### Technical Data Guide



3 03 01 00 Maintenance of Concrete

# MasterEmaco® P 124

Water-based epoxy-cementitious bonding agent and rebar coating

FORMERLY EMACO® P24

#### **PACKAGING**

2.7 GALLON (38.4 LB) KIT:

- Part A: 0.42 gal (1.6 L) epoxy resin
- Part B: 0.42 gal (1.6 L) epoxy hardener
- Part C: 31 lbs (14.1 kg) cementitious component
- 4.8-GALLON (68.0 LB) KIT
- Part A: 0.74 gal (2.8 L) epoxy resin
- Part B: 0.74 gal (2.8 L) epoxy hardener
- Part C: 55 lbs (24.9 kg) cementitious component

#### YIELD

The coverage is 80 ft $^2$ /gal (2.0 m $^2$ /L) at a thickness of 20 mils (0.5 mm).

#### STORAGE

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

#### SHELF LIFE

1 year when properly stored

#### VOC CONTENT

0 g/L less water and exempt solvents

#### DESCRIPTION

MasterEmaco P 124 is a water-based epoxy-cementitious bonding agent. It is also used to coat and protect rebar.

#### PRODUCT HIGHLIGHTS

- · Extended open time
- Integral corrosion inhibitor provides additional protection for reinforcing steel
- High alkalinity; compatible with cementitious materials
- Premeasured units
- · Blue color facilitates proper coverage

#### **APPLICATIONS**

- Bonding plastic concrete to hardened concrete
- · Coating steel rebar to protect against corrosion
- Areas where short open times prevent the use of traditional epoxies

#### SUBSTRATES

- Concrete
- Steel

## HOW TO APPLY SURFACE PREPARATION

CONCRETE

- 1. Concrete must be structurally sound and fully cured (28 days).
- 2. The surface to be repaired must be clean, strong, saturated surface-dry (SSD) and prepared in accordance with ICRI Guideline no. 310.2 to permit proper bond.
- 3. The clean substrate must be alkaline (pH above 9.5)

#### REINFORCING STEEL

Remove all oxidation and scale from the exposed reinforcing steel in accordance with ICRI Technical Guideline No. 310.1R.

#### MIXING

- Precondition all components to 70 F (21 C).
   Thoroughly stir each liquid component before mixing.
- 2. Pour contents of Part A and Part B into a clean mixing bucket and blend the two components for 2 minutes. Slowly add all of Part C. Use a Jiffy paddle and a drill to properly mix the product.



#### **Technical Data** Composition

MasterEmaco P 124 is a water-based epoxy-cementitious bonding agent.

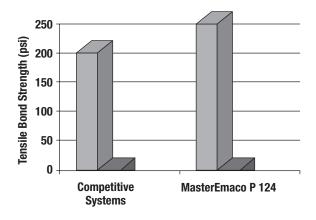
#### **Test Data**

RESULTS	TEST METHOD
90	
30	
8,000 (55.2)	ASTM C 109
1,000 (6.9)	ASTM C 348
	ACI 503R
Psi (MPa)	
> 200 (1.4)	
> 200 (1.4)	
> 200 (1.4)	
	ASTM 882
Psi (MPa)	
> 3,000 (20.7)	
> 2,500 (17.2)	
> 2,000 (13.7)	
4 000 (0.0)	ASTM C 496
	90  30  8,000 (55.2)  1,000 (6.9)  Psi (MPa) > 200 (1.4) > 200 (1.4) > 200 (1.4)  Psi (MPa) > 3,000 (20.7) > 2,500 (17.2)

Test results are averages obtained under laboratory conditions. Expect reasonable variations.

#### Tensile Bond Strength

According to ACI 503R at 28 days, Topping applied 12 hours after MasterEmaco P 124.



#### APPLICATION

Apply with a stiff-bristled broom or sprayer. With any method, be sure to work the bonding agent thoroughly into the substrate. Apply at a rate of 20 wet mils (0.5 mm). When applying to rebar, two coats of 10 mils (0.25 mm) will be required. Protect bonding agent from direct sunlight and temperatures above 95° F (35 °C).

Note: Depending on temperature - 2nd coat can be applied in 30 minutes. 1st coat should be dry with tack free prior to application of 2nd coat.

#### **CLEAN UP**

Clean up with soap and water. Dried material must be removed mechanically.

#### FOR BEST PERFORMANCE

- Substrate and ambient temperature must be from 40 to 95° F (4 to 35° C).
- When MasterEmaco P 124 is used as a bonding agent for overlays or toppings, obtain best results by topping within 6 hours of application. In other applications, including form and pour applications, it will bond to cementitious materials placed within 24-hrs of applying MasterEmaco P 124.
- Do not add solvent, water, or any other material to the product.
- Precondition components to approximately 70°
   F (21° C) for 24 hours before using.
- Protect from direct sunlight, wind, and other conditions that could cause rapid drying of 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 master-builders-solutions. Master Builders Solutions us to verify the most current version.
- 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 are 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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