



POLYMER-MODIFIED CONCRETE RESURFACER

Special acrylic polymer-modified resurfacing cement

1. PRODUCT NAME

Akona® Polymer-Modified Concrete Resurfacer

2. MANUFACTURER

TCC Materials®
2025 Centre Pointe Blvd.
Mendota Heights, MN 55120 USA
Phone: 1.651.688.9116
Web: tccmaterials.com

3. PRODUCT DESCRIPTION

Akona Polymer-Modified Concrete Resurfacer is a special acrylic polymer-modified cement used to resurface spalled and/or damaged interior and exterior concrete surfaces such as garage floors, sidewalks, patios, and steps. Can be applied in a flowable consistency using a long-handled squeegee or in a stiffer consistency using a trowel. Develops a tough bond and dries to a concrete gray color. It may be trowel or broom finished and is designed for applications from ¼ in. (6 mm) down to ⅛ in. (3 mm).

Features and Benefits

- Refinish and renew old concrete surfaces
- Polymer-modified, just add water, mix, and use
- Trowel or broom finish
- Apply from ¼ in. (6 mm) down to ⅛ in. (3 mm) thickness
- On average, allows light foot traffic in 4-6 hours, wheeled traffic in 12 hours

When/Where to Use

- Interior/exterior concrete
- Steps, patios, garage floors
- Renew concrete surfaces

4. TECHNICAL DATA

Applicable Standards:

- ASTM C109/C109M Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2 in. (50 mm) Cube Specimens)
- ASTM C157 Standard Test Method for Length Change of Hardened Hydraulic Cement, Mortar, and Concrete.

Greater than: > Greater than or equal to: ≥ Less than: < Less than or equal to: ≤

Typical Values • Akona Polymer-Modified Concrete Resurfacer	
Initial Set Time	Approximately 20 minutes
Final Set Time	Approximately 60 minutes
Compressive Strength ASTM C109 (air dry)	
24 hours	> 1,250 psi (8.6 MPa)
3 days	> 3,500 psi (24.1 MPa)
28 days	> 5,000 psi (34.4 MPa)

Note: Test results obtained under controlled laboratory conditions at 72°F (22°C) and 50% relative humidity. Reasonable variations can occur due to atmospheric and job site conditions.

Available Size

- 25 lb. (11 kg) bag (BOM # 102642)

Coverage

- 1 sq. ft. per lb. at ⅛ in. thickness (0.09m² per 0.45 kg at 3 mm)
- One 25 lb. (11 kg) bag will cover approximately 12.5 sq. ft. (1.1 m²) at ¼ in. (6.3 mm) thickness

5. INSTALLATION

Preparation

Read all directions before starting work. Proper surface preparation is crucial to achieving a successful application.

1. Remove all loose or unsound materials. Thoroughly clean surface of dirt, dust, grease, paint, algae, mildew or other contaminants before patching, topping, or placing overlays.
2. Surfaces should be a light broom finish or rougher to ensure proper bond adhesion. Smooth troweled or dense concrete surfaces must be mechanically roughened. For best results, apply to clean surface with a concrete surface profile texture between CSP 4 and CSP 6 as referenced in the International Concrete Repair Institute (ICRI) Technical Guideline No 310-2. Mechanical methods such as grinding, shotblasting, scarifying, or sanding can be used to create surface texture.
3. For soiled surfaces, scrubbing with a concrete cleaner, degreaser, or detergent is recommended. Always rinse thoroughly with clean water to remove all cleaning solutions. A 2,500 to 3,500 pressure washer is also advisable to remove all contaminants. Acid washing is not advised, it can damage the existing concrete if not properly done.
4. All cracks or depressions greater than ¼ in. (6 mm) deep should be repaired with a concrete repair product such as Akona Vinyl Cement Patch (sold separately) at least three days prior to resurfacing to allow the repairs to properly cure. Minor blemishes (less than ¼ in. deep) may be repaired with Polymer-Modified Concrete Resurfacer mixed to a trowelable consistency 2-4 hours before applying overlay.
5. For sloped applications, no forms are needed for toppings of ⅛ in. (3 mm). Use removable form boards or other slope guides for thicker toppings.
6. If possible, divide work areas into sections no larger than 100 -140 sq. ft. (9.29-13 m²). Expansion joints and control joints will often form natural breaking points. Expansion and control joints must be maintained, do not fill with the Resurfacer. Weather stripping or duct tape can be used to prevent spillage of the Resurfacer into these joints and surrounding areas.
7. Just prior to application, pre-dampen surface to be repaired with clean water to saturated surface dry (SSD) condition with no standing water remaining.

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Mixing

1. Use cool, potable water, clean tools and clean containers. No bonding additive is needed.
2. Mix only the amount that can be applied within the 10-20 minute working time.
3. Add approximately 3¾ pt. (1.77 L) of clean, cool water per 25 lb. (11 kg). Always stir the powder into the liquid for easier blending. Mix with a paddle mixer on a drill or mechanical batch mixer. Avoid high-speed mechanical mixing which can entrap air into the mixture. A 5-gallon pail can work well as a mixing container, and can be used to pour the mixture onto

the surface being covered. Smaller amounts can be mixed by hand.

- Mix to a uniform, lump-free, stiff, pourable consistency similar to pancake batter or honey. Mixing time is approximately 2-3 minutes. Do not retemper with extra water.
- Warmer temperatures will reduce the working time. The addition of cold water at high temperatures, or warm water in low temperatures will aid in adjusting the mix temperature.

Application

- For best results, do not apply in direct sunlight or on hot, windy days, or when temperatures drop below 50°F (10°C) within 48 hours of application. Protect from rainfall for at least 4 hours after application.
- Clean concrete surface must be completely dampened with no pooling water (also known as saturated surface dry, or SSD). Apply to a uniform thickness of 1/8 - 1/4 in. (3 - 6 mm) with a flat trowel or long-handled squeegee applying some pressure to ensure proper bond. A technique of alternating between spreading with a squeegee and smoothing with a 24 in. drywall knockdown knife works well. Wetting the trowel blade will aid in smoothing.
- Color variation can occur when Resurfacer is applied at uneven thicknesses, especially if it is paper thin in high points and thicker in low points, and color can also vary due to water amounts used, variation in the underlying concrete, and curing conditions. Do not apply over control or expansion joints.
- This product develops initial set in approximately 10-20 minutes depending on temperature and humidity. Complete troweling or broom finish as soon as possible, once thumb print hard and before material hardens. Broom strokes should be in the same direction, opposite the flow of traffic. A concrete edger and groover can be used around the edges for a finished look.
- When desired application thickness is greater than 1/4 in. (6 mm), additional layers can be applied after each layer sets and surface can support foot traffic without indentation (typically 2-4 hours depending on temperature and humidity). Gently fog or lightly mist with water and remove any standing water immediately before applying the second layer. If a second layer is delayed longer than 24 hours, careful cleaning and pressure washing may be needed to provide a clean surface.
- Protect the surface from use until the Concrete Resurfacer is completely hard and set. On average, wait 4-6 hours before allowing light foot traffic, and wheeled traffic in 12 hours depending upon temperature and humidity.
- For vertical applications such as stair risers, mix Concrete Resurfacer to a trowelable consistency.

Curing

Do not wet the surface before the materials has reached final set, at that time, begin moist curing with a gentle mist of water or fog spray. Continue moist curing for 24-48 hours and prior to use. Do not cover unless rain protection is necessary. If desired, water-based sealers may be used per their manufacturer's instructions. Repair can be painted with latex masonry paints once cured for a minimum of 7 days and area remains dry.

Clean Up

Use soapy water to clean hands and tools immediately after use. Dried material must be mechanically removed. Use a waste water hardener (e.g. Congelz® or similar product) for cementitious waste disposal.

Limitations

- Follow all industry standard safety procedures when handling, such as gloves and eye protection. Wear gloves at all times, failure to do so can result in severe burns.
- Use only clean mixing containers and tools.
- Do not add any materials other than clean potable water, no bonding additive is needed.
- Do not cover or fill expansion or control joints.
- Do not use more than the recommended amount of water. Overwatering may cause excessive shrinkage, cracking, reduce adhesion, and long term durability of Polymer-Modified Concrete Resurfacer.
- The final color of Polymer-Modified Concrete Resurfacer will be effected by application thickness, temperature, relative humidity, wind velocity, sunlight and shading, and moisture content of the surface.
- Ideal application temperatures are between 50°F-90°F (10°-90°C).
- Do not apply over concrete cured less than 7 days or surfaces that are frozen or contain frost.
- Surfaces must be clean; do not apply to painted or sealed concrete surfaces.
- Do not apply over polyurethane or acrylic crack fillers.
- Existing cracks can reappear through Concrete Resurfacer due to movement in the concrete base.

Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: tccmaterials.com

Cautions

Read complete cautionary information printed on product container prior to use.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Akona brand product(s) under normal environmental and working conditions. Because each project is different, TCC Materials cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

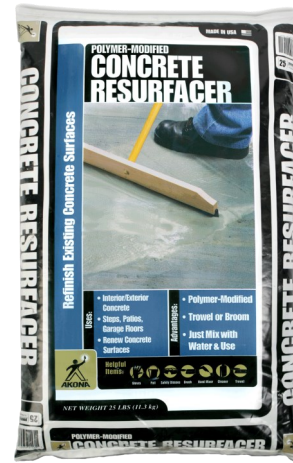
6. AVAILABILITY

To locate Akona products in your area, please contact:

Phone: 1.651.688.9116
Email: info@tccmaterials.com

7. 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 and billable to the Buyer for the product hereunder.



Shelf Life	Best when used within one year in original, unopened bags
Storage Conditions	Store dry, cool, out of direct sunlight. Best to condition material to 50-80°F (10°-27°C) before using.
Color	Gray
WARNING: INJURIOUS TO EYES	
KEEP OUT OF REACH OF CHILDREN	

© Copyright 2020 TCC Materials



2025 Centre Pointe Blvd, Suite
300, Mendota Heights, MN 55120

REV 09/23