Sikacrete 321 FS

Application Instructions
Sikacrete 321 FS

- One-component.
- Fast setting concrete mix.
- Portland cement concrete containing factory blended coarse aggregate designed for quick turnaround patching and overlay needs.
Sikacrete 321 FS

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 and bridges.
Sikacrete 321 FS

▲ Packaging:
  • 65 lb. multi-wall bag.

▲ Coverage:
  • .50 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 ~1.0 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 water into clean pail.

△ Adjust water to achieve the required flow. Do not add more than 5 pints of water.
Mixing

▲ Add Sikacrete 321 FS 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 1.5 min to scrape down the sides to insure all material is fully mixed.

2. Thorough mixing and proper proportioning is necessary.
SSD the surface and scrub coat the repair concrete into the substrate filling all pores and voids.
Sikacrete 321 FS + Application

▲ Apply Sikacrete 321 to the prepared area.

▲ Press concrete behind rebar and make sure the material is consolidated and compacted fully.
Sikacrete 321 FS + 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 321 FS Finish

- Ensure good intimate contact with the substrate is achieved.
- Materials should be scrubbed into the substrate or other suitable means should be employed such as vibration of the materials.
- Vibrate form while pouring.
- Finished as desired.
Sikacrete 321 FS 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.

Sika Corporation
Sika Product Data Sheets can be obtained via:

www.sikaconstruction.com

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