

QUANTOM

Structural Systems

QUANTOM[®] EPR 311



QUANTOM[®] EPR 311 is a 2-component, solvent free, moisture tolerant, and non sagging epoxy paste, QUANTOM EPR 311 complies with ASTM C880.

WHERE TO USE

QUANTOM[®] EPR 311 is a general purpose epoxy paste and can be used in the following applications:

- Multi-Purpose, high strength, structural epoxy paste adhesive
- Repairing concrete surface defects and honeycombs
- Repairing concrete substrates for structural strengthening (FRP, Steel Plate, etc.)
- Dowel bars anchoring
- Acid resistance tile fixing
- As a gap filling adhesive
- As leveling and bedding layer on surfaces to be received external reinforcement
- Structural bonding steel plates to concrete, masonry, wood, stone, etc.

ADVANTAGES

QUANTOM[®] EPR 311 is an extremely versatile product that offers many advantages to the user:

- Excellent adhesion to concrete and most construction materials
- Tolerant of moisture before, during, and after cure
- Excellent early and final mechanical strengths
- Excellent chemical resistance
- Impact, shock and acid resistant
- Colour coded components to ensure proper mixing control
- Good wetting properties, no need to primer or bonding agent on dry substrates
- Easy to use and low odour
- Suitable for both, dry and damp surfaces
- Non sagging and no flow material, even at high temperatures
- Hardens without shrinkage
- Can be extended with quartz sand (0.1~2.0 mm) as a repair mortar
- Will not corrode reinforcement
- Suitable for use in vertical, horizontal and overhead 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.

TECHNICAL INFORMATION

Description	Value
Color	Concrete grey (mixed)
Density (at 25 °C)	1.750 kg/l (mixed)
Bonding Strength	> 3.5 MPa (Concrete failed)
Compressive Strength	60 MPa (7 days)
Tensile & Flexural Strength	> 20 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 2 minutes or until all striations have disappeared and a uniform colour 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 1.750 Kg/M² for 1 mm layer thickness.

Application limits

Description	Value
Minimum layer thickness:	0.5 mm
Maximum layer thickness:	30.0 mm

Do not apply QUANTOM® EPR 311 at temperatures below 5 °C.

Do not thin QUANTOM® EPR 311 by solvent. Solvent will prevent proper cure.

Minimum age of concrete must be 21~28 days, depending upon curing and drying conditions.

Storage / Shelf life

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

Delivery

QUANTOM® EPR 311 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.