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Maintenance of
Concrete

MasterEmaco® ADH 502

General purpose non-sag structural concrete adhesive resin

PACKAGING

8.6 fl. oz / 254 ml Cartridge
(12 per Case)

COLOR

Part 1 White
Part 2 Dark Gray

MIX RATIO:

1:1 by volume

STORAGE

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

SHELF LIFE

2 years when properly stored

SUBSTRATES

- Concrete, brick, stone, and block

VOC CONTENT

0 g/L less water and exempt solvents

DESCRIPTION

MasterEmaco ADH 502 is a general purpose two-component non-sag epoxy for cap seal (crack injection) adhesive and repair applications.

Its non-sag property is ideal for bonding most materials and ideal for both overhead and vertical repairs, using a standard caulking gun. It has an application temperature range between 40 – 110 °F (4 – 43 °C).

PRODUCT HIGHLIGHTS

- Low odor
- Solvent free
- Moisture insensitive
- 1:1 ratio in convenient cartridge
- 100% solids
- High modulus
- Wide application temperature range
- V/OH repairs
- Rapid cure, hard in 3 hours and 75 °F (24 °C)

SUBSTRATES

- Concrete
- Masonry

APPLICATIONS

- Interior and exterior
- Structurally re-bond cracked concrete sections
- Re-bond delaminated concrete toppings
- Filling porous or honeycombed concrete or grout
- Anchoring bolts, dowels, and reinforcing bars
- Cap seal for crack injection

TECHNICAL DATA

Compliance

ASTM C 881-15

Viscosity mixed (Dark Gray)

Non-Sag.

Working Time

22 minutes @ 110 °F (43 °C)

45 minutes @ 75 °F (24 °C)

90 minutes @ 40 °F (4 °C)

Temperature Range

40 °F – 110 °F (4 °C – 43 °C).

Test Data

PROPERTY	RESULTS	TEST METHOD
Compressive Strength, PSI (MPa) 7 days	12,720 (88)	ASTM D 695
Compressive Modulus, PSI (MPa) 7 days	698,400 (4815)	ASTM D 695
Bond Strength, PSI (MPa) (hardened concrete to hardened concrete) 2 days 14 days	2450 (16.9) 2910 (20.1)	ASTM C 882
Water Absorption 14 Day	0.32%	ASTM D 570
Linear Shrinkage (2 day)	0.000015 in/in	ASTM D 2566
Heat Deflection Temperature, °F (°C) (7 day)	124 (51)	ASTM D 648

NOTE: Test results are averages obtained under laboratory conditions 75 °F (24 °C). Expect reasonable variations.

HOW TO APPLY

SURFACE PREPARATION

CONCRETE

1. Substrate may be dry or damp, although dry surfaces product optimum cured (28 day minimum).
2. Remove grease, wax, oil contaminants, and curing compounds by scrubbing with an industrial grade detergent or a degreasing compound. Follow with mechanical cleaning (refer to ASTM D 4258). Remove weak, contaminated, or deteriorated concrete by shotblasting, bushhammering, mechanical means.

STEEL

Remove dirt, grease, and oil with a suitable industrial grade cleaning and degreasing compound (SSPC SP 1). Remove rust and mill scale by gritblasting. Blast steel to white metal. Follow gritblasting with vacuuming or oil free dry air blast (refer to SSPC SP 10 or NACE 2)

MIXING

1. Remove static mixer from cartridge. Remove the over plastic cap. Remove the inner seal cap from the cartridge. Twist the static mixer onto the cartridge and ensure it is tight. Insert cartridge into standard (300 ml) caulk gun.

While holding dispensing tip over a cup slowly dispense material until uniform appearance. If not completely discharge replace sealed cap to protect contents until next use.

2. When mixing without the static mixer, remove the protective cap from the adhesive cartridge and insert the cartridge into the recommended dispensing tool. Begin to dispense product through the opening until both products dispense equally and discard this small amount. Dispense equal parts of both part A and part B onto a flat surface. Mix both components together using a putty knife or similar flat tool until a consistent gray color is achieved with no streaks.

APPLICATION

Application temperature range is 40 to 110 °F (4 to 43 °C). Precondition all components to 70 °F (21 °C) for 24 hours before

CARTRIDGE PREPARATION

1. Unscrew plastic cap from threaded end of cartridge and remove plug.
2. Place cartridge into dispenser.
3. Dispense a small amount of container until both materials flow from cartridge.

4. Attach mixing nozzle to cartridge and dispense a small amount of material until uniform color is achieved.

CLEAN UP

Clean uncured mixed material with xylene or mineral spirits. Cured material must be removed mechanically.

FOR BEST PERFORMANCE

- Do not mend dynamic or moving cracks
- Use entire contents of cartridge. Do not attempt to reuse unused portions.
- Product will discolor with exposure to UV.
- For professional use only: not for sale to or use by the general public.
- Contact your local representative for a pre job conference to plan the installation.
- 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 mbsbcst@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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