# RoadSaver<sup>TM</sup> Silicone Sealant

## Self-Leveling / Non-Sag / Low Modulus



### Silicone Sealant Failure by Years of Service Life at Fairchild Air Force Base <sup>2,3</sup>

Average Total Failure by Years of Service Life

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Product	5 YEARS	10 YEARS	21 YEARS						
Crafco Roadsaver Silicone SL	1%	16%	18%						
Competitor A	2%	14%	31%¹						
Competitor B	1%	28%¹	35%¹						
Competitor C	1%	20%							
Competitor D	10%	23%							
Competitor E	8%	35%¹							
Competitor F	22%	53%¹							

- Based on LTPP Pavement Maintenance (FHWA-RD-99-143) the service life is the time required for 25% of joint length to develop failure, therefore these materials were in the range for replacement.
- Lynch, Larry N., Chehovits, James G., Luders, David G., and Belangie, Michael. "Twenty One Year Field Performance of Joint Resealing Project at Fairchild AFB." Transportation Research Record: Journal of the Transportation Research Board, Volume 2361, 2013.
- Lynch, Larry N., Chehovits, James G., and Luders, David G. "Ten-Year Field Performance Evaluation of Joint Resealing Project." Transportation Research Record: Journal of the Transportation Research Board, Volume 1795, 2002.



Crafco RoadSaver Silicone sealants are uniquely formulated low modulus sealants produced for sealing joints in Portland cement concrete pavements. The sealants are supplied as single component moisture curing materials which provide lasting weather resistant flexible seals.

#### Crafco RoadSaver Silicone is designed to:

- Keep moisture out of pavement sub-base
- Prevent incompressible items from entering joints
- Prevent pavement distresses like cracks and spalls
- Be flexible and durable to work in any climate
- Withstand weather, traffic, and thermal movement
- · Last longer than other silicone joint sealants

#### How It's Supplied

- The sealants are supplied in both non-sag (NS) (Part No. 34902) and self-leveling (SL) (Part No. 34903) application consistencies.
- Sealant is supplied in package sizes including 55 gal steel drums containing 50 gallons (189 L), 5 gal (19 L) plastic pails and quart plastic caulking tubes containing 29 ounces (0.82L).

#### RoadSaver Silicone SL (Self-Leveling) Part Number: 34903



- Offers the performance and durability characteristics of conventional non-sag silicone with the ease of installation of self-leveling materials.
- Supplied as a ready to use one component moisture curing system.
- Offers outstanding weathering resistance, remains flexible down to temperatures as low as -50°F (-46°C), is jet-blast resistant and will maintain field serviceability when exposed to intermittent fuel and oil spills.
- Bonds strongly to concrete joints without the use of a primer.
- Can be used in all typical concrete joint applications on highway and airfield pavements in all climates.
- · Compatible with asphalt pavement.
- Leveling characteristics ensure that the required joint wetting for development of appropriate adhesion occurs during application, with no tooling required.

#### RoadSaver Silicone NS (Non-Sag) Part Number: 34902



- Uniquely formulated low modulus non-sag silicone for sealing joints in Portland cement concrete pavements in all climates.
- Ready-to-use, one component moisture curing system, which provides a lasting and flexible seal.
- Can be used in all typical concrete joint applications, on highway and airfield pavements, and is compatible with asphalt pavement.
- Offers outstanding weathering resistance, remains flexible down to temperatures as low as -50°F (-46°C), is jet-blast resistant, and will maintain field serviceability when exposed to intermittent fuel and oil spills.
- Sealant bonds strongly to Portland cement concrete joints without the use of a primer.
- To achieve the proper joint configuration, Crafco Silicone NS must be tooled.

Joint Design for Crafco RoadSaver Silicone Sealants in PCC Pavements

#### RoadSaver Silicone SL Ultra-Low Modulus (Self-Leveling) Part Number: 34904LM



- Designed specifically to reduce tensile forces on concrete to asphalt joints.
- Can be used in all typical concrete and concrete to asphalt joint applications on highway and airfield pavements in all climates.
- Supplied as a ready to use one component moisture curing system which provides a lasting and flexible seal.
- Offers outstanding weathering resistance and low temperature flexibility, bonding strongly to concrete joints and concrete to asphalt joints without the use of a primer.
- Easily applied using bulk dispensing system units such as the RoadStar joint sealant pump or those available from manufacturers including Pyles/ Graco and Johnstone.
- Leveling characteristics insure that the required joint wetting for development of appropriate adhesion occurs during application, with no tooling required. VOC < 75 g/l.</li>

#### in. (mm) Joint Width\* 1/4 (6) 3/8 (10) 1/2 (13) 5/8 (16) 3/4 (19) 7/8 (22) 1 (25) 1 1/8 (29) 1 1/4 (32) 1 3/8 (35) 1 1/2 (38) Min. Sealant 1/4 (6) 1/4 (6) 5/16 (8) 5/16 (8) 3/8 (10) 3/8 (10) 3/8 (10) 1/2 (13) 1/2 (13) 1/2 (13) 1/2 (13) Recess **Backer Rod** 3/8 (10) 1/2 (13) 5/8 (16) 3/4 (19) 7/8 (22) 1 (25) 1 1/4 (32) 1 1/2 (38) 1 1/2 (38) 1 3/4 (44) 2 (51) Diameter<sup>1</sup> Sealant Bead 1/4 (6) 1/4 (6) 1/4 (6) 5/16 (8) 3/8 (10) 7/16 (11) 1/2 (13) 1/2 (13) 1/2 (13) 1/2 (13) 1/2 (13) Thickness<sup>2,3</sup> Min. Joint Saw/ 1 1/8 (29) 1 1/4 (32) 1 1/2 (38) 1 3/4 (44) 1 7/8 (48) 2 3/8 (60) 2 (51) 2 7/8 (73) 3 1/8 (79) 3 3/8 (86)

Reservior Depth											
Min. Backer Rod Depth	1/2 (13)	1/2 (13)	5/8 (16)	11/16 (17)	3/4 (19)	13/16 (21)	7/8 (22)	1 (25)	1 (25)	1 (25)	1 (25)
	ft./gal. (l/m)	ft./gal. (l/m									
Estimated Usage: Non-Sag	245 (20)	149 (12)	112 (9)	70 (6)	51 (4)	35 (3)	26 (2)	23 (2)	18 (1)	16 (1)	15 (1)
Estimated Usage:	273 (22)	172 (14)	130 (10)	82 (7)	58 (5)	41 (3)	31 (2)	27 (2)	22 (2)	20 (2)	19 (2)

- 1. Backer rod diameter should not be varied from specified dimensions. If larger sizes are used, increased saw depth is needed.
- 2. Sealant bead thickness can vary by + 25% of design value.

Self-Leveling

- 3. Never install Roadsaver Silicone to a depth greater than the joint width (1 to 1).
- \*Please contact Crafco for additional joint size design recommendations.

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