

# MasterProtect® HB 100

Water-based, acrylic copolymer heavily textured coating

FORMERLY THORO® TW COATING

## PACKAGING

5 gallon (18.9 L) pails

## YIELD

See chart on page 2.

## STORAGE

Store in unopened, containers protected from freezing in a clean, dry area

## SHELF LIFE

18 months when properly stored

## VOC CONTENT

103 g/L less water and exempt solvents

## TEXTURE

MasterProtect® HB 100 contains medium sized perlite aggregate (approximate maximum aggregate size 1/10" [2 mm]).

## DESCRIPTION

MasterProtect® HB 100 is a water-based, heavily textured acrylic copolymer wall coating containing perlite aggregate. It is ideal for exterior applications over concrete substrates and tilt-up walls.

## PRODUCT HIGHLIGHTS

- Uniform textured perlite finish hides minor surface imperfections
- Cost-effective quality provides an economical coating for tilt wall concrete surfaces
- Excellent color retention resists long term fading
- Breathable to allow water vapor to escape
- Recoatable making it easy and cost efficient to maintain
- Available in medium tint base and able to be pigmented to a limited range of custom colors

## APPLICATIONS

- Exterior
- Vertical and overhead surfaces
- Above grade
- Tilt-up walls

## SUBSTRATES

- Concrete
- Cast-in-place and precast concrete

## HOW TO APPLY

### SURFACE PREPARATION

1. Surface should be clean and sound. Concrete substrates should have a minimum 28 day cure and be free of all bond-inhibiting contaminants.
2. High-pressure water blast (or abrasive blast on hard, dense surfaces) surface to medium grit sandpaper texture (reference ICRI guide 310.2 SP 3).
3. Repair any holes, spalled and damaged concrete with appropriate Master Builders repair materials. Remove any protruding concrete accessories and smooth out any irregularities.
4. Some stains may require chemical removal. Be sure to neutralize the compounds and rinse with clean water.
5. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide transition to old paint areas.
6. Check adhesion of old paint using ASTM D 3359, measuring adhesion by Tape Method A.
7. Treat cracks greater than 1/32" with MasterProtect FL 746 or MasterProtect FL 748. Treat cracks larger than 1/4" as expansion joints and fill with appropriate Master Builders Solutions sealant.

### CRACKS

1. Locate and properly prepare all cracks.
2. Clean and detail static hairline cracks caused by plastic or drying shrinkage and fill by a brush coat of MasterProtect® HB 400 Smooth and allow to dry.

**Technical Data**

**Composition**

MasterProtect® HB 100 contains water, acrylic copolymer emulsion, fillers and other proprietary ingredients

**Test Data**

PROPERTY	RESULTS	TEST METHODS
<b>Density</b> , lbs/gal (kg/L)	9.5 ±0.5 (1.14 ±0.06)	ASTM D 1475
<b>Solids</b> , % By weight By volume	50.3 45	ASTM D 5201
<b>Viscosity</b> , KU	105–125	ASTM D 562 (Stormer)
<b>Resistance to wind-driven rain</b> (modified over concrete panels)	Meets requirements – no water penetration	TT-C-555B
<b>Artificial weathering and UV resistance</b> , 4,000 hrs	Passed	ASTM G 53
<b>Water-vapor permeance</b> , perms	>8	ASTM E 96
<b>Moisture resistance</b> , 14 days	Passed	ASTM D 2247
<b>Flexibility</b> , 1" mandrel	No Cracking	ASTM D 522
<b>Contrast ratio</b> , (hiding power), %	>98	ASTM D 2805
<b>Heat age stability</b> 30 days at 140° F (60° C)	Passed	Fed. Std.-141 C #3019.1
<b>Salt fog resistance</b> , 300 hrs	No change	ASTM B 117

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

**Yield**

TEXTURE	RATE, FT <sup>2</sup> /GAL/COAT (M <sup>2</sup> /L)
<b>TW</b>	50–70 (1.2–1.7)

Coverages are estimates for smooth, dense concrete. Coverages will vary on porous or textured surfaces.

3. Treat cracks greater than 1/32" with MasterProtect FL 746 or MasterProtect FL 748. Treat cracks larger than 1/4" as expansion joints and fill with appropriate Master Builders Solutions sealant.

PRIMER OR BASE COAT

1. Prime very slick, dense concrete surfaces with a coat of MasterProtect® P 150 at a rate of 175 – 275 ft<sup>2</sup>/gallon (4.3 – 6.7 m<sup>2</sup>/L) before the application of MasterProtect® HB 100.

**MIXING**

1. MasterProtect® HB 100 is a heavily aggregated material.
2. Mechanically mix contents at a slow speed with a drill and mixing paddle before and occasionally during the application to ensure color uniformity and even aggregate suspension. Slow-speed mixing minimizes air entrapment.
3. In multi-pail applications, mix the contents of each new pail into the partially used pail to ensure consistent transitions from pail to pail.
4. Do not dilute or thin material.

**APPLICATION**

SPRAY APPLICATION

1. Spraying MasterProtect® HB 100 is the recommended method of application.
2. MasterProtect® HB 100 can be spray applied with a hopper gun, using compressed air or other select air-assisted equipment (rotor/stator or diaphragm) capable of spraying heavy-bodied and heavy-aggregated materials.
3. Maintain proper uniform coverage and application techniques during application to ensure the desired appearance and performance characteristics (see coverage rates).
4. Always work to a natural break and maintain a wet edge during application.
5. For consistency of texture, keep application methods uniform throughout. Inconsistent application techniques will produce texture variations that may appear as color variation to the untrained eye. The objective is to obtain a pinhole-free system that achieves a consistent film build on all treated surfaces.

ROLLER AND BRUSH APPLICATION

1. General applications by brush or roller are not recommended due to the difficulty in achieving consistency in appearance.
2. MasterProtect® HB 100 can be brushed to "cut in" hard-to-reach areas, if desired, but care must be taken to evenly distribute the aggregate.
3. Work material uniformly onto the wall, always maintaining a wet edge to be followed by the spray finish.

DRYING TIME

70° F (21° C) and 50% relative humidity.  
 To touch: 2 – 4 hours  
 To full cure: 5 days  
 Lower surface or air temperatures and higher relative humidity will extend the drying time.

CLEAN UP

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means.

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#### FOR BEST PERFORMANCE

- Protect from freezing. If partially frozen, material may be usable if containers are placed in a heated area and allowed to warm gradually. Do not apply heat directly to the containers.
- Do not apply when temperature (substrate or ambient) is 40° F (4° C) or below or is expected to fall below 40° F (4° C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.
- Do not use below grade. Do not use where coating is subject to hydrostatic pressure or immersion.
- Do not apply to horizontal, traffic-bearing, or marginally sloped surfaces.
- Do not apply over moving cracks, control joints, expansion joints, or as a crack-bridging system.
- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color and adhesion before proceeding with any project. The test method for measuring adhesion is ASTM D 3359, Measuring Adhesion by Tape, Method A. On the 0 – 5 scale, a minimum adhesion rating of 4A is required.
- Before applying MasterProtect® HB 100, test adhesion of any existing coatings by ASTM D 3359. Adhesion tests should be carried out in multiple areas to ensure accurate results.
- Make certain the most current versions of product data sheet and SDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- 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.

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#### 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 [buildingsystems.basf.com](http://buildingsystems.basf.com), e-mailing your request to [basfbscst@basf.com](mailto:basfbscst@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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#### LIMITED WARRANTY NOTICE

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