



We create chemistry

Technical Data Guide



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Cementitious
Waterproofing

MasterSeal[®] 582

Waterproof cement-based coating for exterior below-grade concrete and masonry

FORMERLY THOROSEAL[®] FOUNDATION COATING

PACKAGING

50 lb (22.7 kg) bags

COLOR

Gray

YIELD

225 ft²/50 lb bag (20.9 m²/22.7 kg bag) as a base coat at 1/16" (1.6 mm) dry-film thickness.

450 ft²/50 lb bag (41.8 m²/22.7 kg bag) as a topcoat at 1/32" (0.8 mm) dry-film thickness.

Coverage will vary depending on surface texture and porosity.

STORAGE

Transport and store MasterSeal 582 in unopened containers and keep in a clean, dry place protected from rain, dew and humidity. Do not stack bags more than two pallets high. Store MasterEmaco A 660 in similar conditions. Do not allow MasterEmaco A 660 to freeze.

SHELF LIFE

1 year when properly stored

VOC CONTENT

0 lbs/gal or 0 g/L,
less water and exempt solvents

DESCRIPTION

MasterSeal 582 is a waterproof Portland cement-based coating for below-grade exterior concrete and masonry surfaces. Polymer-modified with MasterEmaco A 660, MasterSeal 582 creates a cost-effective durable waterproofing barrier.

PRODUCT HIGHLIGHTS

- Waterproof to protect building interiors from dampness and moisture damage
- Resistant to both positive and negative hydrostatic pressure
- Breathable to allow interior moisture to escape without damaging coating
- Cement-based formula helps to bond concrete and masonry substrates

APPLICATIONS

- Exterior
- Below and above grade
- Foundations
- Exterior above-grade as a waterproof base coat for high-build acrylic coatings
- Concrete
- Masonry

HOW TO APPLY

SURFACE PREPARATION

1. Surface preparation is extremely important for proper adhesion. Substrates must be sound and free of dust, dirt, laitance, paints, oils, grease, curing compounds or any other contaminants. Verify substrate has properly cured. Concrete should obtain 80% of design strength, typically achieved within 3–14 days. If efflorescence is present, mechanically remove it before proceeding. For extreme cases where this is not adequate, contact Technical Service.
2. Patch all holes and non-moving cracks before installation with appropriate BASF product.
3. Relieve hydrostatic pressure in concrete block with weep holes.
4. Roughen or brush blast extremely smooth surfaces such as precast and cast-in-place concrete to ensure good mechanical adhesion of MasterSeal 582.
5. Completely saturate the substrate with water and allow surface to dry before application starts. A damp surface will prevent surface drag on the material, keep the substrate cool and eliminate flash drying.

Technical Data

Composition

MasterSeal 582 contains cement, graded sand, and proprietary additives.

Test Data

PROPERTY	RESULTS	TEST METHODS
Specific gravity	1.2	
Water absorption, %		ASTM C 67
Boiling water submersion at 5 hours	3.9	
Water loss after 5 hours	0.42	
Impact strength, lbs	24 = Passed	Fed. Spec. TT-P-0035
Hardness, at 21 days, requirement min = 30, max = 600	47	Fed. Spec. TT-P-0035
Water-vapor transmission, perms	12	ASTM E 96

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.



Clean wall.



Clean footer.



Dampen Surface.



Mix to batter consistency.



Brush it on.



Level it out.



Apply second coat.



Sealed and waterproofed.

MIXING

1. Mix MasterSeal 582 with a mixing liquid consisting of a blend of MasterEmaco A 660 diluted with water. Maximum dilution ratio is one part MasterEmaco A 660 to three parts water. Approximately 6 quarts (5.7 L) of mixing liquid is needed per 50 lbs (22.7 kg) of powder. Water demand may vary with ambient temperatures and humidity levels.
2. For best results, mix MasterSeal 582 with a slow-speed drill and mixing paddle. Gradually add the powder to the mixing liquid while drill is running.
3. When properly blended, MasterSeal 582 will have the lump-free consistency of smooth, heavy batter.
4. Allow the mixed MasterSeal 582/ MasterEmaco A 660 to rest undisturbed for a minimum of 10 minutes to fully wet out all the powder. Then mix the wet mixture and apply. A small amount of mixing liquid can be added to the mixture.

APPLICATION

1. Apply MasterSeal 582 with a tampico brush or broom or equivalent stiff fiber brush 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.
2. It is essential to work the first coat thoroughly into the substrate to completely fill and cover all voids, holes, and nonmoving cracks. Finish with a horizontal stroke for an even coat.
3. Allow to cure 24 hours, then apply the second coat and finish with a vertical stroke. Above grade, the second coat can be replaced with a MasterProtect high-build architectural coating to achieve better color uniformity.

SPECIFIC APPLICATIONS

For ordinary water pressure or dampness in block or concrete foundations

1. Apply two evenly distributed applications of MasterSeal 582, each a minimum of 2 lbs/yd² (1 kg/m²), or a total of 4 lbs/yd² (2 kg/m²).
2. Make sure both applications carry down to and over footer, forming a 1½" (38 cm) cove at junction of walls and footer.

FOR SEVERE WATER PRESSURE AND PARGE COAT

1. Brush on coating using 2 lbs/yd² (1 kg/m²).
2. After 12 hours, apply trowel coat a minimum of 12 lbs/yd² (5.4 kg/m²) or sufficient material to bring surface to true and level lines.
3. For trowel applications add 25 lbs (13.6 kg) clean silica sand to each 50 lbs (22.7 kg) of MasterSeal 582 or use MasterSeal 584 Plaster mix.

FOR EXTERIOR ABOVE GRADE AS A BASE COAT

1. On above-grade exterior applications, apply MasterSeal 582 at a minimum of 2 lbs/yd² (1 kg/m²), back brushing the material down vertically to even out the texture.
2. Allow to cure a minimum of 24 hours, then top coat with MasterProtect high build coatings.

FOR BEST PERFORMANCE

- MasterSeal 582 must be modified with MasterEmaco A 660 to achieve the properties listed in the product data sheet.
- For NSF applications, refer to the MasterSeal 581 data sheet
- Do not apply to substrates with active water leaks or moving cracks.
- Maintain or place expansion and control joints as necessary.
- Do not apply in rain or when rain is expected within 24 hours. Do not apply above 90°F (32°C) or below 40°F (4°C) or when temperatures are expected to fall below 40°F (4°C) within 24 hours. For hot and cold temperature applications, store MasterSeal 582, MasterEmaco A 660 and water at 50 to 70°F (10 to 21°C) before use.
- Windy, dry, or hot conditions may require rewetting of MasterSeal 582 during cure and the use of polyethylene barriers.
- Before specifying MasterSeal 582 for water-retaining structures, conduct tests to determine water quality. MasterSeal 582 is not intended for continuous contact with acid or sulfate-containing water. Very soft water will have an adverse effect on MasterSeal 582.
- Service temperatures: immersion, up to 140°F (60°C); cleaning water, up to 200°F (93°C); dry air, up to 220°F (104°C) .
- Allow MasterSeal 582 to cure 7–10 days before immersion in water.
- On all projects, it is recommended that a sample be prepared on site and approved prior to the commencement of the work. The site sample should confirm the color, texture and workmanship required until the job is finished and accepted. Retain the sample until final approval is secured.
- Not intended as a decorative finish coat.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.basf.us, e-mailing your request to basfbcst@basf.com or calling 1(800)433-9517. Use only as directed.

**For medical emergencies only,
call ChemTrec® 1(800)424-9300.**

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