

MASTERTOP® 590 DC

Polymer-modified cementitious decorative coating

DESCRIPTION:

MASTERTOP® 590 DC decorative coating is a polymer-modified, cementitious coating designed for beautifying concrete, mortar or masonry. MASTERTOP 590 DC decorative coating can be used for both interior and exterior applications.

RECOMMENDED FOR:

- Newly-repaired concrete to provide a uniform color and appearance.
- Architectural coating to beautify concrete.
- Vertical and horizontal surfaces.

FEATURES/BENEFITS:

- Attractive, decorative appearance.
- Protects concrete surfaces from environmental influences.
- Positive-side water protection.
- Flexible designs and patterns.

PACKAGING/ESTIMATING:

The MASTERTOP 590 DC system includes the following components:

- Cementitious decorative coating
- Water-based acrylic sealer (CS-388)
- Solvent-based acrylic sealer (ACRYLSEAL)
- Water-based pigments
- Decorative stencils - various patterns
- Reinforced tape - for creative custom designs

MASTERTOP 590 DC decorative coating is packaged in 55 lb (25 kg) moisture-resistant bags.

One 55 lb (25 kg) bag of MASTERTOP 590 DC coating when mixed with 1.45 gal (5.5 L) of water will yield approximately 4.0 gal (15.0 L).

Coverage Rates - Approximately 100 ft² (9.3 m²) per bag. Coverage rate is based on a thickness of approximately 1/16 inch. Actual coverage will depend on texture and condition of the substrate and method of application. It is recommended that a controlled test area be installed to ascertain total amount of material needed under jobsite conditions.

PERFORMANCE DATA¹:

Working Time 30 minutes @ 70 °F (21 °C)

Recoat Time Allow two hour minimum between coats

Elcometer Adhesion 100% cohesive failure
(ASTM D 4541) (0% bond loss)

Thermal Compatibility 5 cycles, no delamination
(ASTM C 884)

Ultraviolet Resistance No yellowing after 1,000 cycles

Water Vapor Transmission, 7 days 9.5 grains/hr/ft²
(ASTM E 96) (6.65 g/h/m²)

Hydrostatic Pressure Test Positive
(Fed. Spec. TT-P-14411A, modified)

Coverage:	50 ft ² /gal (1.23 m ² /L)
Water Leakage:	None
Softening:	None
Delamination:	None

Abrasion Resistance
(ASTM D-4060, Taber CS-10 Wheel)

	Percent Weight Loss @ 14 days
3,000 cycles	-0.003%
6,000 cycles	-0.004%

¹ The data shown is based on controlled laboratory test of air-cured samples. Reasonable variations from the results shown may be experienced as a result of atmospheric and jobsite conditions. Mix entire bag of MASTERTOP 590 DC mortar when preparing specimens for strength tests.

SURFACE PREPARATION:

Remove all deteriorated concrete. Substrate should be free of all oil, dirt and contaminants. The surface should be roughened by mechanical methods such as sandblasting, waterblasting, shotblasting or other suitable means.

Areas deeper than 1/4 in. (6 mm) should be repaired prior to the application of MASTERTOP 590 DC coating. Contact your local Master Builders representative for repair product information.

Pre-wet the surface with clean water to a saturated surface dry condition (SSD) without standing water. Dense surfaces should be pre-wetted for several hours prior to application. Maintain surface dampness until coating is applied.

Follow guidelines as outlined with in the MASTERTOP 590 DC system Installation Bulletin, provided by Master Builders, Inc.

MIXING:

Recommended Mix Ratios

Brush Applications:	1.15 to 1.45 gal/55 lb bag (4.35 to 5.49 L/25 kg bag)
Trowel Applications:	0.95 to 1.25 gal/55 lb bag (3.60 to 4.73 L/25 kg bag)
Spray or Roller Applications:	1.25 to 1.45 gal/55 lb bag (5.49 to 6.24 L/25 kg bag)

Mechanically mix with a heavy duty drill (400 to 600 rpm) and a Jiffler-type paddle or in an appropriate size mortar mixer. Pour approximately 90% of the mix water into the mixing container; and then add the bagged material while continuing to mix. Mix for 3 to 5 minutes, adding remaining water as needed. If a pigment is being used, add it prior to the remaining water.

APPLICATION:

MASTERTOP 590 DC coating should only be applied over properly prepared, predampened surfaces by means of a stiff brush, trowel or spay equipment.

LIMITATIONS:

- Do not apply coating when rain is expected.
- MASTERTOP 590 DC coating must be mixed to a uniform consistency, without lumps (3 minutes minimum).
Do Not Over Mix (5 minutes maximum).
- Do not use more than recommended amount of water.
- Recommended ambient and substrate temperature range at the time of application is 45 to 90 °F (7 to 32 °C).
- Water protection properties can only be achieved if product is applied on positive pressure side or on noncracked substrates.
- Do not use solvents to clean the system.
- Do not exceed a coverage rate of 250 to 300 square feet per gallon when applying curing & sealing compounds.

RELATED BULLETINS:

Material Safety Data Sheet - MASTERTOP 590 DC coating
Installation Bulletin #114869 - MASTERTOP 590 DC coating

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