SikaTop 123 Plus

Application Instructions

Sika Corporation
SikaTop 223 Plus

- Two-component, polymer-modified, portland cement based.
- Fast-setting, non-sag mortar.
- High performance repair mortar for vertical and overhead surfaces.
- Offers the additional benefit of FerroGard 901- A penetrating corrosion inhibitor.
SikaTop 123 Plus

Where to use:

- On grade, above, and below grade on concrete and mortar.
- On vertical and overhead surfaces.
- As a structural repair material for:
  - Parking structures
  - Industrial plants
  - Water/waste water treatment facilities
  - Roads, walkways, bridges, tunnels, dams, ramps, etc.
SikaTop 123 Plus

▲ Packaging:
  • “A” Comp: 1 gal Jug of Dispersion.
  • “B” Comp: 44 lb Multi-wall bag.

▲ Coverage:
  • .39 cu. ft / unit.
  • 674 cu. inches per unit.
Surface Preparation

**Cementitious Substrates:**

- Should be clean and sound.
- Remove contaminations and bond inhibiting materials from repaired area.
- Obtain exposed/fractured aggregate surface ~1/16 to 1/8 inch profile (ICRI CSP 5 & above).
- Substrate must be saturated surface dry (SSD) with no standing water.
Surface Preparation

▲ Cementitious Substrates:

• Surface should be cleaned and roughened to create a profile.
Surface Preparation

- Saw cut around perimeter of repair area to achieve a minimum 3/8” shoulder.

- Eliminates feathered edges giving a clean repair transition
Surface Preparation

▲ Steel:

• Remove all corrosion and contaminants from exposed steel.
• Surface should be cleaned thoroughly by blast cleaning or mechanical means.
• Exposed steel should be cleaned to white steel.
• If half of the diameter is exposed, chip behind bar, ½” minimum for mortar only.
Steel Preparation

Steel should be cleaned to a bright metal finish.
Tools Required

- ½” Drill Motor.
- Low speed drill 400-600 rpm.
- Large mixing paddle
- Margin trowel
Mixing

▲ Pour “A” Component into clean pail.

▲ Leave approximately 1” of “A” Component in jug.
Add “B” Component to pail with “A” already inside, while mixing continuously.
Mixing

1. Dispersion \(\frac{3}{4} - 1\) gallon of dispersion/Bag.
2. Start with adding liquid to the mixing container.
3. Slowly add powder.
4. Once all the powder is added mix for 3 minutes.
5. Do not add any more than the recommended liquid.
1. While mixing for 3 minutes stop to scrape down the sides to insure all material is fully mixed.
2. Add additional “A”Comp. liquid for desired consistency.
3. Most cases you will have liquid left.
4. Thorough mixing and proper proportioning is necessary.
ST 123+ Application

▲ Apply the mortar to the patch area while the Armatec 110 EpoCem is still wet.

▲ If Armatec is not used as a bonding agent, SSD the surface and scrub coat the repair mortar into the substrate filling all pores and voids.
ST 123+ Application

▲ Apply SikaTop repair mortar to patch.

▲ Press mortar behind rebar and make sure the material is consolidated and compacted fully.
ST 123+ Application

▲ Complete filling patch area.

▲ Work mortar from the center of the patch to the outside.
Min / Max application thickness

▲ Neat
  • Min 1/8 inch
  • Max 1.5 inch

▲ SikaTop 123 Plus **cannot** be extended with aggregate.
SikaTop 123 Finish

▲ After filling patch section, allow mortar to set to desired stiffness.
▲ Then finish with steel, wood, or sponge float to attain look required.
Sikatop 123+ Finish

▲ To assist in the finishing of the SikaTop use SikaFilm.

• SikaFilm is a finishing aid that also retards moisture evaporation.
SikaTop 123+ Finish

You can use a steel trowel to attain a smooth surface.
Sponge Float Finish

▲ You can use Sponge float to attain a textured surface.
SikaTop Curing

▲ Cure as per ACI recommendations. Curing is required.
▲ Moist cure with wet burlap and polyethylene, a fine mist of water.
▲ Moist curing should commence immediately after finishing.
▲ Protect newly applied material from direct sun light, wind, rain and frost.

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Sika Technical Data Sheets can be obtained via:

www.sikaconstruction.com

Refer to data sheets for specific information on each Sika product.