

TECHNICAL DATA SHEET FOR

FLOOR-PRO 504 SL SCREED - UNDERLAYMENT

FLOOR-PRO 504 SL SCREED - UNDERLAYMENT is a one-component self-smoothing floor underlayment designed to prepare stable and flat sub-floor for installation of new coverings. It can be applied on absorbent floor substrate such as cement-sand screed, concrete and non absorbent surfaces such as terrazzo, ceramic and quarry tiles at thickness in the range of 3 - 10mm.

FEATURES

- Pre-packed – easy to mix and apply
- Excellent bond strength to substrates
- Excellent flowability, self-levelling
- Fast setting for quick construction progress, foot trafficable in 2 hours (at 28°C)
- Improves flatness of substrate

APPLICATION AREAS

- Used as underlayment for vinyl, parquet, carpet tiles, ceramic tiles

PHYSICAL PROPERTIES

Chemical Composition	Self-smoothing cementitious underlayment
Density, powder	1.5 g/cm ³ @ 28°C
Density, mixed	2.0 g/cm ³ @ 28°C

PERFORMANCE DATA

Adhesive strength	> 1.5 N/mm ² (Concrete failure)
Compressive strength	1 day: 10.0 N/mm ² 7 days: 25.0 N/mm ² 28 days: 35.0 N/mm ²
Flexural strength	1 days: 5.0 N/mm ² 7 days: 7.0 N/mm ²
Linear shrinkage	0.1% @ 28 days (ASTM C157)
Flow spread	Initial: >260 mm (BS EN 12350-2) After 20 minutes: >250mm (BS EN 12350-2)

*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.

APPLICATION GUIDE	
Water addition (by weight)	20% - 22% /20Kg bag
Number of coats	1 coat
Recommended Thickness	Minimum 3 mm Maximum 10 mm
Theoretical Coverage	~1.6 Kg/m ² /mm
Pot Life (Working time)	20 mins @ 28°C
Curing time	28°C Foot traffic (hrs) 3 Light traffic (days) 3 Exposure to chemicals (days) 7
Substrate Temperature relative to dew point	≥ 3°C
Recommended application temperature range	Minimum 15°C Maximum 35°C
Relative Humidity	< 85%

SUBSTRATE REQUIREMENT	
<ul style="list-style-type: none"> 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. 	

SURFACE PREPARATION	
<ul style="list-style-type: none"> Concrete substrate must be clean, free of laitance and contaminants. The concrete substrate must be dry and waterproofed against negative ground water pressure. Appropriate moisture barrier at 2 mm thickness is recommended if the substrate moisture > 4%. In the event of high substrate moisture > 6%, it is recommended to apply a 5 mm thickness high compressive strength anti-osmosis epoxy mortar as moisture tolerance system. Allow to cure over-night before the application of subsequent painting system. Prepare the concrete substrate surface by captive shot blasting, scarifying or mechanical grinding. Repair damaged area and patch up cracks and holes using a patching compound. Cut 5mmX5mm grooves around the perimeter of the floor and at end points (eg: plinth, column, drains etc.) 	

APPLICATION METHOD	
<p>Applying Primer</p> <ul style="list-style-type: none"> Priming with FLOOR-PRO 105 WATER DISPERSION PRIMER is essential to ensure good adhesion and reduce air release from substrate, which causes bubbling of the underlayment. On standard concrete, apply FLOOR-PRO 105 WATER DISPERSION PRIMER without dilution. Very absorbent concrete may require a second coat of FLOOR-PRO 105 WATER DISPERSION PRIMER. <p>Applying FLOOR-PRO 504 SL SCREED - UNDERLAYMENT</p> <ul style="list-style-type: none"> Use a heavy-duty electric drill fitted with a shear blade mixing paddle. Water and material temperatures shall be kept below 30°C. Pour approximately 80% of the recommended water into a clean container and gradually add the powder while mixing continuously for 3-4 minutes until a smooth, lump-free flowing consistency is achieved. Add the remaining water required, mixing continuously, up to a maximum total of 	

4.2 litres for a 20 kg bag of powder. Mix full bags each time and do not add extra water to regain flowability once the material has been left to stiffen.

- Pour and lay the mixture onto prepared surface. Use a metal trowel to smoothen the material up to thickness of 3mm to 10mm.
- Avoid over rolling and do not attempt to float finish the setting surface.
- Application of mixed materials within 20 minutes
- Allow freshly applied material to cure naturally in ambient conditions. Protect against exposure to direct sunlight and strong wind with polythene sheet to reduce premature water loss and affect strength development. Avoid premature exposure to traffic and mechanical loads.

PACKAGING

TOTAL 25 Kg

STORAGE AND SHELF LIFE

The product has shelf life of 6 months and 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. (Unopened and in good condition temperature 10°C to 30°C)

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.