



## RepSil FS Fast Setting, Self-Leveling Silicone Joint Sealant

### DESCRIPTION:

**RepSil FS** is a one-component, self leveling moisture curing, low modulus silicone for sealing joints in Portland cement concrete pavements in all climates. For use in new construction, repair, or remedial applications, providing a lasting and flexible seal. **RepSil FS** bonds tenaciously to concrete and asphalt without the use of a primer. **RepSil FS is especially recommended for Bridge Decks and concrete projects requiring fast traffic turnarounds.**

### FEATURES:

- Self-leveling, no tooling required.
- Can be extruded from -60° to 200°F.
- Flows into irregular joint widths.
- Does not require tooling.
- Movement capability (+100% / - 50%)
- Ultra-low modulus.
- Weather and UV resistant.
- Fuel resistant-short term exposure.
- Cold applied, ready-to-use as supplied.
- No heating or special preparation.
- Primer is not required for concrete and asphalt.
- **Quick Skin over-traffic in less than one hour.**

### USES:

- **Bridge Joints, Headers, Ramps**
- **Loop Detector Sealant**
- **Airfield & Highway Pavement**
- Parking garages, Plaza decks, Driveways

### TECHNICAL DATA:

ASTM D 5893 Type FS. FAA P-605 for Silicone Joint Sealant. Meets SS-S-200E (section 4.4.12) Flame Test Requirements. EN 14187-5 Hydrolysis Test; EN 14188-2 Class B, C and D ASTM C-920, Type S, Grade P, Class 100/50. TT-S-00230C, Type I, Class A TT-S-001543A, Class A.

### PREPARATION:

Concrete and masonry substrates shall be cured prior to the application of the sealant. The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance, or other surface contaminants. Concrete surfaces require a light sandpaper finish equal

to or greater than an ICRI CSP #1-3. Surface preparation may be completed with the use of **TuffTex PrepEtch. (See PrepEtch Brochure)**

### MIXING:

**RepSil FS** is a one-component, ready-to-use material that requires no mixing.

### PLACEMENT:

Ready to use, apply using professional caulking gun or dispensing equipment. Do not open product container until preparation work has been completed. Apply sealant using consistent, positive pressure to force sealant into the joint. In general, apply the sealant so that it is recessed 1/2 inch (13 mm) below the surface. For highway joints, recess 3/8" inch (9 mm) to 1/2" (13mm). **RepSil FS** is self-leveling therefore, no tooling is needed. It is typical that **RepSil FS** may retain some residual surface tack in its first 2-3 days of cure. This condition does not affect the time the surface joint can be open to service in a properly recessed sealant joint. **RepSil FS** will obtain adhesion to aged, cured asphalt. Never use on newly poured asphalt without a primer. Conduct a field test to document and confirm adhesion under actual jobsite conditions.

If tooling or smoothing of the sealant is necessary, it should be performed within 15 minutes of application. The optimal temperature range for application is between 35°F – 100°F (2°C – 38°C).

### CURING:

**RepSil FS** will have a skin-over time of 30 minutes or less at standard conditions allowing roadways to quickly be opened to traffic.

### CLEAN UP:

Tools and Equipment: Clean before the sealant cures with **Xylene** or **Simple Green**.

### PACKAGING:

**RepSil FS Self-Leveling Silicone Joint Sealant** is supplied in 29-fl oz (857-mL) disposable cartridges, 1 gal. Cans (SO), 5-gal (18.93-L) pails and 50-gal (189-L) bulk drums.

### COLOR:

Concrete Gray, Federal Standard 595c, Color number 35630

### STORAGE:

The material should be stored between 40°F – 95°F (4°C – 35°C) in a cool, dry area away from direct sunlight.

**SHELF LIFE:**

Shelf life of safely stored unopened containers is 24 months (two years). Excessive temperature differential and high humidity can shorten the shelf-life expectancy.

**CAUTION:**

**READ SDS PRIOR TO USING PRODUCT.**

Keep out of the reach of children. Do not take internally. In case of ingestion, seek medical help immediately. May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water, and seek medical help as needed. If eye contact occurs, flush immediately with clean water and seek medical help as needed. Dispose of waste material in accordance with federal, state, and local requirements. Cured Resins are Innocuous.

**WARRANTY:**

Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either **TuffTex Materials, Inc.**, or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

**DISCLAIMER:**

Refer to the SDS sheet before use. The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of **TuffTex Materials, Inc.** Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Published technical data and instructions are subject to change without notice. Contact your local **TuffTex Materials, Inc.** distributor or technical representative for additional technical data and instructions.

**COVERAGE GUIDE:**

See sealant chart below or RepSealants workbook.

Joint Sealant Coverage Chart (linear feet per gallon)

		Width of Joint (in.)													
		1/4	3/8	1/2	5/8	3/4	7/8	1	1.25	1.5	1.75	2			
Depth of Joint (in.)	3/16	411	275	205	164										
	1/4	307	205	154	123	103	88	77	62	51	44	38			
	3/8			103	82	68	59	51	41	34	29	26			
	1/2			77	62	51	44	39	31	26	22	19			
	5/8									25	21	18	15		
	3/4									21	17	15	13		

**PHYSICALS: Total compliance with ASTM D 5893**

TEST ITEM	TEST RESULTS	STANDARD
<b>Drying Time</b>		
Tooling/Skin Time	15-30 minutes	ASTM C 679
Tack-free Time	45 minutes	ASTM C 679
Cure Time	48 Hours	ASTM C 679
Full Physical Characteristics	7 Days	ASTM C 679
<b>As Cured - 7 days, T 77° F (25°C), RH (50%)</b>		
Joint Movement	+100% / - 50%	ASTM C719
Hardness, Shore A	31	ASTM D412
Tensile Strength at 150%	21 psi	ASTM D412
Ultimate Elongation, %	658	ASTM D412
Flowing Property	Pass	ASTM C1183
Useable Temperature Range	-40°F to 200°F (-40°C to 93°C)	ASTM D5893
Adhesion, Heat Aging, Water Immersion, Non-immersion	No cracks or separation	ASTM D5893
Accelerated Weathering (5000h)	No degradation	ASTM C793-91
Nonvolatile content (%)	97	TEX-525-C
Extrusion Rate	220	ASTM 1183 A
Bond Strength	Pass	ASTM D5893
Resilience	99	ASTM D5893
Specific Gravity	1.6	Report

