



# SikaSet<sup>®</sup> Roadway Patch

*Very rapid hardening, highway-patching mortar*

## DESCRIPTION

SikaSet Roadway Patch is a 1-component, very rapid hardening, early strength gaining, cementitious, patching material for concrete.

## WHERE TO USE

- ▲ Use on grade, above, and below grade on concrete.
  - ▲ Structural repair material for pot holes in concrete roadways, parking structures, bridges, dams and ramps.
  - ▲ Economical patching material for horizontal repairs of concrete and mortar.
- note:** SikaSet Roadway Patch contains High Alumina Cement (HAC).

## ADVANTAGES

- ▲ Rapid and very rapid hardening as defined by ASTM C-928.
- ▲ Easy to use, labor-saving material.
- ▲ Contains no added chlorides.
- ▲ High early strength.
- ▲ Fast-setting.
- ▲ Open to foot traffic in 1 ½ hours; to vehicle traffic in 2 hours (at 73F).
- ▲ Easily applied to clean, sound substrate.
- ▲ Not a vapor barrier.

## COVERAGE

Approximately 0.45 cu. ft. When extended with 42 lbs. of 3/8 in. gravel yield is approximately 0.7 cu. ft.

## PACKAGING

60-lb. multi-wall bag.

## HOW TO USE

### SURFACE PREPARATION

Surface must be clean and sound. Remove all deteriorated concrete, dirt, oil, grease, and other bond-inhibiting materials from the area to be repaired. Be sure repair area is not less than ½ in. deep. Preparation work should be done by appropriate means. Obtain an exposed aggregate surface with a minimum surface profile of ± 1/8 in. (CSP-6) on clean, sound concrete. Saw cutting of edges is required. Saturate surface to be repaired with clean water. Substrate should be saturated surface dry (SSD) prior to application.

### PRIMING

For priming of reinforcing steel use Sika Armatec 110 EpoCem (consult Technical Data Sheet).

#### Concrete Substrate:

Prime the prepared substrate with a scrub coat of SikaSet Roadway Patch prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.

### TYPICAL DATA FOR SIKASET ROADWAY PATCH

*(Material and curing conditions @ 73 F and 50% R.H.) (Water/powder = 0.141)*

<b>SHELF LIFE</b>	1 year in original, unopened bag.	
<b>STORAGE CONDITIONS</b>	Store dry at 40-95F (4-35C). <b>Condition material to 65-75 F before using.</b>	
<b>COLOR</b>	Concrete gray.	
<b>MIXING RATIO</b>	Approximately 1 gallon of water per bag. If a higher flow is needed, add up to 1 pint of additional water.	
<b>APPLICATION LIFE</b>	Approximately 15-25 minutes after adding powder to the water.	
<b>COMPRESSIVE STRENGTH, PSI</b>		
<b>Mortar - ASTM C-109</b>		
<b>Concrete - ASTM C-39</b>	<b>Mortar</b>	<b>Concrete*</b>
<b>2 hours</b>	1,500 psi (10.3 MPa)	1,400 psi (9.7 MPa)
<b>1 day</b>	4,000 psi (27.6 MPa)	3,000 psi (20.7 MPa)
<b>7 days</b>	7,000 psi (48.3 MPa)	4,000 psi (27.7 MPa)
<b>28days</b>	8,000 psi (55.2 MPa)	5,000 psi (34.5 MPa)
<b>FLEXURAL STRENGTH, PSI (ASTM C-78)</b>		
<b>1 day</b>	800 psi (5.5 MPa)	600 psi (4.1 MPa)
<b>7 days</b>	1,400 psi (9.7 MPa)	900 psi (6.2 MPa)
<b>28 days</b>	1,500 psi (10.3 MPa)	1,000 psi (6.9 MPa)
<b>SPLITTING TENSILE STRENGTH, PSI (ASTM C-496)</b>		
<b>1 day</b>	500 psi (3.4 MPa)	
<b>7 days</b>	700 psi (4.8 MPa)	
<b>28 days</b>	750 psi (5.2 MPa)	
<b>BOND STRENGTH, PSI (ASTM D-882) MODIFIED</b>		
<b>1 day</b>	2,100 psi (14.5 MPa)	1,500 psi (10.3 MPa)
<b>7 days</b>	2,800 psi (19.3 MPa)	2,500 psi (14.2 MPa)
<b>28 days</b>	3,000 psi (20.7 MPa)	2,700 psi (18.6 MPa)

\* Material was tested with an addition rate of 42 lbs. of clean, well-graded, saturated surface dry, low-absorption and high-density coarse aggregate. Water was added to achieve a 7 in. slump.

### MIXING

Mechanically mix in an appropriately sized mortar mixer. Wet down all tools and mixer to be used. Add approximately 1 gallon of water to the mixing vessel. Add 1 bag of SikaSet Roadway Patch while continuing to mix. If additional water is needed to produce a higher flow, you may add up to 1 pint of additional water. Do not overwater.

For applications greater than 1 in. in depth, add 3/8 in. coarse aggregate. The aggregate must be non-reactive (reference ASTM C1260, C227 and C289), clean, well graded, saturated surface dry, have low absorption and high density, and comply with ASTM C-33 size number 8 per Table 2.

**note:** Variances in aggregate may result in different strengths. The addition rate is 42 lbs. of aggregate per bag of SikaSet Road-

way Patch. (42 lbs. of 3/8 in. aggregate is approximately 3.0 to 3.5 gal. by loose volume of aggregate).

Do not exceed a slump of 7 in. This may cause excessive bleeding and retardation and will reduce the strength and performance of the material.

### APPLICATION

The prepared mortar must be scrubbed into substrate. Be sure to fill all pores and voids. into substrate. Be sure to fill all pores and voids. Force material against edge of repair, working toward center. After filling repair, screed off excess. Allow concrete to set to desired stiffness, then finish. If a smoother finish is desired, a magnesium float should be used. Mixing, placing, and finishing should not exceed 30 minutes maximum.

To control setting times, cold water should be used in hot weather and hot water used in cold weather.

#### **CURING**

As per ACI recommendations for portland cement concrete, curing is required. Moist cure with wet burlap and polyethylene, a fine mist of water or a curing compound meeting ASTM C-309. Moist cure should commence immediately after finishing. If necessary, protect newly applied material from rain. To prevent from freezing, cover with insulating material.

#### **LIMITATIONS**

- ▲ Minimum ambient and surface temperatures 45F and rising.
- ▲ Minimum application thickness ½ in. as a mortar and 1 in. extended with aggregate.
- ▲ Do not feather edge.
- ▲ Do not exceed 7-in. slump when extended.
- ▲ Use only potable water.
- ▲ Variations in aggregates may produce differences in strengths from the typical values stated in Sika's Technical Data.
- ▲ As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy such as Sikadur Hi-Mod 32.

## **CAUTION**

**Irritant; Suspect Carcinogen** - Contains portland cement and sand (crystalline silica). Skin and eye irritant. Avoid contact. Dust may cause respiratory tract irritation. Avoid breathing dust. Use only with adequate ventilation. May cause delayed lung injury (silicosis). IARC lists crystalline silica as having sufficient evidence of carcinogenicity in laboratory animals and limited evidence of carcinogenicity in humans. NTP also lists crystalline silica as a suspect carcinogen. Use of safety goggles and chemical resistant gloves is recommended. If PELs are exceeded, an appropriate NIOSH/MSHA approved respirator is required. Remove contaminated clothing.

#### **FIRST AID**

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush with plenty of water for at least 15 minutes, and contact a physician. For respiratory problems, remove person to fresh air.

#### **CLEAN UP**

In case of spillage, ventilate area of spill, confine spill, scoop or vacuum into appropriate container. Dispose of in accordance with current, applicable, local, state, and federal regulations. Keep container tightly closed and in an upright position to prevent spillage and leakage. **Mixed Components:** Uncured material can be removed with water. Cured material can only be removed mechanically.

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**KEEP CONTAINER TIGHTLY CLOSED  
NOT FOR INTERNAL CONSUMPTION**

**KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY**

**CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION**

Sika warrants its products to be free from manufacturing defects and to meet Sika's current published properties when applied in accordance with Sika directions and tested in accordance with ASTM and Sika Standards. User determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product and excludes labor or the cost of labor. Any claim for breach of this warranty must be brought within one year of the date of purchase.

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