Sikacrete 211

Application Instructions
Sikacrete 211

- One-component.
- Portland –cement concrete containing factory blended coarse aggregate.
Where to use:

- On grade, above, and below grade on concrete.
- On horizontal, vertical and overhead surfaces when formed and pumped or poured.
- Full depth repairs.
- Filler for voids and cavities.
- As a structural repair material for:
  - Parking facilities
  - Industrial plants
  - Walkways, bridges, tunnels, dams and balconies.
Sikacrete 211

▲ Packaging:
• 80 lb. multi-wall bag.

▲ Coverage:
• .65 cu. ft / unit.
• 1123 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 ~1.0 to 1/8 inch profile (ICRI CSP 7 & 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 other mechanical means.
- Exposed steel should be cleaned to white steel.
- If half of the diameter is exposed, chip behind bar, 3/4” minimum.
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 4/5 of 1 gallon water into clean pail.

▲ Adjust water to achieve the required flow. Do not add more water.
Mixing

▲ Add Sikacrete 211 to pail with water already inside, while mixing continuously.
Mixing

1. Slowly add powder.
2. Once all the powder is added mix for 3 minutes.
3. Do not add any more than the recommended liquid.
Mixing

1. While mixing for 3 minutes stop at i.e 1 1/2 min to scrape down the sides to insure all material is fully mixed.

2. Thorough mixing and proper proportioning is necessary.
Sikacrete 211 - Application

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

▲ If Armatec is used as a bonding agent, SSD the surface and scrub coat the repair mortar into the substrate filling all pores and voids.
Sikacrete 211 - Application

▲ Apply Sikacrete 211 to the prepared area.

▲ Press concrete behind rebar and make sure the material is consolidated and compacted fully.
Sikacrete 211 - Application

▲ Complete filling patch area.

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

- **Thickness**
  - Min: 1.0 inch
  - Max: 8.0 inch
Sikacrete 211 Finish

▲ Ensure good intimate contact with the substrate is achieved.

▲ Form should not deflect.

▲ Vent to be capped when steady flow is evident, and forms stripped when appropriate.
Sikacrete 211 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.
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Sika Product Data Sheets can be obtained via:

www.sikaconstruction.com

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