

ZeraBond™ 35

High Strength Clear Epoxy Bonding Agent



DESCRIPTION

ZeraBond™ 35 is a two-component, medium viscosity, 100% solids, moisture insensitive, high strength epoxy adhesive. It is designed primarily for bonding new plastic concrete to existing concrete slabs and steel.

WHERE TO USE

- Bonding fresh, plastic concrete to hardened concrete
- Anchoring bolts, dowels, or pins
- Mix with dried silica sand to create a repair mortar
- Structural adhesive for concrete, masonry, metal, wood

BENEFITS

- 100% solids, zero VOC's
- Excellent adhesion properties to concrete and steel
- Excellent working time
- Adheres to damp concrete
- DOT not regulated, non-corrosive
- Convenient one-to-one mixing ration
- Moisture insensitive during the application and throughout the cure
- High shear and tensile strength
- Open time of the applied thin film is 4-5 hours @ 23°C (74°F)

HANDLING PROPERTIES @23°C (74°F)

Mix Ratio, by Volume	1 part A: 1 part B
Viscosity (Mixed)	2300 cps
Mixed Weight (Density)...	1.06 kg/litre (8.83 lb./US gal)
Pot Life	2-3 hours
Initial Cure	12 hours
Full Cure	7 days
Color	Clear (amber)

CURED PROPERTIES (7 days cured @R.T./50% RH)

Tensile Strength	22-25 MPa (3200-400 psi) (ASTM D638)
Tensile Elongation	8% (ASTM D638)
Compressive Strength	40-62 MPa (5800-9000 psi) (ASTM D695)

SURFACE PREPARATION

Prepared concrete substrate should be structurally sound, dry and free from grease, oil, dust, loose particles and all foreign contamination. All concrete should be chemically cleaned or mechanically scarified for best results. New concrete should be cured 30 days and any surface laitance or curing compound must be removed. The surface must be prepared by sandblast, shotblast or any other mechanical

means. All spalled, delaminated or unsound concrete must be repaired using standard methods prior to the installation of ZeraBond™ 35.

Steel surfaces should be free of dirt, grease, oil or rust. Blast surface using an angular medium such as aluminum oxide or grit to SSPC-SP10 standard, with a minimum profile of 2.5 mils. **Where sandblasting is not practical, the surface should be degreased and mechanically abraded to reveal continuous bright metal.**

AREA PREPARATION

For optimal performance, both the coating and substrate should be maintained at 18 to 30°C (68 to 86°F) for 24 hours prior to beginning work. The same temperature range should be maintained during mixing, application, and cure.

Application in direct sunlight and rising surface temperatures may result in blistering of materials due to the expansion of entrapped air or moisture in the substrate. Concrete that has been in direct sunlight must be shaded 24 hours prior to application and remain shaded until after the initial set.

MIXING & APPLICATION

Bonding for fresh concrete to old concrete:

The use of epoxy adhesive will allow feather edging for concrete mix for areas other than joints, edges or corners. The edges of the deteriorated area should be 1/4" minimum in thickness and should be saw cut to a sound concrete in order to eliminate edge spalling.

Premix both A and B for 30 seconds to ensure uniformity. Combine equal volumes of both A and B of ZeraBond™ 35 into a clean container and mix thoroughly with slow speed Jiffy Mixer for 2 minutes. Move the stirrer up and down and around the sides until a homogeneous uniform mix is obtained. Avoid making the mix frothy by whipping in an excessive amount of air. Do not mix more ZeraBond™ 35 than can be used within the pot life of the product. Application and surface temperatures should be at least 50°F (10°C) and rising.

Immediately pour all mixed coating onto the edges of prepared floor and spread the material evenly with a flat squeegee. Using a lint free 6 mm nap roller back roll the applied material to provide an even coat. Care should be taken not to over-roll the material as air may become entrapped in the coating. Place fresh concrete onto

ZeraBond™ 35 while it is still tacky. The open time is typically 3 to 4 hours at 73°F (23°C). The open time is reduced at warmer temperatures. If **ZeraBond™ 35** loses tackiness or exceeds open time, abrade the surface of the epoxy and re-apply **ZeraBond™ 35**, then proceed. NEVER PLACE CONCRETE OVER DRIED EPOXY.

Mortar: Mix Part ‘A’ and Part ‘B’ as per above instructions. Add 3-4 parts dry silica aggregate by volume. Add aggregate gradually and mix thoroughly exercising care not to entrap excessive amounts of air.

Adhesive Application:

Apply a thin uniform layer of pre-mixed **ZeraBond™ 35** with a brush, or a roller. Avoid forming pools or puddles. Place fresh concrete or the topping while **ZeraBond™ 35** is still tacky.

Patching Application: Saw cut perimeter of spall and prime with mixed neat **ZeraBond™ 35**. Surface should be dry and clean. Apply mortar by trowel.

LIMITATIONS

ZeraBond™ 35 is not recommended for:

- Applications where ambient temperatures are below 10°C (50°F).
- Repairs applied underwater.

COVERAGE

3m²/L (120ft²/U.S. gal) depending on surface texture.

PACKAGING

Available in:

7.58 Litre (2 U.S. gal.)

37.9 Litre (10 U.S. gal.)

CLEAN UP

Clean up all equipment with xylene prior to material set.

SAFETY PRECAUTION

Consult the Material Safety Data Sheet (MSDS) for specific instructions.

STORAGE

Store in a heated warehouse. Storage at temperatures below 4.5°C (40°F) may cause the resin to crystallize.

SHELF LIFE

Two years from the date of manufacture if kept in the original unopened containers under normal heated warehouse conditions.

WARRANTY

“The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied

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