

# CONSEAL M

## EPOXY MORTAR APPLICATION INSTRUCTIONS

**PREPARATION** CONSEAL M must be applied to solid substrates that have been suitably prepared and primed. Poor preparation of the substrate will prevent good results and cause premature failure.

Old concrete must be checked for mechanical strength. All contamination such as oil or grease must be removed with STRIPPIT ALL followed by pressure washing, or by flame blasting. Old coatings must be removed by scabbling or blasting. New concrete that has a layer of friable, dusty material on its surface that has been caused by premature drying out, must have the friable material removed by blasting or acid etching. Porous concrete must be sealed with one coat of CONSEAL P.



Use a scabbler to remove old coatings and weak concrete

Metallic surfaces should be cleaned by suitable mechanical preparation. Steel surfaces are best freed from rust and rolling scale by shot blasting. Where blasting is impossible, thorough manual de-rusting is the least that must be done. To achieve satisfactory wetting of the substrate, oil, grease and other contaminants must be removed.

CONSEAL M can be applied to new green concrete that has been primed with CONSEAL P provided that the concrete has been produced to a high quality specification that does not include an excess of water.

Any obstructions such as manholes must be adjusted in height to correspond to the level of the new screed and suitable edge stops must be installed in doorways and where the screed is to be stopped.

After the substrate has been thoroughly prepared one coat of CONSEAL CCP, clear concrete primer-sealer must be applied. This is a solvent free, pure epoxy system that will bind any remaining dust, fill any porosity in the concrete and consolidate its surface.

CONSEAL M is a resin rich formulation that contains sufficient resin to allow it to be applied to CONSEAL CCP either immediately or within 24 hours. If the CONSEAL M is not to be applied immediately scatter coarse sand over the surface of the wet primer. Although not essential this will prevent the CONSEAL M from sliding over the dry surface as it is spread.

**MIXING** CONSEAL M must be thoroughly mixed in order to produce satisfactory results. 5 kg packs can be mixed by hand but a powered forced action mixer fitted with a scraper is essential for larger batches. Standard cement mixers are not suitable.

Add all of the resin and all of the hardener to the mixer and allow it to mix thoroughly before slowly adding the aggregate. Continue mixing (4 - 5 minutes) until an even homogenous consistency is obtained.

**APPLICATION TEMPERATURE** Epoxy resins thicken in cold conditions and for ease of application the materials and substrate should be above 18°C and preferably 20°C. Application at lower temperatures is possible but the stiffer mortar will be more difficult to lay and not all of the air bubbles that rise to the surface will burst. This problem can be mitigated to some degree by passing a hot air gun quickly over the surface. The hot air will immediately burst any bubbles that have risen to the surface.

**APPLICATION** Apply the mortar to the primed substrate using a perfectly clean plaster trowel. Use a straight edge or level to avoid undulations and roll the trowelled surface with a weighted roller to even out trowel marks.

**HEALTH & SAFETY** Epoxy resins are irritants and the hardeners are corrosive so wear rubber gloves at all times. Wear a dust mask when mixing CONSEAL M because the aggregate contains silica sand dust which could cause silicosis. Please refer to the safety data sheets for more information.



A forced action mixer with a scraper is essential for mixing more than 10 kg batches.

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