## Technical Data Guide



09 97 23 Coatings for Concrete and Masonry

# MasterProtect® C 350

Water-based, 100% acrylic, smooth, easy-cleaning, waterproof coating

#### **PACKAGING**

5 gallon (18.9 L) pails
 Available in Pastel, Medium,
 Ultradeep and Neutral Tintbases

Pre-tinted material available. Contact your Master Builders Solutions representative for further information.

#### YIELD

See chart on page 2

#### STORAGE

Store in unopened containers in a clean, dry area. Keep from freezing.

#### SHELF LIFE

2 years when properly stored

#### VOC CONTENT

< 50 g/L, less water and exempt solvents

#### DESCRIPTION

MasterProtect C 350 is a 100% acrylic, smooth, waterproof coating engineered to reduce dirt pickup and to be cleaned via rainwater runoff or a water rinse.

#### PRODUCT HIGHLIGHTS

- Hydrophobic properties of coating repel water and dirt for long-lasting appearance.
- Dirt-resistant nature of coating helps reduce exterior maintenance costs.
- 100% acrylic formulation provides long-term durability and weather resistance.
- Breathable to permit water vapor to escape.
- Excellent adhesion to concrete and existing coatings results in tight, long-lasting bond.
- UV resistant for excellent color retention.
- Compatible with Master Builders Solutions' MasterProtect coatings and MasterSeal<sup>®</sup> ioint sealants.
- Low VOC content for broad compliance in all regions.

#### **APPLICATIONS**

- Exterior
- Vertical and overhead surfaces
- Above grade
- · Protecting and waterproofing

#### **SUBSTRATES**

- Concrete
- Masonry
- Stucco
- EIFS
- · Over existing coatings

#### **HOW TO APPLY**

SURFACE PREPARATION

- Surfaces should be sound, clean and free of all bond-inhibiting contaminants.
- 2. Concrete substrates should be fully cured.
- 3. Repair any holes, spalled and damaged concrete with appropriate Master Builders Solutions repair materials. Allow appropriate cure time prior to coating.
- 4. Remove any protruding concrete accessories and smooth out any surface irregularities.
- 5. High-pressure power wash surface (or abrasive blast on hard, dense surfaces) to create a profile of CSP3, per ICRI Guide 310.2.
- 6. Some stains may require chemical removal. Neutralize any cleaning compounds used and rinse with clean water.
- Check adhesion of old coatings according to ASTM D 3359, Measuring Adhesion by Tape Test. Method A.
- 8. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide transition to old paint areas.
- 9. Treat cracks greater than 1/32" with MasterProtect FL 746 or MasterProtect FL 748 patching compounds. Treat cracks larger than 1/4" as expansion joints and fill with appropriate Master Builders Solutions sealant.
- 10.New CMU must have a base coat of MasterProtect FL 749 and be pinhole-free.



# Technical Data Composition

MasterProtect C 350 contains water, acrylic emulsion, fillers and other proprietary ingredients.

### Test Data

PROPERTY	RESULTS	TEST METHOD
Density, lbs/gal (kg/L)	11.8 lbs/gal (1.41 kg/L)	ASTM D 1475
Solids, % (volume)	41%	ASTM D 5201
Adhesion to concrete	500 psi	ASTM D 4541
	28 days	
Dirt pickup resistance	>90% retention of reflectance	Miami/Dade TAS 14395 section 7.8 (modified)
Dirt collection 61 days, 45° angle, Southern exposure	Dc Index = 0.98	ASTM D 3719
Resistance to wind-driven rain Average Weight Gain One coat with primer Two coats without primer	No water penetration <0.05 lbs (<0.80 oz) <0.04 lbs (<0.65 oz)	ASTM D 6904 ASTM D 6904
Artificial weathering and UV resistance, Xenon Arc, Type B; 2,000 hrs	No deleterious effect	ASTM G 155
Water-vapor permeance, perms Wet cup test	20	ASTM E 96
Flexibility 7 wet mils, ½" mandrel, 40 °F (4 °C) and 70 °F (21 °C)	No cracking	ASTM D 522
Fungus resistance 30 days exposure	No growth	ASTM D 5590
Yield		

RATE	WET FILM	DRY FILM
FT²/GAL/COAT (M²/L)*	MILS (MM)	MILS (MM)
180-280 (47.55-73.97)	5-8 (0.13-0.20)	2-3.3 (0.05-0.08)

<sup>\*</sup>Coverage rates are approximate, and will vary with surface porosity and application technique. For applications requiring waterproofing, apply two coats, or use as a topcoat over a base coat of MasterProtect HB 200 or HB 400.

11.If applying a single coat to bare concrete, prime the surface with MasterProtect P 150 prior to coating. Chalky surfaces should be primed with MasterProtect P 100.

#### MIXING

- Prior to use, mix MasterProtect C 350 at slow speed with drill and mixing paddle to ensure uniform color and to minimize air entrapment.
- 2. In multi-pail applications, mix the contents of each new pail into the partially used previous pail to ensure color consistency and smooth transitions from pail to pail.

#### **APPLICATION**

- 1. Apply MasterProtect C 350 by brush, spray, roller, or spray-and-backroll.
- 2. Maintain proper uniform wet-film thickness (WFT) during application to ensure the performance characteristics desired (see yield rates section). Application rate should not exceed 5–8 wet mils. Care should be taken when applying to heavily textured substrates. Fluted masonry and raked joint substrates will require hand detailing to assure an even and successful application.
- Always work to a natural break and maintain a wet edge during application.
- 4. For uniformity of color and texture, application techniques must be consistent throughout the project.

#### **ROLLER**

- 1. Use a quality ½" (13 mm) nap roller cover. Depending on the surface texture, a 3/8" (9 mm) roller cover may be needed in order to prevent excessive thickness and mud cracking.
- Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll.
- Cross roll, maintaining a wet edge, to achieve uniform thickness. Backroll in one direction for consistent appearance.

#### **SPRAY**

- Equipment is available for spraying
   MasterProtect C 350. Contact equipment
   manufacturer for further recommendations.
- Backrolling in one direction after spray application is recommended to achieve uniform mil thickness.

#### **BRUSH**

- Application by brush is recommended only for small inaccessible areas, e.g., on touch-ups.
- 2.Use only a nylon brush.

#### **DRYING TIME**

Times assume 70 °F (21 °C) and 50% relative humidity.

To touch: 2-4 hours

To recoat: 6 hours minimum

Lower surface or air temperatures and higher relative humidity will extend the drying time.

#### HYDROPHOBIC EFFECT

The hydrophobic (water repellent) effect develops in approximately 30 days through exposure to the elements. Actual time to water repellency will depend on environmental conditions and level of exposure.

#### MAINTENANCE AND RECOATING

Clean MasterProtect C 350 with water only. The use of detergents or soaps will degrade the hydrophobic effect. After detergent cleaning, the hydrophobic effect will reappear in approximately 30 days time, depending on exposure conditions.

#### RECOATING

Once the hydrophobic effect has developed, MasterProtect C 350 can be recoated, but must first be cleaned with a detergent in order to degrade the hydrophobic effect, and facilitate bond of the new coating.

#### CLEAN UP

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

#### FOR BEST PERFORMANCE

- Do not apply when substrate or ambient temperature 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 on interior applications, belowgrade applications, or for immersion service.
- Not intended for use as a horizontal trafficbearing coating.
- MasterProtect C 350 is a thin film material.
   Hide can be difficult when coating over certain colored sealants. Sealants should be tinted close to the MasterProtect C 350 final color to prevent over application of the material which can lead to cracking.
- Apply a 4 ft x 4 ft (1.2 m x 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.
- Color formulas containing organic colorants are susceptible to fading.
- Do not thin the material.
- For professional use only; not for sale to or use by the general public.
- 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 versions.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions 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.com/en-us, e-mailing your request to mbsbscst@mbcc-group.com or calling 1(800)433-9517. Use only as directed.

IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

#### LIMITED WARRANTY NOTICE

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