

MasterEmaco® ADH 327 RS

Paste epoxy concrete bonding adhesive with short pot life

FORMERLY CONCRECISIVE® PASTE SPL

PACKAGING

1 gallon (3.8 L) kits

YIELD

SMOOTH SURFACES:
 12 ft²/gal (0.29 m²/L)

ROUGH SURFACES:
 6 ft²/gal (0.15 m²/L)

STORAGE

Store and transport in unopened containers in a cool, clean dry area at temperatures between 50 and 90° F (10 and 32° C).

SHELF LIFE

2 years when properly stored

VOC CONTENT

0 g/L less water and exempt solvents

DESCRIPTION

MasterEmaco ADH 327 RS is a two-component 100% solids nonsag epoxy adhesive. It is used for vertical, overhead, and horizontal applications. It is recommended for short-term or moderate-intensity loads and application when ambient or concrete-surface temperatures are in the 32 to 50° F (0 to 10° C) range. It may also be used between 50 and 70° F (10 and 21° C) when rapid curing is required.

PRODUCT HIGHLIGHTS

- Nonsag gel consistency ideal for overhead application
- Moisture insensitive bonds to damp surfaces
- Ease of installation
- Cures quickly at moderate temperatures to minimize downtime

APPLICATIONS

- Interior and exterior
- Horizontal, vertical, and overhead surfaces
- Sealing surfaces before epoxy injection
- Pinning loose or broken masonry
- Bonding of rigid materials
- Fairing uneven surfaces, filling gaps and joints
- Grouting bolts, dowels, and rebar into concrete
- As a rigid, pick-proof security sealant

SUBSTRATES

- Concrete
- Steel

HOW TO APPLY

**SURFACE PREPARATION
 CONCRETE**

1. Substrate may be dry or damp, although dry surfaces product optimum results. new concrete must be fully 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, gritblasting, scarifying, or other suitable 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. The mix ratio is 2:1 (A:B). Mix only the amount of material usable before the pot life expires.
2. Measure each component carefully and then add part B to Part A.

Technical Data

Composition

MasterEmaco ADH 327 RS is a two-component 100% solids nonsag epoxy.

Compliances

- ASTM C 881, Type I, II, IV, V, Grade 3, Class A and B

Typical Properties

| COMPONENT | PART A (Resin) | PART B (Hardener) |
|---|---------------------------------|----------------------------------|
| Form | Paste | Paste |
| Color | White | Black |
| Mixing ratio (by volume) | 2 | 1 |
| Mixed color | Gray | |
| | 40 ° F (4 ° C) | 77 ° F (25 ° C) |
| Nonsag thickness, in (mm) (ASTM D 2730) | 3/4 (19) | 1/2 (13) |
| Pot life, min, 1 gal (3.8 L) | 40 | 14 |
| Open time, min | 90 | 45 |

Test temperature: 77° F (25° C), cured 7 days. Properties listed are typical and may be used only as a guide for determining suitability for particular applications.

Test Data

| PROPERTY | RESULTS | TEST METHOD |
|---|------------------------------|--------------|
| Tensile strength, psi (MPa) | 4,500 (31.0) | ASTM D 638 |
| Elongation at break, % | 0.5 | ASTM D 638 |
| Compressive yield strength, psi (MPa) | 14,000 (96.5) | ASTM D 695 |
| Compressive modulus, psi (MPa) | 3.0 × 10 ⁵ (2.07) | ASTM D 695 |
| Heat deflection temperature, ° F (° C) | 126 (52) | ASTM D 648 |
| Slant shear strength, psi (MPa) | > 5,000 (34.5) | AASHTO T-237 |
| Bond strength, psi (MPa) | 2,300 (15.9) | ASTM C 882 |
| Bond strength, damp-to-damp concrete | 100% concrete failure | AASHTO T-237 |

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3. Mix using a low-speed drill (600 rpm) and mixing paddle (e.g., a Jiffy mixer). Carefully scrape the sides and bottom of the container while mixing. Keep the paddle below the surface of the material to avoid entrapping air. Proper mixing will take at least 3 – 5 minutes. Well-mixed material will be free of streaks or lumps and be uniform in color.

APPLICATION

Application temperature range is 32 to 70° F (0 to 21° C). At 32° F (0° C), ensure that all ice has been removed from the surface being bonded.

GENERAL BONDING

1. The bondline thickness should be $\frac{1}{32}$ – $\frac{1}{8}$ " (0.8–3 mm). Ideally, a small amount of bonding agent should extrude from the joint when the surfaces are mated and pressure is applied. Surfaces must be mated within the open time of the paste.
2. Deep surface irregularities can be faired with a 1-to-1 sand and MasterEmaco ADH 327 RS mix. Allow this fairing material to set. Within 24 hours, apply neat bonding agent with a trowel in sufficient quantities to fill all gaps between the mated surfaces.

BOLT AND REBAR GROUTING

1. The hole must be free of water or debris before grouting.
2. Minimum annular space is $\frac{1}{4}$ ".
3. Apply a measured amount of bonding agent into the bottom of the hole with a caulking gun equipped with an extension nozzle. Insert the bar, displacing the paste, then secure the bar in the center of the hole. Remove excess bonding agent from around the hole before it hardens. Use pressure grouting for holes deeper than 2 ft (0.6 m).

CLEAN UP

Clean all tools and equipment immediately with xylene or mineral spirits. Cured material must be removed mechanically.

FOR BEST PERFORMANCE

- Bonding to a clean damp surface is possible but less desirable than to a dry surface. When applying this product to a damp surface, remove free water by airblast.
- Do not add solvent, water, or any other material to the bonding agent.
- 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 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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