VICASCREED ®

Edition 12023

Fast setting, Polymer Fibers reinforced, Non-shrink, Leveling Screed.

Description

Vicascreed is a high performance, one component, Non-shrink cementitious leveling screed based on VICAT's Special binders, graded fillers, rheology adjustors as well as micro fine polymer fibers. The mix contains no chlorides, ferrous metal or other deleterious materials. The product is pre-blended and ready for mixing on site to produce a Fast setting, non-shrink, easy to apply, homogenous mortar which hardens to a strong Floor screed as well as a leveling base ready to receive toppings, linings, tiles, waterproofing membranes…etc. **Vicascreed** is classified as **CT-C35-F6** According to **BS EN 13813:2002**

Advantages

- Fast setting with adjustable setting time upon request
- Characteristics improvement over 10 years due to slow hydration of Active dicalcium silicate.
- Good abrasion and scratch resistance.
- Nontoxic, suitable for food industry and potable water.
- High early strength with long term strength gain.
- Formulated for short and long term efficiency
- Non-shrink, Minimizes cracking potential as well as allowing jointless repair and leveling applications.
- Suitable for indoor and outdoor application.
- No protection against U.V. needed after application.
- Application thickness up to 10cm.

Uses

Vicascreed can be used but not limited to the following applications:

- Bonded and unbonded screeds.
- As a structural repair material for large thicknesses.
- As a continuous floor screed.
- Concrete Flooring repair and leveling.

Vicascreed is also a complementary product to our products **Vicafloor, Vicaline, Vicatile B**…etc, as well as a leveling base for resin mortars, paints and waterproofing membranes.

Areas of application

Vicascreed is ideal for repair and screeding applications that require fast setting, dimensional stability and high durability such as:

- Industrial floorings
- Car parkings
- Residential and commercial areas
- Industrial refrigerators
- Areas subjected to permenant wetness.

Standards & Specifications

Color	Grey (other colors are available upon request)
Maximum aggregate size	6mm
Consistency of mortar	Stiff to plastic
Processing Conditions	10 -35°C & 35-75% RH, recommended 40-65%
Setting time	Initial :30 min - Final:50 min (can be extended)
Workable time	15 - 20 min
Over coating	24 hrs
Fresh density	≈ 2.1 Kg/L
Toxicity	Non-toxic
Fresh density	2.3 Kg/liter
Bulk density	1.8 Kg/liter
Mixing water	2.4 – 2.7 L / 30kg bag
Thickness of application	Minimum 10mm for bonded screeds Minimum 50mm for unbonded screeds Maximum 100mm

Flexural strength typical values according to EN196-1 is ≥ 4.0 Mpa at 28 days
Compressive strength according to EN196-1 typical values are as follows:
Water to powder ratio = 0.08 by weight

Age					
24 hours	7 days	14 days	28 days	56 days	90 days
11 Mpa	18 Mpa	25 Mpa	30 Mpa	35 Mpa	40 Mpa

*Compressive strength is increasing thereafter due to the slow hydration of Active Dicalcium silicate(C2S).

Package & Coverage

Vicascreed is supplied in 30 Kg bags.
After mixing with water, the 30 Kg bag yields about 14 liters of mortar covering 1.4 m² of about 10.0 mm thickness on an even surface. Allowance should be made for any possible wastage or surface unevenness when estimating.

Application Instructions for bonded screeds

➢ **Surface preparation**
- All substrates must be solid, thoroughly clean and free from laitance, dust, loose particles, oil, wax, grease, asphalt, latex and gypsum compounds, curing compounds, sealers and any contaminant that might act as a bond breaker.
- Acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means for cleaning the substrate. Sanding equipment is not an effective method to remove curing and sealing compounds from concrete.
- The substrate must be rough, porous and load bearing. If necessary, mechanically clean down to a sound, solid substrate by shot blasting or similar. Overwatered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods. Concrete must have a minimum ICRI Concrete Surface Profile of 6 (CSP #6).
- Approved, non-porous substrates must be mechanically abraded to create a profiled surface for bonding.
- Any additional preparation required to achieve these profiles must likewise be mechanical.
- Substrate and ambient temperatures must be 10 - 35°C during and for 48 hours after the installation of **Vicascreed.**

➢ **Water leaks, Joints and Moving Cracks**
- Any water leaks must be stopped and repaired using **Vicaseal Mortar** or **Vicaroc-R** & **Vicaseal Injection** if required.
- Under no circumstances should **Vicascreed** be installed over any joints or any moving cracks. All existing expansion joints, isolation joints, construction joints and control joints (saw cuts), as well as all moving cracks, must be honored up through the topping by installing a flexible sealing compound specifically designed for use in moving joints.
- Failure to do so may result in cracking and/or disbonding of the topping. Even the slightest amount of movement in a control joint will cause the **Vicascreed** to show a hairline crack in a pattern reflective of the joint.
- **Hemts construction chemicals ltd.** cannot be responsible for problems that arise from joints, existing cracks or new cracks that may develop after the system has been installed.

➢ **Mixing**
- Add 2.4 – 2.7 liters of water to one **Vicascreed** 30 Kg bag.
- Mechanical mixing is essential for a rapid and homogeneous mix. Forced action mixers are suitable.
- For best results introduce 3/4 of the water then all the powder then the remaining water quantity.

➢ **Application**
- **Vicascreed** will be laid on the prepared surfaces in one application by screeding techniques over a wet coat of **Vicabond** or wet coat of **SBR-40** slurry or **Primer-EP200** with sand broadcast. (please refer to our technical office)
- Screeding (straight edging the surface), has the greatest effect on the surface tolerances. It should be performed over well leveled screed guides using straightedges specially made for this purpose including hollow magnesium straightedges.
- Make sure to work in sections that can be finished within 15-20 min.
- Temporary screed guides can be lumber, T bars …etc. which should be removed after the screed hardening.
- Where mechanical grinding is not requested, smoothing by hand troweling can be done provided the distance between the screed guides are limited to 1.20 m in order to minimize depressions.
- Curing is very important at least during the first three days. It can be done by the use of water means or by the use of a suitable curing compound.

➢ **Precautions**
- Protect the **Vicascreed** bags from direct sun rays or any other source of heat before use, this can lead to a very fast setting. Avoid working on hot substrates or mixing with hot water.
- Never remix the material with water once it started to set.
- **Avoid contact with gypsum or any other sulfates, on substrate, mixing water or curing water in plastic state.**

Health and safety

Vicascreed is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs, wash thoroughly with clean water. Should eye contact occur, rinse immediately with plenty of clean water and seek medical advice.
Full health and safety data are given in Product Safety Data Sheet.

Storage & shelf life

Vicascreed 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 if packed in paper bags and retested after 18 months if packed in plastic bags.