



# MasterSeal® 581

## Formerly Thoroseal®

### Waterproof Cement-Based Coating for Concrete, Brick and Masonry

MasterSeal 581 is a portland cement-based coating for concrete and masonry that provides protection against water, dampness and seepage. When mixed with MasterEmaco A 660 admixture, MasterSeal 581 creates a low maintenance and highly durable waterproof barrier that is NSF certified for potable water applications.

Information provided in this document is intended as a guideline for product use. Before using this product, download and read the full Technical Data Guide, including Mixing, Application and Safety details on the BASF / Master Builders Solutions website.

[www.master-builders-solutions.basf.us](http://www.master-builders-solutions.basf.us)

#### **SURFACE PREPARATION:**

Surface preparation is extremely important for proper adhesion. All surfaces to be coated must be clean and structurally sound. Chip, sand or shotblast, wet blast or high-pressure water wash to remove all foreign matter, dust, dirt, paints, oils, grease, coatings, laitance or any other surface contaminants. Roughen or brush blast extremely smooth surfaces such as precast and cast in place concrete to ensure good mechanical adhesion of MasterSeal 581.

All static cracks or breaks, joints, voids or honeycombing larger than 1/32" should be cut out and repaired with MasterSeal 590 Hydraulic Cement or other BASF Repair material. Form ties and other metal fragments must be removed and patched. If any doubt exists about the suitability of a substrate to receive MasterSeal 581, then a bond test should be conducted. Consult the MasterSeal 581 Technical Data Guide for further details. On block or masonry substrates, relieve excess water pressure in the substrate by tapping in weep holes at the base before applying MasterSeal 581.

Concrete and/or masonry should be surface saturated dry. Consult the MasterSeal 581 technical data guide for further details.



Satisfactory results depend on selection of suitable product for intended use and compliance with instructions for surface preparation and application.

**DOWNLOAD AND READ FULL TECHNICAL DATA GUIDE FOR MIXING, APPLICATION AND SAFETY DETAILS ON THE BASF / MASTER BUILDERS SOLUTIONS WEBSITE BEFORE USING THIS PRODUCT.**

## MIXING:

MasterSeal 581 **must be mixed with MasterEmaco A 660 admixture** to achieve the published properties.\*\*

For best results, mechanically mix MasterSeal 581 with a slow-speed drill and mixing paddle. Gradually add the powder to the mixing liquid while drill is running.

Mix the MasterSeal 581 powder using a solution consisting of MasterEmaco A 660 diluted with water, usually one part to 3 parts clean water. A 50 lb. (22.7 kg) bag of MasterSeal 581 requires approximately 6 to 8 quarts of mixing liquid. Mix the material until a consistency of smooth, heavy batter is achieved.

Allow the mixed MasterSeal 581/MasterEmaco A 660 to rest undisturbed for a minimum of 10 minutes to fully wet out all the powder and fully activate the waterproofing elements. Remix the wet material and then apply to the substrate. When remixing, a small amount of mixing solution may be added for better workability. The brush will stand up in the mixing container when the proper consistency is reached. Pot life of the mixed material is 60 minutes at 70° F (21° C). At high temperatures and low relative humidity, pot life can be significantly less.

## APPLICATION:

MasterSeal 581 may be applied by fiber brush or broom or by textured spray equipment. Spray applications of the first coat require back brushing or brooming to properly fill voids and achieve uniformity and optimum adhesion. Apply the material on the substrate, filling all pores and voids. It is essential that the first coat is well brushed into the substrate even if the application is by spray.

The first coat should be applied at 2 lbs. per square yard (225 square feet per 50 lb. bag at 25 mils dry film thickness). Finish the coat with smooth horizontal strokes. Allow the material 24 hours to cure before applying a second coat. The second coat should be applied at 1 lb. per square yard (450 square feet/50 lb. bag at 12.5 mils dry film thickness). On block or masonry walls, allow 5–7 days

before applying the second coat to eliminate joint read through. For complete application guidelines reference the technical data guide for MasterSeal 581.

## APPROXIMATE COVERAGE:

225 ft<sup>2</sup>/50 lb (20.9 m<sup>2</sup>/22.7 kg) bag as a base coat at 1/16" (1.6 mm) dry-film thickness.

450 ft<sup>2</sup>/50 lb (41.8 m<sup>2</sup>/22.7 kg) bag as a topcoat at 1/32" (0.8 mm) dry-film thickness.

Coverage will vary depending on surface texture and porosity.

## CLEAN UP, STORAGE AND DISPOSAL:

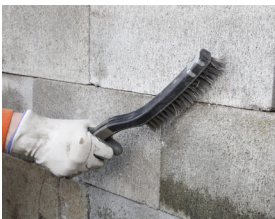
Promptly clean hands and all tools with warm water while product is still wet. Cured material may only be removed mechanically.

Transport and store in unopened containers and keep in a clean, dry place protected from rain, dew and humidity. Do not allow MasterEmaco A 660 to freeze.

## LIMITATIONS:

- Do not apply MasterSeal 581 to surfaces that have not been properly cleaned or are unsound.
- MUST NOT be applied to painted surfaces.
- Do not apply MasterSeal 581 in the rain or when rain is expected before initial set has taken place. Do not apply MasterSeal 581 to frozen or frost filled surfaces or when the temperature is below 40 °F (4.4 °C) or is expected to fall below 40 °F (4.4 °C) within 24 hours.
- For additional limitations, cautions and warnings, reference the technical data guide for MasterSeal 581.

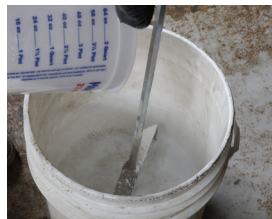
**\*\*Must add MasterEmaco A660 water-based acrylic bonding and modifying admixture for peak performance: improves adhesion, bonding, curing, and resistance to freeze-thaw damage. Adds flexural strength and improves overall durability of the coating.**



Prepare the surface



Saturate surface



Mix MasterSeal 581 with MasterEmaco A 660



Apply using brush or spray



Finish using vertical brush strokes

## Limited Warranty Notice:

BASF provides a limited warranty on its products. For the complete limited warranty statement please refer to the MasterSeal 581 Technical Data Guide on the Master Builders Solutions website.

## BASF Corporation Construction Systems

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## Master Builders Solutions from BASF

The Master Builders Solutions brand brings all of BASF's expertise together to create chemical solutions for new construction, maintenance, repair and renovation of structures. Master Builders Solutions is built on the experience gained from more than a century in the construction industry.

The know-how and experience of a global community of BASF construction experts form the core of Master Builders Solutions. We combine the right elements from our portfolio to solve your specific construction challenges. We collaborate across areas of expertise and regions and draw on the experience gained from countless construction projects worldwide.

We leverage global BASF technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make you more successful and drive sustainable construction. The comprehensive portfolio under the Master Builders Solutions brand encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, concrete repair and protection solutions, performance grouts and performance flooring solutions.