

MASTERSEAL® 550

Flexible, cementitious coating for waterproofing and protection

DESCRIPTION:

Master Builders MASTERSEAL® 550 is a ready-to-use, flexible, polymer-modified, cement-based coating designed for waterproofing and protecting concrete, mortar and masonry surfaces. MASTERSEAL 550 is used for both interior and exterior applications where positive or negative side waterproofing is required. MASTERSEAL 550 can be applied by low pressure spraying or hand troweling.

RECOMMENDED FOR:

- Positive and negative side waterproofing
- Protection of cementitious surfaces
- New and repaired concrete to provide a uniform color and appearance
- Architectural coating for aesthetic enhancement

FEATURES/BENEFITS:

- Flexible – accommodates thermal movements and vibrations
- High waterproofing capabilities – for positive and negative side waterproofing
- Excellent resistance to frost and de-icing salts
- Effective protection against carbonation and environmental pollutants
- Ready-to-use, easy mixing and handling
- Very low permeability
- Attractive, decorative appearance
- Sprayable – reduces labor requirements

PACKAGING/ESTIMATING:

MASTERSEAL 550 is packaged in units of 68 lbs (31 kg). Component B is packaged in 55 lb (25 kg) moisture-resistant bags; Component A is packaged in 1.5 gal (5.7 liter) pails.

One unit of MASTERSEAL 550 consisting of 1.5 gal (5.7 L) of liquid polymer (Component A) and 55 lb (25 kg) of powder (Component B) will yield approximately 4 gal (15.14 L) of mixed material and will cover approximately 220 ft² (20.4 m²) at 31 mils thickness (first and second coat).

First coat @ 31 mils: 55 ft²/gal or 220 ft²/unit
(1.35 m²/L or 20.4 m²/unit)

Second coat @ 31 mils: 55 ft²/gal or 220 ft²/unit
(1.35 m²/L or 20.4 m²/unit)

Maximum application thickness is 1/16 in. (62 mils) per coat. Total application thickness should not exceed 1/8 in. (125 mils). Applications exceeding this rate may result in performance failure of the coating.

Coverage will depend on the condition of the surface and method of application. It is recommended that a controlled test area be installed to ascertain total amount of material needed under jobsite conditions. Apply the second coat after the first has hardened.

PERFORMANCE DATA¹:

Mix Ratio	Pre-measured, 55 lb (25 kg) of powder to approx. 1.5 gal (5.7 L) of liquid polymer (4.3:1)
Working Time	30 minutes @ 70 °F (21 °C)
Recoat Time	Allow 2 hours minimum between coats @ 70 °F (21 °C)
Elcometer Adhesion (ASTM D 4541)	100% cohesive failure (0% bond loss)
Thermal Compatibility (ASTM C 884)	5 cycles, no delamination
UV Resistance	No yellowing after 1000 cycles
Rubber Properties in Tension [ASTM D 412 Modified (Elongation)]	10% max @ 28 Days
Water Vapor Transmission (ASTM E 96A)	@ 28 Days 0.50 grains/hr/ft ² (max) (0.35 grams/hr/m ²)
Hydrostatic Pressure Test (Fed. Spec. TT-P-14411A) Coverage: 55 ft ² /gal (1.35 m ² /L)	
Water Leakage:	None
Softening:	None
Delamination:	None

¹The data shown is based on controlled laboratory tests of air cured samples. Reasonable variations from the results shown may be experienced as a result of atmospheric and jobsite conditions. Mix entire unit of MASTERSEAL 550 when preparing specimens for performance tests.

The following information regarding surface preparation, mixing, application and curing is provided as a brief overview. For detailed instructions before use of this product, reference the MASTERSEAL 550 Installation Bulletin.

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 1/8 in. (3 mm) should be repaired prior to the application of MASTERSEAL 550. Contact your local Master Builders Representative for repair product information.

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

MIXING:

Mechanically mix with a heavy duty drill (400 to 600 RPM) and a Jiffier-type paddle with a "mud" type blade or in an appropriate size mortar mixer. Pour approximately 80% of Component A (liquid polymer) into the mixing container; then slowly add Component B (powder) while continuing to stir until a homogeneous and lump-free mixture is obtained. Mix for 3 to 5 minutes. Depending on application, add remaining component A as required for proper consistency.

APPLICATION:

Trowel and Brush Applications -

MASTERSEAL 550 can be hand applied by trowel or brush. The recommended thickness of the coat to be applied is approximately 31 mils depending on expected water pressure and substrate roughness. The required performance is achieved by applying two coats (cross direction – one vertical and one horizontal).

The second coat should be applied the following day. Depending upon ambient conditions, the second coat may be applied two hours after the preceding one, or as soon as the first coat is dry and cannot be marred with a trowel.

Spray Applications -

For large areas MASTERSEAL 550 can be applied using a Moyno, carousel or screw type low pressure spraying machine with a suitable spray nozzle as would commonly be used for plastering.

CURING:

In applications where the coating will be subjected to continuous contact with water, it is necessary to moist cure the surface for three days, followed by four days of air drying prior to being placed into service. Protect fresh applications from rain, strong wind and intense sunlight for 24 hours.

LIMITATIONS:

- The maximum application thickness is 1/16 in. (62 mils) per coat.
- The minimum ambient and surface temperatures should be 45 °F (7 °C) and rising at the time of application.
- Do not apply coating when surface temperature is 90 °F (32 °C) and above.
- MASTERSEAL 550 must be mixed to a uniform consistency, without lumps (3 minutes minimum). Do Not Over Mix (5 minutes maximum).
- Apply only on a clean, sound, properly prepared saturated surface dry (SSD) substrate.
- Do not apply coating when rain is expected.
- Not recommended for use in swimming pools.
- Masterseal 550 should not be subjected to sharp, concentrated point loads (e.g. furniture) and heavy traffic.

RELATED BULLETINS:

Material Safety Data Sheet — MASTERSEAL 550
Installation Bulletin 7173 — MASTERSEAL 550
Specification Bulletin 7S73 — MASTERSEAL 550

Master Builders, Inc. United States

23700 Chagrin Boulevard
Cleveland, Ohio 44122-5554
(800) MBT-9990
Fax (216) 831-6910

Canada

3637 Weston Road
Toronto, Ontario M9L 1W1
(800) 387-5862
Fax (416) 741-7925

Mexico

Blvd. M. Avila Camacho 80, 3er Piso
53390 Naucalpan, México
011-525-557-5544
Fax 011-525-395-7903