

# TECHNICAL DATA

Revision Date 01/2008

## CASTLESTONE REPAIR MORTARS

### Product Codes

TCB07, TCB08, TCB09, TCB10, TCB13,  
TCB16

Packaging listed overleaf

### Description

Castlestone Repair Mortars are Portland cement based powder mixes which are polymer reinforced, coloured and textured to enable surface finishes resembling stone or reconstituted stone. The mix designs include powerful plasticising agents which produce workable mortars at low water content. The pre-packaged products are ready for on site mixing only requiring measured water addition. The resulting mixes enable repairs to be carried out with excellent finish plus high early and final strengths. The repaired concrete and steel sections are protected from further deterioration, have good freeze-thaw stability and are resistant to oil and many chemical environments. Placement thickness may be in the nominal range 20mm to 65mm.

**Uses include:** Repair and replacement of damaged decorative concrete and reconstituted stone .  
Protection of concrete - steel elements.  
Areas of repairs include walls, columns, beams, lintels and mullions.

### Typical Mortar Properties @ 20°C

#### Compressive Strength

Water content 1.25 litres per 15kg tub

| 1 Day               | 7 Days              | 28 Days             |
|---------------------|---------------------|---------------------|
| 20N/mm <sup>2</sup> | 33N/mm <sup>2</sup> | 50N/mm <sup>2</sup> |

**Density** 2100kg/m<sup>3</sup>  
**Usable Life** 45 minutes

### Specification Outline

Concrete repairs and replacement shall be carried out using Castlestone Repair Mortar as manufactured by Tecroc Products Ltd. The product must be stored, handled and used strictly in accordance with the manufacturer's instructions.

### Quality Assurance

Tecroc Products Ltd is a firm of Assessed Capability. The Company's quality system conforms to BS EN ISO 9001:2000 and is assessed by SGS Ltd Systems and Services Certification.

### Standards

Castlestone Repair Mortars have been tested in accordance with the appropriate parts of the following standards: BS1881

### Instructions For Use

#### Preparation

Contact surfaces must be sound, clean and provide a good mechanical key. Remove all loose material, plaster, paint and oily deposits. Expose reinforcing steel to at least two thirds of its circumference in a sound concrete background. Totally expose steel in areas where concrete repairs are deeper than the steel embedment depth. Clean back corroded reinforcing steel to bright metal. Cleaned steel should be protected by Steel Primer. Cut back repair edges to avoid feather edging.

#### Priming

Prime the prepared concrete surface and reinforcing steel using the slurry primer formed from a mix of: Castlestone Repair Mortar: Five parts by volume  
Water: One part by volume  
Mix the slurry primer in a suitable mixing vessel using a slow speed drill and Mortar Mixer. Do not mix more than can be applied within the usable time, 45 minutes at 20°C. Apply mortar before the primer coat has dried.

#### Mixing

Castlestone Repair Mortars are supplied in 15kg tubs.  
The water requirement to produce the mortar is: 15kg tub 1.25 to 1.40 litres of water  
Mechanical mixing is recommended. Pour the required quantity of water into a suitable mixing vessel. Slowly add the powder to the water whilst continuously mixing. Suitable mixers include a slow speed high torque drill with a Mortar Mixer or a forced action mixer such as Creteangle or Mixal.

For small lots hand mixing may be suitable. Ensure thorough mixing, in a small bucket, to achieve a uniform stiff mortar.



Grouts



Structural Support Mortars



Concrete Repair Products



Construction Adhesives



Resin Et Cementitious Anchors



Highway Products



Coatings



Waterproofing



Ground Engineering

**Head Office**  
Holly Lane Industrial Estate  
Atherstone  
Warwickshire  
CV9 2RN  
Tel: 01827 711755  
Fax: 01827 711330

**Irish Distributor**  
Construction Chemical Supplies  
Unit 219  
JFK Road JFK Industrial Est  
Dublin 12  
Tel: 00 353 1 450 3896  
Fax: 00 353 1 450 3298

Web site: [www.tecroc.co.uk](http://www.tecroc.co.uk)

E-mail: [enquiries@tecroc.co.uk](mailto:enquiries@tecroc.co.uk)

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### Instructions For Use

#### Placing

Apply the mixed mortar firmly into the repair area. It may be necessary to use a gloved hand to place and compact the mortar behind reinforcing steel and into narrow corners and edges. Initially finish the surface with a wooden float. Allow the mortar to stiffen then finish finally with a dampened steel float. Finishing may be varied to suit shape and texture using suitable finishing tools. In situations where thick layers are required to be built up, the surface of the under layer should be left with a wood float finish and should be scored. Subsequent primer and mortar layers may be applied as soon as the initial layer is firm enough not to distort under the new work.

Castlestone Repair Mortars may be applied at temperatures between 5°C and 35°C. For application at temperatures outside this range contact the Technical Service Department.

#### Curing

Curing should be undertaken in accordance with good concrete practice. The curing regime should be applied as soon as finishing is complete. For large areas, as each half square metre is completed curing should be started. Suitable methods of curing include water spray, polythene sheeting and spray applied concrete curing membrane, Polycure

### Precautions

#### Health and Safety

Castlestone Repair Mortars are alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs wash thoroughly with clean water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice.

Full health and safety data are given in Product Safety Data Sheet.

#### Fire

Castlestone Repair Mortars are non-flammable

#### Yield

Castlestone Repair Mortars are packed in 15kg tubs. The yield obtained from these units :  
15kg unit, approximately 7.0 litres of mixed material.

### Storage And Shelf Life

Castlestone Repair Mortars will have a shelf life of 6 months when kept in dry conditions at a temperature of 5°C to 45°C. Storage at higher temperatures or high humidity may reduce the shelf life.

### Packaging And Ordering

Castlestone Repair Mortars are supplied in:

|           |                    |
|-----------|--------------------|
| Portland  | Product Code TCB07 |
| Bathstone | Product Code TCB08 |
| Buff      | Product Code TCB09 |
| Minster   | Product Code TCB10 |
| Crest     | Product Code TCB13 |
| Linpave   | Product Code TCB16 |

Steel Primer is supplied in:

20kg bags Product Code ACR01

Polycure is supplied in:

5 litre polybottles Product code AF03

For further information and sales please contact your local Tecroc Products office as listed below.

Tecroc Products Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Tecroc Products Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Tecroc Products Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.



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Web site: [www.tecroc.co.uk](http://www.tecroc.co.uk)

E-mail: [enquiries@tecroc.co.uk](mailto:enquiries@tecroc.co.uk)