



## SYSTEM SPECIFICATIONS

### WATERPROOFING For ABOVE GRADE POOLS

#### I. DESCRIPTION AND SCOPE

The MULTICOAT WATERPROOF SYSTEM for ABOVE GRADE POOLS is a multi-layer waterproof coating designed for pools above grade. The system applies SCRATCH KOTE 2000, a resin modified cementitious base coat, then two coats of an elastomeric waterproofing membrane (Mulasticoat®) followed by another layer of SCRATCH KOTE 2000. This system is designed to accept marcite (pool plaster), tile, or other pool finishes as endorsed by the National Plasterer’s Association.

The WATERPROOF SYSTEM for ABOVE GRADE is designed to be used to waterproof the interior shell of an above grade pool. It can be applied to properly prepared concrete, shot Crete, or gunnite 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:

	<b>Test</b>	<b>Method</b>	<b>Results</b>
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 whose cured physical properties shall meet or exceed the following test criteria:

## SCRATCH KOTE 2000 / SPEED MIX2000

	<b>Test</b>	<b>Method</b>	<b>Results</b>
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 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 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 voids in the substrate to level profile.

5. CAULKING, shall be a one-part, polyurethane, as manufactured by SIKA Corp, identifying number of 1A or equal.

6. Interior Pool Finish as furnished by others and endorsed or recommended by the National Plasterers Council.

### 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. Moisture content should be below 15%, use moisture meter to check
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 or waterblast with sand injector or turbo nozzle (3,500 psi minimum) to remove all rust, algae, copper sulfate, iron, pool paint, soft or flaky plaster, tile, and other foreign materials. (Note: If you are using a waterblaster with turbo nozzle you must acid wash and neutralize surface with soda ash before waterblasting.)
- d. Re-check for hollows, loose and flaky areas. Soft flaky areas must be removed before SCRATCH KOTE 2000 is applied.
- e. Wash thoroughly with waterblaster and dry all areas to touch before proceeding.

#### IV. APPLICATION

##### *REPAIR AREAS (if needed)*

1. Mix SPEED MIX with clean potable water at a ration not to exceed 1-1/4 gallons of water per bag.
2. Within 30 seconds of mixing, per moisten substrate and place mixed speed 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 of pool 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.

##### *MULASTICOAT®*

1. Stir Mulasticoat prior to use. Do not use mechanical drill to mix.
2. Apply Mulasticoat® via airless spray or 3/4" nap roller, at a coverage rate of 80 to 100 sq. ft. per gallon.
3. In the event that there are "cold joints" in the corners of the underlying substrate the use of caulking and Multicoat's Stitchbond polyester fabric mesh should be used on these joints. We also recommend the use of the fabric on all vertical corners.
  - a) Caulk all visible cold joint cracks with caulking and allow to thoroughly cure.
  - b) Mulasticoat® is brushed 8" to 10" vertically and 8" to 10" horizontally to a mil thickness of 30 mil wet and allowed to dry.
  - c) Once dry, apply another coat of Mulasticoat, 30 mil wet and immediately embed the polyester fabric into the wet Mulasticoat. Allow to tack dry.
  - d) Apply another coat of Mulasticoat over the polyester fabric to completely sandwich it between layers of Mulasticoat.
4. Once the layer of Mulasticoat over the polyester fabric is dry, apply Mulasticoat to entire surface in two (2) thin coats with air less sprayer or roller at a coverage 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.

5. Allow Mulasticoat® to fully dry before proceeding with SCRATCH KOTE 2000.
6. Do not allow Mulasticoat® to be exposed for more than 3 days. If exposed longer than 3 days, apply another coat of Mulasticoat.
7. Do not allow Mulasticoat to become wet prior to coating with SCRATCH KOTE 2000. If Mulasticoat becomes wet prior to application of SCRATCH KOTE 2000, another coat of Mulasticoat must be applied.

#### *SCRATCH KOTE 2000*

*Before proceeding remove dust 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. Allow SCRATCH KOTE 2000 to dry 12 hours minimum, preferably 24 hours. Interior pools will require longer dry/cure time.
5. Interior pool finish material must be applied within 28 days of Scratch Kote 2000 application.

#### *INTERIOR POOL FINISH*

These materials are furnished by others and will be installed in accordance with the manufacturers written instructions for use, following the guidelines and Standards as established by the National Plasterer's Council.

#### **V. WARNING**

Do not apply components of Multicoat's WATERPROOFING FOR ABOVE GRADE POOLS 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 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.

A special extended warranty is available for "Certified" applicators