

# Monolevel 250F

# **Class R1 Fine Grade Fairing Coat for Existing Paint Finishes**

#### **Product Overview**

Fine grade, polymer modified cementitious mortar for filling of blow holes, cracks, surface defects and uneven surfaces in existing paint surfaces. CEmarked in accordance with BS EN 1504-3 Class R1.

#### **Uses**

For the filling of blow holes, cracks, mapping defects, blemishes and levelling out uneven surfaces in existing paint finishes, as well as concrete and mosaic substrates. Suitable for repair methods 3.1 as defined by the standard BS EN 1504-3.

## **Advantages**

- Incorporates the latest proven cement chemistry and styrene acrylic copolymer technology.
- Pre-packaged material requiring mixing with clean water on-site to give an adhesive mortar which can be rapidly applied in vertical and horizontal situations by bag-rubbing, trowel or spatula.
- Non-toxic when cured.
- Economic mortar requiring no substrate or inter-layer priming. Part bags can be mixed. Suitable for feather edging.
- Easily over-coated after just 24 hours with specialist membranes in the Flexcrete range to provide further protection and aesthetic quality.

# **Description**

MONOLEVEL 250F is a single component, polymer modified cementitious mortar for the filling of blow holes, cracks, mapping defects, blemishes and levelling out uneven surfaces in existing paint finishes, as well as concrete and mosaic substrates. It has excellent adhesion to existing paint surfaces, making it ideal for providing a fair faced finish prior to the application of subsequent protective coatings and paint finishes. Once cured, the product should be overcoated with specialist membranes in the Flexcrete range to provide further protection and aesthetic quality.

# **Compliance**

 CE-marked in accordance with BS EN 1504-3 Class R1. Suitable for repair methods 3.1 as defined by BS EN 1504-3

# **Specification Clause**

The fairing coat shall be a single component, waterproof, polymer modified cementitious mortar that is CE-marked in accordance with BS EN 1504-3 Class R1. It shall comply with the following performance specification:

- Compressive strength at 20°C. of at least 4MPa in 1 day and 25MPa in 28 days (mixed at 6 litres / 25kg).
- Flexural strength at 28 days (20°C. & 65% R.H) of at least 6.5MPa in accordance with BS 4551.
- Adhesion to concrete after 28 days of 3.1MPa in accordance with BS EN 1542.



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EN1504-3: Concrete repair product for non-structural repair PCC mortar (based on hydraulic cement polymer modified)

Compressive Strength : Class R1 ≥ 10MPa Adhesive Bond : Class R4 ≥ 2.0MPa

Chloride Ion Content :  $\leq 0.05\%$ 

Dangerous Substances : Complies with 5.4

Reaction to Fire : Class F



### **Technical Data / Mechanical Characteristics**

Property	Standard	BS EN 1504 R1 Requirement	Result
Compressive Strength	EN 12190	≥ 10MPa	28 days: 25-35MPa
Compressive Strength Development @20°C	BS4551		1 day 4-10 MPa 7 days 20-30 MPa 28 days 25-35 MPa
Adhesive Bond	EN 1542	≥ 0.80MPa	3.1MPa Class R4 ≥ 2.00MPa
Chloride Ion Content	EN 1015-17	≤ 0.05%	≤ 0.004%
Flexural Strength	EN196-1		6.5MPa after 28 days
Coefficient of Thermal Expansion	BS EN 1770		1.57 x 10 <sup>-5</sup> °C <sup>-1</sup>
Mixed Density		-	1850 - 1950kg/m³
Mixed Colour		-	White/Off white
Max Application Thickness		-	4mm per layer
Min Application Temperature Max Application Temperature		-	5°C. 35°C.
Working Life (approx.)		-	60 minutes at 20°C.
Reaction to Fire	EN13501-1	Euroclass	Euroclass F

The properties given above are obtained from laboratory tests: results obtained from on-site testing may vary according to site conditions.

# **Application Instructions**

## **Preparation**

The areas to be treated must be free from all unsound material, i.e. dust, flaking paint, oil, grease, organic growth. Existing paint finishes should be cleaned thoroughly using a power washer and left to dry before continuing. Hard glossy finishes should be roughened using mechanical methods to provide a key and promote adhesion. Visible areas of growth and associated underlying loose paint or substrate must be removed by mechanical means and the substrate treated with **BIODEX WASH**.

#### **Mixing**

**MONOLEVEL 250F** should be mechanically mixed using a forced action mixer or in a clean drum using a drill and paddle. A normal concrete mixer is **NOT** suitable. For normal applications add 5-6 litres of clean water per 25kg bag which equates to a volume mix ratio of 3.5-4.5 volumes of powder: 1 volume of water for part bags dependent on consistency.

Normal mixing time is approximately 2 minutes. Mix so as to entrain as little air as possible. Use without delay.

Please Note: It is vital to the success of the application that these instructions are strictly adhered to. Flexcrete cannot be held responsible for any product failures due to incorrect mixing.

## **Placing**

Apply by wooden or sponge faced float or 'bag rubbing' techniques using a circular motion to completely fill all blow holes, cracks and other defects. As a final finishing process, before the material has fully hardened, excess material should be scraped from the surface using a steel float and any residue removed with a dry sponge.

Large surface defects and voids must first be pre-filled with **MONOLEVEL 250F** mixed to a stiffer consistency applied by palette knife or steel float. This should be allowed to stabilise before application of a fine skim coat at the wetter consistency to give a fair faced finish. Allow to cure for a minimum of 24 hours before overcoating.



## **Cleaning and Storage**

All tools should be cleaned with water immediately after use.

Materials can be stored for 24 months in dry, frost free conditions with unopened bags at 20°C.

## **Packaging**

MONOLEVEL 250F is supplied in 25kg bags.

## **Yield and Coverage**

16.2 litres per 25kg bag.

A 25kg bag covers 4m<sup>2</sup> at 4mm thickness.

## **Health and Safety**

Safety Data Sheets are available on request.

# **Application Top Tips**

- 1. Finish in the same direction to produce an even texture.
- 2. Ensure all applicators use the same application techniques to avoid variation in final finish.
- 3. Apply from the top working down to avoid contaminating previously treated areas.
- 4. When treating large flat panel areas, divide the surface into smaller sections using either lines from joins in the formwork or masking tape. Treat each section within the working life of the mixed material.
- 5. If mortar thickens, remix but **DO NOT ADD EXTRA WATER.**
- 6. Cold Weather Working (See separate Guide)
- ≥3°C. on a rising thermometer.
- > ≥5°C. on a falling thermometer.
- 7. Hot Weather Working (See separate Guide)
- Store material in cool conditions to maximise working life.
- Shade applied material from strong sunlight.
- If possible, avoid extreme temperatures by working at night.

The information herein is correct to the best of our knowledge, but it does not necessarily refer to the particular requirements of the customer. If the customer has any particular requirements it should make them known in writing to Flexcrete Technologies Limited, and obtain further advice accordingly.







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