

SECTION 03 35 00

CONCRETE FINISHING

Multicoat Krete Kote

This guide specification has been prepared by Multicoat Product Systems, in printed and electronic media, as an aid to specifiers in preparing written construction documents for cementitious coatings. MULTICOAT KRETE KOTE 2000 System is a super bonding; flexible synthetic resin modified cementitious coating which forms a cost effective, durable, anti-skid, weather and chemical resistant surface over properly prepared substrates. It can be applied to driveways, walkways, steps, pool decks, and most concrete surfaces.

Edit entire master to suit project requirements. Modify or add items as necessary. Delete items which are not applicable. Words and sentences within brackets [_____] reflect a choice to be made regarding inclusion or exclusion of a particular item or statement. This section may include performance, proprietary and descriptive type specifications. Edit to avoid conflicting requirements. Editor notes to guide the specifier are included between lines of asterisks to assist in choices to be made. Remove these notes before final printing of specification.

This guide specification is written around the Construction Specifications Institute (CSI) Section Format standards.

For specification assistance on specific product applications, please contact our offices or any of our local product representatives throughout the country.

Multicoat Product Systems reserves the right to modify these guide specifications at any time. Updates for this guide specification will be posted on the manufacturer's web site and/or in printed matter as they occur. Manufacturer makes no expressed or implied warranties regarding content, errors, or omissions in the information presented.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Section includes traffic coatings for the following applications:

1. Pool Decks
2. Driveways
3. Walkways
4. Steps
5. Concrete Surfaces

1.2 RELATED SECTIONS

- A. 03 01 30 – Maintenance of Cast-in-Place Concrete
- B. 07 18 00 – Traffic Coatings
- C. 09 97 00 – Special Coatings

1.3 SUMMARY

A. Section includes resin modified cement coating for external application to [concrete surfaces]

1.4 SUBMITTALS

A. Product Data:

1. Submit manufacturer's descriptive literature and product specifications for each product.
2. Submit laboratory tests or data that validate product compliance with the performance criteria specified.

1.5 QUALITY ASSURANCE

A. Installer Qualifications:

1. Acceptable to manufacturer with documented experience on at least 2 projects of similar nature in past 2 years and/or training provided by the product manufacturer.

B. Manufacturer Qualifications:

1. Company specializing in manufacturing Products specified in this Section with minimum **[10]** years documented experience.

1.6 DELIVERY AND STORAGE

- A. Deliver, store off the ground and covered, handle and protect products from moisture in accordance with manufacturer's instructions.
- B. Deliver materials in manufacturer's unopened containers, fully identified with brand, type, grade, class and all other qualifying information. Provide Material Safety Data Sheets for each product.
- C. Take necessary precautions to keep products clean, dry and free of damage.

1.7 WARRANTY

- A. Materials are guaranteed with respect to uniformity and quality within manufacturer's specifications.

1.8 PROJECT CONDITIONS

- A. Do not apply if substrate temperature is below 40°F or above 100°F, or if ambient temperature below 40°F above 100°F.
- B. Do not apply if precipitation is expected within a twenty four (24) hour period.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Multicoat Corporation 23331 Antonio Parkway, Rancho Santa Margarita, CA 92688, 877-685-8426, Email: info@multicoat.com, www.multicoat.com

2.2 MATERIALS

- A. Super bonding, flexible synthetic resin modified cementitious coating which forms a durable, anti-skid, weather and chemical resistant surface over properly prepared substrates.
 - 1. Product: MULTICOAT KRETE KOTE
 - 2. Weatherometer: 2000 hrs. – Passed (ASTM G23)
 - 3. Compressive Strength: 2595 psi @ 45 Days air cured - (ASTM C109)
 - 4. Flexural Strength: Modulus of Rupture - 770psi (ASTM-D790)
 - 5. Tensile Strength: 457 psi (ASTM-C190)
 - 6. Bond Strength (Flatwise Tension): 225 psi (ASTM-C297)
 - 7. Abrasion Test: 39 mil loss 1000cyc-1000gms (ASTM-1242A)
 - 8. Salt Spray: 300 hrs. – Passed (ASTM-B117)
 - 9. Water Vapor Transmission: 8.5 Perms (ASTM-E96A)
 - 10. 50-Cycle Freeze thaw: Passed (ASTM-C67)
 - 11. Impact Resistance: MIL-D-3134F Passed
 - 12. Flame Spread: Class A (ASTM-E84)

2.3 ACCESSORY MATERIALS

- A. Color Sealer: ACRATHANE COLORSEAL consists of a series of high quality waterbased modified resins that provide a high quality, durable seal on masonry, cementitious, and other building substrates. Colors are factory blended to insure uniformity.
- B. Clear Sealer: MULTICOAT ACRATHANE CLEARSEAL is also a water base material. Not typically used in COLORSEAL applications, however it can be used to achieve a glossy, wet look. CLEARSEAL can also be used on most masonry and stone substrates.
- C. Color Stain: MULTICOAT MULTI-STAIN is an acrylic based concrete stain furnished in factory blended containers. It is used as a decorative color stain for most cementitious substrates. Interior applications must be sealed with either Micro Seal System or Acrathane Clear Sealer; Exterior must be sealed with Acrathane Clear Seal.
- D. Concrete Repair: MULTICOAT SPEED MIX 2000 is a fast setting, resin modified, hydraulic cement. It is used by itself for most types of concrete repair such as leveling, filling cavities and cracks. Can be used interior or exterior, vertical, horizontal or overhead.
- E. Interior Sealer Only: MULTICOAT MICROSEAL SYSTEM is a clear, two step finishing system intended for interior applications. It is comprised to two products: Micro Epoxy Base Coat is a new generation, low VOC epoxy coating which is roller applied. Micro Clear Finish is an aliphatic urethane also roller applied. Both of these two products are two-component materials mixed together at the job site.
- F. Crack Repair: MULTICOAT SPEED BOND CRACK REPAIR SYSTEM is unique two component water based polyurethane material. SPEED BOND is used to repair cracks, holes, and depressions prior to the application of various Multicoat Systems. SPEED BOND is a two-part material packaged in a standard caulking tube which does not require any special tools.
- G. Water: Potable.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and adjoining construction, and conditions under which Work is to be installed. Do not proceed with Work until unsatisfactory conditions are corrected.
- B. Verify the following substrate conditions before application of waterproof lining:
 - 1. That substrate condition is satisfactory and in accordance with manufacturer's instructions.
 - 2. That concrete surfaces are free of voids, spalled areas, loose aggregate and sharp protrusions, and with no coarse aggregate visible.

3.2 PREPARATION

- A. Substrate must be structurally sound and free from grease, oil, dirt, dust, sealers, water repellents and other foreign materials which may interfere with proper bonding.
- B. Cleaning may be accomplished by shot blasting, sand blasting, mechanical sanding, acid etching, or minimum 3500 psi power washing.
- C. If the surface is cleaned with muriatic acid, it must be thoroughly neutralized by flushing with a solution of baking soda and water.
- D. Smooth steel troweled concrete must be roughened to insure a good bond.
- E. If patching of the concrete surface is necessary, it may be re-leveled with Multicoat Speed Mix.

3.3 APPLICATION

- A. General: Comply with waterproofing manufacturer's written instructions for application and curing.
 - 1. Field mix with potable (clean) water in the approximate amount of 1¾-2 gallons per bag, preferably with a special MULTICOAT Mixing Paddle.
 - 2. Mix vigorously to disperse all lumps and to thoroughly wet all particles. Suggest 1-1½ minutes after all dry material added. Use margin trowel to clear vessel sides.
 - 3. Adjust to desired consistency by addition of dry material or small amount of water. Let mixture stand for 3-5 minutes (depending on weather) and then add a small amount of water and re-break material. This will give additional pot life.
 - 4. Mixed KRETE KOTE and/or TOP COAT 2000 are applied by roller, trowel, or squeegee in one coat plus texture coat, or two or more coats plus texture coat, depending on surface condition. With Hopper Gun - Trowel Knock Down to achieve French Lace Texture.
 - 5. ACRATHANE COLORSEAL must be applied in two thin coats. First Coat - Mix Colorseal to uniformity with slow speed mixer. With continuous mixing, add clean water in ratio of 1 part water to 3 parts Colorseal.

6. APPLY DILUTED COLORSEAL WITH ½" TO ¾" nap roller, using firm pressure. Allow a minimum of (1) hour to dry.
 7. Second Coat - DO NOT DILUTE COLORSEAL! Mix to uniformity only. Apply with firm pressure. DO NOT APPLY THICKER THAN RECOMMENDED! Airless sprayer may be used for final coat.
 8. Allow to cure for a minimum of 24-48 hours before commencing foot traffic, 72 hours for vehicular traffic.
 9. Each 65 lb. of KRETE KOTE or TOP COAT 2000 as described under "APPLICATION," will cover approximately 125-150 sq. ft. depending on surface conditions (2 coats) or 65 sq. ft. (3 coats).
 10. Each gallon of ACRATHANE COLORSEAL will cover approximately 150-200 sq. ft. per gallon, depending on surface texture and/porosity. (See ACRATHANE COLORSEAL Instructions for use).
- B. Note: ACRATHANE Clear Sealers are applied in one or two coats full strength. DO NOT DILUTE.
- C. DO NOT USE IF CONCRETE SLAB MAY BE SUBJECT TO NEGATIVE SIDE WATER OR WATER VAPOR PRESSURE.
- D. Do not bridge expansion or control joints with the KRETE KOTE. All expansion or control joints must be cut and cleaned out and filled with approved caulking material.

END OF SECTION 033500