



Structural Systems

QUANTOM[®] EPR 3311

QUANTOM[®] EPR 3311 is a three-component, non-shrink, and epoxy modified cementitious repair mortar based on emulsion epoxies.

WHERE TO USE

QUANTOM[®] EPR 3311 is a general purpose repair material based on epoxy modified cementitious mortar which does not shrink while curing and provides excellent bonding to dry and wet mineral construction materials (e.g. Concrete). QUANTOM[®] EPR 3311 can be used in the followings:

- Repairing concrete honeycombs
- Repairing pop outs
- As a gap filling mortar
- As leveling and bedding layer on surfaces to be received external reinforcement

ADVANTAGES

- Excellent adhesion to concrete and most construction materials.
- Moisture tolerant before, during, and after cure.
- Good early and final mechanical strengths.
- Good chemical resistance.
- Modulus of elasticity and coefficient of thermal expansion close to concrete.
- Colour coded components to ensure proper mixing control.
- Excellent adhesion to wet surfaces.
- Easy to use and low odour
- Permeable to water vapour (allows substrate to breath).
- Thixotropic, dose not sag when applied vertically.
- Does not shrink while curing
- Will not corrode reinforcement
- Can be overcoated with epoxy resins within 24 hours

HOW TO USE

Surface preparation

The 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, water jet, grinding, or chipping. Wet the substrate to saturated surface dry (SSD).

TECHNICAL INFORMATION

Description	Value
Color	Concrete grey (mixed) Comp. "A": White liquid Comp. "B": Brown liquid Comp. "C": Gray powder
Density (at 25 °C)	2.250 kg/l (mixed)
Bonding strength	> 1.5 MPa (Concrete failed)
Compressive strength	20 MPa (3 days)
	42 MPa (7 days)
	55 MPa (28 days)
Flexural strength (28 days)	>3 MPa (7 days)
	>8 MPa (28 days)
Service temperature	-50 to +150 °C
Full cured	After 28 days (at 25 °C)
Working Time / Pot life	45 min. (25 °C)

Mixing

To mix the components take this mixing ratio $A : B : C = 1.0 : 1 : 3$ by weight Shake component "B" before pouring into component "A" container, then shake well for approximately 30 seconds. Pour binder mixture (A+B) into suitable bucket and add component "C" under continuous stirring. Mix them thoroughly using a low speed drill (max. 400 rpm) and suitable paddle for at least 3 minutes. Avoid air entrainment during mixing.

Priming

Dry and moist surfaces require no primer or bonding agent.

Material consumption

Approximately 2.250 Kg/m² for 1 mm layer thickness.

Application limits

Description	Value
Minimum layer thickness:	0.5 mm
Maximum layer thickness:	30.0 mm
Minimum substrate temperature	5 °C
Maximum substrate temperature	35 °C

Storage / Shelf life

Store out of direct sunlight, and protected from extreme heat and rain fall. Store in dry conditions at temperature above 5 °C.

The shelf life for originally unopened package is 12 months from date of production.

Delivery

QUANTOM® EPR 3311 is available in 15 kg set (A+B+C).

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.