



FLEX FB 45 ELVALOY® KEE ROOF MEMBRANE **(76"and 120" Wide, Reinforced, Thermoplastic Roof Membrane)**

PRODUCT DESCRIPTION

The Flex FB 45 Elvaloy® KEE Roofing Membrane is a high performance thermoplastic membrane designed for adhered roofing applications. The Flex FB 45 is produced with DuPont Elvaloy® KEE at a thickness of 45 mils of polyester reinforced membrane plus a 5.50 oz. polyester fleece backing. The Flex FB 45 Elvaloy® KEE Roofing Membrane is an effective choice for new or re-roofing installations as the fleece backing allows the membrane to be installed directly over most substrates with hot steep asphalt or Flex Substrate Adhesive.

FEATURES AND BENEFITS

- The wider sheet reduces installation cost and increases production.
- May be installed fully adhered to a wide range of substrates including structural or lightweight concrete decks and various types of insulation.
- Has a high degree of resistance to exposure from harsh chemicals and extreme environments.
- The Elvaloy® KEE formulation increases the ability of the membrane to remain flexible in temperatures well below freezing.
- Ideal for applications where standard roofing membranes do not perform well such as heavy industrial sites, airports, and food service facilities.
- The hot air welded seams allow the membrane to be installed in extreme low slope conditions as ponding water has no effect on the membrane.

INSTALLATION

The Flex FB 45 Elvaloy® KEE Roofing Membrane may be installed fully adhered with either Type III or IV hot steep asphalt or Flex Substrate Adhesive, a cold process water based asphalt emulsion adhesive. The membrane may be installed directly over lightweight or structural concrete as well as a wide variety of insulations. All seams of the Flex FB 45 Elvaloy® KEE Roofing Membrane are sealed by hot air welding, recognized as the strongest seam in the roofing industry. Flex has a variety of cold process roofing component configurations that allow for fast and efficient installation in areas that are restricted to fumes or flames such as hospitals, schools, and heavily congested city centers or hard to reach areas.

APPROVALS

The Flex FB 45 Elvaloy® KEE Roofing Membrane exceeds the requirements of ASTM D4434 standard for thermoplastic sheet roofing. The Flex FB has been thoroughly tested by Factory Mutual and has numerous applications meeting or exceeding Class 1-90. The Flex FB has been approved for Class A fire rating by Underwriters Laboratories. Due to the white heat reflective surface, Flex thermoplastic membranes are approved by the EPA's Energy Star® Program and the Cool Roof Rating Council (CRRC).

PHYSICAL PROPERTIES

| <u>Property</u> | <u>Test Procedure</u> | <u>Specification</u> |
|-----------------------------|------------------------------|-----------------------------|
| Color | | White, Gray, Tan |
| Thickness | ASTM D751 | .045" |
| Thickness over scrim | ASTM D7635 | .022" |
| Breaking Strength (lbf) | ASTM D751 | 325 x 324 |
| Tear Strength (lbf) | ASTM D751 | 89 x 109 |
| Seam Strength (lbf) | ASTM D751 | 295 |
| Elongation | ASTM D751 | 50% x 42% |
| Heat Aging | ASTM D3045 | > 90 % |
| Low Temp. Bend | ASTM D2136 | Pass (-40°F) |
| Static Puncture Resistance | ASTM D5602 | Pass |
| Dynamic Puncture Resistance | ASTM D5635 | Pass |
| Permeance | ASTM E96 | 0.003 Perms |
| Dimensional Stability | ASTM D1204 | 0.3 % |
| Weight change after | | |
| Water Immersion | ASTM D570 | 1.20 % |
| Accelerated Weathering | ASTM G155 | Pass |
| Fungi Resistance | ASTM G-21 | No Growth |
| Solar Reflectivity | ASTM C1549 | 82% (White) |
| | ASTM C1549 | 69% (Gray) |
| | ASTM C1549 | 68% (Tan) |
| Emissivity | ASTM C1371 | .91 (White) |
| | ASTM C1371 | .86 (Gray) |
| | ASTM C1371 | .87 (Tan) |
| SRI | ASTM E1980 | 109 (White) |
| | ASTM E1980 | 83 (Gray) |
| | ASTM E1980 | 83 (Tan) |

Flex FB 45 Elvaloy® KEE Roofing Membranes are thermoplastic in nature and exceed the requirements of ASTM D4434 standard specifications for poly (vinyl chloride) based sheet roofing.

WARRANTY

The Flex FB 45 Elvaloy® KEE Roofing Membrane may receive the manufacturer's standard five (5) year or optional ten (10) year, fifteen (15) year or twenty (20) guarantee of watertightness.

Elvaloy® KEE is a registered trademark of DuPont.