

DensiCrete

Application Procedure

I. SURFACE PREPARATION

A. NEW UNTREATED CONCRETE:

1. Patch any defects greater than 1/16 inch in diameter such as holes or cracks.
2. Remove laitance. (an accumulation of fine cementitious particles on the surface of fresh concrete usually due to an upward movement of water - as when excessive mixing water is used.)
3. Remove efflorescence. (Powdery soluble salt crystals sometimes found on the surface of new concrete after evaporation of surface water.)
4. Remove all dust or dirt visible to the eye.

B. OLD CONCRETE:

1. Remove old paint, sealers and oils from the surface so that bare concrete is visible. This may be accomplished by either scabbling, wire brushing, acid etching or solvent cleaning.
2. Remove laitance and efflorescence, if present.
3. Remove all dust or dirt visible to the eye.
4. Patch any defects greater than 1/16 inch in diameter such as holes and cracks.

C. PATCHING OF CONCRETE DEFECTS GREATER THAN 1/16 INCH IN DIAMETER AND THERE IS A WATER SEEPAGE PROBLEM:

1. Crack is less than 1/8 inch in diameter and water is weeping:
 - a. Wet surface area completely with **DensiCrete**; immediately following the wetting, dry portland powder should be hand rubbed (using latex gloves) into the cracks.
 - b. Wet treated surface again with **DensiCrete**; wait 10 minutes, "dust" surface with dry portland powder again and then apply a third coat of **DensiCrete**. (Portland powder refers to just the powder, NOT to portland-based cement.
2. Crack (or hole) is greater than 1/8 inch in diameter and water is flowing in at less than one gallon per hour:
 - a. Wet surface area completely with **DensiCrete**.

- b. Fill holes and cracks with moist mixture of Portland-based patching cement (Note: You must use good quality high strength portland cement; ordinary patching cement is not sufficient. For example, you may use 5,000 PSI Sakcrete sand mix, NOT regular Sakcrete, or use any super strong Portland cement.) Using one part water and one part **DensiCrete** to achieve normal consistency of cement; this mixture should remain workable for 15 minutes.
- c. If necessary, push the mixture into the hole by hand. (Using latex gloves.)
- d. After mixture is in hole, smooth surface first with trowel, then with soft paint brush dampened with water.
- e. Wet treated surface again with **DensiCrete**; wait ten minutes, then “dust” surface with dry Portland powder and then apply a third coat of **DensiCrete**.
- f. Wait 20 minutes, then “dust” surface with dry Portland powder and then apply a fourth coat of **DensiCrete**.

D. PATCHING OF CONCRETE DEFECTS WITH NO WATER PROBLEMS

1. For concrete cleansing and strengthening not involving waterproblems, **DensiCrete** should not be mixed with the patching cement. In these cases, the patching cement should be applied as directed by the manufacturer; then wait the normal curing time as specified in the patching cement directions prior to application of **DensiCrete**.

II. APPLICATION

- A. Do not dilute or mix **DensiCrete** with other liquid. Use as supplied.
- B. Shake or stir **DensiCrete** prior to use.
- C. Apply using mop, brush, roller or garden-type sprayer (20-40 psi).
 1. Apply liberally and saturate all areas.
 2. Vertical walls should be applied from the bottom up to ensure uniformity of application.
- D. Normal coverage is approximately 150 square feet per gallon.
 1. Under normal conditions, for general concrete strength enhancement, two coats are generally required, depending on porosity.
 2. Where excessive moisture is present or where concrete has been subjected to environmental factors causing structural deterioration, additional coats may be required. (Usually to a maximum of six coats.)
- E. **DensiCrete** penetrates the surface layer upon contact. Foot traffic is permissible after 30 minutes. Normal traffic is permissible in two hours.

III. ENVIRONMENTAL CONDITIONS

- A. Ambient Air Temperature - between 60^o degrees F and 85^o degrees F.
- B. Surface Temperature - between 50^o degrees F and 90^o degrees F. If surface temperature is greater than 90^o degrees F, wet surface with water prior to application.
- C. Product Temperature - between 50^o degrees F and 90^o degrees F.
- D. Relative Humidity - less than 95%.
- E. For outside applications - winds should be less than 25 MPH during application and no rain should be predicted for one hour after application.
- F. Storage - should be stored under cover and at a temperature above 32^o degrees F.