

6.02 XPERT Epoxy Grout

Three Component castable epoxy grout of high strength performance.

PRODUCT DESCRIPTION

XPERT Epoxy Grout is a fine filled, high strength, fluid epoxy grout based on epoxy resin for use in underpinning base plates, cranes rails and other equipment subject to dynamic loads.

ADVANTAGES

- Fluid consistency
- High strength
- Easy application
- Excellent adhesion
- Pre-weighed components

TYPICAL PROPERTIES

- Pot Life @ 20°C 30 minutes
- Specific Gravity 20°C 1.65

APPLICATION INSTRUCTIONS

Preparation: All contacted surfaces must be free of oil, grease or other contamination which may inhibit bond. Any loose concrete should be removed and repaired or filled with grout as part of the repair to provide a solid foundation.

Mixing: XPERT Epoxy Grout is suitable for mixing using a drill and suitable paddle. Mix for 3 to 5 minutes to ensure thorough mixing. Only mix that quantity of material that can be used within the setting time. Do not attempt to rework or retemper any partially set product. Avoid waste by using all the kit within 15 minutes of mixing. **Note:** Liquid epoxy grouts will exotherm and set prematurely if not used within the pot life.

Application: Application by Pouring into Formwork This method is commonly used for base plate installation where intimate contact between the grout and base plate is essential to the operation of the equipment being installed. Ensure the formwork is liquid tight by testing with water where possible, allow for provision of drain plugs to remove all water prior to grouting. Use Silicone sealant or other mastic to seal up the joints in the boxing. Place the mixed XPERT Epoxy Grout in the reservoir and maintain the level of liquid by topping up the grout. Do not allow the level in the header box to fall below the bottom of the base plate. Ensure all formwork, shims etc., are greased or coated with Strip form prior to grouting. **Note:** Hardened grout can only be removed by grinding.

Curing: XPERT Epoxy Grout is suitable for removal of formwork after 24 hours. Allow 7 days for full cure.

TECHNICAL INFORMATION

The following results were developed under laboratory conditions.

Usable Life: 2 hours @ 25C; 1 hour @ 35C

Compressive Strength: ASTM C-579 2" (50 mm) cubes @ 70F (21C)

Age Strength

- 3 days 10,875 psi (75 N/mm²)
- 7 days 12,325 psi (85 N/mm²)
- 28 days 13,050 psi (90 N/mm²)

Thermal Expansion, ASTM C-531
2.70 x 10⁻⁵ in./in./oF (4.9 x 10⁻⁵ mm/mm/OC)

Bond to Concrete: Exceeds tensile and shear strength of concrete.

Chemical Resistance: ASTM D-543, excellent resistance to most chemicals, specific recommendations available upon request.

Abrasion Resistance: Greater than concrete.

Flexural Strength, ASTM C 580

- 3 days 3,600 psi (25 N/mm²)
- 7 days 3,800 psi (26 N/mm²)
- 28 days 3,900 psi (27 N/mm²)

Modulus of Elasticity, ASTM C 580

- 3 days 1.16 x 10⁶ psi (8.0 x 10³ N/mm²)
- 7 days 1.21 x 10⁶ psi (8.3 x 10³ N/mm²)
- 28 days 1.46 x 10⁶ psi (10.1 x 10³ N/mm²)

Tensile Strength, ASTM C 307

- 3 days 2,100 psi (14 N/mm²)
- 7 days 2,150 psi (15 N/mm²)
- 28 days 2,225 psi (15 N/mm²)

Gel Time, ASTM D 2471 @ 73F (23C): 70 minutes

Peak Exothermic, ASTM D 2471 91F (33C) @ 230 minutes allow to flow under the plate. Straps pre-placed under the plate will aid in working the grout across. Grout should be placed at a maximum of 3" (75 mm) per lift when placed in a large mass.

PACKAGING

XPERT Epoxy Grout is supplied in ready to use, 8 and 16 Kg Kits.

STORAGE

XPERT Epoxy Grout GP is an epoxy-based product which must be stored in the original unopened containers.

PRECAUTIONS

Where temperatures less than 5°C or greater than 35°C are encountered, contact our Technical Staff for specific advice. XPERT Epoxy Grout GP is non toxic, but it is alkaline in nature. Any contact with eyes or skin should be washed off with soap and clean water.

Do NOT use solvent. Protective gloves, goggles and clothing should be worn. Repeated contact with epoxy resins and hardeners can cause sensitization in some people handling this type of product. Where this occurs seek medical advice before continuing use.