



SYSTEM SPECIFICATIONS

WATERPROOFING For WATERFEATURES / FOUNTAINS

I. DESCRIPTION AND SCOPE

The MULTICOAT® WATERPROOF SYSTEM for water features, fountains, and ponds is a multi-layer waterproof coating system. The system consists of SCRATCH KOTE 2000®, a resin modified cementitious base coat, two coats of Mulasticoat® (an elastomeric waterproofing membrane) followed by final layer of SCRATCH KOTE 2000® which can be the final finish or an optional coating can be applied on top of the SCRATCH KOTE 2000® as the final visual finish.

This WATERPROOF SYSTEM is designed to be used to waterproof the interior shell of fountains, koi ponds, water features, etc. It can be applied to properly prepared concrete, shot crete, gunnite substrates, or most other masonry substrates.

II. MATERIALS

1. Elastomeric Waterproofing Membrane, Mulasticoat®, as manufactured by MULTICOAT® CORPORATION, shall be a modified synthetic latex whose cured physical properties shall meet or exceed the following test criteria:

| | Test | Method | Results |
|----|-----------------------------|-----------------------------|-------------------------|
| 1. | Tensile/elongation | ASTM-D 412-83 | Aged 717 psi/392% |
| 2. | Bond Strength Concrete | ASTM-C 297 | 192 psi |
| 3. | Low Temperature Flexibility | | -5° F |
| 4. | Crack Bridging | LA City Method | Total Elongation 205% |
| 5. | Percolation | 2" x 48" Waterhead – 48 hrs | No Loss |
| 6. | Accelerated Aging | ASTM-D 756 D + E | 25 cycles – Passed |
| 7. | Water Vapor Transmission | ASTM – E 96-BW | Grains/hr/ft.sq = .0044 |

2. Cementitious Base Coat, SCRATCH KOTE 2000®, as manufactured by MULTICOAT® CORPORATION, shall be a synthetic resin modified cementitious material, furnished in dry form, mixed with clean potable water at job site in necessary proportions to obtain desired consistency. This product is used to fill small cracks and voids in the substrate. The cured physical properties shall meet or exceed the following test criteria:

SCRATCH KOTE 2000® / SPEED MIX2000®

| | Test | Method | Results |
|-----|------------------------------|------------------------------------|----------------------------|
| 1. | Weatherometer | ASTM-G 23 | 2000 Hrs - Passed |
| 2. | Compressive Strength | ASTM-C 109 45 Days air cured | 2595 psi |
| 3. | Tensile Strength | ASTM-C 190 | 457 psi |
| 4. | Bond Strength (flat tension) | ASTM-C 297 | 225 psi |
| 5. | Abrasion Test | ASTM-1242 A 1000 cyc – 1000 gms | 39 mil loss |
| 6. | Salt Spray | ASTM-B 117 | 300 hrs. Passed |
| 7. | Water Vapor Transmission | ASTM – E 96 | 1.26 perms |
| 8. | 50-cycle Freeze Thaw | ASTM-C 67 | Passed |
| 9. | Flexural Strength | ASTM-D 790 | Modules of Rupture 770 psi |
| 10. | Impact Resistance | MIL – D 3134 F | Passed |
| 11. | Flame Spread | ASTM-E 84 | Class A |

3. STITCHBOND POLYESTER FABRIC used in conjunction with Mulasticoat® to create flashing shall be in accordance with the following specifications, 10” wide rolls.

| | | |
|----|------------------------|-------------------|
| 1. | Weight | 2.75 oz / sq. yd. |
| 2. | Tensile Strength fd/td | 31.6 lbs. |
| 3. | Elongation | 40.6% |
| 4. | Mullen Burst | 99.6 lbs. |
| 5. | Tear Strength | 13.2 lbs. |

4. SPEED MIX 2000® Cementitious repair mortar mix, as manufactured by MULTICOAT® CORPORATION, shall be a synthetic resin modified cementitious material, furnished in dry form, mixed with clean potable water at job site in necessary proportions to obtain desired consistency whose cured physical properties shall meet or exceed the test criteria listed above. This material is used to fill large cracks and voids in the substrate to level profile.

5. Optional interior finishes such as paint, pebble type surfaces, plaster, etc., should be a commercial grade product, furnished from a manufacturer with at least 10 years experience in these types of goods for this type of environment.

III. SURFACE PREPARATION

NEW CONSTRUCTION

1. All substrates must be structurally sound, free from all grease, oil, paint, dirt, dust, sealers, curing compounds, release agents, and other foreign materials which may prevent proper bonding. Substrates should be constructed in compliance with all applicable building codes.
2. Insure moisture content is below 15%.
3. Substrate should be level and free from voids, protrusions, honeycomb areas, etc.

REMODEL WORK

1. For rehabilitation work:
 - a. Check and completely remove all hollows and loose areas with picks and hammers.
 - b. Chip out a minimum of 2 inches below tile line and around all water inlets, return lines and light fixtures.
 - c. Sandblast, shot blast or dry mechanically remove all rust, algae, copper sulfate, iron, paint, soft or flaky plaster, tile, and other foreign materials. Re-check for hollows, loose and flaky areas. Soft flaky areas must be

removed before SCRATCH KOTE 2000® is applied. Acid wash may be used provided that a complete and thorough neutralization is performed. Do not use high-pressure washing as the force of the wash will drive moisture deep into the substrate thus prolonging the installation.

- d. Wash thoroughly and dry all areas to touch before proceeding.

IV. APPLICATION

REPAIR AREAS (if needed)

1. Mix SPEED MIX 2000® with clean potable water at a ratio not to exceed 1-1/4 gallons of water per bag.
2. Within 30 seconds of mixing, pre-moisten substrate and place mixed Seed Mix® into area and quickly, spread evenly.
3. Allow to dry 1 to 3 hours before proceeding with SCRATCH KOTE 2000®.

SCRATCH KOTE 2000®

1. Mix SCRATCH KOTE 2000® with clean potable water at a ratio of 1-3/4 gallons of clean, potable water per bag.
2. Lightly mist surface with clean water prior to application. Apply mixed SCRATCH KOTE 2000® via hopper gun or other air driven sprayer capable of spraying heavy textured cement based material. Small areas can be rolled with a standard 1-1/4" nap roller.
3. Apply at a coverage of 150 to 175 square feet per bag.
4. Allow SCRATCH KOTE 2000® to dry 8 hours minimum, preferably overnight. Interior applications will require longer dry time

MULASTICOAT®

1. Insure moisture content is below 15% before proceeding with Mulasticoat® application.
2. Gently Stir Mulasticoat® prior to use. Do not use mechanical drill to mix.
3. Apply Mulasticoat® via airless spray or 3/4" nap roller, at a coverage rate of 80 to 100 sq. ft. per gallon.
4. Multicoat's® Stitchbond polyester fabric mesh and Mulasticoat® should be used on all inside corners when there exists the condition of a non-monolithic construction of the substrate in the corners (ie: cold joints).
 - a) Mulasticoat® is brushed 8" to 10" vertically and 8" to 10" horizontally to a minimum mil thickness of 30 mil.
 - b) While this coat of Mulasticoat® is wet immediately push and embed the polyester fabric and center over the corner into the wet Mulasticoat®. **Be sure to thoroughly saturate the underside of the polyester fabric with wet Mulasticoat®.** Allow to tack dry.
 - c) Apply final and liberal coat of Mulasticoat® over the polyester fabric to insure complete saturation of the polyester fabric between the layers of Mulasticoat®.

* * Mulasticoat® over the polyester fabric should be allowed to dry, as indicated by a uniform dark blue color on 100% of the area (these areas over the polyester fabric may require a longer drying period). * *

5. Apply Mulasticoat® to entire surface in two (2) coats with airless sprayer or roller at a coverage rate of 80 to 100 sq. ft. per gallon per coat. First coat is allowed to dry to the touch, usually 1-2 hours depending on ambient temperature.
6. Allow Mulasticoat® to fully dry to a dark blue color and insure that surface is totally dry before proceeding with SCRATCH KOTE 2000®.
7. Do not allow Mulasticoat® to be exposed for more than 2 days.
8. Do not allow Mulasticoat® to become wet prior to coating with SCRATCH KOTE 2000®.
9. If Mulasticoat® becomes wet prior to application of the Scratch Kote 2000®, or if the Mulasticoat® was left exposed for more than 2 days, or if blisters or bubbles are apparent in the Mulasticoat® call Multicoat's office for technical assistance on how to proceed.

SCRATCH KOTE 2000®

Before proceeding remove any dust or foreign material from Mulasticoat® with damp sponge.

1. Mix SCRATCH KOTE 2000® with clean potable water at a ratio of 1-3/4 gallons of clean, potable water per bag.
2. Apply mixed SCRATCH KOTE 2000® via hopper gun or other air driven sprayer capable of spraying heavy textured cement based material. Small areas can be rolled with a 1-1/4" nap roller.
3. Apply at a coverage rate of 150 to 175 square feet per bag.
4. If SCRATCH KOTE 2000® is the final material in contact with water, allow SCRATCH KOTE 2000® to dry a minimum of 5 days before filling with water. Interior water-features/fountains will require longer dry/cure time.
5. Other Cementitious coatings that will be applied over the SCRATCH KOTE 2000® must be applied within 28 days of Scratch Kote 2000® application.
6. For Koi ponds, fill pond with water and circulate water for a period of 5 to 7 days prior to adding fish.

OPTIONAL INTERIOR FINISH

SCRATCH KOTE 2000® is a light grey color and can be left as the final surface. Over time, the color of the material will lighten and/or darken and these color variations may be intense in nature. For a smoother finish, Multicoat's Top Kote® or Krete Kote 2000® can be used. To achieve a more uniform color appearance, use Multicoat's Acrathane Colorseal®. Allow Colorseal to dry a minimum of 10 days before filling with water. Other alternate materials are furnished by others and will be installed in accordance with the manufacturer's written instructions for use.

V. WARNING

Do not apply components of Multicoat's® WATERPROOFING SYSTEM when substrate surface temperature is below 40° F, above 100° F, if ambient temperature is below 50° F and falling, above 100° F and expected to rise, or if precipitation is expected within a 24 hours period. When mixing Scratch Kote 2000® do not exceed water ratio as listed in instructions.

VI. WARRANTY

Materials are guaranteed with respect to uniformity and quality within manufacturer's specifications. Seller makes no other warranty, expressed or implied, regarding the use of its products. Since use of the product is beyond the Seller's control, the buyer assumes all risks of use. Seller's sole obligation shall be to replace material if found to be defective. Seller shall not be liable of any damages, injury, loss, direct or consequential, resulting from use of its products.

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