



NanoFloor Premix

Mineral based, dry shake, ready to use floor hardener for fresh concrete

Description

NanoFloor Premix is ready to use, quartz-silica mixture, of finely graded non-metallic aggregates, plasticizer and cement binder. It is an economical concrete floor hardener recommended for both interior and exterior use. It is particularly valuable because of its non-rusting characteristics when floors will be frequently wet. NanoFloor Premix is available in non-fading colors as well as a natural cement color.

Uses

- Suitable for all floors exposed to severe mechanical wear such as
- Lobbies and waiting rooms of commercial and public buildings
- Corridors and washrooms in institutional and public buildings
- Auto showrooms and service centers
- Factory and warehouse floors
- Commercial and industrial facilities
- Restaurants and dairies
- Parking garage ramps where additional traction is necessary for entering and leaving vehicles

Advantages

- Hardens concrete in one economical operation
- Use of hard and properly graded aggregates increases the wear resistance over plain concrete floors
- Ready-to-use factory blend eliminates messy and expensive job mixing and minimizes errors
- Non-rusting materials make it possible to use NanoFloor Premix outdoors as well as indoors
- Nano Vision dispersing agent contained in NanoFloor Premix makes it possible to incorporate
- NanoFloor Premix into the surface of low slump concretes resulting in exceptionally high surface strengths for maximum wear resistance.

Standard Compliances

BS 1881 Part 116, ASTM C 779-89

Properties

Form	Powder
Color	Grey (Other colors are available on request)
Density	1800 kg / m ³
Compressive Strength	70 N/mm ² @28 days
Moh Hardness	7(steel score)
Minimum abrasion resistance achieved	220.

Packaging

20 kg bag.

Storage

Store in dry and cool place below 35°C. Protect from direct sunlight.

Shelf life

12 months if stored properly in original unopened packaging.

Instruction for use

Base Concrete Requirements:

Minimum compressive strength	30N/mm ²
Minimum cement content	300 kg/m ³
Minimum slump	75 to 90 mm
Maximum air content	3%

It is recommended to add a suitable Nano Vision concrete admixture to improve its properties.

Placing:The concrete slab is ready for the NanoFloor Premix when a thumb pressed hard onto the surface only leaves a 'print' of about 3 - 5 mm depth. Broadcast the mix evenly by hand or with a suitable spreading device. Apply approximately 4.0 to 6.0 kg/m² in two applications. With manual application the surface bleed water should be removed or allowed to evaporate and NanoFloor Premix should be sprinkled onto the screeded concrete evenly in 2 stages: (1st stage 4 kg/m², 2nd stage 2 kg/m²). Care should be taken to apply the powder so as to avoid creating ripples etc. in the concrete surface. Casting NanoFloor Premix powder carelessly or further than 2 meters from point of casting will reduce the consistency of finish. Wait until the NanoFloor Premix has been evenly moistened by the water in the concrete. The first stage should be worked into the slab using a low speed mechanical trowel, held perfectly flat, followed immediately with the sprinkling on of the second measurement of NanoFloor Premix. NanoFloor Premix results in the slab surface becoming stiff more quickly than usual. Careful trimming should take place along the edges where adjoining slabs are to be poured. Final finishing to close pores and remove undulations can be achieved either by hand or power trowel.

Note: If parts of the surface come loose or if the laitance rises, this means the concrete is still too fresh.



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Smoothing:

As soon as the plasticity or initial set allows, perform preliminary smoothing with the same machine running at low speed but equipped with metal smoothing blades, set at a minimum angle. Any final smoothing required should be performed later with the machine running at high speed. Can be finished with manual way also.

Joints:

Contraction joints, expansion joints and floor joints should be saw-cut only after 24 hours. When the slab has hardened, the joints can be filled with the appropriate sealant in accordance with the floor requirements.

Curing:

Proper curing and sealing is required. Sufficient manpower is required to produce consistent results on large placements. To make more dense and water resistant apply NanoCoat PU as a curing compound on fresh concrete(coverage 8-10 m²/Ltr).

Coverage:

Light traffic	4kg/m ²
Medium Traffic	5kg/m ²
Heavy Traffic	6kg/m ²

Cleaning & disposal

Clean tools and equipment with soap and water before material hardens. Do not dispose off into water or soil but according to local regulations.

Precautions & Limitations

Air-entraining admixtures may complicate finishing operations and cause blistering. Contact the Nano Vision company if application of this product will be over air entrained concrete with more than 3% total air content.

For additional abrasion resistance beyond that offered by NanoFloor Premix, consider the use of NanoFloor Premix M, an iron aggregate floor hardener.

Health & safety

NanoFloor Premix is alkaline and should not come into contact with skin and eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust mask should be worn. If contact with skin, wash with water. Splashes to eyes should be washed immediately with plenty of clean water medical advice sought.