

# **Technical Data Sheet FAIRING MORTAR**

# **Surface Fairing Compound**

#### **PRODUCT**

Fairing Mortar is a polymer modified single component cementitious feathering mortar.

# **DESCRIPTION**

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. It can be applied up to a maximum thickness of 3mm. Fairing Mortar is based on hydraulic binders, high grade quartz sand and synthetic polymers and is shrinkage compensated.

Fairing Mortar 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.

# **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.

#### **FEATURES & BENEFITS**

- Single component system pre blended powder, simply add water and mix.
- Excellent bond strength and adhesion and bond to concrete or masonry surfaces.
- Feather edging is possible.
- 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.
- Light off grey colour.

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# **PERFORMANCE PROPERTIES**

# **TYPICAL COMPRESSIVE STRENGTH**

Tested in accordance with AS1012.9 at 20°C

Age	Compressive Strength
28 days	>25 Mpa

# TYPICAL FLEXURAL STRENGTH

Tested in accordance with AS1012.9 at 20°C

Age	Flexural Strength
28 days	>7 Mpa

# **TYPICAL BOND STRENGTH**

Tested in accordance with AS1012.9 at 20°C

Age	Bond Strength
28 days	>2 Mpa

# **APPROXIMATE SETTING TIMES**

Vicat setting times at 20°C

Initial Set	20°C	45 Minutes
	30°C	30 Minutes
Final Set	20°C	60 Minutes
	30°C	40 Minutes

# **APPROXIMATE WORKING TIMES**

Temperature	Time (Minutes)
10°C	60 Minutes
20°C	30 Minutes
30°C	20 Minutes

# **APPLICATION THICKNESS**

Minimum	Feather Edge
Maximum	3mm

# **FRESH WET DENSITY**

1900 kg/m³ approx. (Tested in accordance to AS1012.5)

# **APPLICATION TEMPERATURE**

Minimum	5°C
Maximum	35°C

# WATER REQUIREMENT/20KG BAG

5.8 – 6.2 litres per 20kg bag.

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# **PACKAGING**

Fairing Mortar is supplied in a 20kg polylined bag.

#### **APPLICATION INSTRUCTIONS**

#### **SUBSTRATE & SURFACE PREPARATION**

Surfaces to which Fairing Mortar are applied, should be clean, sound, free of dust and loose particles. Cement laitance, oil, grease, mould 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, Sure Level 644 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, Sure Level 644 Primer 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. Greater quantities of Fairing Mortar must be mixed with a mechanical forced action mixer with a high shear stirrer.

If mixing small quantities by hand the maximum should be volume batched. 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.

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.

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.

DO NOT MIX MORE THAN 2-3KG BY HAND.

#### **PLACING**

Apply the mixed Fairing Mortar to the prepared substrate by steel trowel from a featheredge 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.

Note: Maximum applied thickness of Fairing Mortar is 3mm.

#### **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.

# **LOW TEMPERATURE WORKING**

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 WORKING**

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

#### **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 Sure Level 644 Primer 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.

Sure Level 644 Primer an acrylic based sealer should be applied at coverage of 4-5m² per litre.

Sure Level 644 Primer 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.

# **PRECAUTIONS**

- Fairing Mortar should not be used when the temperature is below 5°C. Fairing Mortar should not be used in temperatures 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.

#### **YIELDS**

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 meter. The recommended application thickness of Fairing Mortar is 3mm.

#### **CLEAN UP**

Fairing Mortar should be removed from tools and equipment with clean water immediately after use.

#### **STORAGE**

Fairing Mortar has a shelf life of approximately 8 months, if kept in a dry environment completely away from moisture.

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#### **HEALTH & SAFETY**

This product is classified as hazardous according to criteria of Work Safe Australia. Material containing Portland Cement and sand now fall into this category.

Continuous or extended contact with this product may cause irritation as well as respiratory issues such as bronchitis or silicosis.

- During use avoid inhalation of dust, contact with skin and eyes.
- Suitable protective clothing, dust masks, gloves and eye protection should be worn.
- Continual or extended contact with cement products can cause skin irritation.
- If skin irritation occurs, remove contaminated clothing and flush skin thoroughly with water for a minimum of 15 minutes. Contact Poisons Information Centre or consult medical adviser.
- Material Safety Data Sheets (MSDS) are available on request from the office. Read the MSDS and product data sheet carefully before using any product.

#### **DISCLAIMER**

Please Note: Recommendation and advice regarding the use of this product is to be taken as a guide only and Sure Level shall not be liable for any inaccuracy in the information or for any loss, injury or damage whatsoever resulting from its use. To the full extent permitted by law, Sure Level's liability is limited at its discretion, to the replacement of the goods or the supply of equivalent goods.

# **FIRE**

Fairing Mortar is nonflammable.

# **DOCUMENT DATE**

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#### **CONTACT DETAILS**

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