

# SyneCrete® EZ-Screed 35

## Underlayment



### Product Description

#### GeneMix™ SyneCrete® EZ-Screed 35

**Underlayment** is a high quality self-flowable pre-mixed cement-based underlayment for fine floor finishing. When water is added, it readily blends to produce a homogeneous flowable mortar to apply as underlayment or floor screed over concrete substrate. This product is formulated for multi-purposes use with low shrinkage, good surface finishing and easy application properties to provide a floor finish with reliable compressive strength, bond strength, slip resistance, abrasion resistance and crack control. This product can be applied by pumping, by hand or with an appropriate machine. The opening time for the mixture is approximately 45 minutes. Further property enhancements can be made on request.

#### Typical Usage

- Interior and exterior floor applications
- To bond on concrete/stone/ceramics
- Surface leveling for rough and uneven floor
- As underlayment for very fine self-levelling or epoxy floor finishing

#### Features and Advantages

- Good strength and mechanical performance
- Good bonding and low delamination risk
- Low shrinkage and crack risk
- High durability
- Extremely low VOC and carbon footprint

#### Testing Methods

Compressive and Flexural Strength	BSEN 1015-11
Bond Strength (Pull-Out Test)	HKHAMTS (2000), Part D 2.1.15
Linear Shrinkage	HKHAMTS (2000), Part D 2.1.21
Flow and Density	BS 4551
VOC Content	USEPA Method 24
Abrasion Resistance	BS 6717 - 2000
Slip Resistance	AS 4586 - 2013

#### Technical Data

28-day compressive strength	> 40 MPa (mean)
3-day compressive strength	> 25 MPa (mean)
7-day compressive strength	> 30 MPa (mean)
28-day flexural strength	> 8.0 MPa (mean)
Bond to concrete at 28 days	0.5 MPa (mean)
Linear shrinkage at 28 days	< 0.1%
Workability (flow – mini slump test)	> 200 mm
Volatile organic compound(VOC) content	≤ 1g/L
Usable time (27°C)	About 45 mins
Maximum sand size	< 1.0 mm
Time open to foot traffic (27°C)	4 hrs
Abrasion Resistance (test a block made of this product)	< 0.2 mm (BS 6717)
Slip Resistance (test a block made of this product)	SRV 81 (>P5)
Density	2000 kg per m3
Typical Mixing Water	3.5 – 4.0 L per bag
Covering dosage	2.0 kg/mm/m2
Packing specification	33.4 kg
Best Use	within 6 months

Note: These technical data are based on laboratory test results by testing methods in relevant standards.



#### Colour

Grey.

#### Major Components

Portland cement, fine aggregate, graded sand, and other mineral and chemical additives.



### Mixing and Application

Add to each bag of the dry material with 3.5 – 4.0 litre of potable water. Mechanical mixing using a pan mixer or a drum mixer with a suitable paddle is recommended. First mix the water-solid mixture at low speed for about 2 – 3 minutes and then at high speed for at least 1 – 2 minutes until a lump-free homogenous mixture is produced. Apply the mixture on the substrate to build-up the required thickness and then use a trowel or similar tool to spread the mortar if necessary and smoothen the surface. Pre-wetting of the substrate, which can generally produce a better bond strength, is recommended.

- The substrate must be clean, free of loose particles, oil, greases, dust and dirt.
- Cracks and defects on the substrate should be repaired before application.
- If application area is large, work split into smaller areas in accordance with open time limitation is recommended.
- Rollers with needles, rakes, leveling rulers etc. should be used within 45 mins after mixing of the screed for compaction and levelling.
- For outdoor applications, cover the application area with plastic sheet to avoid rain damage, etc.
- The screed can be re-opened for foot traffic after 4 hours.
- Ensure the screed is completely set and dry before further work, e.g. epoxy coating, tile paving, etc.

### Curing

Spray water mist onto the fresh mortar surface after hardening. In hot weather and/or strong wind conditions, cover the fresh mortar with plastic sheets that are properly sealed at their joints. Water curing is generally not required.

### STORAGE

Store the unopened bags in dry conditions and keep out of direct sunlight, and protect pallets from rainfall damage with ground clearance. Avoid excessive stacking of pallets. Failure to comply may result in premature deterioration of the product or packaging.

### HEALTH AND SAFETY

The product is alkaline in nature and can cause irritations to persons with sensitive skin. Avoid inhalation of dust and contact in skin and eyes. Wear



suitable protective gloves and masks while handling the product. If in contact with eyes, rinse immediately with plenty of clean water and seek medical advice. This product is non-volatile, non-toxic and is non-flammable.

### IMPORTANT NOTE

All information in this leaflet is to the best knowledge of the supplier and the product descriptions are true and reliable. As the construction site environment and the personnel involved are beyond the control of the supplier, the supplier does not guarantee performance if the product is applied not in accordance with recommended practice and workmanship. Material properties may vary from the specifications above if materials are not stored or not applied as instructed in this leaflet.