteners, sealing gaps, and eliminating thermal bridging.

Fleece backed Fully-Adhered Roofing systems feature a patented low-rise two component insulating polyurethane adhesive. The adhesive is applied using state-of-the-art heated proportioning pumps delivering both components to a mixing spray gun for distribution onto the surface. Fleece backed membrane and/or insulation is set into the foamed adhesive and rolled with a weighted roller. Within 15 minutes, it cures to form a tenacious mechanical bond between the substrate and Fleece backed membrane. The polyurethane adhesive is considered one of the best insulation adhesives on the market resulting in a non-intrusive system application. Each layer of adhesive is typically 1/8" thick (after foaming) providing waterproofing characteristics to the roofing assembly.
ABOUT RPC INDUSTRIES, INC:

RPC Industries, Inc. has been serving customers throughout Virginia since 1979 and specializes in commercial and industrial contracting services, including: roofing, waterproofing, exterior wall coatings, sprayed polyurethane foam insulation, industrial coatings, and lead and asbestos abatement.

With over 25 years of field experience we understand the value of cost engineering, while respecting the need for safety and diligence to provide a quality result. Our staff is dedicated to quality workmanship and on-time delivery. We are factory-trained licensed applicators for a highly selective group of manufacturers. Your roof will be installed by true professionals who are dedicated to their craft.

RPC Industries has a pro-active corporate safety program which meets the in-plant contractor standards of some of the most demanding corporate clients in America. We hold a Class A contractors license, provide all standard contractors insurance, and can furnish performance and payment bonds written by a Treasury listed company.

Advantages of Fleece Backed EPDM Roofing:

**Fleece adds toughness and durability**
- External fleece reinforcement creates a very thick 100- or 115-mil sheet
- 40% greater puncture resistance than 60-mil EPDM and 180% greater tear resistance
- Greater puncture resistance than Modified-Bitumen
- 67% fewer seams than Modified-Bitumen with 10’ sheet
- Passes UL-2218 Class 4 hail resistance test
- Passes FM’s severe hail test
- Passes National Bureau of Standards-23 Ice Ball test up to 3” diameter hail at 32° F

**Environmentally friendly**
- Adhesive is VOC and solvent free
- ENERGY STAR® and Cool Roof Rating Council (CRRC) approved
- No chlorine or plasticizers used
- Resists biological growth
- No HCFC’s – uses water as the blowing agent
- Low odor and noise – great for reroofing occupied buildings

**Superior wind uplift and fire ratings**
- FM 1-945, 1-915, 1-660, 1-645, 1-465, 1-370 and 1-240 ratings available
- UL-580 Class 90 wind uplift at 4 hours cycling
- UL-1897, passes 180 psf uplift over steel deck
- UL Class A Fire Rating
- Dade County approved

**Thermal Efficiency**
- Each layer of insulating SPF Adhesive adds R-value of 0.2 to 0.5
- Thermal bridging of fasteners can be eliminated saving 3-8% R-value
- Helps seal insulation joints saving up to 10% R-value
- Use larger 4’ x 8’ insulation boards reducing insulation joints by 34%

**Manufacturer Warranties**
- 10, 15, and 20 year Total System Warranties available
- Wind speed coverage of 80+ mph
- Hail resistance warranties available
- 1” or 2” hail coverage available
- Puncture resistance warranty available
- Not voided for ponded water
- Not pro-rated
- No dollar limit
- Not limited to original owner
- Fully inspected by Manufacturer Field Service Representatives