

MARCH 2023



KNIGHTSHIELD

KS-5700

Silicone Self-Leveling Roof Sealant

DESCRIPTION

KNIGHTSHIELD KS-5700 is a high performance self-leveling, one-part, moisture-curing, 100% silicone sealant that cures to a low durometer.

The product has ultra-high elongation and remains very durable. It has good flexibility and a low modulus, so it will maintain its integrity on fasteners and penetrations with movement.

KNIGHTSHIELD KS-5700 exhibits excellent unprimed adhesion to concrete, coated metals and most other construction substrates, provided they are clean, dry and free of dust and frost.

The product is unaffected by sunlight (ultraviolet rays), temperature extremes, rain and snow. It has a long service life and was designed to perform between -76° to 392° F (-60° to 200° C).

USES

KNIGHTSHIELD KS-5700 is designed as a self-leveling joint filler to seal joints prior to application of an appropriate silicone roofing membrane. Also, KNIGHTSHIELD KS-5700 is designed to seal the top surface of fasteners or similar-type anchors to help protection against potential damage to the silicone roofing membrane. The product seals fasteners on low-sloped metal roofs, as well as pipe penetrations through roof decks in metal flashings. KNIGHTSHIELD KS-5700 can be used on concrete, coated metal and most other construction substrates

FEATURES/BENEFITS

- Provides mold and mildew resistance
- Adheres to most substrates without primer
- Excellent adhesion and hang – can be used on both vertical and horizontal applications
- Has a wide temperature application and performance
- 100% silicone moisture-cure technology
- Provides high performance sealing
- Ready to use and requires no mixing or additives

PACKAGING

10 Oz. (296 mL) Cartridges (20/Carton)
20 Oz. (591 mL) Sausages (12/Carton)

SHELF LIFE

Twelve months from date of manufacture in the original, unopened container stored below 90° F (32° C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat or ignition.

APPLICATION

Surface Preparation ... All surfaces to be coated must be clean, dry and free of contaminants. Dust and loose particles must be blown out of the joint with oil-free compressed air. An oily surface may reduce adhesion.

Although no primer is needed prior to applying KNIGHTSHIELD KS-5700, it is recommended to conduct a quick field adhesion test prior to application to application over TPO or factory-coated metals. Please contact W. R. MEADOWS for directions if uncertain.

Application Method ... The sealant should be applied in one continuous movement with the nozzle set to fill the joint from the bottom up to avoid creating air voids. The sealant should be tooled to force it against the joint faces for maximum adhesion. Excess sealant should be scraped up and removed.

For fasteners, apply dollop of sealant to each fastener head with a caulk gun, assuring the sealant covers the entire head of the fastener. KNIGHTSHIELD KS-5700 should completely encapsulate the fastener, sealing the perimeter to the deck.

For pitch-pockets, the space between the penetration and roof deck must be sealed with an appropriate adhesive or compressible insulation before installing the interior seal. Fill the interior with a non-shrinking grout to 1" (25.4 mm) below the top edge. Ensure grout is completely cured prior to applying KNIGHTSHIELD KS-5700. Fill the pitch pocket with the sealant, slightly over-filling the pan to avoid water sitting in the pocket.

CONTINUED ON REVERSE SIDE ...

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For most recent data sheet, LEED information and SDS, visit www.wrmeadows.com.

TECHNICAL DATA

Type	100 % silicone, one-part neutral pH
Temperature Range	
Application Temperature Range	35° to 120° F (2° to 49° C)
Useable Temperature Range	-76° to 392° F (-60° to 200° C)
Uncured	
Specific Gravity	1.11
Slump/Sag	Self-leveling
Cure System	Neutral pH, Moisture Cure
Cured at Standard Conditions for 7 Days	
Durometer Hardness (ASTM D2240, Shore A)	15 points
Tensile Strength (ASTM D412)	200 psi (1.37 mPa)
Elongation at Break (ASTM D412)	600%
Tear Resistance (ASTM D624, Die B)	28 ppi (4.9 kN/m)

At standard conditions 77° F (25° C) and 50% relative humidity

Drying Time

Tooling/Skin-Over Time	15 - 30 Minutes
Surface Cure Time	24 hours
Full Physical Characteristics	7 days

At standard conditions [77° F (25° C) and 50% relative humidity

Available Colors

White, Gray
(Black, Tan available by special order)

LIMITATIONS/PRECAUTIONS

KNIGHTSHIELD KS-5700 uses a neutral cure system, so no acetic acid or corrosive byproducts are evolved during cure. Adequate ventilation should be provided with extensive use of this sealant.

This product is intended for use only by professional applicators.

Compatibility to other building materials or products is the sole responsibility of the specifier or end user.



LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.