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Technical Datasheet

MORTAR-QuickPatch

Rapid setting, horizontal patching and resurfacing mortar

CSI Div. 03

03 01 30.61 Resurfacing of Cast-in-Place Concrete 03 01 30.71 Rehabilitation of Cast-in-Place Concrete

LEED Points

Product Description:

MORTAR-QuickPatch is a one-component, versatile, fast-setting, cementitious patching and resurfacing mortar. It can be applied from featheredge to 3" (75 mm). MORTAR-QuickPatch sets fast for easy and cost efficient repairs, minimizing downtime for quick return to service.

Typical Applications:

- Patching and resurfacing interior and exterior concrete floors, decks, patios, balconies, sidewalks and driveways.
- Sloping and leveling elevation changes.
- To provide a like-new finish on worn or spalled horizontal concrete.
- Fill small holes, honeycomb and spalled vertical surfaces.

Advantages:

- Natural gray to blend with existing concrete
- For interior and exterior use
- Outstanding workability and ease of placement
- One component just add water
- Fast setting walk on in approximately one hour
- Can be covered with many floor coverings such as adhesives, urethanes and epoxies within 16 - 24 hours. Always follow floor covering manufacturer's recommendations.
- Featheredge to 3" (76 mm)

Substrate Preparation:

- Concrete surfaces must be structurally sound, free of any loose or deteriorated concrete, dirt, dust, grease, oil, sealers, curing compounds and all other bond-inhibiting materials.
- Mechanically prepare surfaces to achieve a concrete surface profile equal to CSP 3 - 5 as per ICRI Guideline No. 310.2R-13.
- Properly clean profiled area by water-blasting.
- Repair areas exposed to automobile or hard wheeled traffic, should have saw-cut straight edges with a minimum of 1/4" (6 mm) depth. For optimum performance, do not featheredge when exposed to "non-pedestrian" traffic.

Priming:

<u>Steel</u>: All exposed steel must be mechanically cleaned to a white metal finish and primed with 2 coats (20 mils per coat) of Aquafin REBAR PRIMER/BOND CI.

<u>Concrete</u>: Must be primed with scrub coat of MORTAR-QuickPatch. Do not allow scrub coat to dry before completing repair.

| Technical Properties: | | |
|---|---|--|
| Physical state | Powder | |
| Color | Gray | |
| Flammability | Flame Spread: 0 Fuel Contribution: 0 Smoke Development: 0 | |
| AQUAFIN MORTAR-QuickPatch Mixed | | |
| Mix ratio (water:powder) | 3.75 qts. (3.5 L) : 50 lbs. | |
| Application temp. range | 40°F to 90°F (4°C to 32°C) | |
| Working time | approx. 20 minutes | |
| Physical Properties: The values stated are applicable with ambient temperatures of 73°F (23°C) and 50% relative air humidity. Higher temperatures shorten the setting time and colder temperatures retard setting times. | | |
| Compressive Strength (ASTM C109) | 6 hrs 1 day 7 days 28 days | 3,500 psi (24.1 MPa) 5,000 psi (34.5 MPa) |
| Length Change (ASTM C157) | +0.001% | |
| Approximate yield per 50 lb. bag: $^{\sim}$ 0.42 $\mathrm{ft^3}$ | | |
| Storage/Shelf Life/Packaging | | |
| Cool and dry, 12 months in original sealed packaging | | 50 lb. bag (22.7 kg) |

Mixing:

Mixing Ratio: 3.75 qts. (3.5 L) of water per 50 lb. bag

- For best results, mechanically mix at slow speed with a 3/4" drill and "eggbeater" style mixing paddle.
- Add the appropriate amount of potable water into a clean mixing bucket. Gradually add powder while mixing continuously. Add remaining amount of water as needed for workability.
- Mix at slow speeds to prevent entraining air for a minimum of 3 minutes until a lump-free consistency is achieved.

DO NOT OVERWATER! If too much water is added, the mixture will segregate resulting in uneven surface strengths. Surfaces with reduced strength must be removed mechanically.

Application:

- 1. Read all application instructions thoroughly before installation.
- 2. Only proceed with application when the temperatures remain between 40°F and 90°F (4°C and 32°C) and protect from freezing for 24 hrs. after application. For temperatures above 85°F (29°C), follow ACI hot-weather application guidelines to ensure a successful installation.
- 3. Prior to application all surfaces must be saturated surface dry (SSD) with no standing water.

MORTAR-QuickPatch

- When using MORTAR-QuickPatch as a final wear surface, apply an appropriate finish (such as a broom finish) shortly after the material has been placed.
- When steel trowel finishing, it is suggested to allow the repaired area to stand undisturbed until it has reached initial set, approximately (15 - 30 minutes) before finishing.
- 6. Working time is approximately 20 minutes at 72° F (22° C).

Clean-up

Clean all tools and equipment with water prior to the material hardening. Cured material must be removed mechanically.

Curing

Begin curing as soon as the material has set by keeping surface moist as per ACI recommendations for portland cement concrete, using burlap, polyethylene or a fine mist of water. If this is not practical, coat with approved water based curing compound.

Limitations:

- Do not bridge moving cracks or joints.
- Do not add admixtures or extend with aggregate.
- Protect from freezing for 24 hours after application.
- Do not apply when rain is expected within 4 hours after placement.
- Do not add water to the surface during the finishing operation.

Shelf Life:

Store in a cool dry area. Shelf life is 12 months in original, unopened package.

Note:

Installer is responsible for proper product application. Site visits by Aquafin personnel or representatives are solely for the purpose of making technical recommendations, not for providing supervision or quality control.

Safety:

Refer to SDS. This product contains portland cement and sand (crystalline silica) and is highly alkaline (irritant) in contact with water. Avoid breathing dust. May cause delayed lung injury (silicosis). Use rubber gloves and goggles during mixing and application. Protect skin and eyes. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of cool water and seek medical advice.

KEEP OUT OF REACH OF CHILDREN.

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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