

Preblended, single-component, polymer-modified, cementitious levelling mortar

# Uniclass L642 June 2007

## weber.cem fairing coat

## mulsifix fairing coat



## About this product

Preblended, single-component, polymer-modified, cementitious mortar needing only mixing with water to produce a high quality surface levelling mortar and pore filler for most concrete surfaces.

Technical data	
Mixed density	1900 kg/m³
Working time	> 45 mins at 20°C
Bond to concrete	1.3 N/mm² at 28 days
Compressive strength	19 N/mm² at 7 days 23 N/mm² at 28 days
Flexural strength	4.5 N/mm² at 7 days 5.0 N/mm² at 28 days
Tensile strength	2.5 N/mm² at 7 days 3.0 N/mm² at 28 days
Static Modulus of Elasticity	19 kN/mm <sup>2</sup>
ISAT (BS1881-5) (Control concrete: 0.26 ml/m²/sec)	0.017 ml/m²/sec at 10 min 0.008 ml/m²/sec at 30 min 0.005 ml/m²/sec at 60 min
Bond of weber.cote smooth to weber.cem fairing coat	> 1.3 N/mm <sup>2</sup>
Bond of weber.cote EC to weber.cem fairing coat	> 1.0 N/mm <sup>2</sup>
Freeze-thaw resistance (cycled –20°C and +20°C: 25 times)	No degradation or loss of bond
Thermal resistance (cycled +20°C and +60°C: 25 times)	No degradation or loss of bond
Coefficient of linear thermal expansion	10.5 x 10 <sup>-6</sup> per °C at 28 days
Water Vapour Transmission Rate Equivalent air layer thickness Recommended criterion for water vapour release is maximum of 4 metres)	49 g m <sup>-2</sup> day <sup>-1</sup> 0.4 metres at 2 mm layer thickness
Carbon Dioxide Transmission Rate Equivalent air layer thickness (Recommended criterion for CO <sub>2</sub> barrier is minimum of 50 metres)	0.8 g m <sup>-2</sup> day <sup>-1</sup> 49 metres at 2 mm layer thickness

#### Uses

weber.cem fairing coat can be used for:

- Levelling new and old concrete surfaces, infilling surface imperfections
- Making good concrete blow holes, filling small holes
- Making good frost damaged and scoured concrete surfaces
- Levelling of patched concrete repairs

#### **Constraints**

weber.cem fairing coat is not intended as a final finish; normally, an anti-carbonation coating is subsequently applied. Do not use solvent or silane-based coatings.

#### Features and benefits

- ▲ Dual action can be used as a pore filler and a levelling mortar
- ▲ Easy to apply: does not slump or slip
- ▲ Easy to spread to provide a smooth and level surface
- ▲ Good adhesion to prepared concrete
- ▲ Compatible with typical concretes
- ▲ Good carbonation resistance: contributes to the properties of the Mulsifix Concrete Repair System
- Allows water vapour to escape does not trap water vapour - does not blister
- Agrément approved as part of the weber.cem Concrete Repair System





## weber.cem fairing coat

#### Preparation

**weber.cem fairing coat** is suitable for use on concrete and dense concrete blockwork. *It is not suitable for lightweight blocks or bricks*.

All substrates must be sound, free of all contamination including laitance, paints, coatings, oil, grease and dust.

Concrete and concrete blockwork surfaces must be adequately prepared by use of suitable mechanical means such as grit blasting, high pressure water jetting or needle gunning to produce a lightly textured surface to ensure a good key.

Concrete surfaces contaminated with oil or grease require suitable preparation. New concrete must be fully cured for at least 14 days. Do not use a permanent curing membrane.

Defects such as honeycombing, leaks, pinholes, cracks etc. should be treated appropriately prior to the application of weber.cem fairing coat. Pinholes, blowholes, small voids and pores can be treated with weber.cem fairing coat as described below. Cure fresh repairs for at least 24 hours.

Thoroughly dampen the area to be treated with clean water and allow excess to drain off before applying **weber.cem fairing coat**.

#### Mixing

Mix weber.cem fairing coat in a forced-action mixer or in a clean bucket using a paddle and a slow speed drill at a speed not exceeding 400rpm. Mix for at least 2 minutes to a smooth and homogenous paste consistency. For normal levelling applications use 3 to 3.5 litres of water per 25 kg bag. For other applications such as pore filling, dubbing out, etc. the water addition can be varied depending on the consistency required and the ambient temperature.

Min. water addition: 3 litres per 25 kg bag Max. water addition: 3.5 litres per 25 kg bag. Usable time after re-mixing: > 45 minutes. For small quantities, mix 1 part water to 4.5 parts of powder by volume.

#### Application

Ensure all pores, surface voids etc. are filled first before applying **weber.cem fairing coat** as a levelling mortar.

For pore filling: Use a pallette knife or similar tool to apply the mortar, pressing well into the pores. Alternatively, use a damp sponge to rub the mortar into the pores with a circular motion. Finish flush to the surface and rub off any excess mortar. It is best to allow the pore-filling mortar to harden first before re-wetting and applying the levelling coat.

Maximum depth and diameter of application: 5 mm

For surface levelling: Apply with a steel float to a thickness of about 2 mm pressing well into the damp substrate. If a thicker coat is needed to hide deeper surface imperfections, apply the second coat when the mortar has hardened sufficiently to support it.

Minimum thickness of application: 1 mm per

layer. Maximum thickness of application: 3 mm per layer up to a combined maximum of 5 mm.

A spray pump can be used when levelling large areas of concrete.

Use a steel float to provide a smooth surface when the mortar has firmed up sufficiently. Do not re-wet the surface before trowelling. This may cause some surface crazing.

Alternatively, rub up with a wooden float or sponge to produce a level surface suitable for overcoating.

#### Curing

Normal concrete curing methods are recommended. Do not use a curing agent when applying a coating unless it can be proven that the subsequent bond will be unimpaired.

Not to be overcoated until 4 days after application at 20°C.

Temperature range of application: +5°C to +35°C. Do not apply on frozen surfaces or when frost is expected within 24 hours. Do not apply in direct sunlight or on hot substrates.

When applying in confined or close spaces, cure for 4 days then ensure sufficient ventilation to prevent condensation.

**Note:** Times quoted need to be extended at lower temperatures and reduced at higher temperatures.

### Packaging

Supplied in 25 kg bags.

#### Coverage

Actual yield depends on the water mix ratio. Approx 3.8 kg per m<sup>2</sup> when applied at 2 mm thickness.

Approx. 6.5 m<sup>2</sup> per 25 kg at 2 mm. Yield approx. 13 litres.

#### Storage and shelf life

When stored unopened in a dry place at temperatures above 5°C, shelf life is 6 months from date of manufacture.

#### Health and safety

Contains cement (Contains chromium (VI). May produce an allergic reaction). Harmful by inhalation. Irritating to eyes and skin. Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical help. After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing, gloves and eye/face protection.

For further information, please request the Material Safety Data Sheet for this product.

#### **Technical services**

**Weber's** Customer Services Department has a team of experienced advisors available to provide on-site advice both at the specification stage and during application. Detailed specifications can be provided for specific projects or more general works. Site visits and on-site demonstrations can be arranged on request.

Technical helpline Tel: (01525) 722110

#### Sales enquiries

**Weber** products are distributed throughout the UK through selected stockists and distributors. For UK sales enquiries and overseas projects, contact **Weber's** Sales office

Sales office

Tel: (01525) 722100 Fax: (01525) 718988

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Dickens House, Enterprise Way, Maulden Road, Flitwick, Bedford MK45 5BY, UK Tel: 08703 330070 Fax: (01525) 718988 e-mail: mail@weberbuildingsolutions.co.uk To the best of our knowledge and belief, this information is true and accurate, but as conditions of use and any labour involved are beyond our control, the end user must satisfy himself by prior testing that the product is suitable for his specific application, and no responsibility can be accepted, or any warranty given by our Representatives, Agents or Distributors. Products are sold subject to our Standard Conditions of Sale and the end users should ensure that he has consulted our latest literature.

