Technical Data Guide

MASTER® BUILDERS SOLUTIONS

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Painting

MasterProtect® HB 200LR

Low-VOC, highly reflective, water-based modified acrylic coating for the interior of parking structures

FORMERLY PARKCOAT™

PACKAGING
– 5 gallon (18.93 L) pails
– 55 gallon (208 L) drums; special order only

YIELD
See chart on page 3

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

SHELF LIFE
1 year when properly stored

VOC CONTENT
Less than <50 g/L
less water and exempt solvents.

DESCRIPTION
MasterProtect HB 200LR is a one-coat water-based, modified acrylic coating with high light reflectance. When used on the interior walls and ceilings of parking garages, the result is reduced energy usage and increased safety and security.

PRODUCT HIGHLIGHTS
- High light reflectivity enhances the security of garages and increases lighting efficiency
- Airless spray application speeds production and reduces turnaround time
- Excellent adhesion, bonds securely to substrate for long-term durability
- Excellent color retention; maintains brightness without fading over time
- Freeze/thaw resistant, suitable for cold climates
- Low VOC content for broad compliance across all regions
- Water based formula has low odor
- No dirt pick-up to maintain attractive appearance
- One-coat coverage lowers labor and material costs and returns structures to service quickly
- Effective carbon dioxide diffusion barrier, protects embedded steel from corrosion

APPLICATIONS
- Interior
- Overhead and vertical
- Above grade
- Parking structures
- Ceilings
- Walls
- Beams
- Columns

SUBSTRATES
- Concrete
- Brick
- Stucco
- Block
- Primed wood or metal
- Existing Coatings

HOW TO APPLY

SURFACE PREPARATION
1. Surfaces should be clean, sound and free of all bond-inhibiting contaminants.
2. Mildew and fungus must be completely removed before application of MasterProtect HB 200LR.
3. Concrete substrates should be fully cured.
4. Repair any holes, spalled and damaged concrete with appropriate Master Builders Solutions repair materials. Allow appropriate cure time prior to coating.
5. Remove any protruding concrete accessories and smooth out any surface irregularities.
6. High-pressure power wash surface (or abrasive blast on hard, dense surfaces) to create a profile of SP 3, per ICRI Guide 310.2.
7. Some stains may require chemical removal. Neutralize any cleaning compounds used and rinse with clean water.

Technical Data

Composition

MasterProtect HB 200LR is a proprietary blend of acrylic polymers with special additives dispersed in a water base.

Typical Properties

PROPERTY	VALUE
Weight per gallon, lbs (kg) (ASTM D 1475)	10.6 (4.8)
Solids by weight, % (ASTM D 2369)	51.4
Solids by volume, % (ASTM D 5201)	44.8
Viscosity at 77°F (25°C), KU (ASTM D 562)	122–131
pH	8.8–9.3

Test Data

PROPERTY	RESULTS	TEST METHOD
Tensile Strength, psi (MPa)	567 (3.9)	ASTM D 412
Elongation at break,%	35	ASTM D 412
Water vapor, dry perms	2.1	ASTM D 1653
wet perms	15	ASTM E 96
Light Reflectance, %		ASTM E 1164
MasterProtect HB 200LR	88	
Light Concrete	52	
Dark Concrete	27	
MasterProtect HB 200LR over Light Concrete	88	
MasterProtect HB 200LR over Dark Concrete	88	
Flame Spread*	10	ASTM E 84
Smoke Development*	10	ASTM E 84
Carbon-dioxide diffusion		PR EN 1062-6
R (equivalent air-layer thickness), ft (m)	544 (166)	
Sc (equivalent concrete thickness), in (cm)	18 (42)	

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.
*Scale of 0–200; 0 is best

8. Check adhesion of old coatings according to ASTM D 3359, Measuring Adhesion by Tape Test Method A.
9. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide transition to old paint areas.
10. Treat cracks greater than 1/32" with MasterProtect FL 746 or MasterProtect FL 748. Treat cracks larger than ¼" as expansion joints and fill with appropriate Master Builders Solutions sealant.
11. New CMU must have a base coat of MasterProtect FL 749.

MIXING

1. Prior to use, mix MasterProtect HB 200LR at slow speed with drill and mixing paddle to ensure uniform color dispersion 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

2. Apply MasterProtect HB 200LR by brush, spray, roller, or spray-and-backroll.
3. Maintain proper uniform wet-film thickness (WFT) during application to ensure the performance characteristics desired (see yield rates section).
4. Always work to a natural break and maintain a wet edge during application.
5. For uniformity of color, application techniques must be consistent throughout the project.

ROLLER

1. Use a quality ¾–1¼" nap roller cover.
2. Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll.
3. Cross roll, maintaining a wet edge, to achieve uniform thickness. Backroll in one direction for consistent appearance.

SPRAY

1. Equipment is available for spraying MasterProtect HB 200LR. Contact equipment manufacturer for further recommendations.
2. Backrolling in one direction after spray application is recommended to achieve uniform film thickness.

BRUSH

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

DRYING TIME

2–4 hours at 70 °F (21 °C) and 50% relative humidity. Lower surface or air temperatures and higher relative humidity will extend the drying time.

Wet and Dry Mils

FT^2/GAL (M^2/L)	WET MILS (MM)	DRY MILS (MM)
125 (3.1)	12–13 (0.30)	5.5 (0.14)
150 (3.7)	10–11 (0.25)	4.5 (0.11)
175 (4.3)	8–9 (0.20)	4.0 (0.10)

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.
- Not intended for use as a horizontal traffic-bearing coating.
- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color, texture 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.
- 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; visit www.master-builders-solutions.com/en-us 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.

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