

# Quickmast 108

Epoxy bonding agent for concrete



## DESCRIPTION

Quickmast 108 is a solvent-free epoxy resin bonding agent that is supplied in pre-weighted two component packs which when mixed together produce a medium viscosity epoxy adhesive.

Quickmast 108 can be easily spread over old concrete or cementitious substrates to permanently bond freshly casted concrete or new mortars.

Quickmast 108 - S is a slow curing grade from Quickmast 108 especially formulated for hot weather applications or where additional steel reinforcement and formwork has to be fitted.

## APPLICATIONS

Quickmast 108 is a permanent epoxy adhesive for bonding fresh wet concrete/cementitious material to old concrete/cementitious surfaces, which is suitable for internal and external application.

## ADVANTAGES

- » High bond strength.
- » Moisture tolerant; can be applied to damp surfaces.
- » Slow cure, allows more time for subsequent works such as fixing steel reinforcements and erecting shutter.
- » High strength.
- » Slow cure, Quickmast 108 - S.

## STANDARDS

Quickmast 108 complies with ASTM C881, Type II, Grade 2, Class C.

## METHOD OF USE

### SUBSTRATE PREPARATION

The Substrate should be sound, clean and free from contamination. Surface laitance should be removed by acid etching or light grit blasting.

Oil, grease, and fat deposit should be removed by using either appropriate degreaser or steam cleaning. Weak or deteriorated concrete should be removed by scabbling, chipping or grit blasting.

| TECHNICAL PROPERTIES:  | QUICKMAST 108                       | QUICKMAST 108 - S                   |
|--|-------------------------------------|-------------------------------------|
| Colour:  | Green for mixed material            |                                     |
| Mixed density:   | 1.2 ± 0.1 g/cm <sup>3</sup>         |                                     |
| Compressive yield strength:<br>ASTM D695                         | ≥ 50 MPa @ 7 days                   |                                     |
| Bond strength by slant shear:<br>(old/new concrete)<br>ASTM C882 | ≥ 10 MPa @ 14 days moist cure       |                                     |
| Water absorption:<br>ASTM D570                                   | ≤ 0.5%                              |                                     |
| Full cure:   | 7 days @ 25°C<br>5 days @ 40°C      |                                     |
| Typical maximum overlay time*:                                   | 9 hr @ 25°C<br>5 hr @ 40°C          | 18 hr @ 25°C<br>10 hr @ 40°C        |
| Gel time:<br>ASTM C881   | 6 hr @ 25°C                         | 20 hr @ 25°C                        |
| Viscosity @ 25°C:<br>ASTM D2393                                  | 40 ± 10 poise<br>(medium viscosity) | 50 ± 10 poise<br>(medium viscosity) |
| VOC:<br>ASTM D2369   | < 50 g/ltr<br>(comply with LEED)    |                                     |

*\*Maximum overlaying time depend on the ambient weathering conditions. In general the new concrete/cementitious material should be only applied over tacky layer of Quickmast 108.*

## MIXING

Quickmast 108 is designed to have a maximum overlaying time of 9 hours at 25°C and 5 hours at 40°C, Whereas Quickmast 108 - S has a maximum overlaying time of 18 hours at 25°C and 10 hours at 40°C. This should allow for subsequent works such as steel reinforcement fixation and shutter erection.

## APPLICATION

Quickmast 108 should be applied immediately after mixing using a short haired paint brush. The material should be painted evenly across the whole surface and left until it becomes tacky before the new concrete, screed or mortar is placed.

Care should be taken to apply the new concrete, screed or mortar within the overlay time specified in Technical Properties. Failure to do so will have an adverse result and the material will form a de-bonding plane rather than a bonding coat.





# Quickmast 108

Minimum application temperature is 5°C while temperatures exceeding 35°C will decrease pot life and setting time.

#### Notes:

- » If temperature of the material is less than 12°C, it is needed to elevate their temperature to 25°C before the application.
- » And if the ambient and the substrate temperature is less than 5°C, don't use the material.
- » Also, at high temperatures (35°C and above), cooling the material is needed before the application. And try not to make the application in the middle of the day or under direct sunlight.

#### CLEANING

All tools should be cleaned immediately after finishing by DCP solvent. Hardened materials should be cleaned mechanically.

#### PACKAGING

Quickmast 108 is available in 1 and 5 kg packs.

#### COVERAGE

3.0 – 3.5 m<sup>2</sup>/kg.

#### STORAGE

Quickmast 108 has a shelf life of 18 months from date of manufacture if stored at temperatures between 15°C and 30°C.

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

#### CAUTIONS

#### HEALTH AND SAFETY

Quickmast 108 should not come in contact with skin or eyes.

Rubber gloves and eye protection should be worn all the time. The use of barrier cream is recommended on exposed areas of the skin.

In case of contact with eye, rinse with clean water and seek medical consultation.

For further information refer to the Material Safety Data Sheet.

#### FIRE

Quickmast 108 is nonflammable.

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- » Structural strengthening.



#### Note:

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