

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

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:

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.
- Vertical restoration of columns and stair risers by form & pour.

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
- Several types of flooring can be installed over MORTAR-QuickPatch within 16 - 24 hours. Always refer to industry standards, the flooring manufacturer's written guidelines, as well as the flooring adhesive manufacturer's written guidelines and then evaluate the surface of MORTAR-QuickPatch for suitability.
- Featheredge to 3" (75 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.
- Areas designated to receive repairs must remain structurally sound and stable during demolition and surface preparation work, and these conditions must continue throughout the course of the repair work. Any areas of concern or uncertainty should be discussed immediately with the site Superintendent and brought to the attention of the Engineer of record.
- 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.

Technical Properties:	
Physical state:	Powder
Color:	Gray
Bulk Density:	~94 lbs/ft ³ (~1.5 kg/cm ³)
Flammability:	Flame Spread: 0 Fuel Contribution: 0 Smoke Development: 0
AQUAFIN MORTAR-QuickPatch Mixed	
Mix ratio (water:powder):	3.75 qts/50 lbs (3.5 L/22.7 kg)
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. 3,000 psi (20.7 MPa) 1 day 3,500 psi (24.1 MPa) 7 days 5,000 psi (34.5 MPa) 28 days 6,000 psi (41.4 MPa)
Length Change (ASTM C157):	+0.001%
Approximate yield per 50 lb. bag:	
Cubic Ft.:	~0.40 - 0.46 ft ³ (0.011 - 0.013 m ³)
Sq. Ft. at 1/4" (6.35 mm):	~18 - 22 ft ² (1.67 - 2.04 m ²)
Approximate yield per 13 lb. pail:	
Cubic Ft.:	~0.10 - 0.12 ft ³ (0.002 - 0.003 m ³)
Sq. Ft. at 1/4" (6.35 mm):	~4 - 6 ft ² (0.37 - 0.55 m ²)
Actual coverage may vary due to surface profile.	
Storage/Shelf Life/Packaging	
Cool and dry, 12 months in original sealed packaging	50 lb. bag (22.7 kg) 13 lb. pail (5.9 kg)

For optimum performance, do not featheredge when exposed to "non-pedestrian" traffic.

Priming:

Steel: All exposed steel reinforcement must be mechanically prepared to remove all traces of rust, oxidation, and corrosion and primed with Aquafin REBAR PRIMER/BOND-CI.

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

MORTAR-QuickPatch

Mixing:

Mixing Ratio:

- 50 lb. bag (22.7 kg): 3.55 - 3.75 qts. (3.36 - 3.55L) of water per bag
- 13 lb. pail (5.9 kg): 0.8 - 1 qt. (0.75 - 0.94L) of water per pail
- For best results, mechanically mix at slow speed with a 3/4" (19 mm) drill and "eggbeater" style mixing paddle.
- Add the appropriate amount of potable water into a clean mixing bucket. Start with lowest water amount per mixing ratio. Gradually add powder while mixing continuously. Add remaining amount of water, a little at a time, up to the highest water amount per mixing ratio if needed for workability.
- Mix at slow speeds to prevent entraining air for a minimum of 3 minutes until a lump-free consistency is achieved.

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 90°F (32°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.
4. 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.
5. 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 sand, aggregate, cement, accelerators, retarders, admixtures, or other ingredients to the mix.
- Do not exceed the range of water in the mix ratio. Adding extra water to the mix will reduce the strength and performance of MORTAR-QuickPatch and can also lead to mix segregation which may result in weak and unacceptable surfaces.
- Do not re-temper or use additional water during the finishing process. The addition of excess water will negatively affect the materials final properties.
- Protect from freezing for 24 hours after application.
- Do not apply when rain is expected within 4 hours after placement.
- Concrete repair products are not designed to color-match existing concrete surfaces. In addition, jobsite conditions including temperature, humidity, and air movement can create color variations within the application of the same unit of MORTAR-QuickPatch.

Shelf Life:

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

Note:

Proper application is the sole responsibility of the user. Applicators are expected to follow ICRI and ACI guidelines as well as other applicable industry standards. Aquafin personnel or representatives are not site inspectors or construction project managers and therefore do not approve surface preparation, mixing, or application of Aquafin products. Site visits by Aquafin personnel or representatives are solely for the purpose of making technical recommendations, not for providing supervision or quality control.

General Information:

All details in particular to the suggestions for the processing and use of the product is based on our present knowledge and experiences at the time of printing. Depending on specific applications, in particular regarding substrates, processing and environmental conditions may affect the final results.

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 do not guarantee compatibility of Aquafin products with other brands. For this reason, we strongly recommend application of a sample area at the jobsite to help determine suitability with other products. 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.

For Professional Use Only.