

QUANTOM

Structural Systems

QUANTOM[®] EPR 3001



QUANTOM[®] EPR 3001 is a 2-component, solvent free, moisture tolerant, and non sagging epoxy paste, QUANTOM[®] EPR 3001 complies with ASTM C880.

WHERE TO USE

QUANTOM[®] EPR 3001 is a general purpose epoxy resin and can be used in the following applications:

- Installing FRP fabrics on concrete substrates in wet lay-up and dry lay-up strengthening systems
- Installing FRP fabrics on wood, Steel, Aluminium and other metallic substrates
- Implantation of anchor bolts
- Anchoring Dowels and rebars
- Bonding precast concrete segments together
- Crack sealing and nipple installation for epoxy resin injections
- Bonding load bearing objects on steel, concrete, masonry, wood, stone, FCB, etc.

ADVANTAGES

QUANTOM[®] EPR 3001 is an extremely strong adhesive that offers many advantages to the user:

- Excellent adhesion to concrete, natural stone, steel and most construction materials
- Very high mechanical properties such as bond strength tensile strength and shear strength
- Excellent early and final mechanical strengths
- Excellent chemical resistance
- Impact, shock and acid resistant
- Good wetting properties, no need to primer or bonding agent on dry substrates
- Easy to use and low odour
- Can be extended with quartz sand as an ultra high strength repair mortar
- Non sagging and no flow material, even at high temperatures
- Hardens without shrinkage
- Can be drilled and grinded when cured
- Will not corrode reinforcement
- Suitable for use in vertical and horizontal applications

HOW TO USE

Surface preparation

substrate must be sound and free of loose particles. Remove dust, laitance, oil, grease, curing compounds, impregnations, waxes, foreign particles, disintegrated materials, and other bond inhibiting materials from the surface. Surface can be prepared by blasting methods, grinding or chipping. Substrate must be dry with no standing water.

APPLICATION

Apply QUANTOM® EPR 3001 in wet lay-up and dry lay-up strengthening systems according to the QUANTOM® wrap fabrics data sheets.

TECHNICAL INFORMATION (EN 196)

Description	Value
Colour	Clear
Density (at 25 °C)	1.15 kg/l (mixed)
Bonding Strength	> 3.5 MPa (Concrete failed)
Compressive Strength	60 MPa (7 days) at 35 °C
Tensile & Flexural Strength	> 45 MPa
Service Temperature	-35 to +65 °C
Full Cured	After 7 days (at 25 °C)
Working Time / Pot Life	60 min. (25 °C)

Mixing

Mix each component separately. Add component "B" to Component "A" and mix them thoroughly using a low speed drill (max. 300 rpm) and suitable paddle for at least 3 minutes or until all striations have disappeared and a uniform mixture is obtained. For partial mixing, proportion 1 part of component "B" to 3 parts of component "A" by weight or volume into a clean pail. Mix only that quantity which can be used within its pot life.

Priming

Dry and moist surfaces require no primer or bonding agent.

Material consumption

Approximately 0.8 to 1.2 Kg/M2 for installation of fabrics in normal thickness.

Do not apply QUANTOM® EPR 3001 at temperatures below 5 °C.

Do not thin QUANTOM® EPR 3001 by solvent. Solvent will prevent proper cure.

Do not load the installed objects before curing time.

Storage / Shelf life

Store out of direct sunlight, and protected from extreme heat and cold. The shelf life for originally unopened package is 24 months from date of production.

Delivery

QUANTOM® EPR 3001 is available in 4.00 kg and 10.00 kg pails.

Safety precautions

Product may cause skin irritation. Wear gloves and goggles. In contact with eyes or mucous membrane, flush immediately with plenty of warm water and seek medical attention without delay.