

# **Product Data Sheet**

## FLEX FB 50 ELVALOY® KEE ROOF MEMBRANE

(76"and 120" Wide, Reinforced, Thermoplastic Roof Membrane)

#### **PRODUCT DESCRIPTION**

The Flex FB 50 Elvaloy<sup>®</sup> KEE Roofing Membrane is a high performance thermoplastic membrane designed for adhered roofing applications. The Flex FB 50 is produced with DuPont Elvaloy<sup>®</sup> KEE at a thickness of 50 mils of polyester reinforced membrane plus a 5.50 oz. polyester fleece backing. The Flex FB 50 Elvaloy<sup>®</sup> 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 50 Elvaloy<sup>®</sup> 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 50 Elvaloy<sup>®</sup> 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.

Review Flex Specifications for Complete Installation Information.

#### APPROVALS

The Flex FB 50 Elvaloy® KEE Roofing Membrane exceeds the requirements of ASTM D4434 Type III 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 Cool Roof Rating Council (CRRC).

### **PHYSICAL PROPERTIES**

Property	Test Procedure	Specification
Color		White, Gray, Tan
Thickness	ASTM D751	.050"
Thickness over scrim	ASTM D7635	.026"
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 D3048	> 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)
ž	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)
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Flex FB 50 Elvaloy® KEE Roofing Membranes are thermoplastic in nature and is certified as conforming to the requirements of ASTM D4434 Type III standard specifications for poly (vinyl chloride) based sheet roofing and IBC 1504.7.

### **WARRANTY**

The Flex FB 50 Elvaloy® KEE Roofing Membrane may receive the manufacturer's standard five (5) year or optional ten (10) year, fifteen (15) year or twenty (20) year guarantee of watertightness.

Elvaloy® KEE is a registered trademark of DuPont.