



# RAPID PATCH® CONCRETE REFINISHER

Fast-setting patching material for vertical, overhead, and horizontal concrete surfaces

©AKONA MANUFACTURING LLC, A TCC Materials Company • May 2017 Version 3.1

## PRODUCT DESCRIPTION

Rapid Patch® Concrete Refinisher is a heavy duty, fast-setting patching material for concrete tilt-up panels, pre-cast concrete, concrete block, concrete pipe, and other concrete or masonry surfaces. This product is suitable for interior or exterior use. Just add water to create a workable, easy to apply mixture with excellent bonding characteristics. This product may be trowel applied over existing concrete surfaces from a feather-edge to 2" (5 cm) thickness to refinish the appearance of concrete surfaces. It can be shaved or molded to required shape.

## WHEN/WHERE TO USE

- When downtime is critical
- Ideal for vertical, overhead and horizontal repairs
- Interior or exterior
- When high early strength and fast setting is required
- Use for patching concrete pipes, masonry, curbs, sidewalks, formed and precast concrete walls or surfaces

## ADVANTAGES

- Fast-setting patching and refinishing material
- Easy to mix and handle
- Excellent freeze/thaw and salt resistance properties
- Excellent low shrink properties
- High strength and excellent durability
- Can be shaved and/or sanded to required shape

## AVAILABLE SIZE

- 50 lb. (22.7 kg) bag (BOM #103145)
- 3 lb. (1.4 kg) zip pouch (BOM #104563)

## COVERAGE

1 lb. will yield 1 sq. ft. at 1/8 in. thickness (0.09m<sup>2</sup> per 0.45 kg at 3 mm)  
50 lb. (22.7 kg) bag yields approximately 1/2 cu. ft. (0.014 m<sup>3</sup>)

## PREPARATION

Read all directions before starting work. Proper surface preparation is crucial to achieving a successful application. The surface should be prepared according to procedures outlined in the American Concrete Institute (ACI) 546R-14, "Guide to Concrete Repair" or the International Concrete Repair Institute (ICRI) Technical Guideline Number 310.1R-2008, "Guideline for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion." All surfaces must be structurally sound. Remove all dust, waxes, sealers, old adhesive residue, curing compounds, oil, or other foreign materials prior to application.

## MIXING

Mix approximately 4% - 5 qt. (4.5 - 4.73 L) of water per 50 lb. (22.7 kg) bag of Rapid Patch Concrete Refinisher to form a stiff, no slump mixture. Add water to the mixing container first, then slowly add the powder. Mix to a uniform, lump-free consistency. If additional water is needed for your application, add in small doses. Material becomes stiff in approximately 8 -10 minutes, so mix only what you plan on using in this time period.

## APPLICATION

Apply only to surfaces that are frost free and above 40°F (4°C) and below 100°F (38°C) within 24 hours of application and 72 hours thereafter, and rain is not expected for 24 hours. Prior to material placement, dampen the area to be repaired with clean water to a saturated-surface-dry (SSD) condition. Improved bond may be achieved by mixing a slurry coat consisting of the Rapid Patch Concrete Refinisher powder and water to a pancake batter-like consistency and brushing it around the area to be repaired. The repair should be made before the slurry coat dries.

Product can be applied to vertical, overhead and horizontal concrete surfaces in single pass thickness between feather edge and 2 inch (5 cm) using pressure to force material into position. Please note that material may be prone to slump off of vertical and overhead surfaces when placed thicker than 1 1/2 in. (3.8 cm) in one lift. Once the



material has been placed and achieves initial set, use a trowel to shave or shape the material to the surrounding surface.

Cold weather conditions below 45°F (7.2°C) can extend the set time of the product. Heating of the concrete repair area before and after placement and using warm water for mixing may assist in increasing the rate of strength gain. In warm weather conditions, materials and concrete surfaces that are hot may reduce the working time of the product. Keeping water and material cool should assist in maintaining open time of the product.

## CURING

Refrain from using curing/sealing compounds over patching materials for a minimum of two weeks. Under hot and windy conditions, all concrete tends to lose moisture unevenly and may develop plastic shrinkage cracks. Protect from freezing for a minimum of 72 hours. Protect surface from rain for 24 hours.

## CLEAN UP

Use warm, soapy water for cleaning hands and tools while product is wet. Hardened material requires mechanical removal.

## FOR BEST RESULTS

- Use potable water for mixing, no bonding additives are needed.
- Clean trowel frequently during application.
- Do not over-work or over-trowel
- As with all cementitious materials, avoid contact with aluminum to prevent adverse chemical reactions and possible product failure.
- Rapid Patch Concrete Refinisher should be installed in accordance with local building code provisions and all applicable ASTM standards. Good workmanship and proper detailing &

## Helpful Items:





# RAPID PATCH<sup>®</sup> CONCRETE REFINISHER

Fast-setting patching material for vertical, overhead, and horizontal concrete surfaces

©AKONA MANUFACTURING LLC, A TCC Materials Company • May 2017 Version 3.1

design assures durable, functional, water tight construction.

*Proper application and installation of all AKONA products are the responsibility of the end user.*

## WARNING

Always read the product SDS and cautionary statements on product container prior to application. Wear proper protective gear as advised on the label and/or SDS. Wash hands thoroughly with warm, soapy water after handling or before eating. Do not take internally. **KEEP OUT OF REACH OF CHILDREN.**

## WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed to the Buyer for the product hereunder.

## Akona<sup>®</sup> Rapid Patch<sup>™</sup> Concrete Refinisher Data

Tests Performed	Typical Values
Pot Life @ 70° F (21° C)	20 Minutes
Initial Set @ 70° F (21° C)	8-10 Minutes
Final Set @ 70° F (21° C)	20 Minutes
Drying Time Before Shaving Patch	10 Minutes
<b>Compressive Strength, psi (ASTM C109)</b>	
3 hours	2,750 psi (193 kg/cm <sup>2</sup> )
1 day	5,530 psi (389 kg/cm <sup>2</sup> )
7 day	6,630 psi (466 kg/cm <sup>2</sup> )
28 day	8,740 psi (614 kg/cm <sup>2</sup> )
<b>Flexural Strength, psi (ASTM C348)</b>	
4 hours	270 psi (19 kg/cm <sup>2</sup> )
1 day	300 psi (21 kg/cm <sup>2</sup> )
7 day	400 psi (28 kg/cm <sup>2</sup> )
28 day	500 psi (35 kg/cm <sup>2</sup> )

<b>Shelf Life</b>	Minimum 12 months in original, unopened container.
<b>Storage Conditions</b>	Store dry in tightly sealed original factory container.
<b>Color</b>	Gray

**WARNING: INJURIOUS TO EYES**

**KEEP OUT OF REACH OF CHILDREN**

### TILT UP PRE-CAST PANELS: TROWEL APPLY OVER EXISTING CONCRETE SURFACES



### VERSATILITY: SHAVE THE MATERIAL TO THE SURROUNDING CONCRETE SURFACE



### CONCRETE PIPE: SHAPING THE BELL

