



FAST FEATHER

FAST SETTING, HIGH STRENGTH, FIBER-REINFORCED FEATHER EDGE REPAIR MORTAR & UNDERLAYMENT TECHNICAL DATA & APPLICATION INSTRUCTION

PRODUCT DESCRIPTION

Kingdom Products' **FAST Feather** is formulated to very rapidly develop maximum strength and attain a tenacious bond. **FAST Feather** can be easily installed from a true featheredge up to 4" in one lift. Fast Feather can be used for repairing vertical, overhead and horizontal concrete surfaces or wherever a fast setting, high strength concrete repair material is needed. May be used in conjunction with Kingdom Products' full line of fast setting products and repair & restoration materials as well as any of the Impressionaire Floor & Wall products.

BENEFITS/FEATURES

- True featheredge
- Easy to mix & apply
- Fiber-Reinforced
- **FAST** setting - reduce down time
- One component - just add water
- High Compressive & Flexural Strength
- Moldable/Shapeable
- Superior bond to existing concrete
- Install organic coatings and floor coverings in as little as one hour

RECOMMENDED APPLICATIONS

Use to repair all vertical, horizontal and overhead concrete surfaces, such as sidewalks, driveways, tunnels, bridges, overpasses, retaining walls, beams, building facades, parking garages, ceilings and balconies. Concrete with defects like honeycombs and spalling or wherever a fast setting, high strength, moldable concrete repair material is needed.

TECHNICAL INFORMATION

Working Time.....	10 min	<u>Compressive Strength ASTM C-109</u>
Not Trowelable.....	15 min	4 Hours.....
Initial Set.....	20 min	24 hours.....
Final Set.....	35 min	7 days.....
Overlay/Coat Time.....	1 Hour	28 Days.....
Light Foot Traffic.....	1 Hour	<u>Flexural Strength ASTM C-348</u>
Wet Appearance.....	Dark Gray	28 Days.....
Dry Appearance.....	Gray	<u>Tensile Strength ASTM C-190</u>
Concrete Adhesion.....	Excellent	28 Days.....
Freeze-Thaw Resistance.....	Excellent	Application Temperature.....

***Please note that low air and/or concrete temperatures and/or relative humidity may extend drying times. Follow recommended coverage rates for best results.*

APPROXIMATE COVERAGE RATES

1 gallon pail (10 lbs) will cover:	9 - 10 sq ft at 1/4"	40 lb bag will cover:	36 - 40 sq ft at 1/4"
	4.5 - 5 sq ft at 1/2"		18 - 20 sq ft at 1/2"

PACKAGING

Kingdom Products' **FAST Feather** is stocked and sold in 10 lb pails and 40 lb bags.

STORAGE & SHELF LIFE

Keep product in a cool dry location in a tightly sealed container. Keep product stored at room temperature. Be sure product is at room temperature prior to use. Colder material may take longer to achieve final set time, while hot material may set very quickly. Avoid storing in damp or humid areas. Shelf Life is approximately SIX MONTHS depending upon environmental conditions. To extend shelf life, transfer any leftover material to a plastic pail with a gasketed lid.

To ensure excellent performance, all substrates must be structurally sound, clean & free from all contaminants such as dust, pollen, paint, sealers and curing compounds, existing primers, grease, laitance, loose or delaminating surface areas or any debris or substances that could impair proper adhesion. Mechanically prep the surface by using surface grinder, diamond cup wheel or similar type tooling, to achieve an ICRI profile of a minimum CSP #1 to a CSP # 3 (Refer to the ICRI Technical Guideline). Dust created by prep work should be removed by flushing area with clean water prior to application. Surface can be Saturated Surface Dry (SSD) depending on the application. To ensure a **tenacious bond** with the substrate, prime the surface with *Kingdom Products' Universal Primer Activator or Superbond Polymer Primer*. Allow the Primer to turn from white milky to clear and tacky then apply the **FAST Fill** without delay.

MIXING

WATER DEMAND: **1 gallon pail** - Add up to .31 gallons (40 fl oz.) **40 lb bag** - Add up to 1.25 gallons (160 fl oz.)

Mechanical mixing will produce a smoother consistency without the need for additional water. **DO NOT OVERWATER.** Mix smaller quantities to suit (no less than 2 parts compacted powder to one part water by volume). Mix thoroughly for 2-3 minutes and apply to the substrate without delay. If surface skinning occurs, remix before using. **Do Not Add More Water.** Keep mixing vessel clean.

APPLICATION

FAST Feather can be applied from a true featheredge up to 4" in one lift. Use the least amount possible to attain the desired smoothness. Can be smoothed, molded and shaped as the material is setting, keeping in mind, the working time is only 10 minutes.

FAST Feather should be applied immediately after mixing. Apply a bond coat or "scrub coat" first to the SSD or properly primed surface. The bond coat should be approximately 1/8" and worked thoroughly in to the entire area to be repaired. Immediately apply more material with a trowel to start building the material.

Overhead and vertical repairs may require multiple lifts of 2" maximum in each lift. If multiple lifts are needed, leave the first lift slightly rough and score with trowel. Dampen the surface again with water and apply another bond/scrub coat and another lift coat. Do not exceed 6-8" total with multiple lifts. If deep fills are required, consider using *Kingdom Products' FAST Fill Concrete Mix*.

FAST Feather can be used as a wear surface but it is recommended to skim coat with *Kingdom Products' Top Cap Overlay or Rosalia Microtoppings* to ensure longevity of the repaired areas and provide a uniform look overall. In such cases, be sure to acid etch or sand the **FAST Feather** repairs before top coating, as the **FAST Feather** is dense and non-porous.

PRECAUTIONS AND LIMITATIONS

- Apply **FAST Feather** to a properly prepared CURED substrate! Do not apply over dust, dirt, debris or a previously sealed surface until all of the sealer has been removed.
- Do not over water this product!
- Avoid using in temperatures below 50°F or above 85°F. Maintain above 50°F during curing cycle.
- Allow Superbond primer to tack up prior to application.
- **FAST Feather** may reflect moving cracks and control joints. Re-cut control joints.
- The proper application of this product is the sole responsibility of the end user. Supervision and quality control are the sole responsibility of the end user.

SPECIAL NOTES

Please consult Safety Data Sheet (SDS) and Technical Data Sheets (TDS) and read Warranty information prior to use. **FOR PROFESSIONAL USE ONLY!** Always install a test area or job site mock up for owner approval of acceptable color, texture, finish adhesion and any other critical requirements prior to proceeding with the installation. Verify that the most current versions of the Technical Data Sheets (TDS) and installation guidelines are being utilized.