



# Akona Feather Patch™

Skim Coat, Patching & Finishing Cement Underlayment

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## Product Description

Akona Feather Patch™ is a non-sanded, portland cement based product for skim coating and finishing of interior subfloors. This product should be applied prior to the installation of flooring applications such as vinyl and VCT, carpet, ceramic tile, slate, granite or marble. Akona Feather Patch™ renders a smooth finish and its self drying properties allow the installation of floor coverings in less than 20 minutes. Other uses include smoothing of ridges, patching cracks and holes or as a skim coat of concrete, interior plywood, ceramic tile, stone, cement terrazzo, and sheet vinyl. This evolutionary product is polymer-modified and has characteristics of a patching material that will produce a feather edge finish.

## When/Where to Use

Akona Feather Patch™ can be used on interior applications where a permanent, water-resistant surface is needed. Strength of the product increases during the initial 28 days. Akona Feather Patch™ can be applied from a feather edge to a thickness of ½" (13 mm) in a single coat without worry of shrinking or cracking. For small holes or patches, a thickness up to 3" is permissible. A minimum floor temperature of 50°F is required for best results.

## Advantages

- Portland cement based
- Self drying
- Fast-setting patching material
- Easy to mix and handle
- Feather edge to ½" thickness
- Excellent low-shrinkage and cracking properties
- Exceptional bond strength

## Typical Yield

- 5 lb. (2.3 kg) pail will skim coat a concrete surface of 115 to 150 sq. ft.
- 40 lb. (18.1 kg) bag will skim coat a concrete surface of 920 to 1,200 sq. ft.

## Packaging

- 5 lb. (2.3 kg) plastic pail
- 40 lb. (18.1 kg) bag

## Surface Preparation

Proper surface preparation is crucial to achieving a successful application. Surfaces must be structurally sound and non-flexing. Remove all dust, waxes, sealers, old adhesive residue, curing compounds, oils, gypsum based materials, surface hardeners, paints, old floorings and other loose or foreign material prior to application. Do not apply where hydrostatic pressure exceeds flooring manufacturers recommendations.

**Cementitious Floors:** For best results, any concrete surface to be skim coated shall be cured for a minimum of 28 days and free of surface imperfections, such as efflorescence. Loose chunks or chips of concrete should be cleared and remove any resulting dust. Smooth, steel-troweled surfaces shall be roughened to provide a mechanical bond. Prior to product application, dampen concrete surface with clean water (no puddles). Apply underlayment while floor is still damp.

**Wood Substrates:** All wood flooring should be structurally sound with no flexing. Only spot patching should be done on wood substrates. Exterior Grade Plywood (EGP) must first be securely fastened.

**Existing Adhesive Residue:** Scrape off all ridges and remove any loose adhesive. Existing adhesive residue shall be hardened and well bonded to the substrate. Residue shall be mechanically reduced to expose the substrate and that only a transparent residue shall be present. Mechanically remove any loose material or old patching compounds. Remove all dust from adhesive residue and check remaining residue to make sure it is not water soluble or will interfere with flooring adhesive. For difficult substrates such as existing adhesive residue, we recommend adding Akona Mighty Bond™ latex additive in lieu of water to increase bond and adhesive strength. The addition of a latex additive will extend the setting time.

**Other Surfaces:** Marble, terrazzo and existing ceramic tile surfaces must be well bonded to subfloor, cleaned of any waxes and abraded to a rough surface prior to application of Akona Feather Patch™. Remove all dust from adhesive residue and check remaining residue to make sure it is not water soluble or will interfere with flooring adhesive. For difficult substrates such as marble, terrazzo and existing tile surfaces, we recommend adding Akona Mighty Bond™ latex additive in lieu of water to increase bond and adhesive strength. The addition of a latex additive will extend the setting time.

## Mixing and Application

- Mix one 5 lb. pail of Akona Feather Patch™ with approximately 1-1¼ quarts (.9 -1.2 L) of clean water or Akona Mighty Bond™ latex additive to increase bond and adhesive strength.
- Mix one 40 lb. bag of Akona Feather Patch™ with approximately 8-9 quarts (7.6 -8.5 L) of clean water or Akona Mighty Bond™ latex additive to increase bond and adhesive strength.

Mix amounts that can be applied in 10 minutes. Always add the powder to the liquid and mix with a low speed drill (300 RPM or less) until a lump-free mix is obtained. Use a mixing paddle that does not entrap air into the mortar. Do not add any liquids other than Akona Mighty Bond™ latex additive or potable water to this product.

**Regular Application:** Prior to application, dampen concrete surface with clean water (no puddles). Apply the mixture to the prepared surface by forcing the initial coat into the substrate with a trowel. Continue to build the material to the desired thickness, not to exceed approximately ½" (13mm). Begin to finish immediately using a flat steel trowel.

**Skim Coat Application:** For skim coat applications, prepare substrate as explained above. Apply mixture using a smooth-edge trowel to level the surface area by forcing the mix into substrate defects, voids and gaps. Trowel at a 45 degree angle to the substrate surface to fill voids while removing excess material from the surface. This product should not be over-troweled or over-worked. Dip application trowel in water frequently to make the finishing process easier; clean tools often. Akona Feather Patch™ may be sanded after a hard set (usually within one hour under normal conditions).





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**Embossing Application:** Embossed felt-backed residential sheet vinyl must be clean and free of any waxes or other finishes. The flooring must be well bonded and not show any signs of moisture, mildew, or other deterioration. For embossing applications use Akona Mighty Bond™ latex additive in lieu of potable water. Typical drying time would be 1 ½ hours prior to using flooring adhesive. Do not use Akona Feather Patch™ for embossing cushion backed flooring or perimeter bonded flooring.



## Curing

A cure time is normally obtained in 15 to 45 minutes, depending on job site conditions. If the new floor coverings and bonding adhesives are affected by moisture, the Akona Feather Patch™ should be tested by a moisture meter prior to installation of subsequent flooring. Allow the Akona Feather Patch™ to dry to an acceptable moisture level recommended by the manufacturers of the flooring materials and bonding adhesives. Always check moisture prior to installation of wood or resilient flooring materials.

## Clean Up

Typically water will satisfactorily clean tools after using Akona Feather Patch™. If the material has begun to harden, warm soapy water may be helpful for cleaning hands and tools.

**WARNING: INJURIOUS TO EYES!**

**KEEP OUT OF REACH OF CHILDREN!**

## Warning

This product contains portland cement. Contact with cement, freshly mixed concrete, or mortar can cause severe burns. The cementitious materials mixed onsite are alkaline in nature and on contact with water may irritate the eyes and skin. If contact with eyes occurs, flood eyes repeatedly with clean water and see a physician immediately. Do not rub eyes. Wash hands thoroughly after handling or before eating. Do not take internally. This product may contain silica. Inhaled silica dust may cause respiratory or other health problems.

## 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, the sellers liability to the buyer at no point for any particular project shall exceed the total purchase price of said product.

## Akona Feather Patch™ Data

Tests Performed	Typical Values
Pot Life @ 70° F (21° C)	15-20 Minutes
Initial Set @ 70° F (21° C)	15-20 Minutes
Final Set @ 70° F (21° C)	30 Minutes
Drying Time Before Floor Covering Install	30 Minutes
<b>Compressive Strength, psi (ASTM C109)</b>	
4 hours	1,500 psi (120 kg/cm <sup>2</sup> )
1 day	2,000 psi (141 kg/cm <sup>2</sup> )
7 day	2,500 psi (183 kg/cm <sup>2</sup> )
28 day	> 3,000 psi (225 kg/cm <sup>2</sup> )

<b>Shelf Life</b>	Six months in original, unopened bags
<b>Storage Conditions</b>	Store dry at 40-95°F (4°C –35°C)
<b>Color</b>	Gray