



# NanoFloor Premix M

Heavy duty, metallic, floor hardener for fresh concrete

## Description

NanoFloor Premix M is ready to use, dry shake, metallic floor hardener with graded iron aggregate in a high strength cementitious binder. Designed to be incorporated into fresh concrete slabs NanoFloor Premix M provides a dense, tough surface capable of withstanding the abrasion and impact loading of industrial and manufacturing facilities. NanoFloor Premix M is also used to construct iron armored joints to protect and reinforce joint shoulders in heavy traffic areas.

## Uses

- Industrial floors
- Loading docks
- Warehouses
- Main, high traffic aisle ways
- Processing plants
- Passenger and freight terminals
- Towveyors
- Distribution centers
- Iron armored joints

## Advantages

- Highest wear resistance.
- Antistatic performance.
- Achieves roughly 6 times the abrasion resistance of plain, cured concrete
- Iron aggregate is free of rust, oil, or other contaminants
- Dense surface resists penetration of oil, grease, and many other liquids
- Virtually non-dusting in service
- Easy to clean and maintain
- Economical to own over the life of the floor
- Can be applied at coverage rates up to 5 To 10 kg/m<sup>2</sup>
- Available in 8 standard colors.

## Standard Compliances

BS 8024, BS 2050, DIN 5193

## Properties

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

## Packaging

20 kg bag..

## Storage

Store in dry and cool place below 35oC. 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 <sup>2</sup>
Minimum cement content	300 kg/m <sup>3</sup>
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 M 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 to 8 kg/m<sup>2</sup> in two applications. With manual application the surface bleed water should be removed or allowed to evaporate and NanoFloor Premix M should be sprinkled onto the screeded concrete evenly in 2 stages: (1st stage 4-5 kg/m<sup>2</sup>, 2nd stage 2-3 kg/m<sup>2</sup>). Care should be taken to apply the powder so as to avoid creating ripples etc. in the concrete surface. Casting NanoFloor Premix M powder carelessly or further than 2 meters from point of casting will reduce the consistency of finish. Wait until the NanoFloor Premix M 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 M.



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NanoFloor Premix M 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.

**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 m<sup>2</sup>/Ltr).

**Coverage:**

Light traffic	4kg/m <sup>2</sup>
Medium Traffic	6kg/m <sup>2</sup>
Heavy Traffic	8kg/m <sup>2</sup>

**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.

**Health & safety**

NanoFloor Premix M 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.