TECHNICAL DATA SHEET FOR

FLOOR-PRO 412 WB PU MF SATIN

FLOOR-PRO 412 WB PU MF SATIN is a four-component cementitious polyurethane hybrid system with self-sealing satin sealer to provide excellent abrasion, impact resistance and easy cleaning maintenance

FEATURES

- Water-based, low odour
- Seamless
- Excellent abrasion resistance
- Good impact resistance
- Good chemical resistance
- Good resistance against uprising moisture and hydrostatic pressures activities
- Easy to clean
- Highly compatible with concrete due to similar properties

APPLICATION AREAS

- Used as an abrasion and impact resistance heavy duty smooth finish in harsh industrial environment with heavy traffic activities.
- Used as moisture barrier and levelling underlayment prior to receiving any overlay finishes

PHYSICAL PROPERTIES

Chemical Composition	Water-based cementitious polyurethane hybrid
Colour	As per standard colour
Finish	Satin
Density, mixed	2.0 g/cm^3 @ 30°C
Viscosity, mixed	2000 - 4000 cps @ 30°C
Solid Content, mixed	65 % (By weight)

PERFORMANCE DATA

Adhesive strength	> 1.5 N/mm^2 Concrete failure (ASTM D4541)
Compressive strength	> 50.0 N/mm^2 (ASTM C579)
Shore D hardness	> 80 (ASTM D2240)
Taber Abraser Wear Index	40 mg / 1000 revolutions / 1 Kg (ASTM D 4060)
Light fastness (Scale 1-8, 8=best)	6 (DIN EN ISO 105-B02)

*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

Mixing Ratio (by weight)	Part A 3.0	: Part B : 3.0	: Part C : 13.5	: Part D : 0.5
Number of coats	1 coat			
Recommended Thickness	1 - 3 mm			

Theoretical Coverage	1.9 Kg/m^2/ coat (if use as primer if required) 5.7 Kg/m^2/ coat (as a finishing top coat)
Pot Life (Working time)	20 mins @ 28°C
Curing time	30°C Foot traffic (hrs) 12 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

- Concrete or screed substrate compressive strength should be of minimum 25 N/mm^2 and adhesive pull off strength of 1.5 N/mm^2.
- The moisture content of concrete shall be < 4% or dried up to 85% RH as per BS8204. It shall be free from rising damp and must be waterproofed against negative ground water pressure.

SURFACE PREPARATION

- Concrete substrate must be clean, free of laitance and contaminants.
- If the substrate moisture exceeded 6%, apply FLOOR-PRO 202 SF EPOXY MORTAR at 5mm thickness as moisture barrier.
- Allow to cure over-night before the application of subsequent coating 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 suitable repair material compatible with the coating system.
- Prepare grooves of 3mm wide x 3mm deep at all edges, bay joints, columns, doorways and drains for anchoring purpose.

APPLICATION METHOD

- The products in the system are multi-components and pre-packed in sets. Each set requires effective and homogenous mixing using drill and helical spinner with the least inclusion of air in a clean mixing barrel prior to applying.
- FLOOR-PRO 412 WB PU MF SATIN is proportioned multi-component products which are spread on the floor by notched squeegee and finished with spike roller.
- If it is used as a primer/scratch coat for high moisture substrates after premixed it is scratched to the substrate with trowel to a thickness about 1mm prior to applying the same product as a self-smoothing by notched squeegee and spike roller.
- If reworking after application, it will require light sanding to improve adhesion.

PACKAGING

Components	PART A	PART B	PART C	PART D
TOTAL 20 Kg	3.0	3.0	13.5	0.5

STORAGE AND SHELF LIFE

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. (Unopened and in good condition temperature 15°C to 35°C)

Components	PART A	PART B	PART C	PART D
Months	12	12	12	12

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.