

TECHNICAL DATA SHEET FOR

FLOOR-PRO 604 EMERY BASED FLOOR HARDENER

FLOOR-PRO 604 EMERY BASED FLOOR HARDENER is a one-component ready-to-use dry blend of emery, Portland cement and additives. It is to be applied as a dry shake over freshly floated concrete floor and the aggregates provide good abrasion and protection against impact and chemicals, oil, grease and hydraulics fluids.

FEATURES

- Applies monolithically to fresh concrete
- Quick application
- Slip resistance finish can be obtained
- Easy to maintain
- Excellent impact resistance

APPLICATION AREAS

- Use for army camps, warehouses, ports, garages, engineering workshops, parking lots, service stations and factories.

PHYSICAL PROPERTIES

Chemical Composition	Industrial source of crushed and graded metallic aggregates mixed with cement, pigments and additives
Appearance	Natural cement colour powder

APPLICATION GUIDE

Theoretical Coverage	Light duty Medium duty Heavy duty Very Heavy duty 3 Kg/m ² 4 Kg/m ² 6 Kg/m ² 9 Kg/m ² The consumption rate will depend on application method and the concrete mix ratio. This figure does not allow for surface profile and wastage
Curing time	24 hours @ 30°C (Foot traffic) The above value depends on the concrete and ambient condition of the area applied.
Substrate Temperature relative to dew point	≥ 3°C
Relative Humidity	<85%

PERFORMANCE DATA

Compressive strength	3 day - 50 N/mm ² 7 days - 65 N/mm ² 28 days - 80 N/mm ²
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*Conditions such as installation process, inappropriate maintenance, short and long-term wear and use as well as surface contaminants (wet or dry) affects the slipperiness of flooring materials. To meet slip resistance requirement for wet conditions and/or surface contaminants (wet or dry), appropriate textured or anti-slip floor systems are recommended. Please contact Nippon Paint for further details and specifications.

**The final floor finish shall follow the profile of the concrete, therefore appropriate levelling compound is recommended to treat the undulating surface.

SUBSTRATE REQUIREMENT

- Concrete or screed substrate should be a minimum of 25 N/mm² and adhesive pull off strength of 1.5N/mm², free from laitance, dust and other contamination.
- The substrate should be dried up to 85% RH as per BS8204 and free from rising damp and ground water pressure.

APPLICATION METHOD

- FLOOR-PRO 604 EMERY BASED FLOOR HARDENER shall be broadcasted over the still fresh but stiff concrete base and should be placed in mark bays to ensure an even distribution of materials.
- As the bay edges are subjected to heavier impact and wear, additional treatment should be considered for these areas. Float into surface using wooden float.
- FLOOR-PRO 604 EMERY BASED FLOOR HARDENER is ideally applied to a surface which is neither too wet nor too dry. Ambient temperatures will dictate when the material is to be applied.
- Using a raised trestle, which spans the slab, the material is broadcasted by hand onto the wet concrete surface. The application is carried out in 2 stages:
 1. Apply $\frac{2}{3}$ of the material over the fresh but stiff concrete to ensure even distribution.
 2. Allow applied material to absorb moisture from the concrete surface. A uniform darker colour will appear.
 3. Using a wooden float, float FLOOR-PRO 604 EMERY BASED FLOOR HARDENER into the concrete ensuring material becomes an integral part of the concrete.
 4. Apply the remaining material. Again, wait until material has obtained a darker colour before floating with a wooden float.
 5. When surface is sufficiently firm enough to take the weight of the foot traffic, FLOOR-PRO 604 EMERY BASED FLOOR HARDENER should be finished off by means of a power float. A smooth slip resistant finish can be obtained but the surface should not be overwork.
 6. If manual finishing with steel trowels is to be undertaken, this should take place before concrete becomes firm for foot traffic.
- Cure and seal FLOOR-PRO 604 EMERY BASED FLOOR HARDENER, if required. As soon the surface will not be marred by the application, apply the recommended curing compound based on the type of surface and floor use involved.

LIMITATION

- FLOOR-PRO 604 EMERY BASED FLOOR HARDENER shall be broadcasted over the still fresh but stiff concrete base and should be placed in mark bays to ensure an even distribution of materials.
- Application of FLOOR-PRO 604 EMERY BASED FLOOR HARDENER must not be carried in windy area or dry conditions.
- Do not use concrete where some cement has been replaced by fly ash, as this makes the mix sticky and less workable.
- Variations in concrete characteristics such water content and cement quality may lead to slight colour variation.
- To ensure optimum colour consistency, it is essential that the floor laying operation is clean and protected from dust and rain.
- Colour variation during the drying period is normal for this system.

PACKAGING

25 Kg paper bag

STORAGE AND SHELF LIFE

FLOOR-PRO 604 EMERY BASED FLOOR HARDENER has a shelf life of 6 months from manufacturing date. The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

SAFETY PRECAUTION

- This product is intended for use by professional applicators. Refer to the safety information display on the container and in the safety data sheet (SDS) before using the product.
- Use this product in well-ventilated area, avoid skin contact, spillage on the skin should immediately be removed with suitable cleanser, soap and water.
- Eye should be well flushed with water and seek for medical attention immediately upon contact with this product.
- During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.
- If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

DISCLAIMER

The information in this data sheet is given to the best of Nippon Paint's knowledge and practical experience. Users may consult with Nippon Paint on the general suitability of the product for their needs and specific application practices though it remains each user's responsibility to determine the suitability of the product for the user's particular use. The condition of the substrate and application are not within Nippon Paint's control. Therefore no implied conditions, warranties or other terms will apply to the Product. Nippon Paint does not and cannot warrant the results which the user may obtain by using the product. In no event will Nippon Paint be liable to the user for any kind of loss (whether direct or indirect) even if Nippon Paint was previously advised of it. In line with Nippon Paint's policy for continuous development, Nippon Paint reserves the right to modify the product and the information in this data sheet without prior notice. It is the user's responsibility to check with Nippon Paint for the latest version of this data sheet. This data sheet has been translated into various languages. In the event of any inconsistency, the English version shall prevail.