NOT ALL PVC MEMBRANES ARE CREATED EQUAL

BREAKING STRENGTH - 200 lbf/in, minimum per ASTM D4434



SENTINEL KEE is reinforced with a high-performance, anti-wicking, polyester reinforcement that provides superior breaking strength designed for unmatched, long-term performance.

TEAR RESISTANCE - 45 lbf, minimum per ASTM D4434



SENTINEL KEE's superior tear resistance makes it ideal for roofs designed for mechanical attachment, while also providing enhanced dimensional stability for adhered systems.

*Based on published data

OUTPERFORMING THE COMPETITION

SENTINEL KEE membrane is a PVC membrane containing Elvaloy™ KEE, or Ketone Ethylene Ester, a first-of-its-kind nonmigrating solid plasticizer. That innovation helps the membrane remain supple, pliable and durable over its entire life cycle, as opposed to those with liquid plasticizers, which can become brittle and crack as the plasticizer migrates out. Elvaloy™ KEE can be mixed with SENTINEL PVC to provide superior reflectivity and chemical resistance, as well as fire resistance.



BENEFITS OF KEE-ENHANCED ROOFING MEMBRANE

- Light, easy to install, and has a high tensile strength to resist breaking under pressure
- Remains flexible in extreme environments and over time, thanks to its non-migrating solid plasticizer
- High resistance to chemicals, air conditioning coolants, jet fuels, grease, UV light and industrial pollutants
- Qualifies for LEED credits
- Environmentally friendly, contains no VOCs



INNOVATION SINCE 1908

SOPREMA has developed around the idea that the quality, durability and reliability of materials must match builders' ambitions and expectations. For more than 100 years, SOPREMA has been using its expertise to develop a variety of high-end products that meet or exceed all the requirements of the construction field.

ROOFING WATERPROOFING WALLS CIVIL ENGINEERING



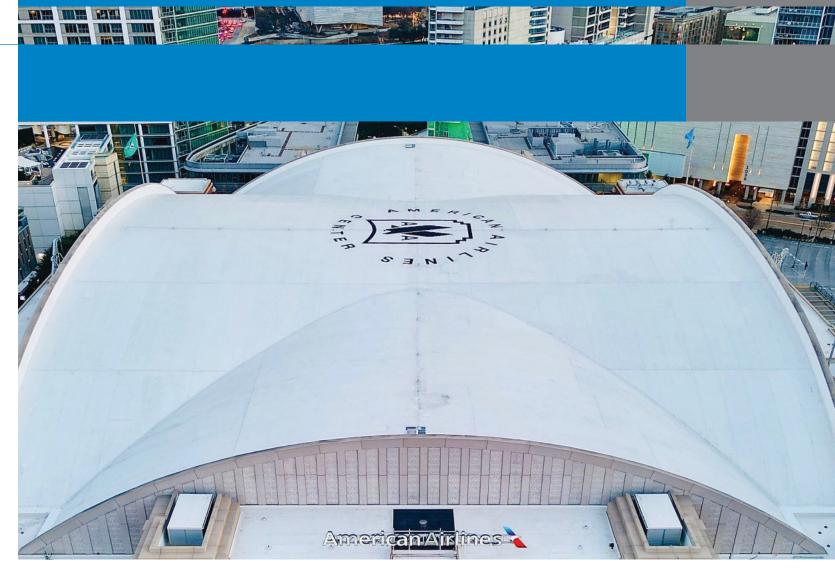
ROOFING & WATERPROOFING

VEGETATED SOLUTIONS

SOPREMA is an international manufacturer specializing in the production of waterproofing and insulation products, as well as vegetative and soundproofing solutions, for the building and civil engineering sectors.

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SENTINEL[®] KEE MEMBRANES





+

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INNOVATION

SENTINEL[®] KEE MEMBRANES

Time proven quality and decades of in-situ exposure to elements around the world; SOPREMA has been producing high-performance flexible PVC (polyvinyl chloride) membranes for roofing and waterproofing for over 50 years. SOPREMA's SENTINEL KEE membrane, featuring the revolutionary Elvaloy[™] KEE solid plasticizer, is a great addition to the SOPREMA product line that will carry on the tradition of providing proven fire and chemical resistance as well as superior weldability in a variety of conditions. SENTINEL KEE features include:

- Non-migrating Elvaloy[™] KEE is a non-migrating PVC plasticizer used for watertight, low-slope roofing. Elvaloy[™] KEE makes PVC supple, pliable and durable. The non-liquid additive also eliminates plasticizer migration, which can cause resin to shrink, expand, crack and leach other chemicals.
- Temperature-resistant Elvaloy™ KEE has a high tolerance for temperature swings. PVC roofing membranes modified with Elvaloy™ KEE are tolerant of temperatures ranging from minus 35 degrees Celsius (minus 31 degrees Fahrenheit) to 100 degrees Celsius (212 degrees Fahrenheit).
- Easy installation A roofing membrane modified with Elvaloy[™] KEE is light, easy to install and has a high tensile strength to resist breaking under pressure.

The fraction of solar energy that is reflected by the roof THERMAL EMITTANCE The relative ability of the roof surface to radiate heat

SOLAR REFLECTANCE

Some heat is absorbed by the roof and transferred into the building

SUCCESS STORY

Bachman Water Treatment Facility Dallas, Texas

Dallas Water Utilities (DWU) is one of the largest water distribution systems in the United States, so when TDR Commercial Roofing elected to use SENTINEL KEE on one of the DWU's three treatment plants, they did so with the knowledge that 1.3 million Dallas residents were relying on it to keep their water supply safe. Fortunately, this 17,500 square foot project, completed in the fall of 2023, will protect the Bachman Water Treatment Facility for decades, thanks to SENTINEL KEE's revolutionary solid plasticizer, along with its environmental and chemical resistance properties.

DESIGN BENEFIT: REFLECTIVITY & SUSTAINABILITY

SENTINEL KEE membranes help roofs reflect sunlight while also cooling themselves by efficiently emitting any heat absorbed. The roofs literally stay cooler and reduce the amount of heat conducted into the building below. If a building does not have air conditioning, this keeps the building cooler and a more constant temperature. If a building has air conditioning, the equipment does not have to work as hard.

Roofing membranes created with Elvaloy[™] KEE last longer than the alternative and are not susceptible to microorganism (mold) growth, which eats away at plasticizers and eventually causes roofing to degrade and fail.



SENTINEL KEE MEMBRANE OFFERINGS

	PRODUCT	REINFORCEMENT	THICKNESS	APPLICATION
	SENTINEL KEE P150	Polyester	60 mils (1.5 mm)	Mechanically Fastened, Fully Adhered
	SENTINEL KEE P200	Polyester	80 mils (2.0 mm)	Mechanically Fastened, Fully Adhered
	PRODUCT	REINFORCEMENT	THICKNESS	APPLICATION
	PRODUCT SENTINEL KEE P150 HFB	REINFORCEMENT Polyester	THICKNESS 60 mils (1.5 mm)	APPLICATION Mechanically Fastened, Fully Adhered

SENTINEL KEE COMPLIMENTARY PRODUCTS

ACCESSORIES

SENTINEL Walkway Pad – An extruded PVC roll that protects roof membranes from damage from foot traffic

SENTINEL KEE Pre-Fabricated Inside Corners – Polyester-reinforced 60 mil flashings for 90-degree corners

SENTINEL KEE Pre-Fabricated Outside Corners – Polyester-reinforced 60 mil flashings for 90-degree corners

SENTINEL KEE T-Joint Patches – 4.5-inch diameter circles of 60 mil reinforced P150 membrane

SENTINEL KEE VCM – A 24 gauge (0.6 mm) galvanized metal sheet with a 20 mil SENTINEL KEE membrane laminated to one side

SENTINEL KEE Boot Flashing – A factory-fabricated pipe flashing using polyester-reinforced membrane

ADHESIVES

SENTINEL S Bonding Adhesive – Solvent-based adhesive for bare-backed SENTINEL membranes

SENTINEL Spray Adhesive – Solvent-based contact adhesive for bare-backed SENTINEL membranes

SENTINEL Universal Sealant – Moisture-cured, polyether, elastomeric sealant for use in approved SENTINEL PVC membrane and flashing assemblies

DUOTACK SPF Adhesive – A low-pressure, two-component spray polyurethane foam adhesive formulated for adhering SENTINEL HFB (Heavy Fleece-Backed) membranes

DUOTACK SPF HFO Adhesive – A low pressure, two-component spray polyurethane foam adhesive formulated for adhering SENTINEL HFB (Heavy Fleece-Backed) membranes, insulation and coverboard

TESTING & APPROVALS





