

ShaliFloor[®] NM

Non-Metallic Floor Hardener



STP Limited

Description

ShaliFloor[®] NM is one part, pre-blended, mixture of finely graded non-metallic aggregates, additives, cement and pigments.

ShaliFloor[®] NM is a concrete floor hardener recommended for both interior and exterior use, and has non-rusting characteristics.

ShaliFloor[®] NM is added to floor surface to improve their resistance to abrasion and inhibit dust formation.

Characteristics

Physical Appearance	Cementitious Powder	Theoretical Coverage *	
Abrasion Resistance	Treated concrete will give 150 - 225 % better abrasion resistance than control concrete	• Light Traffic	3.0 – 3.5 Kg/ m ²
		• Medium Traffic	4.0 – 5.0 Kg/ m ²
		• Heavy Traffic	6.5 – 7.0 Kg/ m ²
		Resistant to rusting (150 hrs salt spray)	Non-rusting
Curing Time, days		Bulk Density, Kg / L	1.6
• Foot Traffic	1 – 2	Compressive strength – 28 days	60 – 70 N/mm ²
• Light Vehicle Traffic	8 – 10		
• Full Cure	28		

* Depending upon surface condition.

Application

- Topping of monolithic floor subject to light to heavy usage.
- Car park areas of commercial and public buildings.
- Floor topping for factories / Shopping malls / warehouses / restaurants / automobile store.
- Engineering workshops.

Advantages

- When sprinkled and trowelled into fresh wet concrete floors, it forms a coloured, wear resistant smooth hardened surface
- Impact / Wear resistant.
- Increase resistance to oils / grease.
- Dust proof. Easy to clean.
- Non-rusting materials.

Application Methodology

➤ Surface Preparation

- Ensure that base concrete has minimum cement level of 300 kg of cement per cubic meter of concrete and a slump @ 50 – 75 mm.
- Ensure that compressive strength of concrete is 25 Mpa minimal.
- Ensure that the thickness of surface is 15 cm minimum.
- Air entrant concrete is not suitable for dry shake hardener application.
- Use float or darby to level surface. To remove excess / bleeding water, drag surface with a burlap or sack.
- After the concrete has stiffened somewhat, open the surface by floating with hand wood or power float.
- Ensure construction joints, expansion joints and floor joints are saw-cut only after 24 hours. When the slab has hardened, fill the joint with ShaliSeal PS.

➤ Application of Material

- Remove bleed water of concrete before application of **ShaliFloor® NM**.
- Broadcast **ShaliFloor® NM** as per the doses uniformly over the SSD conditioned surface.
- For higher doses of application of **ShaliFloor® NM**, two stage application is to be followed dividing the desired quantity in the ratio of 50 : 50. Allow the first shake to remain unworked on the surface, until it has absorbed moisture and is of uniform in colour.
- Second Stage : Immediately after first broadcast of **ShaliFloor® NM**, apply second broadcast at right angles to the first one, making application to the edges first.
- Use a low rpm mechanical trowel, held perfectly flat for compaction. If parts of the surface come loose or if the laitance rises, please allow concrete to harden till a thump pressed hard on to the surface leaves a print of about 3 – 5 mm depth.
- Never add water to the surface for ease of trowelling.
- Smoothing is to be done as the initial set is achieved with the same trowel machine running a low speed quipped with metal smoothing blades set at minimum angle.
- If required, any final smoothing should be performed later with the machine running at higher speed.
- **ShaliFloor® NM** can be used in conjunction with vacuum dewatered concrete at maximum of 5 kg / m² spread rate.
- Cure the broadcasted **ShaliFloor® NM** floor with ShaliCure PA.
- Alternatively use water ponding method or polyethene sheeting.

Limitation

- The use of supplementary cementitious materials are not recommended for use with a dry shake hardener.
- Proper curing and sealing is required.
- Do not apply **ShaliFloor® NM** during strong wind or extreme dry weather.
- Do not use concrete where some cement has been replaced by fly ash, as this makes the mix sticky and less workable.
- Variation in concrete characteristics such as water content and cement quality may lead to slight colour variations.
- Dry shake hardeners give a finish to concrete with some colour variation across the floor due to the natural variability of the concrete onto which they are applied.
- To ensure optimum colour consistency, it is essential that the floor laying operation is as clean and protect from the environment as possible.
- Color variation during the drying out period is normal.
- Every effort must be made to ensure an even application of **ShaliFloor® NM**. Correct timing and troweling techniques are essential.
- Saw the joints as soon as possible without spalling the concrete.

Cleaning & Maintenance

Clean tools and equipment with water before the material hardens.

Health & Safety

- Avoid contact with skin / eyes, and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Packing

Available in 30 kg bag. Coloured **ShaliFloor® NM** available on request.

Storage

Store in a cool dry place, under shed, away from heat.

Shelf Life

12 months in original unopened sealed condition.



- Product Range**
- Waterproofing & Insulation
 - Road Surfacing
 - Sealants & Adhesives
 - Pipeline Coatings
 - Protective/Anti-Corrosion Coatings
 - Epoxy and Flooring
 - Grouts and Admixtures (GARA)
 - RestoFix - Repair/Rehabilitation
 - Other Construction Chemicals



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