

# Technical Data Sheet



# **VICAFLOOR-SL280®**

Edition 01024

# Fast setting, Cementitious Self-Levelling Underlayment

# **Description**

Vicafloor-SL280 is a one component Cementitious Self-Levelling Underlayment based on VICAT Special Binders, siliceous graded aggregates, mineral additives and admixtures.

When mixed with water, it produces a Highly Flowable, Fast drying cementitious underlayment for the filling, levelling and smoothing of floors prior to the final finish whether it is vinyl, carpet, laminated floors or resinous coatings.

Vicafloor-SL280 is noted for its very low shrinkage values which enables it to be used as a continuous self-levelling layer without any joints. Vicafloor-SL280 is classified as CT-C25-F4 according to BS EN 13813:2002.

# **Advantages**

- Fast Setting and drying.
- 3-4 hours walk on time (+24°C).
- Very low shrinkage minimizes cracking risks.
- Highly Flowable with maintained flowability during its pot life.
- High early strength with long term strength gain.
- Application thickness from 2mm to 12mm.
- Economic & Easy to use.
- Very good air release.
- Smooth surface profile.

### Uses

Vicafloor-SL280 is used for smoothing and leveling concrete slabs and floors before installing tiles or other floor coverings that are not limited to the following:

- Vinyl, Carpet & laminated floors.
- Ceramic/natural stone.
- Terrazzo coverings.
- Substrates with epoxy coatings.
- Heated screeds.
- Vicafloor-SL280 can also be used under wood flooring (parquet) if used in combination with elastic adhesives

## **Technical characteristics**

Color Grey (other colors are available upon request)

**Toxicity** Non-toxic

**Processing Conditions** 10 -35°C & 35-75% RH, recommended 40-65%

Water/Powder ratio 0.24 - 0.26

Initial 40 min. Setting time @ 23° C 45 min. Final

Workable time @ 23° C 20 - 30 min Dry density ≈ 1.1 Kg/L

Fresh density ≈ 2.0 Kg/L Adhesion to concrete substrate

> 1 N/mm<sup>2</sup> (primed with Primer- A42) (Adhesion depends very much on proper surface preparation) Flow according to BS EN 1015-3 (Without Jolting)

Flow after mixing according to BS EN 13395-2:2002 (cm) ≥ 75 Cm in 30 Seconds (22% water)

Linear Shrinkage at 56d according to BS EN 12617-4 (%) ≤ 0.03% (Unrestrained)

Linear Expansion at 56d according to BS EN 12617-4 (%) ≤ 0.01% (Unrestrained) Flexural strength at 28d according to BS EN 196-1 (MPa) > 4 MPa

Compressive strength according to BS EN 196-1 (MPa) (4x4x16 prisms)

Water/Powder ratio	Age				
	4 hours	24 hours	7 days	28 days	56 days
0.24	5	9	14	22	25

<sup>\*\*</sup>Compressive strength is increasing thereafter.





# Package & Coverage

Vicafloor-SL280 is supplied in 25 Kg packs.

After mixing with water, the 25 Kg pack yields about 15.5 liters of self-leveling compound covering 6 m<sup>2</sup> of 2.5mm thickness. Allowance should be made for any possible wastage when estimating.

# **Application Instructions**

## **Surface preparation**

In order that maximum bond strength is achieved between the substrate and **Vicafloor-SL280**, all substrates should be sound, clean, and free from laitance, dust, loose particles, grease, oil or any other foreigner matter. The substrate must be rough, porous and load bearing. Any water leaks must be stopped and repaired following a proper repair procedure, using **Vicaseal Mortar** or **Vicaroc** & **Vicaseal Injection** if required.

#### Primino

All substrates must be primed using a suitable primer such as **Primer-A42 or SBR-40** for improved adhesion and left to cure until the surface is tacky. If any steel rebars are uncovered, they should be protected first using **Vicasteel-CP** before priming. In extreme cases of absorbent subfloors, a second coat of primer is to be applied after the drying of the first coat. If higher bonding values are required, **EP-200** solvent free epoxy primer with sand broadcasting can be used.

#### Mixing

- Add 6.00 6.5 liters of water to one Vicafloor-SL280 25 Kg bag.
- Either the powder or the water may be introduced first in the mixer, for best results introduce half of the water then all the powder then the remaining water quantity & continue mixing till homogeneity.
- A maximum 0.25 liter of additional water can be added under stirring until the desired consistency is achieved.
- Mechanical mixing using a slow speed drill (300 600 rpm) is essential for a rapid and homogeneous mix.

#### **Application**

- Make sure that the primer is tacky using your finger tip and there is no ponding and no bond breaking substance over the primer.
- Pour **Vicafloor-SL280** over the primed substrate & spread it using a suitable gauge rake to the desired thickness immediately after pouring.
- Good raking is sufficient to push any entrapped air to the surface; however, a spiked roller can be used to speed up the air releasing procedure immediately after raking.
- The whole process should be fast to avoid any roller markings on the surface.
- Too much rolling & late rolling are the main reason for dotted matrix surface marks.
- Make sure to work in sections that can be finished within 20-30 min.
- Vicafloor-SL280 can be finished using a smooth rake.
- **Vicafloor-SL280** is self-curing and doesn't require any additional curing; however, it must be protected for 24 hours against direct sun light, wind and hot temperature.

# **Precautions**

- Protect the Vicafloor-SL280 bags from direct sun rays or any other source of heat before use, this can lead to a very fast setting.
- During the setting of the mixture, exposure to drafts and intense sunlight should be avoided. This can lead to a
  too fast removal of moisture, whereby the leveling compound is more susceptible to cracking, shrinkage and the
  surface edges can be pulverized.
- Avoid working on hot substrates and avoid mixing with hot water.
- The temperature of Vicafloor-SL280 & the elements coming into contact with it should be in the range of 10°C to 35°C.
- Never exceed the stated water dose and temperature to avoid bleeding, segregation and further cracking.
- Never remix with water to retrieve its initial workability.
- When applying multiple layers of leveling compound, it is necessary to use primer in between layer.
- For application thickness other than the stated, please refer to our technical office.
- Avoid contact with gypsum or any other sulfates on substrate, mixing water or curing water in plastic state.
- · Never add other materials such as cement or fillers.

# Storage & shelf life

**Vicafloor-SL280** should be stored in normal temperature and closed shaded dry area in undamaged original packing. It is recommended to be re-tested after 6 months from the production date.

### **Technical support**

For any technical support, please consult our technical office or representatives.

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