

PRIMER-EP200®

Edition 07023

Low Viscosity Solvent Free Epoxy Concrete Primer

Description

PRIMER-EP200 is a high performance two component solvent free epoxy primer suitable as sealer for concrete & designed to penetrate deep into concrete porous substrates. The impregnated surfaces become stable and durable with a significant resistance to abrasion and an increase in mechanical properties. **PRIMER-EP200** is specifically designed to be used as bonding primer with sand broadcast before applying **VICAFLOOR** toppings and underlayments. **PRIMER-EP200** is classified as **SR- B2,0 - AR0,5 - IR4** according to **EN13813**. It follows the **LEED** requirements for the **VOC** content, **VOC<150 g/l**.

Advantages

- Solvent free, low odor, used in poorly ventilated areas.
- Offers a dust proof for concrete surface.
- Durable, low maintenance cost.
- Good wetting out and penetration properties.
- Excellent resistance against a wide range of industrial chemicals.
- Can be diluted with suitable diluent up to 10% when used as primer.
- Economical, easy to apply.

Uses

PRIMER-EP200 is specially developed for the following:

- As bonding primer with sand broadcast before applying **VICAFLOOR** toppings and underlayments.
- Reinforcing concrete substrate and screeds.
- As a high-quality protective coating for chemical plants, sluice gates, drainage channels and ships.
- Sealing coating of cement-based floors in industrial areas, warehouses etc.
- Linings for containers, tanks and pipes made of, concrete, asbestos & cement.
- Injection of cracked concrete.

Technical characteristics at 25° C

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| Color | Transparent |
| Toxicity | Non-toxic |
| Mixing Ratio by weight | 1: 0.6 (Base: Hardener) |
| Processing Conditions | 20°C & 65% RH |
| Gel time for 100 ml | 20 min |
| Tack free | 4 hours |
| Hard cure | 8 hours |
| Walkable after sand broadcast | 6 hours |
| Installation of underlayment or topping | ≥ 16 hours |
| Density (B+H) | 1.00: 1.15 kg / L |
| Solid content | 100% |
| Viscosity of mix | 2300 mPaS |
| Chemical Resistance | PRIMER-EP200 is unaffected when submerged for 12 months in the following reagents: <ul style="list-style-type: none"> • Ammonia 10% • Caustic soda 30% • Sulphuric acid 10% • Hydrochloric acid 10% • Water deionized, Seawater, Crude Oil and Gasoline (Super, 98 Octane) |

Package & Coverage

PRIMER-EP200 is supplied in packages (B+H) of 2.4 Kg.

Approximate Coverage rate is 150 to 250 gm/m² for rough concrete and 100 to 200 gm/m² for smooth concrete.

Exact consumption depends on the roughness of the substrate.

Application Instructions

> Surface preparation

- All substrates to be coated 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. When used as a bonding agent with sand broadcast for **VICAFLOOR** toppings; Concrete must have a minimum ICRI Concrete Surface Profile of 3 (CSP #3).

- 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.
- For best results, it is recommended that the concrete must have a minimum tensile strength of 1.5 N/mm² when tested in accordance with **BS EN 1542** or **BS 1881: Part 207**.
- Substrate and ambient temperatures must be at least 10 - 35°C during the application of **PRIMER-EP200**.
- **Water leaks, Joints and Moving Cracks**
 - Any water leaks must be stopped and repaired following a proper repair procedure, using **VICASEAL MORTAR** or **VICAREPLUG & VICASEAL INJECTION** if required.
 - Under no circumstances should **PRIMER-EP200** 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 **PRIMER-EP200** 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.
- **Dormant Cracks**
 - Before proceeding with the installation, all dormant cracks greater than 0.7 mm wide must be prefilled with a fully rigid, 100% solids material, such as **VICAREP-F** and suitable bonding agent.
 - The filling of dormant cracks as described above is recommended to help prevent the cracks from showing through the topping. However, should movement occur, cracks will reappear.
- **Mixing**
 - **PRIMER-EP200** comes in a 2.4 kg kit with separate, pre-weighed amounts of hardener (Part H) and base (Part B).
 - Before blending, thoroughly stir the individual components after opening each container.
 - The base (Part B) is mixed with the hardener (Part H).
 - Pour in all of the hardener and thoroughly mix for at least 3 minutes with a low-speed drill (300 rpm) and an epoxy mixing paddle.
 - Pour some of the epoxy back into the hardener container after it has been mixed, mix for 10 seconds, and then pour the entire contents back into the resin container. Mix for another 30 seconds before applying.
- **Application**
 - Immediately after mixing, spread using a notched or flat squeegee at the above-mentioned rates depending on the surface profile, and the rest of the batch within 20 minutes @ 20°C using a short haired roller for smooth substrates and long haired roller for rough substrates and a brush for tight spaces and corners.
 - While the coat is still fresh, broadcast the clean sand perpendicularly over it until 100% saturation. Never let the epoxy to be exposed at any time. **(Please refer to our technical office for suitable sand types and sizes)**
 - Do not stand or walk on the freshly applied epoxy when broadcasting the sand. Once the sand broadcast is complete, avoid all general traffic over the surface for a minimum of 6 hours.
 - After 16 hours, broom sweep and vacuum the surface to remove all loose sand. The clean, prepared surface of the sand is the priming system for the **VICAFLOOR** underlayment or topping. No additional priming is required.
 - There is no limit to how long the sanded surface can remain open before installing the **VICAFLOOR** underlayment or topping provided that the surface does not become contaminated.
- **Precautions**
 - **This product is for professional use only.**
 - All tools used must be cleaned immediately after application using a suitable solvent.
 - **PRIMER-EP200** is highly affected by heat. While high temperature decreases its working time, low temperature increases it. Never apply **PRIMER-EP200** on substrates of temperature less than 10°C.
 - **PRIMER-EP200** is exothermic when mixed and highly reactive, so use it immediately after mixing without interruption.

Health and safety

PRIMER-EP200 should not come into contact with food, mouth, skin or eyes during application. Always wear safety goggles, dust mask and gloves. If skin contact occurs, wash thoroughly with clean water. Should eye contact occur, rinse immediately with plenty of clean warm water for 15 minutes and seek medical advice. If accidentally swallowed, drink 2 cups of clean water and seek medical advice. Keep away from children reach. Never use solvents it will only make **PRIMER-EP200** penetrate deeper into your skin.

Storage & shelf life

The shelf life of the product is one year in its original, Storage in dry area at temperatures between +5°C up to 40°C.

Technical support

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

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