# SF878

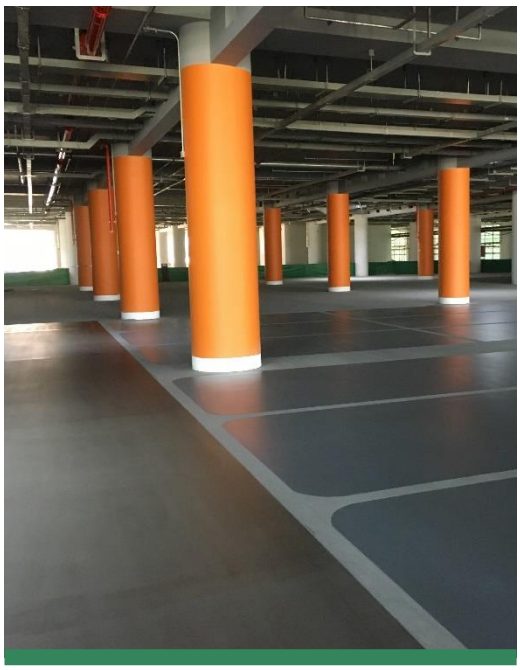
## SELF-LEVELLING SCREED (HEAVY DUTY)

### HIGH STRENGTH FAST-SETTING TRAFFICABLE CEMENTITIOUS SMOOTHING SCREED

## PRODUCT DESCRIPTION

***OPTIMIX SF878 SELF-LEVELLING SCREED (HEAVY DUTY)*** is a fast-setting pre-blended cementitious self-leveling floor screed suitable for regular rubber wheeled vehicular traffic and high volume foot traffic such as car parks and shopping malls. It is designed with a particularly high strength to achieve a seamless, strong and wear resistant finish.

It is easy to mix and apply with a highly flowable consistency that is ideal for rapid installation of small or large scale projects. It can be applied at thickness between 3mm and 15mm in one operation and will gain strength quickly to accept light foot traffic in around 4 hours.



## TYPICAL USAGE

- Busy Car Parks and Heavy Foot-Fall Areas
- New-build and renovation projects
- Can be used 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

- High Mechanical Strength
- Strong Solid Dustless Surface
- Extremely Flat and Smooth Finish
- Low Shrinkage
- Hand or Machine Installation
- Simple And Easy To Use
- Consistent Quality
- Efficient Application

ISO 9001 : 2015 Certificate No.: CC 2170
ISO 14001 : 2015 Certificate No.: CC 5041

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## TECHNICAL DATA

| **Product Characteristics** | ***OPTIMIX SF878*** |
|---|---|
| Compressive Strength at 28 days | ~ 40 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 | 2,000 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 SF878*** 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 SF878*** 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 SF878*** 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 until the RH of the screed has dropped below 75%.

## HEALTH AND SAFETY

***OPTIMIX SF878*** 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)
- ***SF868*** Self-Levelling Screed (Exterior)




OPTIMIX 奥迪美

**OPTIMIX (HONG KONG) LIMITED**
20/F, SUP Tower, 75-83 King's Road, North Point, Hong Kong
(852)2395 5388 (852)2802 6433
(852)2802 6408 www.optimix.com.hk