

REBAR PRIMER/BOND-CI

Cementitious corrosion protection and bonding agent

CSI Div. 03

03 01 00 Maintenance of Concrete

LEED Points

MR Credit 5.1, Regional Materials.....Up to 2 Points
 IEQ Credit 4.2, Low-Emitting Materials Paints and Coatings... 1 Point
Using this AQUAFIN product can help contribute to LEED certification of projects in the categories shown above.

Product Description:

REBAR PRIMER/BOND-CI is a one-component, cementitious, anti-corrosion coating for protection of steel reinforcement and as a bonding agent for concrete surfaces.

Typical Applications:

- As an anti-corrosion, protective coating for steel rebar in concrete restoration.
- As a bonding agent for concrete repair mortars or fresh concrete.

Advantages:

- Mixes with water only
- Extended pot life and contact time
- VOC compliant (solvent free)
- Resistant to penetration of water and chlorides
- Excellent workability with long pot life
- Very easy to use even on vertical and overhead areas
- Extended open time allowing for repair mortars up to 3 days after application
- Can be applied by brush or spray
- Active corrosion inhibitor

Substrate Preparation:

- Before application of REBAR PRIMER/BOND-CI, exposed steel reinforcement must be cleaned by abrasive blasting.
- Concrete reinforcement must be dry, dust and grease free. Follow abrasive blasting by removing all dust (refer to SSPC-SP-10 or NACE-2)
- Concrete surfaces must be clean and free from laitance, dirt, dust and any other bond inhibiting substances.
- Prepare surface by mechanical means to obtain a surface profile of CSP 3 - CSP 5 per ICRI Guideline No. 310.2-R2013, Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays and Concrete Repair.
- Concrete surfaces must be left in a saturated surface dry (SSD) condition immediately prior to the application of REBAR PRIMER/BOND-CI.

Mixing Ratio:

- 10 lb. (4.5 kg) pail: 1.4 qts. (1.32 L) of water (yield of 0.75 mixed gallon)

Technical Properties:	
Physical state	Cement powder
Color	Red
Components	One
Bulk density	1.2 kg/dm ³
Working time	~60 minutes @ 68°F (20°C)
Application temperature	40°F (5°C) to 95°F (35°C)
Physical Properties: The values stated are applicable with ambient temperatures of 73° F (23° C) and 50% relative air humidity. Higher temperatures shorten the processing time, lower temperatures extend processing times.	
Flexural Strength ASTM C 348	~1,400 psi @ 28 days
Splitting Tensile Strength ASTM C 496	~500 psi @ 28 days
Slant Shear ASTM C 882	~2,600 psi @ 28 days
Yield as a Bonding Agent: ~60 ft ² /mixed gal. (one coat at 20 mils)	
Yield on Reinforcing Steel ~30 ft ² /mixed gal. (two coats at 20 mils each)	
Bar Size	Linear Feet (m) Covered
#4	230 (70)
#5	184 (61)
#6	153 (47)
#7	131 (40)
#8	115 (35)

Mix REBAR PRIMER/BOND-CI with a suitable drill (max. 300 rpm) and mixing paddle (mixing time approx. 2 – 3 minutes) until a homogenous and lump free consistency is achieved. Allow material to sit approx. 2 minutes then remix 15 – 30 sec. Only mix as much material as can be used within working life of the material (1 hour depending on temperature).

Application:

- **Steel reinforcement anti-corrosion coating:**
 Apply REBAR PRIMER/BOND-CI by brush or spray at a thickness of 20 mils to properly prepared steel reinforcement. Take care to properly coat the underside of the exposed steel. Apply the second coat, at the same rate, after the first coat has dried (approx. 2 hours). Place repair mortar after primer has dried and within 7 days of application.

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- **Concrete bonding agent:**

Apply REBAR PRIMER/BOND-CI by brush or spray at a thickness of 20 mils to a properly prepared and SSD concrete surface.

Application of repair mortar or fresh concrete is best while the REBAR PRIMER/BOND-CI is wet. Place repair mortar or fresh concrete immediately after application of bonding agent, or after it has dried (2 to 4 hours), but within 3 days of application.

- **Clean-up:**

Thoroughly clean tools with water (before material hardens).

- **Shelf Life:**

12 months when stored dry in the original unopened packaging.

- **Packaging:**

22 lb (10 kg) pails (yield of ~1.65 mixed gallons)

- **Limitations:**

- Ensure that the substrate and ambient temperatures are between 40°F (5°C) and 90°F (32°C).
- Minimum thickness for corrosion protection is 40 mils.
- Minimum thickness for bonding agent is 20 mils.
- Pre-condition material to 70°F (21°C) for 24 hours before using.
- Protect from freezing for 24 hours after application.
- Cover treated areas with suitable sheeting to protect against rain, contamination with bond-breaking substances (i.e. construction dust), and corrosion causing salts (i.e. ocean air).
- If material is exposed to the elements, the surface must be cleaned with water prior to the placement of mortar or concrete.
- Areas not being treated are to be protected from the effects of REBAR PRIMER/BOND-CI.
- Do not re-temper.

- **Note:**

Proper application is the responsibility of the user. Field visits by AQUAFIN personnel are for the purpose of making technical recommendations and not for supervising or providing quality control on-site.

- **Health & Safety:**

Refer to SDS. KEEP OUT OF REACH OF CHILDREN.

REBAR PRIMER/BOND-CI contains cement that forms an alkaline reaction with moisture. Therefore contact with the eyes and skin is to be avoided and mortar splashes are to be thoroughly washed off immediately with plenty of water. On contact with the eyes, seek medical attention from an eye specialist.

LIMITED WARRANTY: AQUAFIN, INC. warrants this product for a period of one year from the date of installation to be manufactured free of defects and to be consistent with its technical properties as stated in our current Technical Data Sheet. This product must be used as directed and within its stated shelf life. AQUAFIN INC. will replace or at our discretion refund the purchase price of any product, excluding cost of labor, which is proven to be defective. Our product recommendations are based on industry standards and testing procedures. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. We assume no warranties written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

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