

# COREFLEX®

## THERMOPLASTIC WATERPROOFING MEMBRANE WITH ACTIVE POLYMER CORE

### DESCRIPTION

COREFLEX® is a 1,5 mm nominal thermoplastic membrane reinforced with a 165 gram weft inserted knit polyester fabric integrally bonded to an Active Polymer Core (APC). COREFLEX® 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 plasticizers, 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® 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 soldier pile and lagging. The membrane can be continued under the floor slab and up onto a horizontal deck to provide a continuous, uniform waterproofing system. COREFLEX® can be used to waterproof structures under continuous or intermittent hydrostatic pressure. COREFLEX® applications include: Plaza Decks, Split-Slab Deck Construction, Foundation Walls, Earth-Covered Structures, Property Line Construction, Under Slab, Tunnels and Greenroofs.

### INSTALLATION

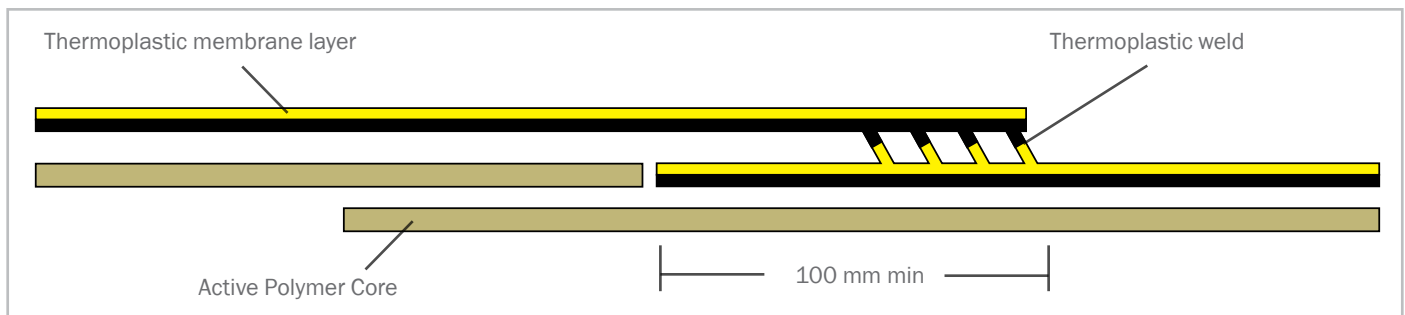
General: Install COREFLEX® Waterproofing System in strict accordance with the manufacturer's installation guidelines and details using accessory products, protection and drainage layers, and overburden as specified or required. Install COREFLEX® with the grey APC geotextile side directly in contact with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

### PACKAGING

COREFLEX® is available in 1,4 m x 15,2 m rolls; 1,37 m wide thermoplastic membrane with APC layer offset by 150 mm along the long roll edge.

### QUALITY ASSURANCE PROGRAM

Rely on quality waterproofing products and the HydroShield™ Quality Assurance Program from CETCO. This program is designed to protect your building and its contents from water leaks through pre-installation planning, experienced craftsmanship, and onsite inspection backed by the strongest warranty in the industry. If it's worth building, it's worth protecting.



Typical COREFLEX® membrane overlap assembly with continuous thermoplastic weld

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TECHNICAL DATA		
PROPERTY	TEST METHOD	TYPICAL VALUE
Membrane Composite Thickness	ASTM D751	3,8 mm
Hydrostatic Pressure Resistance (min 1 hr at 100 psi)	ASTM D5385	70 m
Puncture Resistance	ASTM D4833	996 N
Tensile Strength	ASTM D751	2442 N
Bonded Seam Strength	ASTM D751	3136 N
Peel Adhesion to Concrete	ASTM D903 (mod)	1751 N/m
Methane Permeability	ASTM D1434	25 ml (STP)/m <sup>2</sup> /day
Oil Resistance	ASTM D543	Passed
Microorganism Resistance	ASTM D4068-88	Passed
Environmental Stress Cracking	ASTM D1693	Passed
Hydrostatic Resistance (Procedure A)	ASTM D751	5,2 mPa
Water Vapour Retarder	ASTM E1745	Class A
Water Vapour Transmission	ASTM E96	0,1 perms (0,036 gr/m/hr)
Tensile Strength	ASTM E154	68 kN/m
Puncture Resistance	ASTM D1709	5500 grams