# MortCrete 3000

## **Multi-Purpose Epoxy Mortar**



**DESCRIPTION** • *MortCrete* 3000 is a high performance two component solvent free epoxy mortar for surface preparing, repairing and filling concrete cracks. *MortCrete* 3000 is based on a solvent free epoxy system to achieve high bonding strength.

**USES** • *MortCrete 3000* is an ideal material for repairing and bedding in a single operation with one material. It is used wherever a high degree of compressive strength, chemical resistance and excellent mechanical properties are required such as in garages, service facilities, workshops, hospitals, swimming pools, and electrical stations. *MortCrete 3000* is also suitable for patching concrete surfaces prior to application of an epoxy coating system. *MortCrete 3000* may be applied to horizontal as well as vertical surfaces. Due to its water resistance and impermeability, *MortCrete 3000* is suitable for wet area applications and swimming pools.

#### **ADVANTAGES** •

- High ultimate compressive strength.
- ✓ Hard wearing and durable.
- ✓ Provides a smooth surface finish.
- ✓ High abrasion resistance.
- ✓ Provides a hygienic, impervious finish.
- ✓ Available in a wide range of colors.
- ✓ Non-toxic.
- ✓ Easy to apply.
- ✓ Does not require priming.
- ✓ Excellent chemical resistance.
- ✓ Impermeable when immersed in water.
- ✓ Excellent adhesion to most surfaces.
- ✓ Suitable for horizontal and vertical application.

**LIMITATIONS** • On horizontal surfaces, do not apply in more than 30 mm thickness. On vertical surfaces, do not apply in more than 10 mm thickness. Multi layers may be applied with a minimum period of two hours between each layer.

#### PHYSICAL PROPERTIES •

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Density	1800 ± 10 kg/m <sup>3</sup>		
Pot Life	60 mins at 20°C 35 mins at 30°C		
Ultimate Compressive Strength (BS 6319 Part 2)	78 N/mm <sup>2</sup> 20 N/mm <sup>2</sup> 13 N/mm <sup>2</sup>		
Flexural Strength (BS 6319 Part 3)			
Tensile Strength (BS 6319 Part 7)			
Minimum surface Temp. Maximum Service Temp.	10°C 60°C		
VOC (ASTM	38 g/L		

#### **CHEMICAL RESISTANCE** •

Acids:

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0	Hydrochloric Acid 50%	Excellent		
0	Nitric Acid 25%	Excellent		
0	Sulfuric Acid 50%	Excellent		
0	Phosphoric Acid 50%	Excellent		
0	Acetic Acid 10%	Excellent		
0	Lactic Acid 10%	Excellent		
0	Citric Acid	Excellent		

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	<ul> <li>Citric Acid</li> </ul>	Excellent
•	Alkali	
	<ul> <li>Sodium Hydroxide</li> </ul>	Excellent
	<ul> <li>Ammonia (880) 10%</li> </ul>	Excellent
•	Solvents	Excellent
•	Petrol, Oil, Kerosene	Excellent
•	Butanol	Very Good
•	Hodrol	Good
•	Bleach (concentrated)	Excellent
•	Saturated Sugar	Excellent
•	Urea	Excellent

**COVERAGE** • Coverage rate is dependent on the width and depth of the cracks to be patched.

**SURFACE PREPARATION** • The surface should be dry (moisture < 5 %) and any dust should be removed with a vacuum. Laitance, dust and contaminants must also be removed.

Prior to application, *MortCrete 3000* system should be stored under cover and protected from extremes of temperatures which may cause inconsistent workability and cure times for the mixed material. Ideally, at least 24 hours before mixing, *MortCrete 3000* system should be maintained at approximately 25°C. During application in cold conditions, application should be halted if the ambient temperature is likely to fall below 10°C. The substrate or base slab is likely to be considerably colder than the surrounding air temperature. Pot life of the mixed material will be affected by ambient temperature.

**MIXING** • Base and hardener should be mixed together in a mix ratio of 1:1 by volume in a suitable container until uniform color is obtained.

**APPLICATION** • Apply *MortCrete 3000* on the repair areas with a spatula, scraper or palette knife at above the existing finished level of the surface. Allow *MortCrete 3000* to dry to touch for approximately 6 hours depending on ambient temperature. Sand down the dried *MortCrete 3000* to achieve a flush overall surface.

**CURING** • Good curing is essential for resin based materials to ensure specified performance. Installation using *MortCrete 3000* systems can be

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opened to foot traffic after approximately 24 hours at 25°C. Complete cure is achieved after 72 hours at 25°C.

**CLEANING** • Tools and equipment should be cleaned by using *SolvCrete 100* or an organic solvent. Uncured material can be wiped with a dry cloth following grouting.

**STORAGE & SHELF LIFE** • Product should be stored at 25°C in dry conditions away from direct sun light. Shelf life is approximately 12 months from date of purchase in original unopened container at specified storage temperature.

**SAFETY PRECAUTIONS** • The application of material should be under good ventilation. Avoid inhalation of the vapors. Use goggles and vinyl gloves. In case of contact with eyes, rinse immediately with plenty of clean water, do not use solvent and seek medical attention immediately.

The product complies with environmental and occupational health & safety standards ISO 14001 and OHSAS 18001.

PACKAGING • 10 kg two-part kit.