Ref: Fairing Mortar –Surface Fairing Compound

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Fairing Mortar Surface Fairing Compound

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Fairing Mortar is a polymer modified, fine feathering mortar for applications in thin layers to produce a natural concrete grey appearance to concrete surfaces or masonry surfaces.

Fairing Mortar is based on hydraulic binders, high grade quartz sand and synthetic polymers and is shrinkage compensated.

This compound will adhere well to most cementitious or masonry surfaces provided the surface is clean and film free and has some porosity for bond to develop.

Advantages

Excellent bond strength and adhesion and bond to concrete or masonry surfaces Feather edging
Shrinkage compensated
Easy to use and apply
No primer or curing compound is required for most work
For internal or external use
Durable, low water permeation
Can be used in vertical, horizontal and overhead applications



Product Attributes

Recommended Uses

- ∇ Thin layer patching for vertical, horizontal and overhead applications.
- ∇ Rendering over porous or damaged concrete structures
- ∇ Levelling of uneven surfaces prior to coating.
- ∇ Repairs where uniform concrete colour is required.
- ∇ Repairing honeycomb concrete, cracks and pinholes.
- ∇ Tilt slab and precast concrete.
- ∇ Application of render over brickwork.
- ∇ Applications of fairing mortar over existing concrete or masonry surfaces.
- ∇ Applications requiring a thin build of Fairing Mortar to 3mm.

Performance: Residential, commercial and medium industrial.

Yield: The approximate yields are obtained if mixed in accordance with the recommended

procedures and accurately measured water content.

A 20kg bag of Fairing Mortar with 5.8 litres of water will yield approximately 13 litres.

78 bags required per cubic metre.



Installation

Substrate and surface preparation:

Surfaces to which Fairing Mortar are applied, should be clean, sound, free of dust and loose particles. Cement laitance, oil, grease, mold release oil or curing compounds must be removed from concrete or masonry surfaces by using a wire brush, bush hammer, scabbler, grit blaster or other means. During application, the temperature of the substrate should not be below 5°C. To avoid high surface temperatures, it is advised to shade area during the period of application

Priming:

Fairing Mortar is designed to adhere to most clean cementitious or masonry surfaces, without the need for priming where bond is required to the substrate. Where high impact or repetitious loading is applied, Cemco 101 Primer should be applied and allowed to reach a tacky state prior application.

At elevated temperatures it is desirable to presoak areas in which Fairing Mortar is to be applied with water prior to application. For very porous substrates it is essential that after presoaking the substrate, Cemco 101 Primer should be applied to the substrate and allowed to reach a tacky consistency prior to application of Fairing Mortar.

Mixing:

Care should be taken to ensure that the Fairing Mortar is thoroughly mixed. Small quantities (up to 2kg) can be mixed by hand using a suitable mixing drum or bucket. When mixing small quantities by hand the maximum should be volume batched. DO NOT MIX MORE THAN 2-3KG BY HAND.

Add approximately 5 volumes of the Fairing Mortar powder (loose-filled to excess and struck off level with the top of the measuring container) to two volumes of drinking quality water. This should be mixed until fully homogeneous and uniform

Greater quantities of Fairing Mortar must be mixed with a mechanical forced action mixer with a high shear stirrer.

When mixing complete bags add between 5.8 to 6.2 litres of drinking quality water into the mixing vessel and, with the mixer in operation, add one full 20kg bag of Fairing Mortar and mix for 3 to 5 minutes until fully homogeneous, uniform and lump free.

	Fairing Mortar	Drinking Water
Water Quantity	20kg	5.8 – 6.2 litres

Dependent on the ambient temperature and the desired consistency, the amount of water required may vary slightly but should not exceed 6.2 litres per 20kg bag of Fairing Mortar. Excess mixing water may result in surface crazing, cracking as well as lower strength and adhesion.

Note: In all cases Fairing Mortar powder must be added to water.



Pot Life:

Setting begins after 30-40 minutes (at 25°C substrate and ambient temperature) and ends after another 50-60 minutes.

The working period depends very much on the product temperature and on the amount of mixing water added.

Therefore the times given above should be regarded as a guideline. The lower the temperature the longer the setting time, the less water added the shorter the setting time

The addition of water to the mortar after it has started to stiffen is not recommended and the product should be discarded.

Finishing

Fairing Mortar should be finished with a steel trowel.

Application Thickness

Minimum	Feather Edge
Maximum	3mm

Application Temperature

Minimum	5°C
Maximum	35°C

Low temperature application:

In cold conditions down to 5°C, the use of warm water (up to 30°C) is advised to accelerate strength development. Normal precautions for winter working with cementitious materials should then be adopted. The material should not be applied when the substrates or air temperature is 5°C and falling.

High temperature application:

At temperatures above 35°C, the material should not be used as this will cause premature setting and make working with the product difficult.

Placing:

Apply the mixed Fairing Mortar to the prepared substrate by steel trowel from a feather-edge up to 3mm thickness. It should be applied with the minimum of working and be allowed to partly set before finally trowelling to finish. If a very smooth finish is required, a steel trowel should be used. Do not proceed with the application when rainfall is imminent unless in a sheltered or protected situation.

DO NOT ADD EXCESS WATER.

<u>Application Thickness:</u> Maximum applied thickness of Fairing Mortar is 3mm.



Technical Data

Setting times

Initial Set	20°C	50 minutes
	30°C	35 – 40 minutes
Final Set	20°C	60 minutes
	30°C	45 – 50 minutes

Traffic Time

Foot Traffic	2 Hours
Vehicle Traffic	12 Hours
Time to cover with floor covering (overlay)	<10mm 12 – 18 Hours >10mm 24 Hours
Check Moisture Content	Max 5.5% prior to installation

Typical setting times at 20°C

Curing

Fairing Mortar does not normally require curing. In hot, dry windy conditions all cementitious based mortars have to be protected against too rapid surface drying and evaporation. Under harsh conditions, protective measures should be taken to reduce water loss.

Fairing Mortar must be cured immediately after finishing in accordance with good concrete practice. The use of Cemco 101 primer or an acrylic based sealer sprayed, brushed or rolled on the surface of the finished Fairing Mortar in a continuous film, is recommended when maximum curing is required.

Cemco 101 Primer or an acrylic based sealer should be applied at coverage of 4-5m² per litre.

Cemco 101 primer or an acrylic based sealer should be applied immediately after final trowel.

In very extreme temperatures material should not be applied.

Application of Coating

Fairing Mortar, when cured, has excellent resistance to water. However, if areas are subject to continuous water immersion or chemical attack from solvents or acids, suitable coatings should be applied. To ensure a long lasting highly protective coating, it is recommended that up to two coats may be applied. The first coat should be applied 12-24 hours after the Fairing Mortar has been applied. The second coat may be applied the following day or as soon as the first coat has dried.





Typical Mechanical Properties

Compressive Strength

Age	Compressive Strength
28 days	>25 MPa

Tested in accordance with AS1012.9 at 20°C

Flexural Strength

Age	Flexural Strength
28 days	>7 MPa

Tested in accordance with AS1012.9 at 20°C

Bond Strength

Age	Bond Strength
28 days	>2 MPa

Tested in accordance with AS1012.9 at 20°C

Fresh Wet Density 1900 kg/m3 approximate. (Tested in accordance to AS1012.5)

Packaging: 20kg multi wall bag (50 bags per tonne).

<u>Shelf Life</u> 10 months when stored in a dry place in the original, unopened packaging. Do not

store on concrete floors. High levels of humidity will reduce the shelf life of the

product.

Attention

Fairing Mortar should not be used when the temperature is below 5°C or greater than 35°C.

Fairing Mortar should not be applied greater than 3mm thickness in any given application.

For concrete substrates subject to rising damp or moisture, a waterproof membrane is required.

New concrete surfaces must be at least 7 days old prior to application of Fairing Mortar.

To avoid too rapid drying, protect applied Fairing Mortar from direct sunlight or drying winds during actual application, and while curing for up to 24 hours.

If the substrate on to which Fairing Mortar is applied moves or cracks, reflective cracking will occur in the Fairing Mortar.

Risk

All cement-based products are alkaline and can cause irritation. This product is considered hazardous according to criteria of Work Safe Australia. A dust mask



should be worn when handling the material. Continuous or extended contact with this product may cause irritation, as well as respiratory issues such as bronchitis or silicosis. Contact with the eyes and repeated and prolonged skin contact should be avoided.

Safety Precautions:

All cement-based products are alkaline and can cause irritation. Although this product is not considered hazardous, a dust mask should be worn when handling the material. Contact with the eyes and repeated and prolonged skin contact should be avoided.

Full Technical Papers and Material Safety Data Sheets should be read before handling or the commencement of any works. Technical Papers and Material Safety Data Sheets are available on request. A WESTBUILD Representative is always available should you require further information.

Related Products and Information

Cemco 101 Primer – Admixture – Bonding Agent Westbuild General Purpose Primer Ultra Light Weight (ULW) Repair Mortar Level It - Self Smoothing, Self Levelling Underlay

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WESTBUILD CONTACT DETAILS

PHONE: 08 9309 2029 FAX: 08 9302 1129

E-MAIL: admin@westbuildgroup.com