

# KEY EPOXY MORTAR GROUT-HIGH FLOW

## Product Information Sheet



## DESCRIPTION

**KEY EPOXY MORTAR GROUT-HIGH FLOW** is a three-component, high flow, high strength, expansive epoxy grout designed for large plates and narrow configurations where flowability is critical. Additionally, the proprietary aggregate blend greatly reduces the amount of dust released into the environment during mixing and handling.

## KEY ADVANTAGES

- User-friendly placing characteristics
- Low odor for use in occupied areas
- Proprietary aggregate blend greatly reduces dust
- Positive effect bearing
- Excellent bonding of machinery to foundation
- High early strength, rapid return to service
- >95% effective bearing
- Excellent chemical resistance

## KEY CONSIDERATIONS

- Minimum application temperature of 50°F
- Store materials at 75°F for minimum 24 hours before use
- Do not remove/add more aggregate than recommended in this document
- Clean tools and mixer with soap and water

## PRIMARY USES

- Machinery/equipment needing maximum bearing support
- Rail grouting, keyways, baseplates
- Narrow clearance areas, anchor bolts
- Precision alignment of equipment

## COMPOSITION

Epoxy resin and grout aggregate fillers.

## WORKING TIME

Working Life (ICRI Protocol)	65 mins @ 73°F
Peak Exotherm	95°F @ 160 mins

## APPLICATION

### SURFACE & FORM PREPARATION

**Surface Preparation:** New concrete must be a minimum of 28 days old. The concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using suitable equipment to give a surface profile of at least CSP 5-7 in accordance with ICRI Guideline 310.2, exposing the coarse aggregate of the concrete. The final step in cleaning should be the complete removal of all dust and residue with a vacuum followed by pressure washing. Vacuum all water and allow to dry completely. Acid etching is acceptable only when mechanical preparation is impractical. It is recommended that only contractors experienced in the acid etching process use this means of surface preparation. The salts of the reaction must be thoroughly pressure washed away. Allow the concrete to completely dry.

**Important Note:** Even with proper procedures, an acid etched surface may not provide as strong of a bond as mechanical preparation procedures. All concrete must possess an open surface texture with all curing compounds and sealers removed.

**Form Preparation:** Forms must be liquid tight to prevent leakage, and they must be strong and well braced. To facilitate stripping, the forms should be coated with two applications of paste wax or each piece wrapped with polyethylene.

**Anchor Bolt Holes and Blockouts:** Holes and blockouts must be cleaned of all dust, dirt, and debris and allowed to dry. If the sides are smooth, roughen the hole with a stiff bristle wire brush or with a rotary brush hammer.

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## APPLICATION (Continued)

### MIXING INSTRUCTIONS

Mix parts A & B (resin & hardener) separately using a drill and Jiffy mixer. Then, pour the Part B into the Part A container. Mix for 2-3 minutes, scraping the bottom and sides of the container, to ensure proper chemical reaction. Do not whip air into the epoxy while mixing. After the epoxy has been mixed, directly pour all of the mixed resin into a horizontal shaft mortar mixer. Add Part C (aggregate) to the mixture one bag at a time (4 bags total) and mix for 2 to 3 minutes until the aggregate is completely wetted out. Place immediately.

### INSTALLATION

Pour into anchor bolt holes and blockouts through a funnel or directly if space permits. When grouting plates, pour grout into the headbox and allow to flow under the plate. Straps pre-placed under the plate will aid in working the grout across. Grout can be placed at a minimum of 1/2" (12 mm) thick to a maximum of 6" (150 mm) per lift when placed in a large mass. Note: Bring all E3-FLOWABLE materials as well as foundation and baseplate as close to 75°F (23°C) as possible. Cold temperatures will significantly reduce flow characteristics and will increase the difficulty of baseplate grouting. Higher temperatures will increase initial flow but reduce working time.

## INSTALLATION (Continued)

**Curing:** Does not require special curing procedures.

**Finish:** If a smooth finish is desired, the surface of the grout may be brushed and troweled with a light application of solvent.

## PACKAGING

**KEY EPOXY MORTAR GROUT-HIGH FLOW** is packaged in standard 1.35 ft<sup>3</sup> units. Part A, resin: 22.04 lb, Part B, hardener: 5.69 lb, Part A and Part B are contained in a 5 gallon plastic pail, and Part C, aggregate: 4/30 lb bags. May also be ordered as a 5 bag Standard Flow mix, which will yield 1.5 ft<sup>3</sup>.

## TECHNICAL SERVICE

**Key Resin Company** provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Resin Sales/Technical Representatives** are available to assist you. Telephone 888.943.4532 or visit [www.keyresin.com](http://www.keyresin.com).

## CLEAN-UP

Clean skin, tools and equipment with soap and water. Consult Safety Data Sheet (SDS) for safety and health precautions.

## PHYSICAL PROPERTIES

Bond Strength	ASTM C882	2,800 psi @ 7 days 3,300 psi @ 28 days
Compressive Strength	ASTM C579	9,500 psi @ 1 day 11,500 psi @ 7 days
Flexural Strength	ASTM C307	3,500 psi @ 1 day 3,700 psi @ 7 days
Tensile Strength	ASTM C307	1,100 psi @ 1 day 1,500 psi @ 7 days
Chemical Resistance	Excellent resistance to most industrial chemicals	

## WARRANTY

**Key Resin Company** ("Key") warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed, and applied in accordance with recommendations of Key. If any product fails to meet this warranty, the liability of Key will be limited to replacement of any non-conforming material if notice of such non-conformity is given to Key within (1) one year of delivery of materials. Key may in its discretion refund the price received by Key in lieu of replacing the material. No customer, distributor, or representative of Key is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of Key. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. Key reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. KEY'S OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND KEY SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.