

# CoreFlex 60



## Thermoplastic Waterproofing Membrane with Active Polymer Core

### DESCRIPTION

CoreFlex 60 is a 1.5 mm nominal thermoplastic membrane reinforced with a 142 gram weft inserted knit polyester fabric, integrally bonded to an Active Polymer Core (APC). CoreFlex 60 offers the ultimate in waterproofing barrier protection technology. The barrier performance starts with a thermoplastic membrane with welded seams, providing a monolithic watertight barrier layer. The thermoplastic membrane is reinforced with a weft inserted knit polyester reinforcement fabric and is produced with DuPont's Elvaloy-KEE® (Keytone Ethylene Ester), a solid phase high molecular weight ethylene interpolymer. Unlike traditional liquid PVC plasticisers, the Elvaloy-KEE does not experience phase separation and migrate out; thus the membrane properties are maintained for long term performance. Elvaloy-KEE also provides superior chemical resistance properties. The Active Polymer Core layer is integrally bonded to the Elvaloy-KEE thermoplastic membrane. The APC layer is designed to activate with water to swell and form a positive seal. Thereby, at any unforeseen puncture or installation defect, the APC layer reacts at the breach, self-sealing to stop the water ingress. CoreFlex is the only welded thermoplastic membrane composite with this reactive, self-sealing performance feature.

### APPLICATIONS

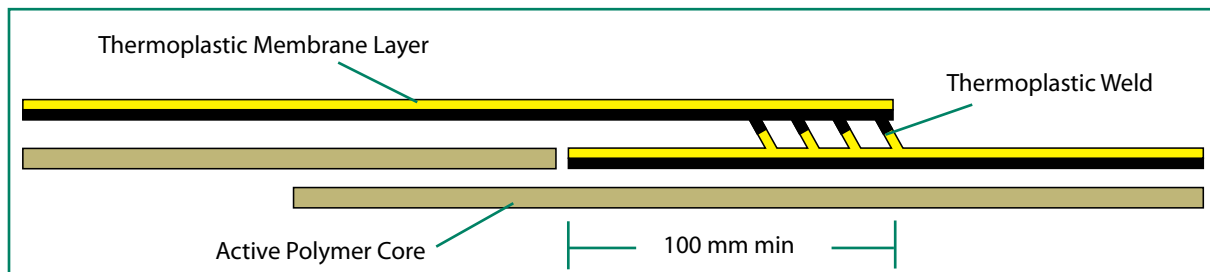
The CoreFlex 60 waterproofing system provides waterproofing protection for structural concrete surfaces. Below-ground applications include backfilled cast-in-place concrete and masonry block foundation walls as well as property line shoring walls such as steel sheet piling, contiguous piling, secant piling and traditional lagging. The membrane can be continued under the floor slab and up onto a horizontal deck to provide a continuous, uniform waterproofing system. CoreFlex 60 can be used to waterproof structures under continuous or intermittent hydrostatic pressure. CoreFlex 60 applications include: Podium Decks, Split-Slab Deck Construction, Foundation Walls, Earth-Covered Structures, Property Line Construction, Under Slab, Tunnels and Greenroofs.

### INSTALLATION

General: Install CoreFlex 60 Waterproofing System in strict accordance with the manufacturer's installation guidelines and details using accessory products, protection and drainage layers, and load as specified or required. Install CoreFlex 60 with the grey APC geotextile side directly in contact with the concrete to be waterproofed. Secondary protection should include Waterstop-RX® installed in all applicable horizontal and vertical concrete construction joints and around penetrations.

### PACKAGING

CoreFlex 60 is available in 1.4 m x 15 m rolls; 137cm wide thermoplastic membrane with APC layer offset by 150 mm along the long roll edge.



*Typical CoreFlex 60 membrane overlap assembly with continuous thermoplastic weld*

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## PHYSICAL PROPERTIES

Property	Test Method	Typical Value
Membrane Composite Thickness	ASTM D751	3.8 mm
Hydrostatic Pressure Resistance (min 1 hr @ 100 psi)	ASTM D5385	70 m
Puncture Resistance	ASTM D4833	1014 N
Breaking Yield Strength	ASTM D751	62.2 N/mm
Low Temperature Flexibility (-34.4° C)	ASTM D2136	Pass
Resistance to Wicking (max. 3.2 mm)	ASTM D751	Pass
Tear Strength	ASTM D4533	423 N
Hydrostatic Resistance	ASTM D751	4.7 mPa
Membrane Bursting Strength	ASTM D751	284 kg
Water Vapor Retarder	ASTM E1745	Class A
Water Vapor Transmission	ASTM E96	0.036 gr/m/hr
Tensile Strength	ASTM E154	68 kN/m
Puncture Resistance	ASTM D1709	5500 grams

### January 2009 (Supersedes All Previous Versions)

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