



Thermoplastic Single Ply and Multi-Ply Roofing Systems

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FLEX FB Plus 45 ELVALOY® KEE ROOF SYSTEMS **FLEECE BACKED, REINFORCED, THERMOPLASTIC ROOF MEMBRANE** **(76" wide and 120" wide rolls)**

PRODUCT DESCRIPTION

The Flex FB Plus 45 Elvaloy® KEE Roofing Membranes are high-performance thermoplastic membranes designed for mechanically attached or adhered roofing applications. The Flex FB Plus 45 Roofing Membrane is produced with DuPont Elvaloy® KEE and is manufactured in thicknesses of 45 Mils of polyester reinforced membrane with a fleece backing.

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 Plus 45 Elvaloy® KEE Roofing Membrane can be installed directly over most substrates with excellent results.

FEATURES AND BENEFITS

The Flex FB Plus 45 Elvaloy® KEE Roofing Membranes have 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 Plus 45 Elvaloy® KEE Thermoplastic Roofing Membranes with the durability and added protection of the fleece backing provides the building owner with an unmatched, superior roof system.

ADHERED INSTALLATIONS

The Flex FB Plus 45 Elvaloy® KEE Roofing Membranes offer 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 Plus 45 Elvaloy® KEE Roofing Membranes 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 Plus 45 Elvaloy® KEE Roofing Membrane adhered roof system meets Factory Mutual's Class 1-270 over lightweight concrete. This allows for high rise and coastal region installations in the most extreme weather conditions.

APPROVALS

The Flex FB Plus 45 Elvaloy® KEE Roofing Membranes exceed the requirements of ASTM D6754 standard for thermoplastic sheet roofing. The Flex FB Plus 45 Elvaloy® KEE Roofing Membranes meet a wide range of Factory Mutual's wind uplift requirements up to a FM Class 1-735 when installed on a Structural Concrete Deck. The FB Plus 45 Elvaloy® KEE Roofing Membranes are also assembled in a variety of adhered and mechanically attached roof applications that meet Underwriters Laboratories Class A fire rating.

FLEX FB Plus 45 ELVALOY® KEE ... ONE SUPERIOR ROOF SYSTEM

The ease of the Flex FB Plus 45 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 Plus 45 Elvaloy® KEE Membrane 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 Plus 45 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>Property</u> | <u>Test Procedure</u> | <u>Specification</u> |
|--|------------------------------|-----------------------------|
| Color | | white, gray, tan |
| Thickness | ASTM D751 | .045" |
| Thickness over scrim | ASTM D751 | .024" |
| Breaking Strength | ASTM D751 | 406 lbf/in |
| Tear Strength | ASTM D751 | 101 lbf |
| Elongation at break | ASTM D751 | 44 % |
| Fabric Adhesion | ASTM D751 | 18 lbf/in |
| Retention of Properties after Heat Aging | ASTM D3045 | |
| Breaking Strength | | 100% |
| Elongation at Break | | 100% |
| Low Temperature Bend | ASTM D2136 | pass |
| Change in weight after water immersion | ASTM D471 | 1.5% |
| Factory Seam Strength | ASTM D751 | 459 lbf. |
| Lineal Dimensional change | ASTM D1204 | 0.3% |
| Hydrostatic Resistance | ASTM D751 | pass |
| Static Puncture Resistance | ASTM D5602 | pass |
| Dynamic Puncture Resistance | ASTM D5635 | pass |
| Accelerated Weathering | ASTM G154 | pass |
| Accelerated Weathering | ASTM G155 | pass |
| Fungi Resistance | ASTM G 21 | pass |
| Abrasion Test | ASTM D3389 | pass |
| Solar Reflectivity | ASTM E903 | .811 (white) |
| Emissivity | ASTM E903 | .919 (white) |
| SRI | ASTM E903 | 109 (white) |

Flex FB Elvaloy® KEE membrane is thermoplastic in nature and exceeds the requirements of ASTM D6754 standard specification for Elvaloy® KEE sheet roofing.

Elvaloy® is a registered trademark of DuPont.