



Thermoplastic Single Ply and Multi-Ply Roofing Systems

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FLEX FB 100 ELVALOY® KEE ROOF SYSTEM **(FLEECE BACKED, REINFORCED, THERMOPLASTIC ROOF MEMBRANE)**

PRODUCT DESCRIPTION

The Flex FB 100 Elvaloy® KEE Roofing Membrane is a high-performance thermoplastic membrane designed for mechanically attached or adhered roofing applications. The Flex FB 100 is produced with DuPont Elvaloy® KEE and is composed of 60 Mils of polyester reinforced membrane with a 8 oz. (40 Mil) fleece backing giving a total 100 Mils of thickness.

For re-roofing installations, the fleece backing serves as a separation or cushioning layer between the membrane and a preexisting, smooth built-up or cap sheet surface, including structural or lightweight concrete decks and various types of insulations. In adhered and mechanically attached applications, the Flex FB 100 can be installed directly over most substrates with excellent results.

FEATURES AND BENEFITS

The Flex FB 100 Elvaloy® KEE Roofing Membrane has been specifically designed for use over minor imperfections, splits or ridges that may have formed in the existing roof system. The fleece backing acts as a cushioning layer which prevents abrasion problems and keeps small imperfections or ridges from coming in contact with the membrane, eliminating the need for insulation or slipsheets.

The unique combination of the quality performance and longevity of the Flex FB 100 Elvaloy® KEE Thermoplastic Roofing Membrane with the durability and added protection of the 8 oz. fleece backing provides the building owner with an unmatched, superior roof system.

MECHANICALLY ATTACHED INSTALLATIONS

The Flex FB 100 is ideal for use as a mechanically attached membrane over existing smooth surface built-up or cap sheet roofs. Once again, the fleece backing acts as a cushioning layer and minimizes the effect of minor imperfections in the substrate, which greatly improves the overall aesthetic appearance of the completed project and eliminates the need for insulation in most cases.

ADHERED INSTALLATIONS

The Flex FB 100 offers distinct advantages in adhered applications directly over lightweight and structural concrete with Flex's (Water-Based) Substrate Adhesive or in hot steep asphalt. The Flex FB 100 can be installed in Flex's Substrate Adhesive or hot steep asphalt over a wide variety of insulations and deck types with proven results. The superior wind uplift performance achieved by the Flex FB 100 adhered roof system meets Factory Mutual's Class 1-180 over lightweight concrete. This allows for high rise and coastal region installations in the most extreme weather conditions.

APPROVALS

The Flex FB 100 Elvaloy® KEE Roofing Membrane exceeds the requirements of ASTM D4434 standard for thermoplastic sheet roofing. The Flex FB 100 meets Factory Mutual's 1-90 and 1-180 wind uplift requirements in numerous adhered and mechanically attached roof applications and meets Underwriters Laboratories Class A fire rating.

FLEX FB 100 ELVALOY® KEE - ONE SUPERIOR ROOF SYSTEM

The ease of the Flex FB 100 Elvaloy® KEE Membrane one-step installation process provides overall time and labor savings advantages as well as the superior performance and durability of Elvaloy® KEE which can withstand the harshest of chemicals and the most punishing UV and aging tests available. The Flex FB 100 seams are hot-air welded which are as strong as the membrane itself and creates a quality watertight seal that will not break down over time. The fleece backing ensures added protection in those areas where there is excessive foot traffic. Overall the Flex FB 100 Elvaloy® KEE Roofing Membrane is the roof of choice when you need a dependable and reliable roof system which will out perform all requirements and expectations.

PHYSICAL PROPERTIES

<u>Characteristics</u>	<u>Test Method</u>	<u>Physical Properties</u>
Color		White or Off-White
Thickness	ASTM D751	.100" Nominal
Breaking Strength	ASTM D751	>325 lbs.
Tensile Strength	ASTM D638	MD 1844 // TD 2111
Elongation	ASTM D638	MD 183 // TD 108
Shore "A" Hardness	ASTM D2240	85
Heat Aging	ASTM D0573	90% of Original
Cold Resistance	ASTM D2136	-40 Degrees F
Water Vapor Permeability	ASTM E96	3.5g/m ² /day
Wt. Change After Immersion	ASTM D570	1.5% max.
Seam Strength	ASTM D751	80% of sheet
Dimensional Stability	ASTM D1240	0.5%
Accel. Weathering (Xenon Arc)	ASTM D2565	10M hrs. (No Change)
Oil Resistance	Mil-20696C	No cracking, swelling or leaking
Hydrocarbon Resistance	Mil-20696C	No cracking, swelling or leaking
Underwriters Laboratories		Class A
Factory Mutual		Class 1-90
Solar Reflectivity	ASTM E903	.822
Emissivity	ASTM C1371	.915
SRI	ASTM E1980	109

Flex FB Elvaloy® KEE membrane is thermoplastic in nature and exceeds the requirements of ASTM D4434 standard specification for poly vinyl chloride sheet roofing.

WARRANTY

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

Elvaloy® is a registered trademark of DuPont.