# Technical Data Guide





# MasterProtect<sup>®</sup> EL 750

Water-based, 100% acrylic, elastomeric, waterproof coating

FORMERLY THOROLASTIC®

#### PACKAGING

5 gallon (18.9 L) pails

YIELD See chart on page 2

#### STORAGE

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

SHELF LIFE 18 months when properly stored

VOC CONTENT Less than 100 g/L less water and exempt solvents.

#### DESCRIPTION

MasterProtect EL 750 is a water-based, high-build, elastomeric, 100% acrylic waterproof coating for above-grade concrete, masonry, stucco and EIFS.

#### PRODUCT HIGHLIGHTS

- Available in a broad range of colors and textures for design versatility
- Resists wind-driven rain, helps prevent water penetration into the substrate
- Breathable to allow water vapor to escape
- High elongation and recovery for durable performance over dynamic cracks.
- Excellent adhesion, bonds securely to substrate for long-term durability
- UV resistance provides excellent color retention for a long lasting attractive finish
- Excellent hiding power
- Textured formulations help improve aesthetics of irregular substrates
- Effective carbon dioxide diffusion barrier, protects embedded steel from corrosion
- Low VOC content for broad compliance across all regions
- Flexibility at very low temperatures makes it suitable for all climates
- · Resistant to dirt pickup
- Also available in algae resistant (AA) formula for versatility

#### APPLICATIONS

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

#### SUBSTRATES

- Concrete
- Masonry
- Cement Plaster
- Stucco
- EIFS
- Over Existing Coatings

#### HOW TO APPLY SURFACE PREPARATION

- 1. Surfaces should be clean and sound and free of all bond-inhibiting contaminants.
- 2. Concrete substrates should be fully cured.
- 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.
- High-pressure power wash surface (or abrasive blast on hard, dense surfaces) to create a profile of SP 3, per ICRI Guide 310.2.
- 6. Some stains may require chemical removal. Neutralize any cleaning compounds used and rinse with clean water.
- 7. 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.



# Technical Data Guide MasterProtect<sup>®</sup> EL 750

# Technical Data

# Composition

MasterProtect EL 750 contains water, acrylic emulsion, fillers and other proprietary ingredients.

# Test Data

MASTERPROTECT EL 750 SMOOTH

MASTERPROTECT EL 750 SMOOTH			
PROPERTY	RESULTS	TEST METHOD	
<b>Density,</b> lbs/gal (kg/L)	11.2–12.2 (1.34–1.46)	ASTM D 1475	
Solids*, % By weight By volume	64.2 50	ASTM D 5201	
Viscosity, KU	127–135	ASTM D 562 (Stormer)	
*Value for white			
MASTERPROTECT EL 750 FINE			
PROPERTY	RESULTS	TEST METHOD	
<b>Density,</b> lbs/gal (kg/L)	10.2–11.2 (1.22–1.34)	ASTM D 1475	
Solids, % By weight By volume	65.5 56	ASTM D 5201	
Viscosity, KU	127–135	ASTM D 562 (Stormer)	
MASTERPROTECT EL 750 COARSE			
PROPERTY	RESULTS	TEST METHOD	
Density, lbs/gal (kg/L)	9.9–10.9 (1.19–1.31)	ASTM D 1475	
Solids, % By weight By volume	64.5 58	ASTM D 5201	
Viscosity, KU	127–135	ASTM D 562 (Stormer)	
MASTERPROTECT EL 750 SMOOTH			
PROPERTY	RESULTS	TEST METHOD	
Ultimate elongation, %	344	ASTM D 412	
Elongation recovery, % After 10 minutes After 24 hours	96.9 98.4	ASTM D 412	
Ultimate tensile strength, psi (MPa)	220 (1.5)	ASTM D 412	
Crack bridging, mils (mm) -77° F (-60° C) 32° F (0° C) 73° F (23° C)	12 (0.3) 19.5 (0.5) 27.5 (0.7)	PR EN 1062-7	
Flexibility, in (mm) mandrel, at -30° F (-34° C)	⅓ (3)	ASTM D 522	
Pull-off strength adhesion, psi (MPa)	210 (1.4)	ASTM D 4541	
	210 (1.4) Passes	TT-C-555B	

#### Test Data

MASTERPROTECT EL 750 SMOOTH APPLIED AT 16 MILS DFT

PROPERTY	RESULTS	TEST METHOD	
Carbon-dioxide diffusion R (equivalent air layer thickness), ft (m) Sc (equivalent concrete thickness), in (cm)	263 (80) 8 (20)	PR EN 1062-6	
Accelerated weathering, 5,000 hrs	Passes	ASTM G 23, Type D	
Visual color change, 5,000 hrs	Passes	ASTM D 1729 ASTM D 4214 ASTM C 67	
Chalking, 5,000 hrs	Passes		
Freeze/thaw resistance, 60 cycles	Passes		
Salt spray resistance, 300 hrs	Passes	ASTM B 117	
Dirt pick-up, % after 6 months exposure	94 .33	ASTM D 3719	
Mildew resistance	No growth	ASTM D 3273 / 3274	

lest results are averages obtained under laboratory conditions. Reasonable variations can be expe

#### **Theoretical Film Thicknesses\***

COVERAGE RATE SMOOTH		FINE		COARSE		
FT <sup>2</sup> /GAL (M <sup>2</sup> /L)	WET MILS (MM)	DRY MILS (MM)	WET MILS (MM)	DRY MILS (MM)	WET MILS (MM)	DRY MILS (MM)
50 (1.2)	32 (0.813)	16 (0.406)	32 (0.813)	18 (0.457)	32 (0.813)	19 (0.483)
80 (2)	20 (0.508)	10 (0.254)	20 (0.508)	11 (0.279)	20 (0.508)	12 (0.305)
100 (2.4)	16 (0.406)	8 (0.203)	16 (0.406)	9 (0.229)	16 (0.406)	9 (0.229)

Actual DFT to achieve the stated performance properties is 16 mils (0.406 mm).

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

- 9. Treat cracks greater than  $\frac{1}{22}$  with MasterProtect FL 746 or MasterProtect FL 748. Treat cracks larger than  $\frac{1}{4}$  as expansion joints and fill with appropriate Master Builders Solutions sealant.
- New CMU must have a base coat of MasterProtect FL 749.

# MIXING

- Prior to use, mix MasterProtect EL 750 at slow speed with drill and mixing paddle to ensure uniform color and texture, and to minimize air entrapment.
- 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

- MasterProtect EL 750 is meant to be applied as a two-coat system, achieving a total dry-film thickness (DFT) of 16–20 mils (0.4–0.5 mm).
- 2. Apply MasterProtect EL 750 by brush, spray, roller, or spray-and-backroll.
- 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 and texture, application techniques must be consistent throughout the project.

#### ROLLER

- **1**.Use a quality <sup>3</sup>/<sub>4</sub>–11/4" 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

 Equipment is available for spraying all grades of MasterProtect EL 750. For fine and coarse textures, it is necessary to use a heavyduty sprayer designed for the application of coatings that contain sand particles.
Contact equipment manufacturer for further recommendations.  For smooth and fine grades, backrolling in one direction after spray application is recommended to achieve uniform texture and 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

Times assume 70° F (21° C) and 50% relative humidity. To touch: 6 hours

To recoat: minimum of 12 hours

Lower surface or air temperatures and higher relative humidity will extend the drying time. MasterProtect EL 750 requires ultraviolet (UV) light to cure.

# 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, undersides of balconies, soffits, below-grade applications or for immersion service.

- Do not use where there may be hydrostatic water transfer from the backside of the substrate.
- Do not apply to improperly sealed substrates that are subject to rising dampness or migrating moisture.
- Not intended for use as a horizontal trafficbearing coating.
- Elongation and crack-bridging abilities are reduced with textured grades.
- Application of nonelastomeric topcoats could reduce the performance properties of MasterProtect EL 750.

 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.

- Color formulas containing organic colorants are susceptible to fading in exterior applications. Refer to Technical Support for guidance.
- 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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