Quickmast PTS

Flexible, solvent free polyurethane transition strip mortar

DESCRIPTION

Quickmast PTS is a three components solvent free polyurethane mortar supplied in pre-weighed quantities ready for on-site mixing and use.

Quickmast PTS is specially formulated from polyurethane to produce a durable and highly flexible, UV resistant mortar with excellent adhesion to concrete, asphalt and steel surfaces.

APPLICATIONS

Designed for use as a transition strip between expansion joints & bridge decks, asphalt, steel and concrete substrates.

ADVANTAGES

- Solvent free, environment friendly.
- Hard wearing with high abrasion resistance
- Excellent UV resistance.
- Exhibits excellent adhesion to concrete, asphalt and steel surfaces.
- Withstand dynamic movement.
- Durable for heavy traffic.
- Maintains its mechanical properties under sunlight and weathering conditions.

METHOD OF USE

SUBSTRATE PREPARATION

Normally, substrates will be made of steel, concrete, or asphalt. Other substrates may be suitable; consult DCP's Technical Department for advice. All substrates must be clean and free from dust and loose particles. Substrates must be visibly dry, structurally sound and free from oil, grease and other forms of contamination.

Concrete Substrates:
Concrete surface should be dry and suitably prepared either by scabbling or grit blasting to remove any surface laitance. New concrete must be cured (minimum of 14 days).

Steel Substrates:
All surfaces should be grit blasted to reach a bright finish meeting the requirement of Swedish Standard SA 2 ½ Or SP-10, near white.

TECHNICAL PROPERTIES @ 25°C:	
Mixed density:	2.05 ± 0.10
Pot life:	20 - 25 min @ 15°C 10 - 15 min @ 25°C 6 - 9 min @ 35°C
Bond strength over concrete: EN 1542	> 2.0 MPa @ 7 days (substrate failure)
Compressive strength: BS 6319-2	≥ 20 MPa @ 7 days
Tensile strength: (Neat resin) ASTM D638	≥ 2 MPa @ 7 days
Water absorption ASTM D570	< 0.4 % @ 7 days
Elongation at break: (Neat resin) @ 7 days ASTM D638	≥ 50 % @ 7 days
Shore A (Neat resin) ASTM D2240 @ 7 days	80 ± 5 @ 1 day
Coefficient of thermal expansion: ASTM D696	≈ 5 x 10^{-5}

MIXING

Quickmast PTS comprises of three components, a resin base, hardener and filler which are pre-weighed to the correct proportions. Under no circumstances should part mixing be carried out. It is recommended not to mix more than 1 pack at a time.

To ensure proper mixing, a mechanically powered mixer or drill fitted with a suitable paddle should be used. Ensure that the bottom and sides are thoroughly scraped; Stir the content of each component separately to disperse any settlement. Transfer the entire contents of the HARDENER to the RESIN and mix for approximately 1 minute or until a uniform color and consistency are obtained.

Carefully start adding the aggregates to the mixture and keep mixing for 2 minutes or until all of the aggregates are coated.

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APPLICATION

Cover the formwork with plastic tape or similar to provide easy removal after Quickmast PTS has cured. Apply the mixed Quickmast PTS to the prepared block-out substrate using steel float. Compact by hand and finish using the steel float.

REMARKS

- Application should not be undertaken if the temperature is below 5°C, nor when the moisture content of concrete is over 4%.
- For new green concrete where moisture content is > 4%, epoxy bonding agent Quickmast 108 must be used as a primer before the application of Quickmast PTS. In such cases, application of Quickmast PTS done once the Quickmast 108 becomes tacky. If the concrete substrate is not humid, and does not have excess moisture above 4% in it, then no need for the use of a bonding agent.
- Application should not be carried out, when there is standing or running water.
- Precaution is recommended if the application is taking place at high temperatures (above 30°C).
- In hot climate conditions, it is important to keep containers cool at temperature of around 15 - 20°C, in order to avoid shortened pot life, conversely, in cold climate conditions, containers should be kept warm (approx. 20°C) to ensure easy mixing.

CURING

Quickmast PTS should be allowed to cure for 24 hours when cured at normal conditions before being subjected to traffic, lower temperature will delay curing.

CLEANING

All tools should be cleaned immediately using DCP Solvent. Hardened material must be cleaned mechanically.

PACKAGING

Quickmast PTS is available in 32 kg pack size comprising resin base, hardener and aggregate components.

YIELD

Approximately 15.5 - 16 litre/32 kg pack.

THICKNESSES AND SIZE LIMITATIONS

Quickmast PTS can be applied in a single layer at thicknesses up to 100 mm. For thicknesses greater than 100 mm, Quickmast PTS can be built up in successive layers.

STORAGE

All parts should be stored in their original packaging, protected from frost and stored under dry warehouse conditions, away from humidity and at temperatures between 5°C and 30°C.

SHELF LIFE

Quickmast PTS has a shelf life of 12 months from date of manufacture if stored in unopened, undamaged, sealed containers and stored away from humidity and under good conditions.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

CAUTIONS

HEALTH AND SAFETY

Quickmast PTS should not come in contact with skin or eyes. Goggles and gloves should be used.
In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.

For further information, refer to the Safety Data Sheet.

FIRE

Quickmast PTS is nonflammable.

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- Concrete repair.
- Flooring systems.
- Protective coatings.
- Sealants.
- Waterproofing.
- Adhesives.
- Tile adhesives and grouts.
- Building products.
- Structural strengthening.