

# Sealants



## Polyurethane Sealants

### Sikaflex®-2c SL

- High-performance joint sealant
- Self-leveling
- 2-Component
- +/- 50% joint movement
- Over 40 colors with color paks
- 1.5 gal units and 3 gal units
- Limestone gray color available pre-pigmented base



Packaged in 2-gallon pails which includes catalyst. Yield - 1.5 gallons. Color-paks and traffic grade components added separately. Special order 3 gallon units.

### Sikaflex®-2C NS

- High-performance joint sealant
- 2-Component
- Non-sag
- +/- 50% joint movement
- Over 40 colors with color paks
- 1.5 gal units and 3 gal units
- Limestone gray color available pre-pigmented base



#### Sikaflex Sealants

##### Federal

Federal Spec TT-S-00230C, Type II, Class A-	Sikaflex-1a Sikaflex-15LM *
Federal Spec TT-S-00230C, Type I, Class A (for mortar)	Sikaflex-1CSL
Federal Spec TT-S-001543A, Type NS-	Sikaflex-15LM * +
Federal Spec TT-S-00227E, Type II, Class A-	Sikaflex-2c NS **
Federal Spec TT-S-00227E, Type I, Class A-	Sikaflex-2c SL **

##### ASTM

ASTM C-920, Type M, Grade NS, Class 25-	Sikaflex-2c NS **
ASTM C-920, Type M, Grade P, Class 25- Use T, NT, M, G, A, O	Sikaflex-2c SL **
ASTM C-920, Type S, Grade NS, Class 25- Use T, NT, M, G, A, O	Sikaflex - 1a
ASTM C-920, Type S, Grade NS, Class 25- Use T**, NT, M, G, A, O	Sikaflex -15LM *
ASTM C-920, Type S, Grade P, Class 25- Use T, M	Sikaflex -1CSL
ASTM C-920, Type S, Grade NS, Class 12* Use T, NT, M, A	Sikaflex TR

#### Linear Feet of Sealant per Gallon

		Depth					
		¼	½	¾	1	1¼	1½
Width	¼	308.0					
	½	154.0	77.0				
	¾	102.7	51.3	34.2			
	1	77.0	38.5	25.7	19.3		
	1¼	61.6	30.8	20.5	15.4	12.3	
	1½	51.3	25.7	17.1	12.8	10.3	8.6

#### Definitions

##### ASTM Specifications

Type S	A single-component sealant
Type M	A multi-component sealant
Grade P	A pourable or self-leveling sealant
Grade NS	A non-sag or gunnable sealant

##### Federal Specifications

Type I	Self-leveling, pour grade
Type II	Non-sag, gun grade
Type NS	Non-sag, gun grade
Class A	+25%, -25% expansion/contraction

**Class 25** - A sealant that, when tested for adhesion or cohesion under cyclic movement shall withstand an increase and decrease of at least 25% of the joint width as measured at the time of application and, in addition, meet all the requirements of this specification.

**Class 12** - A sealant that, when tested for adhesion and cohesion under cyclic movement shall withstand an increase and decrease of at least 12% of the joint width as measured at the time of application and, in addition, meet all the requirements of this specification.

# Sealants



## Polyurethane Sealants

### Sikaflex®-1a

- All purpose sealant
- 1-Component
- Non-sag
- +/- 25% joint movement
- 10.3 fl. oz. cartridges, 24/case
- 20 fl. oz. sausages, 20/case



### Sikaflex®-1CSL

- Horizontal joint sealant
- Self-leveling
- 1-Component
- +/- 25% joint movement
- 30 fl. oz. cartridges
- 5 gallon pails



### Sikaflex®-15LM

- Low-Modulus
- Joint sealant
- 1-Component
- Non-sag
- +100%/-50% joint movement
- 10.3 fl. oz. cartridges, 24/case
- 20 fl. oz. sausages, 20/case



## Sikaflex Sealants

- Will not revert
- Consistent quality
- Fast tack-free time
- Fast strength build-up
- Paintable and sandable
- High movement capabilities
- Water immersible
- Wide color selection
- Extremely tear resistant
- High resistance to dirt pick-up
- Pre-tinted base for Sikaflex 2c
- Excellent durability and weather resistance
- Chemical resistance
- Bonds to most substrates without the use of primers

*Typical Technical Properties of Sika Sealants*

	<i>Sikaflex 1a</i>	<i>Sikaflex 15LM</i>	<i>Sikaflex 1CSL</i>	<i>Sikaflex 2c NS/SL</i>
Service Range	-40° to 170° F	-40° to 170° F	-40° to 170° F	-40° to 170° F
Tack-Free Time Final Cure	4 hrs 4-7 days	6-8 hrs 7-10 days	1-2 hrs 3-5 days	6-8 hrs 3 days
Elongation	500%	700%	700%	650%
Tensile Strength	200 psi	125 psi	550 psi	175 psi
Hardness, Shore A	40±5	20±5	45±5	25±5/40±5
Adhesion in Peel Bond Strength (Unprimed Concrete)	20 lb	30 lb	30 lb	25 lb/30 lb
Joint Movement Capability	+25% -25%	+100% -50%	+25% -25%	+50% -50%
Colors	Seven standard colors, Special colors available upon request	Fourteen standard colors, Special colors available upon request	Concrete Grey	40 standard. Pre-pigmented limestone. Over 320 special colors available upon request.

# Sealants



## Sikaflex® Sealant/Adhesive Primers

**260/205, 429/202, 449/203**

- Description:** Sikaflex primers are special materials formulated to improve the bond of Sikaflex urethane sealants when applied to specific substrates.
- Sikaflex Primer 260/205:** Sikaflex Primer 260/205 promotes adhesion of urethane sealants to various metallic, non-metallic and plastic substrates.
- Sikaflex Primer 429/202:** Sikaflex Primer 429/202 promotes adhesion to clean, sound and dry concrete, masonry, Exterior Insulation Finish Systems (EIFS) and wood – including teak and mahogany.
- Sikaflex Primer 260/205:** Sikaflex Primer 449/203 is used to promote adhesion to pvc, solvent-based enamel, PPG's fluorocarbon Duranar-finish and certain plastics such as ABS and Plexiglass.
- Where to Use:** Most substrates require a primer only if testing shows need for it or where the sealant will be underwater after cure. Certain substrates do require a primer under all conditions.
- Advantages:**
- Single-component, ready to use
  - Easily applied by brush, dauber or spray
- Coverage:** Following are average coverages, depending on porosity of substrate:
- | <b>Sikaflex Primer</b> | <b>Cover per pint linear ft. 1/2 x 1/2 in. joint</b> |
|------------------------|--|
| 260/205                | 300-500  |
| 429/202                | 300  |
| 449/203                | 300-500  |
- Packaging:** **Sikaflex 260/205 and 449/203** primers are available in pints, 6/carton. **Sikaflex 429/202** primer is available in pints, 6/carton; and gallons, 4/carton.



### Model 632-C

6/case, 38 lbs.  
32 oz bulk capacity  
Accepts 1/4 gallon cartridge  
OV-25 oval nozzle included

**10:1 Thrust Ratio Converts to 15:1 Thrust Ratio**



### Model 535-XSP

6/case, 34 lbs.  
30 ml x 300 ml side by side epoxy applicator.

**26:1 X-tra Super Power**



### Model 250

1/10 gallon – 6/case, 13 lbs.  
Super Smooth Rod  
**18:1 Thrust Ratio**

- Revolving barrel
- Zinc alloy handle & trigger
- Ladder hook
- Thumb release
- Built-in spout cutter
- Seal puncture tool
- All steel welded construction

• U.S. Patent 5,815,925 • 6,176,398



### Model 255

1/4 gallon – 6/case, 18 lbs.  
Super Smooth Rod  
**18:1 Thrust Ratio**

- Revolving barrel
- Zinc alloy handle & trigger
- Ladder hook
- Thumb release
- Built-in spout cutter
- Seal puncture tool
- All steel welded construction

• U.S. Patent 5,815,925 • 6,176,398



# Sealants



**PECORA CORPORATION**

## Sealant Guide

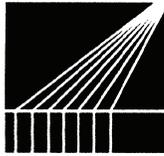
SEALANT	MAXIMUM MOVEMENT CAPABILITY Extension/Compression	PRACTICAL JOINT DESIGN #Times Expected Movement	JOINT REQUIREMENTS Width-Minimum/Maximum Depth-Minimum/Maximum	PRIMERS When Required Masonry* Anodized Aluminum*	SERVICE TEMPERATURE RANGE °F	STOCK COLORS	PACKAGING	BACKER RODS Denver Foam Polyurethane (DF) Polyethylene (PE)	ASTM and FEDERAL SPECIFICATIONS
NR-200 Urethane Two-Part Urethane Type I	25% 25%	4	1/4-N.A. 1/4-1/2	P-200 P-100	-20 to +180	12 39 515	1-12/ gal. 3 gal.	PE	ASTM C-920 TT-S-227E D-1850
NR-201 Urethane One-Part Urethane Type I	25% 25%	4	1/4-1 1/4-1/2	P-75 N.R.	-20 to +180	39 515	30 oz. ctg. 2 gal. 5 gal.	PE	TT-S-230C ASTM C-920 ASTM D-1850
Dynatrol II <sup>UL</sup> Two-Part Urethane Type II	50% 50%	4	1/4-2 1/4-1/2	P-150 P-75 P-120	-20 to +180	Standards and Color Flex	1-1/2 gal.	PE DF	TT-S-227E ASTM C-920 ASTM D-1850
Dynatrol I One-Part Urethane Type II	25% 25%	4	1/4-1-1/4 1/4-3/8	P-75 P-120	-20 to +180	12, 515, 39 595, 516	10.3 oz. ctg. 2 gal.	DF	TT-S-230C ASTM C-920
Dynatred <sup>UL</sup> Two-Part Urethane Traffic Grade, Type II	25% 25%	4	1/4-2 1/4-1/2	P-150 P-75 P-120	-20 to +180	Standards and Color Flex	1-1/2 gal.	PE	ASTM D-1850 TT-S-00227E ASTM C-920
Dynaflex <sup>UL</sup> Two-Part Urethane Security Sealant, Type II	12-1/2% 12-1/2%	8	1/4-2 1/4-1/2	P-200 P-120	-20 to +180	Standards and Color Flex	1-1/2 gal.	PE DF	TT-S-00227E ASTM C-920
GC-5 Synthacalk Two-Part Polysulfide Type II	25% 25%	4	1/4-2 1/4-1/2	P-53 N.R.	-20 to +180	39, 345 512, 515 516, 545, 595	1-3/4 gal.	PE DF	TT-S-227E ASTM C-920
GC-9 Synthacalk One-Part Polysulfide Type II	16% 16%	6	1/4-1 1/4-1/2	P-75 N.R.	-20 to +180	39, 345 515, 314	10.3 oz. ctg. 2 gal. 5 gal.	DF	TT-S-230C ASTM C-920
860 Silicone Acetoxy, Type II	25% 25%	4	1/8-1 1/8-3/8	N.A. N.R.	-75 to +400	12, 39, 345 515, 610 Translucent	10.3 oz. ctg. 5 gal.	DF	ASTM C-920 TT-S-1543A
863 Silicone High-Modulus Acetoxy, Type II	25% 25%	4	1/8-1 1/8-3/8	N.A. N.R.	-75 to +400	345 and 610 Translucent	10.3 oz. ctg. 5 gal.	DF	TT-S-1543A TT-S-230C 19-GP9, ASTM C-920
864 Silicone <sup>UL</sup> Low-Modulus Neutral Cure, Type II	50% 50%	4	1/8-1 1/8-3/8	P-64 N.R.	-65 to +300	12, 39, 113, 314, 345, 515, 545	10.3 oz. ctg. 2 gal. 5 gal.	DF	TT-S-1543A TT-S-230C 19-GP-9, ASTM C-920
895 Silicone Medium-Modulus Neutral Cure, Type II	50% 50%	4	1/8-1 1/8-3/8	P-64 N.R.	-65 to +300	12, 314, 345, 515, and 610 Translucent	10.3 oz. ctg. 2 gal. 5 gal.	DF	TT-S-1543A TT-S-230C 19-GP-9, ASTM C-920
60+ Unicrylic One-Part Acrylic Type II	7.5% 7.5%	12	1/4-1 1/4-1/2	N.R. N.R.	0 to +180	314, 515, 39, 345, 403, 512	10.3 oz. ctg.	PE DF	TT-S-230 19-GP-9
AC-20 + Silicone One-Part Acrylic Latex Type II	7.5% 7.5%	12	1/4-3/4 1/4-3/8	N.R. N.R.	0 to +180	See AC-20 Color Card	10.5 oz. ctg. 30 oz. ctg. 5 gal.	PE DF	ASTM C834-91

TYPE I = Self-Leveling  
TYPE II = Non-Sag

N.A. = Not Applicable  
N.R. = Not Required

NOTE: Ideally, depth should be 1/2 the width without exceeding Min./Max. limits.  
\*For other substrates, refer to Technical Bulletin #51 or consult Technical Service department.

# Sealants



**METZGER/McGUIRE**

## *Industry Standard Industrial Concrete Floor Joint Fillers & Repair Products*

### **MM-80**

**The Industry Standard  
“Heavy-Duty” Semi-Rigid  
Epoxy Joint Filler**

MM-80 is a two-component, 100% solids content epoxy joint filler. When cured, MM-80 is a gray, semi-rigid (hard but slightly resilient) filler with a shore hardness of A90-95 and D50-55.

MM-80 is designed for use in areas where final temperatures are from 40°F to -30°F.

### **Spal-Pro RSF**

**Heavy-Duty, Rapid Set  
Freezer/Cooler Polyurea  
Joint Filler**

Spal-Pro RSF is a rapid setting, two-component polyurea polymer liquid of 100% solids content. When cured, Spal-Pro RSF is a medium gray, rubberlike solid with a hardness of Shore A88-94, depending on temperature.

Spal-Pro RSF is designed for use in areas where final temperatures are from 45°F to -30°F.

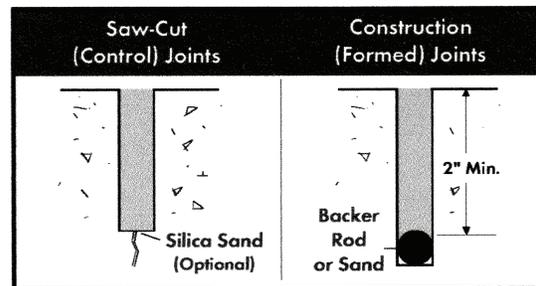
#### Coverage Rates

Joint Size (US)	LF/Gal.
1/8" x 1"	150
1/8" x 1-1/4"	120
1/8" x 1-1/2"	100
1/8" x 1-3/4"	85
1/8" x 2"	75
3/16" x 3/4"	135
3/16" x 1"	100
3/16" x 1-1/4"	85
3/16" x 1-1/2"	70
3/16" x 1-3/4"	60
3/16" x 2"	50
1/4" x 1"	80
1/4" x 1-1/4"	60
1/4" x 1-1/2"	50
1/4" x 1-3/4"	45
1/4" x 2"	40
1/2" x 1"	40

#### **Installation Depth**

Both the American Concrete Institute (ACI) and Portland Cement Association (PCA) standards call for semi-rigid industrial floor joint fillers to be installed full joint depth in saw-cut control joints or 2" minimum in joints deeper than 2".

**Example:** In a typical 6" slab on grade, the control joints are cut 1-1/2" deep and the construction (cold) joints would be 6" deep. The filler would be installed 1-1/2" in control joints and 2" in thru-slab construction joints.



### **Spec Joint CJ**

Spec Joint CJ is a 100% solids, two-component, semi-rigid epoxy joint filler specially designed to reduce spall-back and help support the joint edges of industrial concrete floors.

Spec Joint CJ complied with ACI 302 guidelines.

- Pourable gray consistency. Available in colors.
- Moisture Insensitive
- Shore A Hardness of 75-85
- Available in 2 and 10 gallon units

### **CM2000**

CM 2000 is an ultra low viscosity, two-component, rapid cure and chemical resistant material for the repair of hair-line cracks or deteriorated and spalled concrete.

CM2000 can be installed in temperatures as low as -40°F.

- Open to traffic in 15 minutes
- Chemical resistant
- Shore D Hardness of 71 +/- 5
- 300ml x 300ml cartridges
- Available in 2 and 10 gallon units

### **JointFill**

JointFill is a 100% solids, two-component, self-leveling aromatic polyurea joint filler having good flexibility and elongation, allowing 10 to 15% joint width movement.

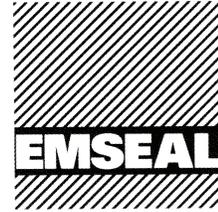
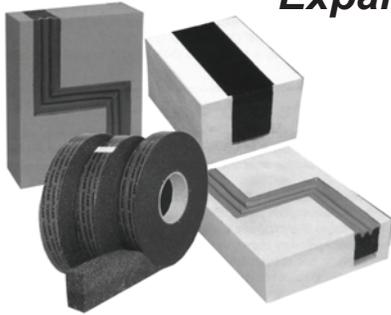
JointFill can be installed in temperatures as low as 15°F.

- Pourable gray consistency. Available in colors.
- Shore A Hardness of 75-80
- 300ml x 300ml cartridges
- Available in 2 and 10 gallon units

Division 7

# Sealants

## Expanding Foam Sealants



### Seismic Colorseal

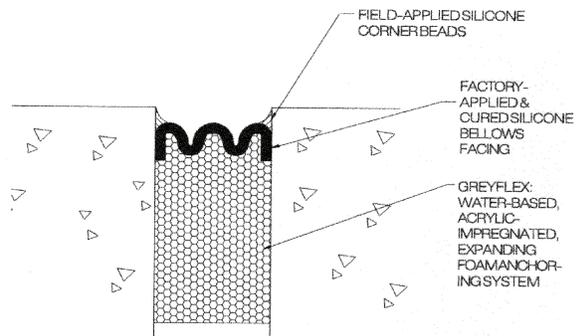
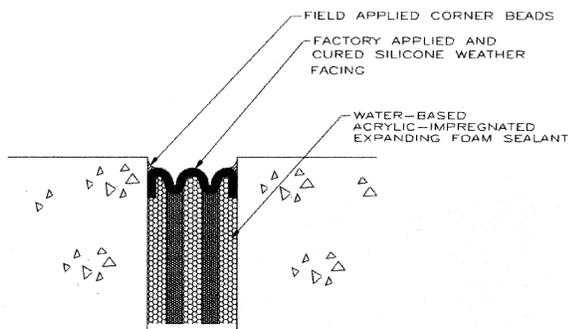
Use as primary seal in vertical joints of building facades, soffits, precast, brick and metal.

Factory applied low modulus silicone facing. Joint movement of +50%, -50% (100% total). Available in 11 colors.

### Colorseal

Use as primary seal in vertical joints of building facades, soffits, precast, brick and metal.

Sealing new and retrofit joints in EIFS systems. Factory applied low modulus silicone facing. Joint movement of +25%, -25% (50% total). Available in 11 colors.



### 25V

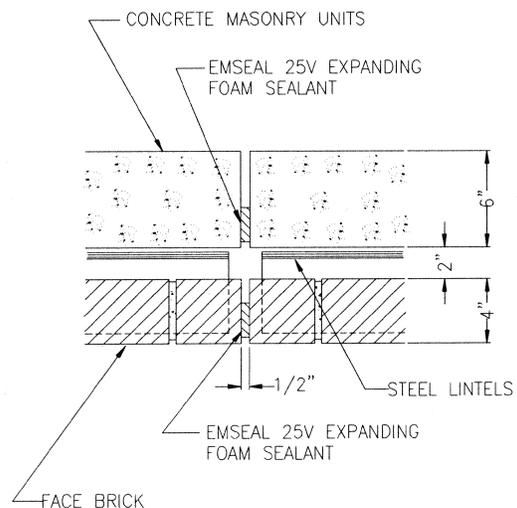
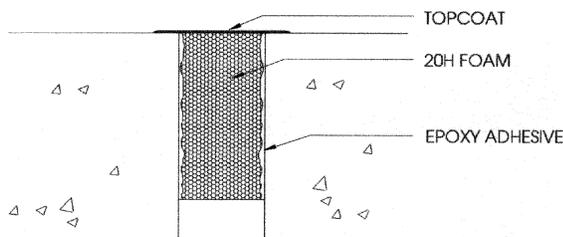
Use as primary seal in vertical joints of concrete, precast, brick and block.

Joint movement of +25%, -25% (50% total). Black.

### 20H System

Use as a watertight seal in joints of roadways, below-grade foundation walls and tunnels.

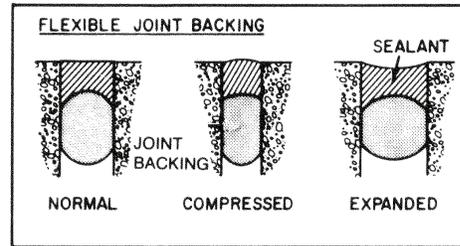
Joint movement of +25%, -25% (50% total). Black.



# Sealants

## Backer Rods – Basic Use

- Control sealant depth
- Provide backstop to allow sealant tooling
- Ensure sealant adhesion to joint surfaces only
- Develop proper shape factor



## Soft-Type Backer Rod

Pliable, non-gassing, polyolefin foam.

### Available Sizes & Quantities

Rod Dia.	Feet/Cartron	Rod Dia.	Feet/Cartron
3/8"	2100	1-1/2"	420
5/8"	1550	2"	240
7/8"	850	2-1/2"	156
1-1/8"	500	3"	102
		4"	48

## Standard Backer Rod

Closed cell polyethylene foam.

### Available Sizes & Quantities

Rod Dia.	Feet/Cartron	Rod Dia.	Feet/Cartron
1/4"	4000 (2 spools)	1-1/2"	4000 (2 spools)
3/8"	2100 (2 spools)	2"	2100 (2 spools)
1/2"	2500 (2 spools)	2-1/2"	2500 (2 spools)
5/8"	1550 (2 spools)	3"	1550 (2 spools)
3/4"	1100 (2 spools)	4"	1100 (2 spools)
7/8"	850	5"	850
1"	600	6"	600
1-1/4"	400	Over 1-1/2" dia. in 6' lengths	

## Denver Foam®

Denver Foam® is a round, labor-saving, continuous-length, compressible open-cell polyurethane foam used primarily as a "non-gassing" backer rod in caulking and sealant applications such as expansion joints.

### Denver Foam Backer Rod

Open cell polyurethane foam

#### Available Sizes & Quantities

Rod Dia.	Feet/Mini Bag	Feet/Master Bag
3/8"	200	3600
5/8"	100	2000
7/8"	100	1050
1-1/8"	75	600
1-1/2"	40	350
2"	25	200

Hot & Cold Sealant Use -60°F to 500°F.



## Ultra Block®

Mechanical expansion and construction joint fire stopping system: 2-Hour, 3-Hour and 4-Hour fire rated. Ultra Block® is a pre-engineered, patented, flexible textile fiberglass roll material with a fiberglass matt facing, containing approximately 30% by weight unexpanded vermiculite.

