

Construction

SikaTop 111 Plus

Application Instructions



Sika Corporation

SikaTop 111 Plus

- ▲ Two-component, polymer-modified, portland cement based.
- ▲ Fast-setting, screed mortar.
- ▲ Performance repair mortar for horizontal repairs and form pour/pump vertical and overhead applications.
- ▲ Offers the additional benefit of FerroGard 901- A penetrating corrosion inhibitor.



SikaTop 111 Plus

- ▲ **Where to use:**
 - On Grade, above, and below grade on concrete and mortar.
 - On horizontal, vertical and overhead surfaces.
 - As a structural repair material for:
 - Parking facilities
 - Industrial plants
 - Water/waste water treatment facilities
 - Walkways, bridges, tunnels, dams, etc.
 - Free-flowing repair mortar for hard-to-reach areas.
 - Filler for voids and cavities.



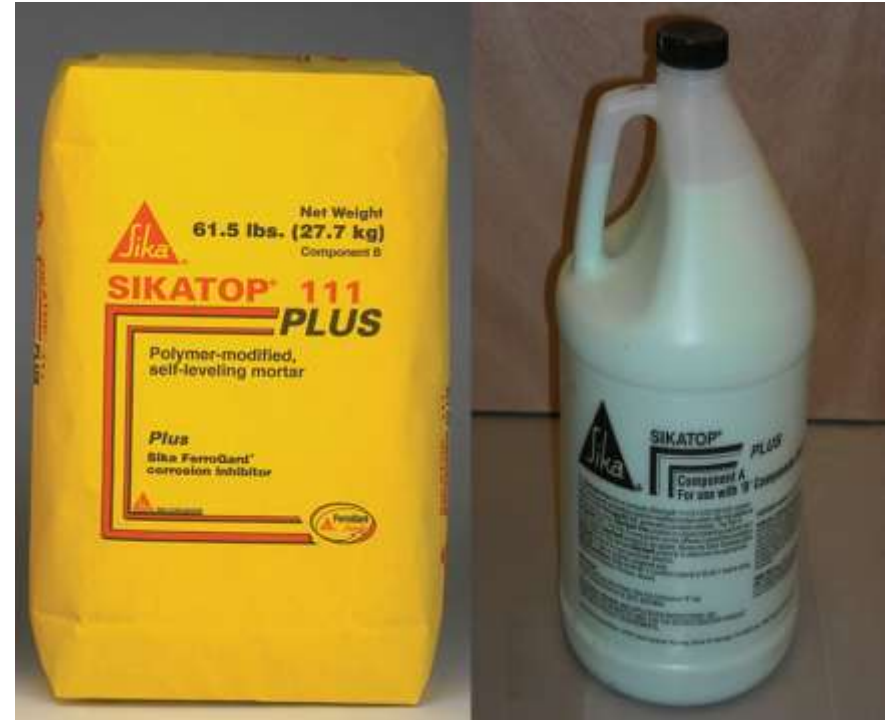
SikaTop 111 Plus

▲ Packaging:

- “A” Comp: 1 gal Jug of Dispersion.
- “B” Comp: 61.5 lb Multi-wall bag.

▲ Coverage:

- .51 cu. ft / unit.
- 864 cu. inches per unit.



Surface Preparation

- ▲ **Cementitious Substrates:**
 - Should be clean and sound.
 - Remove contaminants and bond inhibiting materials from repaired area.
 - Obtain exposed/fractured aggregate surface ~1/16 to 1/2 inch profile (ICRI CSP 6 & above).
 - Substrate must be saturated surface dry (SSD) with no standing water.



Surface Preparation

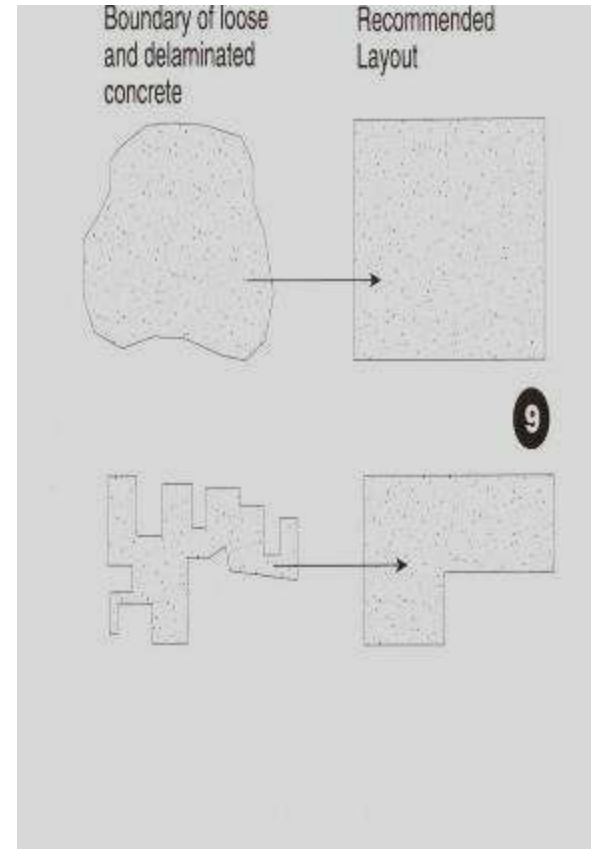
▲ Cementitious Substrates:

- Surface should be cleaned and roughened to create a profile.



Surface Preparation

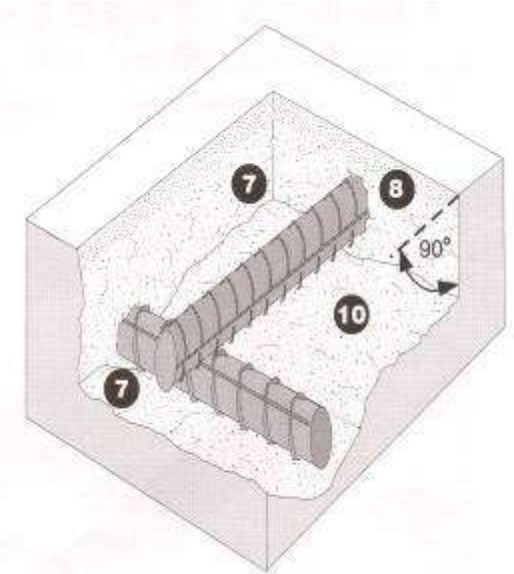
- ▲ Saw cut around perimeter or repair area to achieve a minimum 3/8" shoulder.
- ▲ This will eliminate feather edging the product and give a clean transition for the repair.



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, 1/2" minimum for mortar only.



Steel Preparation

- ▲ Steel should be cleaned to a bright metal finish.



Tools Required

- ▲ 1/2" Drill Motor.
- ▲ Low speed drill 400-600 rpm.
- ▲ Large mixing paddle
- ▲ Margin trowel



Mixing

- ▲ Pour approximately 7/8 “A” Component into clean pail.
- ▲ Leave approximately 1” of “A” Component in jug.



Mixing

- ▲ Add “B” (powder) 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.



Mixing

1. While mixing for 3 minutes stop after 1.5 minutes 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 111 PLUS 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 111 PLUS Application

- ▲ Apply SikaTop repair mortar to patch.
- ▲ Press mortar behind rebar and make sure the material is consolidated and compacted fully.
- ▲ For flow able material, above is not done if pumped or formed and poured



ST 111 PLUS Application

- ▲ Complete filling patch area.
- ▲ Work mortar from the center of the patch to the outside.



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Min / Max application thickness

▲ Neat

- Min 1/2 inch
- Max 1.0 inch

▲ Extended

- Min 1.0 inch
- Max 6.0 inch



SikaTop 111 PLUS Finish

- ▲ After filling patch section, allow mortar or concrete to set to desired stiffness.
- ▲ Then finish with steel, wood, or sponge float to attain a smooth surface, or broom or burlap-drag for a rough finish.



Sikatop 111 PLUS Finish

- ▲ To assist in the finishing of the SikaTop use SikaFilm.
 - SikaFilm is a finishing aid that also retards moisture evaporation.



SikaTop 111 PLUS 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 or water based curing compound.
- ▲ Moist curing should commence immediately after finishing.
- ▲ Protect newly applied material from direct sun light, wind, rain and frost.



SikaTop 111 Plus

Sika Product Data Sheets can be obtained via:

www.sikaconstruction.com

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

