

INSEE Sanstha Self-Levelling Floor Mortar













INSEE Sanstha Self-Levelling Floor Mortar

is a cement-based self-levelling compound, specially designed for levelling the internal floor. It is used for repairing and levelling pitted and rough surfaces, as a sub-floor underlayment, before installation of carpet, tiles, or other floor-covering systems, and is compatible with commonly used adhesives.

INSEE Sanstha Self-Levelling Floor Mortar is supplied as dry powder, requiring only the addition of water, to produce a smooth free-flowing and self-levelling coat, which can be laid to a feather edge. Depending on the application, it can either eliminate or minimise trowelling. The product can be applied in multiple layers, with each layer being no more than 10mm thick, or for greater thicknesses, can be mixed with a graded aggregate to fill the greater depths.

Advantage

- Consists of special additives, which enhance good workability
- Smooth, free-flowing and self-levelling coat, which can be laid to a feather edge
- Eliminates or ensures minimum trowelling (depending on the application)
- Proper strength and setting time
- High durability

Applications

New Concrete

Thoroughly dry for at least 3 - 5weeks. Before priming, remove any concrete sealers or curing compounds on the surface, e.g. resin, wax sealers. Steel trowel-finished concrete should be roughened mechanically to remove laitance and provide a good key for priming. Patch larger cracks and holes with a suitable concrete repair mortar.

New Sand/Cement Screeds

Thoroughly dry for at least 2 - 3 weeks. Leave the render with a wood float finish to establish a mechanical key. It should be no less than 12mm in thickness. Screeds should be pitched to drains where required. Responsibility of surface preparation is with the Builder, Renovator, or Main Contractor and the applicator with appropriate skills. Test areas should be performed in all cases to determine the suitability of the product for its intended use. The substrate must be consistently flat, firmly fixed, strong, and rigid, to support the floor covering. Suitable for use over concrete surfaces, but not on substrate subject to continuous damping. Surfaces must be clean, free of dust, dirt, oil, grease, and other loose materials. Ensure surfaces are dry, with no residue or permanent dampness. Non-porous surfaces, such as steel-floated concrete, must be primed. Alternatively, they can be mechanically abraded and cleaned. Acid etching is not recommended for cleaning and does not use solvents. Ensure subfloor temperatures are above 15°C and below 35°C.

Priming is crucial to the application of INSEE Sanstha Self-levelling floor mortar. Priming improves the adhesion and reduces pin-holing in the finished floor. Porous concrete surfaces must be primed with suitable sealer. Under hot conditions, it is important to wet down the surface with clean water before priming, so that the primer does not flash dry, but does not puddle excess water on the surface.

Coverage Rates

25kg (1 bag) can cover an area of approximately 14-15 m2 /mm or 1.60-1.70 Kg/m2, at 1mm thickness.

Mixing

Proper mixing (Lump Free) is crucial for a successful application, using the paddle and a heavy-duty electric drill (500 - 600RPM). Electric mixing produces a much smoother mix. Use an appropriate Pre-Pump Mixer for pumping application and mix for about 3 minutes. Do not mix more material than can be laid in 10 -15minutes, but ensure that the next mix is ready, so that pouring can be continued until the whole area to be covered is complete. Always add the powder into the water. Add approximately 5ltrs of clean water to a bucket and start to stir the water with the electric mixer. Then slowly add the 25kg bag of INSEE Sanstha Self-Levelling Floor Mortar, while mixing, and continue until a creamy consistency is achieved. This will take a few minutes to provide a smooth and lump-free flowing mix. After allowing to mature for 2 - 3min, mix again thoroughly and be ready for application. Do not overwater.

Drying Time

Self-levelled floors must be protected for at least 12hrs from rain, sunshine and any direct source of heat, without interfering with any civil works or traffic on top of the flooring, until it is completely dried. Drying time will depend on the site conditions, temperature, humidity, and applied thickness. Lightfoot traffic allowed after 12hrs. The other floor covering can be laid after a minimum of 24hrs.

Storage & Shelf Life

6 months if stored in unopened bags clear of the ground, in cool and dry conditions. Protect from excessive draught.



TECHNICAL PROPERTIES

PROPERTIES

CONDITION / DESCRIPTION	SPECIFICATION
Density	1.8-1.9 g/cm3
Coverage	14-15m2 at 1mm thickness or 1.60-1.70 Kg/m2 per 1mm thickness
Water Ratio	24-25% by weight (240-250ml per Kg)
Pot Life	<15min when mixed
Light Foot Trafficking	> 24 hrs
Compressive strength after 3day	23 N/mm2
Compressive strength after 28day	34 N/mm2
Flexural Strength after 3 day 6.5 N/mm2	6.5 N/mm2
Flexural Strength after 28 day 6.5 N/mm2	7.9 N/mm
Tensile adhesion after 28days	1.8 N/mm
Setting time (min) ASTM C191	65-80
Spread Degree (EN12706)	After 5 min 145 mm
	After 20 min 140 mm

Precautions

Avoid contact with skin and eyes: in case of contact with eyes, rinse immediately with plenty of water and seek medical advice, wear suitable gloves and eye protection and keep the product out of the reach of children. Avoid inhaling dust by using a dust mask. If swallowed, do not induce vomiting, give a glass of water and contact a doctor.