



Technical Data Sheet

FEATHER EDGE

SANDABLE SUB FLOOR FAIRING COMPOUND



Product

Feather Edge is a polymer modified single component cementitious feathering mortar.

Description

Feather Edge 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 from Feather Edge up to a maximum thickness of 10mm and can be readily sanded to further remove any construction or placement irregularity soon after set. Feather Edge is based on hydraulic binders, high grade quartz sand and synthetic polymers and is shrinkage compensated.

Feather Edge will strongly adhere 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 such as walls, water tanks, sewerage and water treatment plants.
- Levelling of uneven surfaces prior to coating.
- Repairs where high compressive strength and abrasion resistance is required.
- Repairing honeycomb concrete, cracks and pinholes.
- Tilt slab and precast concrete.
- Application of render over brickwork.
- Application of mortar over existing concrete or masonry surfaces.
- Applications requiring thin build of Feather Edge to 10mm.

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 internal or external use.
- Durable, low water permeation.
- Can be sanded/shaped within 2 to 4 hours at 20C.
- Adequate strength.
- Can be used in vertical, horizontal and overhead applications.

Performance Properties

Typical Compressive Strength

Tested in accordance with AS1012.9 at 20C and AS2073

Age	Compressive Strength
28 days	>25 Mpa

Typical Flexural Strength

Tested in accordance to ASTM C348 at 20C

Age	Flexural Strength
28 days	>4 Mpa

Typical Bond Strength

Tested in accordance to ASTM C882

Age	Bond Strength
28 days	>3.5 Mpa

Typical Setting Times

Vicat setting times at 20C

Initial Set	20C	45 minutes
	30C	30 minutes
Final Set	20C	60 minutes
	30C	40 minutes

Typical Working Time

Temp	Time
10 C	60 minutes
20 C	30 minutes
30 C	20 minutes

Application Thickness

Minimum	Feather Edge - Sandable
Maximum	10mm

Fresh Wet Density

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

Application Temperature

Minimum	5 C
Maximum	35 C

Water Requirement/10kg Bag

1.3-1.8 litres per 10kg bag.

Packaging

Feather Edge is supplied in a 10kg polylined bag.

Application Instructions

Substrate and Surface Preparation

Surfaces to which Feather Edge are applied, should be clean, sound and 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 wire brush, bush hammer, scabber, gritblasting or other means. During application, the temperature of the substrate should not be below 5C. To avoid high surface temperatures, it is advised to shade area during the period of application.

Priming

Feather Edge is designed to adhere to most clean cementitious or masonry surfaces without the need for priming where an improved bond is required to the substrate. Where high impact or repetitious loading is applied, Surecure should be applied and allowed to reach a tacky state prior application.

At elevated temperatures it is desirable to pre soak areas in which Feather Edge is to be applied with water prior to application. For very porous substrates it is essential that after pre soaking the substrate Surecure be applied to the substrate and allowed to reach a tacky consistency prior to application of Feather Edge.

Mixing

Care should be taken to ensure that Feather Edge is thoroughly mixed. Small quantities (up to 2kg) can be mixed by hand using a suitable mixing drum or bucket. Greater quantities of Feather Edge 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 Feather Edge powder (loose-filled to excess and struck off level with the top of the measuring container) to one volume of drinking quality water. This should be mixed until fully homogeneous and uniform. When mixing complete bags add between 1.3 to 1.8 litres of drinking quality water into the mixing vessel and, with the mixer in operation, add one full 10kg bag of Feather Edge and mix for 3 to 5 minutes until fully homogeneous, uniform, lump free. Dependent on the ambient temperature and the desired consistency, the amount of water required may vary slightly but should not exceed 1.8 litres per 10kg bag of Feather Edge. Excess mixing water may result in surface crazing, cracking as well as lower strength and adhesion. Note: In all cases Feather Edge powder must be added to water.

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





Placing

Apply the mixed Feather Edge to the prepared substrate by steel trowel from a feather-edge up to 10mm 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 Feather Edge is 10mm.

Pot Life

Setting begins after 20-30 minutes (at 25C substrate and ambient temperature) and ends after 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

Feather Edge may be finished by striking off with a straight edge and closing with a steel float.

Low Temperature Working

In cold conditions down to 5C, the use of warm water (up to 30C) 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 5C and falling.

High Temperature Working

At temperatures above 30C, the material should not be used as this will cause premature setting and make working with the product difficult.

Curing

Feather Edge 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. Feather Edge must be cured immediately after finishing in accordance with good concrete practice. The use of Surecure sprayed, brushed or rolled on the surface of the finished Feather Edge in a continuous film, is recommended when maximum curing is required. The Surecure should be applied at a coverage of 4-5m² per litre. Surecure should be applied immediately after final trowel. In very extreme temperatures and drying conditions, supplementary curing with polythene sheeting, taped down at the edges, may be required. Large areas should be cured as trowelling progresses (0.5m² at a time) without waiting for completion of the entire area.

Application of Coating

Feather Edge, 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 two coats be applied. The first coat should be applied 12-24 hours after the Feather Edge has been applied. The second coat may be applied the following day or as soon as the first coat has dried.

Precautions

- Feather Edge should not be used when temperature is below 5C. Feather Edge should not be used in temperatures greater than 35C.
- Feather Edge should not be applied greater than 10mm thickness in any given application.
- For concrete substrates subject to rising damp or moisture, a waterproof membrane is required.
- It is recommended that Sure Moisture Barrier be used as a primer (consult Technical Data Sheet or office).
- New concrete surfaces must be at least 14 days old prior to application of Feather Edge.
- To avoid too rapid drying, protect applied Feather Edge from direct sunlight or drying winds during actual application, and while curing for up to 24 hours.
- If the substrate on to which Feather Edge is applied moves or cracks, reflective cracking will occur in the Feather Edge.

Yields

The approximate yields are obtained if mixed in accordance with recommended procedures and accurately measured water content. A 10kg bag of Feather Edge with 1.8 litres of water will yield approximately 4.8 litres. 218 bags required per cubic metre. The recommended application thickness of Feather Edge is 10mm.

Clean Up

Feather Edge should be removed from tools and equipment with clean water immediately after use.

Storage

Feather Edge has a shelf life of approximately 8 months if kept in a dry environment completely away from moisture.

Health and 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

Disclaimer

Please Note: Recommendation and advice regarding the use of this product is to be taken as a guide only and Sure Level Pty. Ltd. 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 Pty. Ltd. liability is limited at it's discretion, to the replacement of the goods or the supply of equivalent goods.

Fire

Feather Edge is non flammable.

Part Number

SLF3017