

# SILANDE®



**Pavement Joint Sealant**

[www.cnsealant.com](http://www.cnsealant.com)

# MF896

## Silicone Joint Sealant

**Non-Sag Silicone Joint Sealant for Portland Cement Concrete Pavement Joints**

### INTRODUCTION

MF896 Silicone Joint Sealant is one-component, moisture curing, low-modulus non-sag silicone sealant for sealing joints in Portland cement concrete pavements in all climates, for use in new construction, repair or remedial applications, which provides a lasting and flexible seal. MF896 can be used in all typical concrete joint applications on highway and airfield pavements. The sealant bonds strongly to Portland cement concrete joints without the use of a primer, is compatible with asphalt pavement, easily applied to pavement joints using bulk dispensing system units such as joint sealant pump.

### CHARACTERISTICS

- One component, cold applied, ready-to-use as supplied, dispensed directly from the bulk container into the joint by hand or with an air-powered pump.
- Unprimer adhesion - primer is not required for bonding to Portland cement concrete.
- Irregular pavement sealing -- The broken joints can be sealed as long as there is enough interface between sealant and substrate.
- Movement capability - 100% extension and 50% compression.
- Low modulus - The sealant only places little stress on joint interface when it reaches 100% elongation, which allows continuous movement to ensure sealing performance.
- No pollution - Free of solvent and volatile substance, environmentally friendly and no corrosion to substrate.
- Curing time - The sealant will have a skin-over time of one hour or less as standard conditions.

### TYPICAL PROPERTIES

MF896 Silicone Joint Sealant meets and exceeds the requirements of ASTM D5893:

TEST ITEM	TECHNICAL DATA	TEST RESULT	STANDARD
<b>Test Conditions: T (23±2)°C, RH (50±5)%.</b>			
Density, g/cm <sup>3</sup>	1.48±0.01	1.48	GB/T 13477.2
Sag, mm	≤3	0	GB/T 13477.6
Extrusion Rate, ml/min	≥20	78	ASTM C1183
Tack-free Time, h	≤5	2.5	ASTM C679
<b>As Cured - 21 days, T (23±2)°C, RH (50±5)%.</b>			
Heat Aging, %	≤10	2.74	ASTM C792
Hardness, Shore A	≤25	22	ASTM C661
Curing Time, d	21	< 21	ASTM D5893
Tensile Strength at 150%, MPa	≤0.31	0.21	ASTM D5893
Elongation at Break, %	≥600	1100	ASTM D5893
Elasticity Recovery, %	≥75	80	GB/T 13477.17
Adhesion, Non-immersion	No cracks or separation	No cracks or separation	ASTM D5893
Adhesion, Water Immersion	No cracks or separation	No cracks or separation	ASTM D5893
Adhesion, Heat Aging	No cracks or separation	No cracks or separation	ASTM D5893
Accelerate Weathering (5000h)	No Pulverizing and fracturing	No Pulverizing and fracturing	ASTM C793
Resilience	≥75%	79	ASTM D5893

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## METHODS OF APPLICATION

MF896 Silicone Joint Sealant is non-sag and ideal for use in transverse and vertical joints. As non self-leveling sealant, it is necessary to press the sealant into joint with tools to ensure good adhesion and intimate contact with substrate. Also the sealant depth and recess surface are controlled. Before attempting to seal joints in new asphalt, the asphalt must be given sufficient time to cool and to cure, so that damage will not result from sawing. This time will depend upon a number of factors, such as mix design, time of year for placement and geographic location. The asphalt must also be completely dry prior to sealant installation. In new construction, a shallow cut is recommended where the backer material is placed on the bottom of the joint (Refer to Road Sealant Installation Specification). A shallow cut saves time and saw blades. All old sealant and / or joint filler must be removed prior to sealant installation. The tools and techniques used to remove the existing sealant or joint filler will be determined by the

material in the joint and by available equipment. In such case, the standard joint design that the backer material is slightly higher than joint bottom is recommended, providing certain room for accommodating extruded sealant.

When MF896 Silicone Joint Sealant is used for sealing reflection cracks in asphalt pavements, additional joint preparation steps must be used. Cracks that have formed in the asphalt pavement must be totally removed by saw-cutting. This can be accomplished by saw-cutting along both sides of the crack, exposing freshly cut and sound asphalt joint faces.

MF896 Silicone Joint Sealant is only part of the installation system, which also includes suitable backer material, correct installation procedures. For further information about applications, preparations and installation, please refer to Road Sealant Installation Standard from SILANDE.

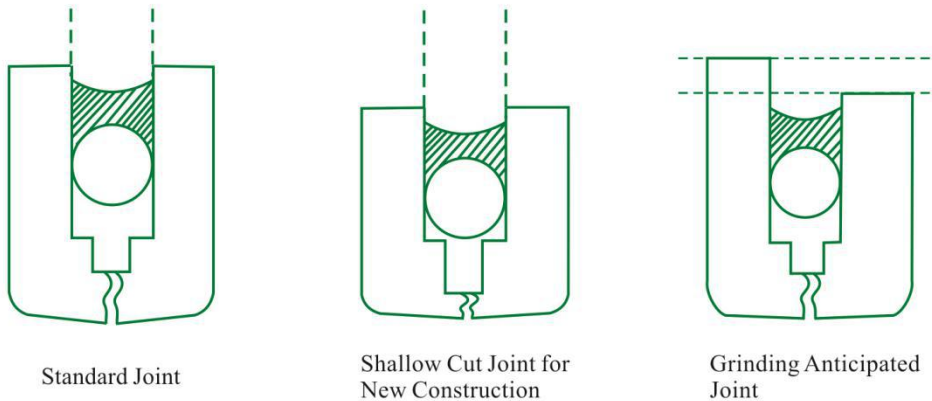


Fig.1: Joint Design

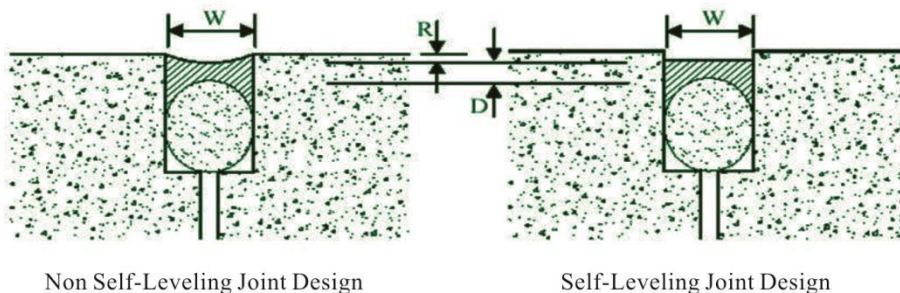


Fig.2: Joint Design

Joint Width  $W=6 \sim 102\text{mm}$   
 Protection Recess  $R=9 \sim 13\text{mm}$   
 Sealant Depth  $D=W/2 \quad 6\text{mm} \leq D \leq 13\text{mm}$

## Recommended Backer Rod Materials Installation (Shallow Cut).

Measure in mm

Joint Width	6	9	13	19	25
Concavity Depth	9	9	9~13	9~13	≥13
Sealant Thickness	6	6	6	9	13
Backer Rod Material	9	13	16	22	32
Total Joint Depth	25~29	29~32	32~35	41~45	57~60



## LIMITATIONS

MF896 Silicone Joint Sealant is not recommended for following situations:

1. Sealed and air-free areas.
2. Continuous water immersion, It should not be applied in totally confined spaces where the sealant is not exposed to atmospheric moisture.
4. It is recommended that the new concrete be allowed to cure and dry a minimum of 7 days in good drying weather before. Cold, wet weather will require a longer drying time and an additional day of good drying weather should be allowed for each day of poor drying weather.
5. The sealant tooled must be lower than pavement surface to avoid abrasion of people and vehicle.

6. Inspect the sealant adhesion to substrate except for concrete prior to large-scale application. The product is not put to the inspection of medical treatment and pharmaceutical use.
7. The sealant should never be applied to wet or damp asphalt or concrete pavement or installed during inclement weather.

## STANDARDS

MF896 Silicone Joint Sealant is in accordance with below standards:

- ASTM D 5893 Type NS
- MH 5006
- GJB 6951
- JC/T 976

## LIMITED WARRANTY INFORMATION

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that SILANDE products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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# SILANDE<sup>®</sup>

## FIRST AID INFORMATION

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Wash contaminated clothing and clean shoes before reuse. **Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention. **If swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give person two glasses of water. Never give anything by mouth to an unconscious person. **Keep out of reach children.** Refer to Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) for details. **Emergency Telephone Number:** +86 371 67982270

## STORAGE

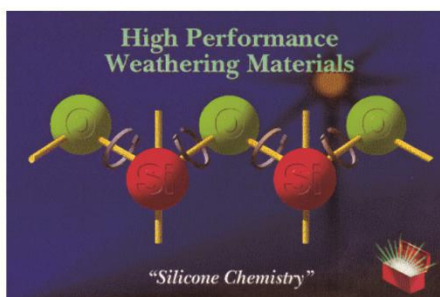
The shelf life will be 12 months stored in cool, dry and ventilated place below 32°C. Keep containers tightly closed.

## PACKAGING

Sausage: 592ml/piece  
Drum: 280 kg (189L / 50 gallons)

## TRANSPORTATION

MF896 is non-dangerous, can be transported by train, automobile, ship and plane.



Technology Leads The Future,  
Shaping The Quality Brand!

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