

## PRODUCT DESCRIPTION

Akona® Self-Leveling Floor Underlayment Cement is a flowable mortar for use where a level surface is necessary prior to installing floor coverings. It requires minimal labor to produce a smooth, level surface that is ready for installing floor coverings such as ceramic tile, wood, marble, resilient flooring, and carpet. Because the primer is now integral within the mix, you no longer need to spend time or money adding additional primer. When used to encapsulate radiant heating installations, it helps to increase even heat distribution and protects cables or tubes during the finished flooring installation process. Designed for interior applications from 1/8 in. to 1 in. (3-25 mm). Not designed for use as a final wear surface.

## WHEN/WHERE TO USE

- Used to prepare plywood or concrete surfaces prior to installation of flooring
- Designed for interior applications from 1/8 in. up to 1 in. thick (3-25 mm)
- Encapsulate radiant heat installations
- Can be used for leveling, smoothing, and repairing interior floors before installation of floor coverings

## ADVANTAGES

- High strength
- Self-leveling and flowable mixture
- Premixed with integral primer
- Provides flat and level floors

## AVAILABLE SIZE

- 50 lb. (22.7 kg) bag (BOM #104623)

## YIELD

One 50 lb. (22.7 kg) bag will cover approximately 50 sq. ft. at 1/8 in. thickness (4.6 m<sup>2</sup> @ 3 mm).

## PREPARATION

Read all instructions before starting work. Remove all loose or unsound materials. Thoroughly clean all surfaces and substrates of any dirt, dust, paint, wall compound, curing agents, grease, or other

contaminants that could act as a bond breaker before applying an underlayment cement. Smooth troweled or dense concrete surfaces should be roughened to ensure proper bond adhesion. This product will not correct or compensate for a structurally defective substrate, the installer is responsible for ensuring the subfloor is suitable for this underlayment cement and the selected finished flooring.

**Concrete Surfaces:** Floors must be fully cured, free of moisture, free of curing compounds, and contaminants. For best results, the surface should be rougher than light broom finished concrete with a concrete surface profile (CSP) texture between CSP 4 to CSP 6 as referenced in the International Concrete Repair Institute (ICRI) Technical Guideline No 310-2. Mechanical methods such as shotblasting, scarifying, grinding, or sanding can be used to create surface texture.

**Plywood Surfaces:** Plywood surfaces must be at least 3/4 in. (19 mm) exterior grade or exposure 1 underlayment grade fastened securely, structurally sound, with a maximum deflection of L/360 for ceramic tile or L/720 for stone (including live, dead, impact, and concentrated loads). Allow a 1/8 in. (3 mm) gap between sheets and fill with caulk, mortar or tape. All nail holes or areas where flow could leak should be filled with mortar or caulk. Securely fasten every 4 in. (10 cm) either galvanized metal lath or plastic lath designed for this purpose to the plywood surface prior to applying underlayment cement. Install expansion joints where underlayment cement meets retraining surfaces such as perimeter walls or dissimilar floors.

Reference: Tile Council of North America (TCNA) Handbook for Ceramic, Glass, Stone and Tile Installations; International Residential Building Code (IRC); International Building Code (IBC); Marble Institute of America (MIA)

## MIXING

Mix a 50 lb. bag of underlayment cement with measured 4 1/2 qt. (4.275 L) of cool, clean water. Add powder to the pre-measured water and mix with a 400-600 RPM power mixer with a square mortar paddle mixing tool until a lump-free mixture is obtained. A 5 gal. (18.9 L) pail is recommended for mixing. **Do not add additional water** to the product as this will adversely affect the performance of



WARNING: INJURIOUS TO EYES

KEEP OUT OF REACH OF CHILDREN

the product. Acclimating water and powder to room temperatures of 65-75°F (18-23°C), 24 hours before use is recommended. At 70°F (21°C), the product has about a 10 minute flow/heel time. Always pour fresh material into existing material within this time frame.

## APPLICATION

Once product is mixed, pour material onto floor in a uniform manner to achieve a flat floor. Do not over work material once it is on the floor. Best results are obtained pouring across the shorter distance in the room. Restrict underlayment from moving to unwanted area's by creating small dams constructed of 1" x 2" lumber wrapping their edges with duct tape. A gauge rake designed for underlayment's may be helpful for larger areas. If a higher build-up is needed over the first pour, allow 24 hours drying time between pours.

## IMPORTANT NOTES

- Protect new surface from use until material is completely hard and set.
- At temperatures of 72°F (72°C) or above:
  - Surfaces will accept foot traffic in 2-4 hours



## Helpful Items:



- Installation of ceramic tile after reaching walkable hardness, typically 12-24 hours or overnight
- Installation of resilient flooring after 72 hours
- This product may not be used over gypsum surfaces, particle board, paints, adhesive residues, vinyl, plastics, and epoxy or urethane floors.
- This product is not to be used as a final wear surface.

## CLEAN UP

Typically, water will satisfactorily clean tools. If the material has begun to harden, warm soapy water may be helpful for cleaning hands and tools. Hardened material requires mechanical removal.

## 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, express or implied, including, but not limited to, those including 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 at no point for any particular project shall exceed the total purchase price of said product.

## ENVIRONMENTAL ADVISORY

Uncured or crushed cured cement is an environmental hazard, which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.



Applying Self-Leveling Floor Underlayment Cement thru a pump



Applying Self-Leveling Floor Underlayment Cement on top of Plastic Lath with radiant heat cables



A gauge rake designed for underlayments may be helpful for larger areas