

Improves strength, adhesion, abrasion and freeze-thaw resistance

1. PRODUCT NAME

Akona® Concrete Bonding Additive

2. MANUFACTURER

TCC Materials®
2025 Centre Pointe Blvd.
Mendota Heights, MN 55120 USA
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3. PRODUCT DESCRIPTION

Akona Concrete Bonding Additive is an acrylic cement modifier that dramatically improves strength, adhesion, abrasion resistance, and freeze-thaw resistance. Ideally suited for use with non-modified sand, mortar, cement mixes and selected Akona Repair Products. Concrete Bonding Additive produces a patch that will adhere to old concrete and provides the adhesion required for thin overlays.

Features and Benefits

- Enhances strength
- Improves adhesion
- Increases durability
- Provides superior freeze-thaw resistance

When/Where to Use

- Interior and exterior applications
- Add to concrete and sand mixes
- Add to mortar and cement mixes
- Add to repair and patching materials
- Apply to surfaces to be repaired
- Priming surfaces for installing self leveling underlayments

4. TECHNICAL DATA

Akona Concrete Bonding Additive is formulated of fine quality ingredients. It is carefully blended and quality controlled.

Available Sizes

- 1 qt. (0.95 L) bottle (BOM #102658)
- 1 gal. (3.8 L) bottle (BOM #102659)

Coverage

Use as a liquid replacement in place of water according to the following table:

Liquid Addition (50/50 blend of water and bonding additive)		
Concrete Mix Bag	Starting Liquid	Do Not Exceed
60# (27 kg)	2 qt. (2.9 L)	3 ½ qt. (3.3 L)
80# (36 kg)	3 qt. (2.8 L)	4 ½ qt. (4 L)
Sand Mix Bag	Starting Liquid	Do Not Exceed
60# (27 kg)	3 qt. (2.8 L)	4 ½ qt. (4 L)
80# (36 kg)	4 qt. (3.8 L)	6 qt. (5.6 L)
Mortar Mix Bag	Starting Liquid	Do Not Exceed
60# (27 kg)	4 qt. (3.8 L)	5 qt. (4.7 L)
80# (36 kg)	5 qt. (4.7 L)	6 qt. (5.6 L)

5. INSTALLATION

Preparation

Read all directions before starting work.

- Prepare surfaces per manufacturers instructions of the cement, concrete or masonry product being used. Proper surface preparation is crucial to achieving a successful application.

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

Mixing

- Slowly stir product before use. Do not create bubbles or foaming by shaking the product.
- In most cases, use Concrete Bonding Additive as a 50/50 blend of additive and water. When enhanced bond and durability are desired, use 100% Concrete Bonding Additive in place of water.
- Protect liquid from freezing. If frozen, thaw out slowly. Gently stir material to remix. If liquid is not smooth, DO NOT USE.

Application

When used as an additive with concrete mixtures, 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. Do not apply in direct sunlight or hot, windy days or when rain is forecasted within 24 hours. Protect new surfaces from use until material is completely hard and set.

When used as a primer for self leveling underlayments, use the following directions:

Concrete Substrates:

- Concrete substrates must be fully cured (28 days minimum), free of efflorescence, and not subject to hydrostatic pressure or moisture condensation.
- When applying over concrete curing compounds, Akona Bonding Additive can be applied over concrete treated with silicate or acrylic resin curing compounds only. With silicate curing compounds, remove all residual salts. Evaluate bond strength by first installing a sample test area. Minimum tensile bond strength of 72 psi (0.5 MPa) is required.
- Petroleum based or wax emulsions and dissipating curing compounds are not acceptable substrates; they must be removed by mechanical means such as shot blasting or grinding.

Adhesive Cutback Residue over Concrete:

- Akona Self Leveling Underlayment may be installed over properly prepared cutback and carpet adhesive residue that is on concrete only. All adhesive residues must be non-soluble when put in contact with water.
- Before proceeding, test the adhesive residue for water solubility. Water soluble adhesive must be removed mechanically to achieve a clean concrete surface.
- Cutback adhesive residue must be scraped to as thin a layer as possible and no longer be tacky. Any adhesive residue must be sound and well bonded to the concrete surface.
- Reference Akona Self Leveling Underlayment TDS for more detailed information for the substrate requirements and preparation instructions.
- Use Akona Bonding Additive over adhesive residues.

Non-Porous Substrates:

- Akona Self Leveling Underlayment may be installed over non-porous substrates such as well-adhered epoxy coatings, existing ceramic tile, quarry tile, and burnished concrete. Akona Self Leveling Underlayment may also be applied over VCT and non-cushioned vinyl sheet goods if they are a single layer only and well-bonded to a substrate approved for the finished flooring.
- All substrates must be structurally sound and free from all contaminants such as dust, dirt, grease, and any foreign material that may inhibit adhesion.
- Vacuum thoroughly, removing all dust and other loose contaminants before applying the Akona Bonding Additive

Wood Subfloors:

- APA rated exterior grade/exposure 1 plywood or OSB underlayment grade equivalent.

For all of the substrates listed above, apply to surfaces that are frost free and between 50°F-70°F (10°C-21°C) for 24 hours prior and 48 hours after application. Apply an even, continuous film using a brush or short nap roller for non-porous surfaces or a soft push broom for porous surfaces. Leave no bare spots, puddles, or excess primer. Under ideal conditions (70°F/21°C with 50% RH),

Concrete Bonding Additive dries in 1-3 hours. Cures to a transparent color. Apply a second coat if the first coat is rapidly absorbed into the substrate. The primer must be completely dry before installing Akona Self Leveling Underlayment. Protect primed substrate from foot traffic. Primer must be reapplied if not covered within 24 hours or if it becomes contaminated by foot traffic, dust or dirt.

Curing

Follow manufacturers instructions for the cement, concrete or masonry product being used.

Clean Up

Typically water will satisfactorily clean tools immediately after using Concrete Bonding Additive. If the material has begun to harden, warm soapy water may be helpful for cleaning hands and tools. Hardened concrete mixtures require mechanical removal.

Limitations

- Follow all industry standard safety procedures when handling, such as gloves and eye protection.
- Do not allow unused bottle of product to freeze. Store dry at 40°F-95°F (4°C-35°C).
- Best when used in non polymer-modified mixes.

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 bottle.
Storage Conditions	Store dry, 40-95°F (4°-35°C), out of direct sunlight, in tightly sealed original labeled container.
Color	Milky white liquid, dries to clear.

KEEP PRODUCT IN CONTAINER FROM FREEZING

WARNING: INJURIOUS TO EYES

KEEP OUT OF REACH OF CHILDREN



SPEC BLENDED CONSTRUCTION PRODUCTS®

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