



NOVEMBER 2008 (Supersedes March 2003)

# SOF-SEAL®

CSI Code: 32 13 73.16

# Cold-Applied, Low-Modulus Horizontal Joint Sealant

# DESCRIPTION

Cold-applied SOF-SEAL low modulus horizontal joint sealant is a premium-grade, pourable, twocomponent sealant composed of a special combination of polymeric compounds that provides outstanding performance in both Portland cement and asphalt concrete. Once properly mixed and applied, it cures within two hours to a soft, highly flexible, rubber-like material that is capable of maintaining a sealed joint or crack over a wide temperature range. SOF-SEAL does not track in the summer and will not become brittle at temperatures as low as -20° F (-29° C). It remains soft, flexible, and pliable in the joint, even after repeated freeze/thaw cycles. SOF-SEAL offers excellent elongation, high resiliency, tenacious bonding power, and excellent longevity.

This self-leveling sealant requires no special application equipment and can easily be poured into cracks and joints.

#### USES

SOF-SEAL is a versatile pavement sealant suitable for either large- or small-scale sealing. It is excellent for crack repair and preventive maintenance sealing projects. It is ideal for use when a maintenance group doesn't have a melter, or where it is not practical to fire up and repeatedly move melterapplicator units (small-scale sealing projects). Typical applications include the sealing of expansion and contraction joints, longitudinal joints and random cracks in concrete pavements, reflective and random cracks in asphalt paving, and asphalt-toconcrete shoulder joints. It is also ideal for highsheer bridge joint applications. In addition, SOF-SEAL can be used as a pitch pan sealant.

# PACKAGING

Two-component SOF-SEAL is packaged in convenient three-gallon (11.36 liter) units. The base material is furnished in an oversized container suitable for mixing and pouring. The activator is furnished in a bottle inserted in a plastic bag, which hangs inside the container. Both components are premeasured to exact quantities. Mix all materials in container; do not mix partial units.

# **FEATURES/BENEFITS**

- Provides a cost-effective alternative to hotapplied sealants.
- Delivers reliable, consistent performance, even during cold weather or after repeated freeze-thaw cycles.
- Remains pliable in the joint for years ... a superb preventive maintenance factor.
- Accommodates joint movement effectively over a wide range of temperatures.
- Offers exceptional elongation and longevity, high resiliency, and tenacious bonding power.
- Rejects ingress of incompressibles.
- Does not become brittle or crack out in winter ... will not flow in warm weather.
- Maintains low stress development because of its low modulus properties.
- A proven alternative to silicone-based sealants.
- Can be used as a pitch pan sealant.

TECHNICAL DATA	
Application Life (Pot Life) @ 70°F (21°C)	45 Minutes
Initial Cure:	approx. 2 hours
Penetration mm/10 @ 77° F (25° C) @ 0° F (-18° C)	140 35
Flow, cm	None
Resilience, %	90%
Bond Test, 3 cycles 200% extension @ -20° F (-29°C) Elongation, 300% @ -20° F (-29° C)	Pass 3 cycles Pass 1 cycle

# COVERAGE

7.47 gal./ft.<sup>3</sup> (1000 L/m<sup>3</sup>). A joint <sup>1</sup>/2" x <sup>1</sup>/2" (12.7 mm x 12.7 mm) will require 1.3 gal./100 linear feet (16 liters/100 m).

# SHELF LIFE

When stored indoors in original, unopened containers at temperatures between  $40^{\circ} - 90^{\circ}$  F (4° -  $32^{\circ}$  C), optimum performance and best use is obtained within two years of date of manufacture.

#### CONTINUED ON REVERSE SIDE...

# W. R. MEADOWS, INC.

P.O. Box 338 • HAMPSHIRE, IL 60140-0338 Phone: 847/214-2100 • Fax: 847/683-4544 1-800-342-5976 www.wrmeadows.com HAMPSHIRE, IL /CARTERSVILLE, GA /YORK, PA FORT WORTH, TX /BENICIA, CA /POMONA, CA GOODYEAR, AZ / MILTON, ON /ST. ALBERT, AB

#### **LEED INFORMATION**

May help contribute to LEED credits:

- EQ Credit 4.1: Low Emitting Materials: Adhesives and Sealants
- MR Credit 5.1: Regional Materials: 10% Extracted, Processed & Manufactured Regionally
- MR Credit 5.2: Regional Materials: 20% Extracted, Processed & Manufactured Regionally

#### APPLICATION

Surface/Joint Preparation ... Remove foreign substances, incompressibles, and free water from joint opening. For proper adhesion, joints must be clean and surface dry. Dust, dirt, and laitance should be removed prior to application. SOF-SEAL adheres well to unprimed concrete. Proper joint design practices and applications must be followed for successful performance. SOF-SEAL should be used on joints not less than 1/4" (6.35) mm) wide. A 2:1 width-to-depth ratio should be maintained. For straight joint edges, mask off top surfaces with masking tape. To control sealant depth, insert KOOL-RODTM backer rod or DECK-O-FOAM® from W. R. MEADOWS in the joint before sealing. For larger joints, where additional support is required, use a non-asphalt joint filler, such as CERAMAR® flexible foam expansion joint filler from W. R. MEADOWS.

**Mixing** ... Prior to mixing, SOF-SEAL should be stored at temperatures of  $55^{\circ}$  F ( $13^{\circ}$  C) or higher. The two components of SOF-SEAL are premeasured and must be mixed together at one time. Add the activator to the base material and blend thoroughly. Mixing can be accomplished with a variable speed drill operated at slow speeds (see A) or by hand (see B). In either case, the mixing should be interrupted occasionally and the mixing paddle used to wipe material from the sides and bottom of the container for thorough blending. A. Preferred Method ... Mixing with a variable speed drill fitted with a slotted, flat-headed paddle is best accomplished when the drill is operated at slow speeds, not to exceed 400 rpm. MIXING TIME IS FIVE MINUTES MINIMUM.

*B.* Mixing by hand can be accomplished with a flat, wooden mixing paddle. MIXING TIME BY HAND IS EIGHT MINUTES MINIMUM.

**Pouring ...** SOF-SEAL may be poured from its original container or any clean container suitable for pouring. A commercial sealing pot equipped with a narrow pouring spout and shutoff valve is ideal. Fill cracks or joints flush with pavement surface. If cracks are overfilled, use a squeegee to achieve a uniform appearance. To facilitate prompt opening to vehicular traffic, about one hour after applying sealer, dust with limestone dust or talc, as an example, to minimize tracking.

**Cleanup** ... Before material has cured, use an aromatic solvent, such as toluene. After material has cured, it will be necessary to cut or abrade the material from equipment.

# PRECAUTIONS

SOF-SEAL components are pre-measured to exact quantities. Mix all materials in container; do not mix partial units or dilute. Apply only when the temperatures of the air and joint interfaces are 40° F (4° C) or higher. Avoid contact with skin or prolonged breathing of vapors. Refer to Material Safety Data Sheet for complete health and safety information.

For most current data sheet, further LEED information, and MSDS, visit www.wrmeadows.com.



# LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

#### **Disclaimer**

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection

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