

# SF838 SELF-LEVELLING SCREED (COLOUR) DECORATIVE TRAFFICABLE FAST-SETTING CEMENTITIOUS SMOOTHING SCREED

## **PRODUCT DESCRIPTION**

OPTIMIX SF838 SELF-LEVELLING SCREED

(COLOUR) is a pigmented fast-setting preblended cementitious self-leveling floor screed. It is suitable for foot traffic and intermittent light vehicular traffic and is specially designed for rapid installation of small or large scale projects. Typically applied between 5mm and 20mm thick in one operation; it will gain strength quickly to accept light foot traffic in around 4 hours.

When correctly bonded to a stable substrate it can quickly achieve a strong, seamless and wear resistant surface with a distinctive natural coloured finish.

Contact Optimix for details of available colours.



## **TYPICAL USAGE**

- New-build and renovation projects where quick turnaround or rapid return to service is important.
- Domestic and commercial use in apartment units, shopping malls, offices, hotels and schools.
- Free from casein and ammonia additives thus is also suitable for hygiene critical areas such as hospitals, kitchens etc.

# FEATURES AND BENEFITS

- Rapid Setting and High Early Strength
- Foot Traffic In About 4 Hours
- Strong Solid Dustless Surface
- Available in a selection of colours
- Low Shrinkage
- Efficient Hand or Machine Installation
- Simple and Easy To Use
- Consistent Quality



# **TECHNICAL DATA**

| Product Characteristics              | OPTIMIX SF838 |
|--------------------------------------|---------------|
| Compressive Strength at 28 days      | ~ 30 MPa      |
| Flexural Strength at 28 days         | ~ 7.0 MPa     |
| Bond Strength to Concrete at 28 days | ~ 1.8 MPa     |
| Linear Shrinkage at 28 days          | < 0.1 %       |
| Hindered Shrinkage at 56 days        | < 0.2 %       |
| Workability (Flow)                   | ≥ 130 mm      |
| Self-Healing Time                    | 20 Minutes    |
| Time Open to Foot Traffic            | 4 hours       |

Note: The above are typical laboratory test results and can vary slightly depending on the ambient and substrate conditions during application.

| Environmental Data               |   |
|----------------------------------|---|
| Volatile Organic Compounds (VOC) | ≤ 10 g/L  |
| Potential BEAM points            | Product is manufactured within 800km of Hong Kong project sites |
| Packaging Composition            | Paper bags incorporating 40%<br>recycled paper                  |

| 1,950 kg/m <sup>3</sup>   |
|---------------------------|
| 5.7 – 5.9 L               |
| 1.65 kg/mm/m <sup>2</sup> |
| 25 kg                     |
| 6 months                  |
|                           |



Note: The above are approximate figures and take no account of wastage of any kind.

| Testing Methods                   |                                 |
|-----------------------------------|---------------------------------|
| Compressive and Flexural Strength | BS EN 1015 - 11                 |
| Bond Strength to Concrete         | HKHA/MTS (00/02), Part D 2.1.15 |
| Linear Shrinkage                  | HKHA/MTS (2000), Part D 2.1.21  |
| VOC Content                       | USEPA Method 24                 |

Note: The tests were performed according to the national standard or in-house modifications of the corresponding testing procedures.

## **INSTALLATION GUIDE**

(Refer to Method Statement for more details)

## SURFACE PREPARATION

Substrate must be clean, free from unsound material, oil, grease and other contaminants. It is recommended to clean the substrate with high pressure water jet to remove dust and loose particles.

It is essential to pre-treat the substrate surface with diluted **OPTIMIX SF80** Primer. This will enhance the adhesion properties but more importantly will minimise pinholes and other surface blemishes caused by a porous, textured or variable substrate.

Apply primer liberally by brush to ensure complete penetration into the surface. Remove any excess primer while the primer is still wet. Allow the primed substrate become touch dry or tacky. Poor or highly porous substrates may benefit from a second coat applied wet-on-dry.

## **MIXING**

For hand or batch mixing mix each 25kg bag of **OPTIMIX SF838** dry powder with 5.7 - 5.9 L potable water. Mechanical mixing with a slow speed drill fitted with a suitable paddle is recommended. Mix the material for about 3 - 4 minutes or until a lump-free homogeneous mix is achieved. Allow the mixture to stand for 1 minute, mix briefly again and the material is ready for use.

For pump or continuous flow mixers adjust the water addition to achieve flow diameter of 140mm at the point of application.

## APPLICATION

The mortar should be laid to position within the working life and self-healing time of the mixture. This is dependent upon many factors including water addition, water temperature, mixing method, surface condition, ambient temperature, relative humidity, sunlight and drafts.

It is suggested to use a rubber scraper or pin leveler to achieve an even application and to level adjacent wet applications. In most circumstances optimum effective layer thickness is around 5mm to 8mm. A spikedroller can then be used to remove the trapped air bubbles. These operations should be completed as soon as possible and within working life of the mortar.

For the best results the **OPTIMIX SF838** should be handled as little as possible to achieve smooth and continuous installation. Overworking the surface can lead to watermarks and other blemishes. For best results we recommend all applications be done by our skilled approved applicators.

## FINISHING

The finished surface should be flat and smooth, and its levelness is largely dictated by the contour of the substrate. Minor surface defects, which pose no detrimental effect to the mechanical performance of flooring, may occur due to substrate contours and texture, substrate movement, uneven drying or other external factors beyond our control. (See limitations)

## CURING

Protect the surface from strong or localised drafts, sunlight, AC's, heaters for at least 4 hours and preferably for 2 to 3 days.

## LIMITATIONS

**OPTIMIX SF838** is a cement based product with an inherent natural variation that results in a distinctive architectural finish. This finish is liable to change and develop as the material ages, weathers and is subject to wear and tear. As such any samples provided will exhibit some difference from the overall finish achieved on site so Optimix strongly recommends site trials to ensure the result can meet expectations.



#### **HEALTH AND SAFETY**

**OPTIMIX SF838** is alkaline in nature and can cause irritations to persons with sensitive skin. Avoid inhalation of dust and contact with skin and eyes. Wear suitable protective gloves and masks while handling the product. If contact with eyes, rinse immediately with plenty of clean water and seek medical advice. This product is non-toxic and is not flammable.

#### **STORAGE**

Store the products in a cool and dry place with the original unopened bags on pallets with plastic wrapping. Protect from direct sunlight, rainfall and exposure to high humidity conditions. Avoid excessive stacking of pallets. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging and reduce shelf life.

## **ALTERNATIVE PRODUCTS**

Other products from the Optimix range include:

- SF818 Self-Levelling Screed (Underlayment)
- SF828 Self-Levelling Screed (Overlayment)
- SF868 Self-Levelling Screed (Exterior)
- SF878 Self-Levelling Screed (Heavy Duty)



Important Note: The information contained herein is, the best of our knowledge, true and reliable and is supported by the present state of our knowledge. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives as the conditions of use and any labour involved are beyond our control.



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