

SF868

SELF-LEVELLING SCREED (EXTERIOR)

EXTERIOR GRADE FAST-SETTING CEMENTITIOUS SMOOTHING SCREED

PRODUCT DESCRIPTION

OPTIMIX SF868 SELF-LEVELLING SCREED (EXTERIOR) is a fast-setting pre-blended cementitious self-leveling floor screed. It is formulated with waterproofing additives making it suitable for locations subject to occasional wetting such as fully or partially covered areas. Its stability makes it an ideal base for ball court and playground coatings.

Typically applied between 3mm and 15mm thick in one operation; it will gain strength quickly to accept light foot traffic in around 4 hours.



TYPICAL USAGE

- For smoothing sound, properly prepared exterior concrete surfaces and internal areas subject to occasional moisture and water ingress
- New-build and renovation projects
- Suitable for walkways, ball courts, playground and other interior and exterior floor areas
- Ideal base for full or partial covering with resin based coatings, line markings or other court details

FEATURES AND BENEFITS

- Resistant to Occasional wetting
- Good Workability
- Strong Solid Dustless Surface
- Extremely Flat and Smooth Finish
- Low Shrinkage
- Hand or Machine Installation
- Simple and Easy To Use
- Consistent Quality
- Efficient Application

TECHNICAL DATA

Product Characteristics	OPTIMIX SF868
Compressive Strength at 28 days	~ 35 MPa
Flexural Strength at 28 days	~ 7.0 MPa
Linear Shrinkage at 28 days	< 0.1 %
Hindered Shrinkage at 56 days	< 0.2 %
Workability (Flow)	≥ 130 mm
Self-Healing Time (25°C)	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% recycled paper

Packaging & Yield	
Wet Density	1,950 kg/m ³
Water Demand	5.7 – 5.9 L
Coverage	1.6 kg/mm/m ²
Packaging (per bag)	25 kg
Shelf Life	6 months

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

Testing Methods	
Flow	BS EN 12706
Density	BS 4551
Compressive and Flexural Strength	BS EN 196-1
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 SF868** 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 spiked-roller 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 SF868** 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.

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.

OPTIMIX SF868 achieves full strength after 28 days but under most circumstances should be suitable for full service traffic within 7 days. Overcoating with impermeable paints and coatings should be delayed at least 3 days and until the RH of the screed has dropped below 75%.

HEALTH AND SAFETY

OPTIMIX SF868 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)
- **SF838** Self-Levelling Screed (Colour)
- **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.