

TECHNICAL DATA SHEET FOR

FLOOR-PRO 201 VAPOUR BARRIER

FLOOR-PRO 201 VAPOUR BARRIER is a two-component, water-based epoxy polyamide membrane/barrier coating that has been specifically designed for use in negative water pressure applications

FEATURES

- Withstands 250kPa hydrostatic pressure (25 metre head of water) when primed, the cured membrane will withstand 400kPa pressure (40 metre head of water)
- Can be readily applied to damp surfaces (in saturated surface dry condition)
- Can be applied to freshly laid hardened (green) concrete
- No maximum recoat time required
- Versatile in use - can be overcoated using almost any decorative or industrial finishing paint
- Excellent adhesion to most substrate including brick, masonry, concrete, stone & timber
- Prevents rising damp and the formation of efflorescence
- Environmentally friendly - safe to use in sensitive locations (e.g. around food or habitable areas) and easy clean-up using water.
- Non-flammable

APPLICATION AREAS

Recommended for use as a waterproof & vapour barrier in a wide spectrum of applications

Flooring Application

- As a low water vapour transmission coating & damp proof membrane to prevent rising damp in floors.
- As a system together with Floor-Pro 505 SL Screed - Underlayment to protect vinyl and other resilient flooring finishes.

As a primer/ barrier cum sealing coat

- For waterproofing membranes onto damp substrates and as the waterproofing system under vinyl and other resilient floor finishes.
- Over freshly laid, damp concrete or efflorescence producing concrete prior to over-coating with conventional building paints.

As a waterproofing membrane

- To resist positive and negative hydrostatic pressure. Prevents water seepage or damp penetration through the interior of walls and floors, in below grade surfaces such as basements, tunnels, lift wells, retaining walls and car parks.
- In tanking applications, including potable water containment.

PHYSICAL PROPERTIES

Chemical Composition	Two- component water- based epoxy polyamide membrane coating
Colour	Grey
Finish	Semi-gloss
Density, mixed	1.30 g/cm ³ @ 28°C

PERFORMANCE DATA	
Tensile strength	>3 N/mm ²
Resistance to Hydrostatic	Resistant to 250 kPa, 25m head pressure of water (ASTM C1306.95)
Water Vapour Transmission Rate	10.5 g/m ² /24 hrs (ASTM E96 Section 12)
Permeance Film	Approx. 3.2 x 10 ⁻⁸ g/Pasm ²
<p>*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.</p> <p>**The final floor finish shall follow the profile of the concrete, therefore appropriate levelling compound is recommended to treat the undulating surface.</p>	

APPLICATION GUIDE																						
Mixing Ratio (by volume)	Part A : Part B 1 : 1																					
Number of coats	2 coats																					
Recommended Thickness	300 µm per coat																					
Theoretical Coverage	0.66 L/m ² in 2 coats to achieve min DFT of 300 microns for it to function as an effective waterproofing membrane.																					
Dilution	Up to 10% of clean water																					
Recoating time	4 hrs @ 28°C																					
Pot Life (Working time)	1 hr @ 28°C																					
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Substrate Temperature relative to dew point	≥ 3°C																					
Recommended application temperature range	Minimum 10°C Maximum 30°C																					
Relative Humidity	< 85%																					

SUBSTRATE REQUIREMENTS	
<ul style="list-style-type: none"> Concrete or screed substrate should be a minimum of 25 N/mm² and adhesive pull off strength of 1.5 N/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

- 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

Priming

- When FLOOR-PRO 201 VAPOUR BARRIER is to be applied to dry concrete, the surface must be dampened with water before application, followed by priming with FLOOR-PRO 201 VAPOUR BARRIER diluted with 10% clean water.
- It is critical to obtain a dry film thickness (D.F.T.) of 300 microns and priming with diluted FLOOR-PRO 201 VAPOUR BARRIER can assist to achieve this; FLOOR-PRO 201 VAPOUR BARRIER will not perform as defined above unless a minimum D.F.T. of 300 microns is obtained in the final membrane.

Mixing

- Stir the Components A & B of FLOOR-PRO 201 VAPOUR BARRIER individually to ensure uniformity prior to mixing together.
- Once premixed, add the full contents of both components (in the ratio of 1:1 by volume) in a large 30 litre bucket and mechanically mix until a homogenous blend is obtained

Application

- Apply FLOOR-PRO 201 VAPOUR BARRIER onto the prepared surface at spread rate of 0.3 litre per m² per coat.
- At up-stands and direction changes, pretreat the surface by first priming the concrete, followed by applying the first layer of FLOOR-PRO 201 VAPOUR BARRIER.
- Whilst the coating is still wet, immediately embed with fiber mesh into FLOOR-PRO 201 VAPOUR BARRIER by pressing strongly & evenly down into the membrane using a steel roller
- Allow an approximate time interval of 4 hours before applying the second coat of FLOOR-PRO 201 VAPOUR BARRIER

PACKAGING

Components	PART A (BASE)	PART B (HARDENER)
TOTAL 20 L	10L	10L

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 10°C to 30°C)

Components	PART A (BASE)	PART B (HARDENER)
Months	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.