

VICASCREED-XA40®

Edition 09024

Fast setting, Non-shrink, Exposed aggregate decorative Screed.

Description

VICASCREED-XA40 is a shrinkage free, fast setting, exposed aggregate screed based on **VICAT** Special Binders, siliceous graded aggregates, mineral additives and admixtures. **VICASCREED-XA40** can be applied indoors and outdoors at a minimum thickness of 10mm to provide a unique and attractive decorative finish. In addition to its natural anti-slip properties, it offers both beauty and functionality, making it an excellent choice for areas where safety and aesthetics are equally important. **VICASCREED-XA40** is ideally suited for external residential and commercial applications where minimal maintenance is desired, yet a decorative finish is essential.

VICASCREED-XA40 is classified as **CT-C40-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.
- Excellent UV resistance.
- Application thickness up to 10cm.

Uses

VICASCREED-XA40 is designed to create a decorative exposed aggregate finish for internal & external floors, making it ideal for areas such as patios, walkways, bomas, and pool surrounds. It is perfectly suited for both residential and commercial outdoor applications, including outdoor areas of retail shops, restaurants, parks, and other similar spaces where a decorative finish is desired with minimal maintenance. However, it is not suitable for driveways or any areas subject to vehicle traffic.

Standards & Specifications

Color	Grey, yellow, red, black, orange, brown (other colors are available upon request)
Aggregate type	Sand pebbles (other shapes, types & colors are available)
Maximum aggregate size	4mm
Consistency of mortar	Stiff to plastic
Processing Conditions	10 -35°C & 35-75% RH, recommended 40-65%
Setting time	Initial :60 min - Final:80 min (can be extended)
Workable time	30 min
Sealing	24 to 48 hrs
Toxicity	Non-toxic
Fresh density	2.3 Kg/liter
Bulk density	1.8 Kg/liter
Mixing water	2.7 – 3.0 L / 30kg bag
Thickness of application	Minimum 10mm - 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 = 0.09 by weight	

		Age		
24 hours	7 days	14 days	28 days	56 days
14 Mpa	18 Mpa	25 Mpa	42 Mpa	45 Mpa

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

Package & Coverage

VICASCREED-XA40 is supplied in 30 Kg bags.

After mixing with water, the 30 Kg bag yields about 15 liters of mortar covering 1.5 m² of about 10 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.

➤ Water leaks, Joints and Moving Cracks

- Any water leaks must be stopped and repaired using **VICASEAL MORTAR** or **VICAREPLUG & VICASEAL INJECTION** if required.
- Under no circumstances should **VICASCREED-XA40** 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 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-XA40** 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 2.7 – 3.0 liters of water to one **VICASCREED-XA40** 30 Kg bag.
- Mechanical mixing is essential for a rapid and homogeneous mix. Forced action mixers are suitable.
- For best results introduce all of the water then all the powder. Low mixing water triggers the fast setting.

➤ Application

- **VICASCREED-XA40** 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. (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 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.
- For aggregate exposure, Spray the flooring with **CRETARD-T20** concrete surface retarder and after the final setting remove the excess unhydrated cement layer with water jet or soft running water with a broom depending on the setting level of the material and ambient conditions.
- For uniform color, it is recommended to neutralize the acidity of **CRETARD-T20** after the exposure using a suitable slightly alkaline solution. (Refer to our technical office).
- Application techniques vary depending on the applicators experience and tools.
- After 24 to 48 hours, the flooring must be sealed using any appropriate concrete sealer (Refer to our technical office).

➤ Precautions

- Protect the **VICASCREED-XA40** 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-XA40 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-XA40 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.

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