

# FIBGROUT-HS3

## High Performance Epoxy Grout

### DESCRIPTION

Fibgrout- HS3 is a high performance epoxy grout designed for free flow grouting material for use in situations where heavy dynamic and mobile loads are encountered. Fibgrout HS3 is characterized by low shrinkage, high bearing surface, low creep and excellent flowability and is the choice for the toughest and most demanding epoxy installations where bond to existing foundation and machinery is critical.

### AREAS OF APPLICATION

- Pump, compressors and fans
- Deep fill machine bases
- All high strength applications including crane rails
- Tanks, turbines and housings
- Large anchor bolts and keyways
- Quick re-grouts and start-ups

### FEATURES & BENEFITS

- Fast setting / quick return to service
- High chemical resistance
- Excellent bearing
- Excellent bond foundation to base plate
- Stable in deep or thick sections

### SPECIFICATIONS & COMPLIANACES

- Fibgrout HS3 meets the requirements of ASTM C 307, Type I, Grade II, Class A.
- Fibgrout HS3 meets the thermal compatibility with concrete requirements of ASTM C 884.

### TECHNICAL SPECIFICATIONS

The following results were developed under laboratory conditions

#### COMPRESSIVE STRENGTH: (50 mm)CUBES

Age	Strength
24 hours	700 - 800 kg/ cm <sup>2</sup>
3 days	800 - 900 kg/cm <sup>2</sup>
7 days	900 - 940 kg/cm <sup>2</sup>
28 days	940 - 1000 kg/cm <sup>2</sup>

### SLINEAR SHRINKAGE

Negligible



## **BOND TO CONCRETE**

Exceeds tensile and shear strength of concrete.

## **IMPACT RESISTANCE**

Greater than concrete or cementitious grout

## **CHEMICAL RESISTANCE**

Excellent resistance to most chemicals. Specific recommendations available upon request.

## **ABRASION RESISTANCE**

Greater than concrete.

## **FLEXURAL STRENGTH**

7Days                      280 kg/cm<sup>2</sup>

## **TENSILE STRENGTH**

28Days                      150 kg/cm<sup>2</sup>

## **GEL TIME**

45- 60 minutes at 30°C.

## **CONSUMPTION/YIELD**

1860 kg/m<sup>3</sup>

## **APPEARANCE**

Fibgrout – HS3 is three part epoxy grout system which consists of Part A (resin), Part B (hardener) and Part C (aggregate). After mixing and placing the color is similar to that of

## **APPLICATION METHODOLOGY**

### **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 a scabber, bush hammer, shotblast or scarifier which will give a surface profile of a minimum 3mm and expose the coarse aggregate of the concrete. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing.

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.

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

## FORM PREPARATION

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

## ANCHOR BOLT HOLES AND BLOCKOUTS

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Holes and blockouts should 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 rotary brush hammer if access permits.

## MIXING

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Mix Parts A & B (resin & hardener) for 2 minutes using a drill and mixing prop. For ease of mixing, add the Part B to the Part A (not the reverse). The epoxy must be well mixed to ensure proper chemical reaction. After the epoxy has mixed, add the Part C (aggregate) and rise for 2-3 min. until the aggregate is completely wetted out. For large jobs, use a mortar mixer for mixing. Place immediately.

## PLACEMENT

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Pour into anchor bolt holes and blockouts through funnel or directly if space permits. When grouting plates, pour grout into the head box and allow to flow under the plate. Straps preplaced under the plate will aid in working the grout across. Grout should be placed at a minimum of 25 mm thick and a minimum of 152 mm per lift when placed in a large mass.

**NOTE:** Bring all Fibgrout-HS3 materials as well as foundation and baseplate as close to room temperature as possible. Cold temperatures will significantly reduce flow characteristics and will increase the difficulty of baseplate grouting. Higher temperatures will increase initial flow but cut down on working time.

## CURING

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Fibgrout HS3 requires no special curing procedures.

## FINISH

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

## CLEAN-UP

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Tools and mixer may be cleaned with Xylene or Toluene solvents

## PRECAUTIONS

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- Wear protective gloves and eye glasses when handling epoxies.
- Do not use over frozen concrete.
- Store material at room temperature before use.
- Grout should be placed at ambient temperatures of 4° to 32°C.

## STORAGE

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Store in a cool, dry place.

## PACKAGING

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5,20kg & Project Standard

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