

ISO 9001 CERTIFIED



VOC Regulatory Compliance:



TK-SUPER SEAL PE™

Super Adhesion Sealant

Item No. TK-2204

# PRODUCT DESCRIPTION

TK-SUPER SEAL PE<sup>™</sup> is an elastomeric moisture curing sealant designed for use in metal architecture, curtain wall construction and joints subject to movement. SUPER SEAL PE<sup>™</sup> adheres to difficult surfaces and permits its use on anodized metal and coatings such as Kynar 500® PVDF. SUPER SEAL PE<sup>™</sup> will not stain absorbent stone substrates like limestone and marble. Its unique polyether chemistry eliminates out-gassing on green concrete and protects against "sun tanning" or discoloration when exposed to ultraviolet light.

SUPER SEAL PE<sup>™™</sup> is compatible with both the AIRMAX<sup>™</sup> line of air/vapor/weather barriers and the CLIMATE TECH<sup>™</sup> weather resistant barrier.

Features:

- Solvent-free, 100% solids will not shrink
- Non-slump, applies vertically and overhead
- 30 minute skin over
- No outgassing on damp surfaces
- Color stability, will not suntan
- Paintable within 24 hours
- +/- 50% joint movement

#### USES:

To fill a nd s eal j oints a nd s eams in p re-cast c oncrete, b lock and masonry, curtain walls, expansion joints, exterior gypsum joints, cove joints, parapets, window and door frames, siding, and weather sealing.

SUPER SEAL PE<sup>™</sup> is compatible with many construction materials such as: exterior gypsum, CMU, concrete, precast, block, brick, stone, masonry, Kynar 500® PVDF metal, aluminum and galvanized metal, wood, engineered plastics, PVC, glass, fiberglass and EPS foam. Always test for adhesion when in doubt of substrate compatibility.

## APPLICATION PROCEDURES PREPARATION:

#### Concrete Preparation:

Prior to application, remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents, friable and loose concrete. Dry all visible and standing water prior to applying SUPER SEAL PE<sup>™</sup>. Install an appropriate backer rod, when needed, to avoid three-point bonding.

## Metal Preparation:

Prepare all metal to ensure maximum adhesion. Remove all rust, scale, and residue by wire brushing to a bright metal sheen. Remove films, I oose or i nappropriate coatings and oils with an appropriate solvent.

### Wood Preparation:

Wood should be clean, sound and dry prior to sealant application. All wood shall have 16% moisture content or less. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant treated plywood.

TECHNICAL DATA				
Color:	Black			
Gun Grade:	Zero slump			
Viscosity:	750,000 ср +/- 150,000 ср			
Density:	11.0 +/-0.2 lbs per gallon			
Service Temperature(s):	-40°F to 200°F (-40°C to 93°C)			
Tack Free Time (@ 70°F & 50% RH):	20-40 minutes			
VOC Content:	< 19 g/l			
A.I.M. Category:	This product is not currently regulated by 1999 Federal EPA VOC regulations			

# APPLICABLE STANDARDS

-ASTM C920, Type S, Grade NS, Class 50, Uses NT,  $\rm T_{2^{\prime}}$  M, G, A and O -Federal Specification TT-S-00230-C Type II, Class A

- -Corps of Engineers CRD-C-541, Type II, Class A
- -Canadian Standards Board CAN 19, 13-M82
- -SWR Institute Validated (Sealant Waterproofing and Restoration)
- -AAMA 802.3-08 Type II, AAMA 803.3-08 Type I, and AAMA 805.2-08

Group C

-USDA Authorization for non-food contact

	TESTING DATA		
Elongation at Break:	700%		
Peel Strength:	25-30 psi		
Tensile Strength:	150-200 psi		
Hardness Shore A:	20-23		
Lap Shear Strength:	150-175 psi		
Low temp. flexibility:	Pass -10°F (-23°C) 1/4″ mandrel		
Shrinkage:	No visible shrinkage after 14 days		
Weathering:	No cracking or chalking, slight matte finish after 2000 hours QUV "A" bulb. Durometer gain of 5 points.		

## See page 2 for additional Technical Data information

## Joint Preparation:

Joint surfaces should be clean, dry and free from all contamination including dirt, oil, grease, tar, wax, rust and other substances that may inhibit the sealant's performance.

## Joint Design:

Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio pf 1:2 (joint depth one-half the width).

If needed, control the depth of the sealant by using a polyethylene backer rod that is 25% larger than the joint opening at standard temperature. To prevent three-point adhesion use a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weatherproof seal. Where the joint configuration will not permit a backer rod, TK Products recommends that an alternative bond breaker be used.

Joint Width in Inches (mm)	Joint Depth in Inches (mm)
1/4 - 1/2 (6-13)	1/4 (6)
1/2 - 3/4 (13-19)	1/4 - 3/8 (6-10)
3/4 - 1 (19-25)	3/8 - 1/2 (10-13)
1 - 2 (25-50)	1/2 (13)

\*TK Products recommends an appropriate substrate primer to be used on high moving joints or dissimilar substrates which require increased adhesion properties.

### **APPLICATION:**

Remove all dust, dirt, oil, loose paint, frost and other contamination from all working surfaces with alcohol. DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain SUPER SEAL PE<sup>™</sup> at room temperature before applying to ensure easy gunning and tooling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. Tooling should be done within fifteen minutes of application.

For gypsum sheathing seam applications, a crown bead nozzle applicator tip should be used. Apply SUPER SEAL PE<sup>™</sup> to a depth of 1/4", or an 80-100 mil crown bead. Continue bead past joint seam 1/4" onto gypsum sheathing, making certain that material is equal on both sides of the joint. To promote proper adhesion, "knock down" the material to disperse bead into the joint.

#### CLEAN-UP:

Wet sealant may be removed using a solvent such as alcohol. If cured, SUPER SEAL  $PE^{M}$  may be removed by abrading or scraping the substrate.

#### **STORAGE:**

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. SUPER SEAL PE<sup>™</sup> will not freeze.

#### **SHELF LIFE:**

Shelf life is 12 months from manufactured date when stored at  $70^{\circ}$ F (21°C) with 50% relative humidity. High temperatures and high relative humidity may significantly reduce shelf life.

CURE TIME STUDY					
SKIN TIME	70°F / 50% RH	30°F / 65% RH			
Porous Substrate: 32 min		110 min			
Non-Porous Substrate:	32 min	110 min			
CURE THROUGH TIME	70°F / 50% RH	30°F / 65% RH			
Porous Substrate:	3 hours	<20 hours			
Non-Porous Substrate:	3 hours	<20 hours			

COMPATIBLE SUBSTRATES*				
• Kynar		•	Stainless Steel	
Anodized	Aluminum	•	Carbon Steel	
Cut Concr	ete	•	FRP	
Aluminum		•	Vinyl Siding	
Glass		•	Brick (red)	

\* Adhesion testing should always be performed to confirm fitness for use with the substrate

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recommended. See also CONDITIONS OF SALE/ LIMITED WARRANTY (Section 7) above.

