



SECTION 03 01 30.61

Guide Specification SKIMCRETE® CP

PART I – GENERAL

1.1 SUMMARY

- A. Section Includes: Application of a high-performance, cementitious mortar with high early strength that is designed for repairing indoor and outdoor surfaces.
- B. Related Sections:
 - a. Section 03 30 00- Cast in place concrete
 - b. Section 03 41 00- Precast Structural Concrete
 - c. Section 03 41 13- Precast concrete hollow core planks

1.2 SYSTEM DESCRIPTION

- A. American Society for Testing and Materials:
 - 1. ASTM C109 Modified - Compressive Strength of Hydraulic Cement Mortars.
 - 2. ASTM C348 - Flexural Strength of Hydraulic Cement Mortars.
 - 3. ASTM C307 - Tensile Strength of Chemical Resistant Mortars, Grouts, and Monolithic Surfacing.
 - 4. ASTM C266 -Time of Setting of Hydraulic Cement Paste by Gilmore Needle.
- B. Strength:
 - 1. 3 Hours- 1200 PSI
 - 2. 1 Day- 4500 PSI
 - 3. 7 Days- 6000 PSI
 - 4. 28 days- 7000 PSI

1.3 SUBMITTALS

- A. Submit:
 - 1. Manufacturer's product data sheets and installation instructions to prove compliance with specified requirements.
 - 2. [Sample of manufacturer's limited warranty and warranty application procedures.]

1.4 QUALITY ASSURANCE

- A. Qualifications
 - 1. Contractor shall be knowledgeable and well trained in the use of repair materials.
- B. Field Samples Application: At location on Project selected by [Architect] [Engineer], perform substrate preparation work strictly using methods in accordance with the manufacturers written instructions. Notify Architect/Engineer to allow observation. Install a sample of material using similar techniques that will be used on the project. The sample size shall be a minimum of 4 feet by 4 feet and the standard for comparing the remainder of the project.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Comply with manufacturer's instructions. Deliver in original, unopened packaging. Store in dry conditions and protect from direct sun exposure, freezing, and extreme heat (greater than 105F.(41C)).

1.6 PROJECT CONDITIONS

A. Environmental Requirements

1. Hot weather: Comply with ACI 305. Do not apply in extreme heat (greater than 105F(41C.)).
2. Cold weather: Comply with ACI 306. Do not apply when ambient, surface, or material temperature is below 50F. (10C.).
3. Surfaces in frozen conditions must be thawed and dry and surfaces must attain a desired temperature prior to applying material.
4. If snow, rain or fog are expected within 12 hours of application DO NOT apply the materials.

PART II – PRODUCTS

2.1 MANUFACTURERS

- A. Dependable, LLC phone 1-800-227-3434.
- B. Substitutions: Comply with [Instructions to Bidders] [_____] for substitution request procedures.

2.2 MATERIALS

- A. High performance repair mortar
 1. Skimcrete CP
 2. Technical Data

- a. Working Time: 20 minutes
- b. Set Time, Final (ASTM C266): 30-45 minutes (F-2)

2.3 EQUIPMENT & MIXING

- A. Mixing devices: The material should be mixed by a mechanical mixer
 1. Mix with cool clean potable water in a clean container at a speed recommended by the manufacturer.
- B. Mixing: Allow approximately 20 minutes between mixing and application when average room temperature is 72.

PART III – EXECUTION

3.1 PREPARATION

- A. All substrates, regardless of type, must be solid, sound, clean and free of any gravel or bond breakers. Concrete substrate must be fully cured for 28 days.
- B. Surface shall be presoaked and saturated without standing water.
- C. Concrete
 - a. All unsound or delaminated concrete must be removed in order to provide 1/4" substrate profile and 3/4" clearance behind the corroded steel.
 - b. Edges are to be saw-cut along the repair area to make it a minimum of 1" deep in order to eliminate feather edges.
 - c. Expansion joints are to be done according to the architects specifications.
 - d. Dampen concrete surface that needs repaired without leaving standing water.
 - e. If there are any cracks in the interface area of patch or overlay report to architect and repair according to the architects directions.
- D. Corroding Steel
 - a. Remove oxidation or any other type of corroding from the exposed steel. In order to prevent future issues of corrosion place a zinc-rich primer on the steel.

3.2 APPLICATION

- A. Once surface is soaked but standing water is removed place the mortar moving from one side to the other. Work the repair mortar firmly to ensure a good bond. Place an appropriate finish once the mortar is set.

3.3 CURING

- A. The repair mortar will cure within 30-45 minutes and can be open to traffic within 4 hours.
- B. Epoxy finish flooring may be applied after 4 hours of cure time in 72° F.

3.4 PROTECTION

- A. Protect repair mortar from damage during the construction process by a suitable protection barrier such as plywood.
- B. Protect repair mortar from freezing temperatures for at least 24 hours after application.

END OF SECTION