

**TECHNICAL DATA**

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MANUAL SECTION	ISSUE DATE	AUTHORISED	REPLACES	PAGE
<i>Concrete Repair</i>	<i>Feb 2010</i>	<i>PM</i>	<i>July 2005</i>	<i>1 of 3</i>

## K20 CONCRETE REPAIR SYSTEM (CRS)

**GENERIC TYPE:**

A three part, 100% reactive epoxy resin incorporating a chemical resistant curing hardener system.

**TYPICAL  
PROPERTIES/  
FEATURES:**

- K20 has been specifically formulated as a repair binder mortar with good trowelling and application properties.
- Non-slump, smooth trowelling properties.
- Excellent chemical resistance. Acid resistant. Hydrogen sulphide gas resistant.
- Tolerant of damp cool surfaces.
- Good weather resistance - may chalk on prolonged UV exposure (this however will not detract from its general durability and chemical resistance).
- Excellent abrasion resistance.
- Good surface wetting.
- Ready to use, disposable kit form, eliminates mixing pails and weighing.
- Low odour.
- Excellent adhesion to most substrates.
- Can be applied to vertical horizontal surfaces.
- Finish/colour - normally clear high gloss but dependant on fillers and/or aggregates used. Suitable coloured pigments may be incorporated.
- Volume solids - 100%
- Minimum application temperature: Std cure +8°C.

**SUGGESTED USES:**

- Monolithic, hygienic floor toppings for food processing, chemical, ablution, amenity and industrial areas.
- Reinstatement of acid gas corroded concrete in sewage and waste water systems.
- Tank linings.
- Concrete sealing.
- Filling and repairing concrete surfaces.
- Non-skid topping for steps and ramps.
- Bedding of bolts or stanchions into concrete.

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**K20 CONCRETE REPAIR SYSTEM** (cont'd)**NOT****RECOMMENDED:**

- Application below dew point (may cause surface bloom).
- Application to green concrete (allow 21 days cure).
- Prolonged contact with Phenols, amines and strong acids.
- Very hot environments (see product selection).

**CHEMICAL  
RESISTANCE:**

Alkalies	Excellent
Acids: strong	Fair
dilute	Good
Motor oils	Excellent
Alcohol	Good
Aromatic Solvents	Good
Water: salt	Excellent
distilled	Excellent
Brine	Excellent
Wet Hydrogen Sulphide Gas	Excellent

**SURFACE  
PREPARATION:**

- Shot blast, acid etch, high pressure waterblast or grind concrete to clean.
- Prime the concrete with Aquaseal. Prime again if the surface is still porous. Porous substrates may lead to blister forming in the K20 topping. This is due to escaping air. Aquaseal is **white** when applied. Wait until it turns clear before K20 is applied.
- Mix the primer according to instructions on that data sheet. Apply at 6-8m<sup>2</sup>/mixed litre. Silica sand may be blown into the primer to improve K20 pick-up during trowelling

**APPLICATION:****(a) Mix Ratios**

K20 CRS is provided as a ready-to-use kit.

K20 Resin	3.0kg
K20 Hardener	1.14kg
K20 Acid Resistant Filler	8.10kg

The combined mix totals 12.24kg and produces a mixed volume of 7.5 litres.

**(b) Coverage**

The kit will cover 2.5m<sup>2</sup> at 3mm thick.

**(c) Mixing**

Apply the K20 within 4 hours of the primer application. The K20 CRS kit is provided in a disposable pack form which avoids the weighing of compounds. All components will mix into a 10Lt pail. Mix the resin and hardener. Mix briefly until uniform. Add the complete bag of filler. **Do not** part add as the filler component may not be fully mixed. Mix slowly with a slow speed powerful drill. K20 **must be** power mixed to develop the non-slump gel structure.

## **K20 CONCRETE REPAIR SYSTEM** (cont'd)

- (d) **Application** Apply to the pre-primed surface using a plasterers trowel and hawk.
- (e) **Pot Life** 45 minutes at 18°C. K20 CRS is formulated to apply on horizontal, vertical, coves or overhead situations. Thickness at least up to 10mm will be non-slumping.  
When trowelling is complete the surface may be left as is to provide a non-slip surface. Alternatively the surface may be glassed-off by spraying with Eposolve 70 solvent and trowelling or rolling smooth.

### **PROPERTIES:**

- (a) **Coverage** 2.5m<sup>2</sup>/7.5Lt kit @ 3mm thickness
- (b) **Film Build** 2-30mm+ as required
- (c) **Pot Life** 45 minutes @ 18°C
- (d) **Cure Time**
- |               |                 |
|---------------|-----------------|
| Touch hard    | 5 hours         |
| Fully cured   | 36 hours @ 15°C |
| Overcoat time | 12 hours @ 15°C |
- (e) **Clean Up** Eposolve 70
- (f) **Shelf Life** 24 months minimum in unopened containers
- (g) **Optional Overcoating** K20 CRS may be overcoated with epoxy coatings eg: Terratuff. Apply coating after 12 hours. If more than 72 hours has expired, then abrade the K20 to ensure adhesion.
- (h) **Control Joints** Ensure control joints are carried through the K20 system.

### **HEALTH & SAFETY:**

- Use gloves to avoid skin contact.
- **\*\*Caution\*\***: Eposolve 70 thinners are flammable.