HITi
Construction Revolution

SM REPAIR

Technical Data Sheet



Contact:
Phone : +9647500700015
info@hiti-krd.com
www.hiti-krd.com



Product Description

HITI REPAIR SM is an advanced, one-component cementitious skimming mortar (skim coat) designed for rapid hardening and exceptional performance. Crafted from premium binders and specialized admixtures, this fine-textured mortar offers superior application characteristics.

Upon mixing with water, **HITI REPAIR SM** yields a mortar with excellent adhesion properties, making it ideal for application with a spreader. It is an exterior and interior skim coat for **concrete and all kinds of cement boards**, and is well-suited for a broad range of repair tasks on concrete and masonry surfaces, including vertical and overhead applications.

Formulated to be shrinkage-compensated, **HITI REPAIR SM** delivers a smooth, high-quality finish. Its advanced composition ensures outstanding adhesion, along with remarkable resistance to water and salts, providing long-lasting durability in various environments.

USES

- Exterior and interior skim coat for concrete and all kinds of cement boards.
- Ideal for repairing damaged, weakened, or de-bonded concrete surfaces.
- Effective for addressing honeycombed concrete and replacing spalled or mechanically damaged concrete.
- Suitable for patchwork repair on horizontal, vertical, and overhead surfaces.
- Provides a smooth base layer that is ideal for subsequent painting applications.
- Serves as a pore sealer and finishing mortar on cementitious substrates and cement boards.
- Designed for the repair of R.C.C. sections following de-shuttering.
- Optimal for replacing concrete affected by carbonation, chlorides, and sulfates.

ADVANTAGES

- Exceptional workability for a smooth application process.
- User-friendly and easy to apply.
- Enhanced strength with additional reinforcement from incorporated fibers.
- Ideal for high-build applications.
- Versatile application methods, including trowel, pump, or spray.

- Provides resistance to water and salts.
- Suitable for use in marine and industrial environments.
- Effectively prevents corrosion of steel reinforcement within concrete.

Application Procedure

Surface Preparation

- Ensure the concrete or cement-board surface to be repaired is sound, clean, and free from contaminants. Saw cut the decayed or damaged area to achieve square edges.
- Remove loose materials using appropriate techniques such as water-jet washing, blast cleaning, sharp tools, or a chipping hammer.
- For corroded reinforcement, fully expose and clean the steel to a bright metal condition.
- In hot climates or on absorbent substrates, pre-dampen the surface thoroughly just before application. Ensure the surface is saturated surface dry (SSD), without any standing water.

Priming

- **Reinforcement Steel:** After cleaning, prime the reinforcement steel with HITI ELASTICSEAL 2K1075.
- **Concrete:** Apply a bonding coat of HITI LATEX before placing **HITI REPAIR SM** to achieve an optimal bond. Ensure **HITI REPAIR SM** is applied within the working time of the primer.

Mixing

- In a clean bucket, mix one 20 kg bag of **HITI REPAIR SM** with 6.4 – 7.0 L of cold water (32 – 35 %) using an electric blender fitted with a suitable mixing spiral.
- Gradually add **HITI REPAIR SM** powder while continuously mixing for at least 3 minutes until the mixture is completely lump-free.
- Use the blender at a low speed (maximum 400 rpm) to avoid mechanical strength decay and excessive air entrapment.

Application

- While the primer is still tacky, apply the mortar mix and compact it well.
- Spread a layer of mortar 0.5 – 2 mm thick (standard 1 mm) on the prepared surface using a rubber or smooth metal spreader.
- Finish the surface of **HITI REPAIR SM** with the same spreader or a damp sponge float a few minutes after application.
- **HITI REPAIR SM** can be applied in layers of 0.5 – 2 mm on vertical and overhead surfaces. Ensure that each layer is crosshatched and allowed to set before applying the next coat.
- In sunny or windy conditions, or particularly hot areas, spray water on the surface of the skim coat when it starts to set (when touch dry). Continue spraying water for the next few days to prevent quick drying and hygrometric shrinkage, which may cause cracks.

- Painting: after 7 days.

Property	Details
Composition	Cementitious mortar
Appearance / Color	Light Grey, White
Packaging	20 kg Bag
Shelf Life	12 months from date of production if stored properly in undamaged, unopened, original sealed packaging
Storage Conditions	In dry conditions at temperatures between +5 °C and +35 °C. Protect from direct sunlight, heat, and moisture
Mix Density	1850 kg/m³
Application Temperature Range	+5 °C to +35 °C
Mixing Ratio	32 – 35 % water = 6.4 – 7.0 L per 20 kg bag (cold water)
Pot Life	60 minutes at 20 °C
Bond strength	> 1 N/mm²
Layer Thickness	Standard 1 mm · 0.5 – 2 mm per layer
Consumption	1.85 kg/m² of mixed mortar per mm · ~1.4 kg/m² of powder at 1 mm thickness
Primer	Concrete: HITI LATEX bonding coat · steel: HITI ELASTICSEAL 2K1075
Painting	After 7 days

Contact:
Phone : +9647500700015
info@hiti-krd.com
www.hiti-krd.com