

# Product Information

## Silicone Sealants

DOW CORNING

# Dow Corning® 888 Silicone Joint Sealant

## FEATURES

- Can be extruded from -20 to 120°F
- Unprimed adhesion to Portland cement concrete
- May be used in joints that are not uniform in width
- Movement capability 100% extension and 50% compression
- Low modulus
- Weather and UV resistant
- Meets or exceeds the requirements of ASTM D5893

## BENEFITS

- 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.
- Unprimed adhesion – primer is not required for bonding to Portland cement concrete. For optimum adhesion, the surface must be clean, dry and frost-free.
- High movement capability; 100% extension and 50% compression.
- Low modulus.
- Weather and UV resistant.
- Cure time – typically, the sealant will have a skin-over time of one hour or less at standard conditions.

## COMPOSITION

- One-part, cold applied, non-sag silicone sealant.

Non-sag silicone joint sealant for Portland cement concrete pavement joints.

## DESCRIPTION

*Dow Corning*® 888 Silicone Joint Sealant is a one-part, non-sag silicone material that cures to a low-modulus silicone rubber upon exposure to atmospheric moisture. Can be applied over a wide temperature range.

## APPLICATIONS

- *Dow Corning* 888 Silicone Joint Sealant can be used for concrete to concrete pavement joints.
- For use in new construction, repair or remedial applications. *Dow Corning* 888 Silicone Joint Sealant may be used to seal joints that are not uniform in width provided the movement capability of the sealant is not exceeded. May also be used in joints with minor spalling.

## TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test	Property	Result	D5893 Requirement
<b>As Supplied</b>			
	Color	Gray	
ASTM D2202	Slump	Pass	<0.30 inches
ASTM C 1183	Extrusion Rate, minimum	72 mL/min	20 mL/min
ASTM C 679	Tack Free Time	Pass	5 hours max
ASTM C 792	Heat Aging	3.05%	10% loss max
ASTM C 661	Durometer Shore A-2	15	25 maximum
ASTM D 792	Specific Gravity	1.48	
	Cure Time, 1/2" x 1/2" x 2" (73°F, 50% R.H.)	Pass	21 day Cure
<b>As Cured – 21 days at 25°C (77°F) and 50% RH</b>			
	Bond, Non-Immersed	Pass	No cracks or separation
	Bond, Water Immersed	Pass	No cracks or separation
	Bond, Oven Aged	Pass	No cracks or separation
ASTM D 412 (Die C)	Ultimate Elongation	≥1000%	600% min
ASTM D 412 (Die C)	Tensile Stress @ 150%	28 psi	45 psi max

## HOW TO USE

Please refer to the **Dow Corning Silicone Pavement Sealants Installation Guide 61-507N-01**

## HANDLING

### PRECAUTIONS

**Caution:** Before handling sealant, read product and material safety data sheets for detailed use and health information.

This product contains a proprietary acetamidossilane that liberates N-ethyl acetamide (N-EA) during cure. N-EA may cause birth defects based on animal data. Toxicology studies indicate that repeated, pro-longed overexposure to N-EA causes an adverse reproductive effect in laboratory animals. Avoid breathing vapors. Do not use in poorly ventilated spaces. Avoid prolonged skin contact. **KEEP OUT OF REACH OF CHILDREN.**

Fully cured sealant is nonhazardous.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEB SITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

## USABLE LIFE AND STORAGE

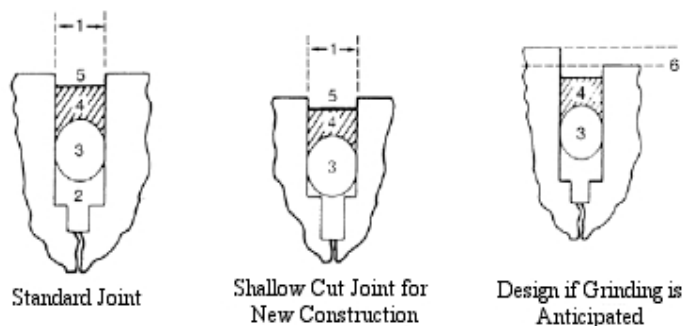
Keep stored in original, unopened containers at or below 32°C (90°F). Refer to product packaging for

## TYPICAL PROPERTIES (con't)

Test	Property	Result	D5893 Requirement
ASTM C 793	Effects of Accelerate Weathering Resilience	Pass 77%	5,000 hours 75% min
ASTM C719	Joint Movement Capability, +100/-50 percent, 10 cycles	No failure	

ASTM: American Society for Testing and Materials.

**Figure 1: Good Joint Design**



1. Joint width wide enough to accommodate movement. (For additional information on joint width, see papers by Spells and Klosowski, "Silicone Sealants for Use in Concrete Construction," Vol. 1, No. 1, American Concrete Institute, SP-70, 1981; J.B. Cook, "Construction Sealants and Adhesives," Wiley-Interscience, 1970; and J.M. Klosowski, "Sealants in Construction," Marcel Dekker, 1989.)
2. Joint sawed deep enough to allow backer rod/sealant placement and space for pumping of old sealant compounds. NOTE: This applies to standard joints only; void space beneath backer rod in new construction is not needed.
3. Proper backer rod placement to prevent three-sided adhesion.
4. Sealant installed to proper depth and width.
5. Sealant recessed a minimum of 3/8 inch to 1/2 inch (9.53 mm to 12.7 mm) below pavement surface.
6. Depth of lowest slab determines the amount of recess required if grinding is anticipated; once grinding is complete, the sealant will have proper recess below the pavement surface.

"Use By" date. Keep containers tightly closed.

## PACKAGING INFORMATION

Dow Corning 888 Silicone Joint Sealant is supplied in 29-fl oz (857-mL) disposable plastic cartridges, 4.5-gal (17-L) bulk pails, and 50-gal (189-L) bulk drums.

## LIMITATIONS

Dow Corning 888 Silicone Joint Sealant is not recommended for continuous water immersion. It

should not be applied in totally confined spaces where the sealant is not exposed to atmospheric moisture.

Not intended for use with asphalt.

The sealant should never be applied to wet or damp concrete pavements or installed during inclement weather.

Dow Corning does not promote or warrant the use of *Dow Corning*<sup>®</sup> brand sealants in applications

associated with spill containment areas of any kind.

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

### SHIPPING LIMITATIONS

None.

### HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [dowcorning.com](http://dowcorning.com) or consult your local Dow Corning representative.

### LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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 our 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.

Dow Corning’s sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

**DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

**DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

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**Table 1: Recommended Backer Rod Installation (Shallow Cut)<sup>1</sup>**

<b>Measured in Inches</b>						
Joint Width	1/4	3/8	1/2	3/4	1	>1
Recessed Below Surface	3/8	3/8	3/8 to 1/2	3/8 to 1/2	1/2+	Contact
Sealant Thickness	1/4	1/4	1/4	3/8	1/2	Dow
Backer Rod Diameter	3/8	1/2	5/8	7/8	1 <sup>1</sup> / <sub>4</sub>	Corning
Total Joint Depth	1 - 1 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>8</sub> - 1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub> - 1 <sup>3</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>8</sub> - 1 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub> - 2 <sup>3</sup> / <sub>8</sub>	
<b>Measured in Millimeters</b>						
Joint Width	6	9	13	19	25	
Recessed Below Surface	9	9	9 to 13	9 to 13	13+	
Sealant Thickness	6	6	6	9	13	
Backer Rod Diameter	9	13	16	22	32	
Total Joint Depth	25 - 29	29 - 32	32 - 35	41 - 45	57 - 60	

<sup>1</sup>On road surfaces where grinding is planned at a later date, the sealant and backer rod should be installed so that sealant is approximately 3/8 inch (9.35 mm) below the road surface after grinding is complete. An additional small amount should be added to allow for surface imperfections on the bottom and to provide room for old sealant to pump up from below during rehabilitation work in the summer months.