

NIPPON FLEX 200
Updated Jan'18

Description:

Nippon FLEX 200 is a single component, elastomeric, breathable, acrylic copolymer liquid apply waterproofing coating. It is air cured to form a seamless, UV-durable, protective waterproofing coating. It resists ageing from heat, UV, sunlight, rain, wind or frost and ozone. It resists water but allows water vapour to escape through it, and thus preventing blistering issue.

Uses:

Nippon FLEX 200 is a basic waterproofing coating for old and new construction. It is suitable for above ground, interior and exterior waterproofing applications such as:

- RC roof, car porch roof, open roof terrace
- Balconies, A/C ledge, Overhangs, and etc
- Walls and RC fencing
- Asbestos
- Timber
- Asphalt/Bitumen

Advantages:

- Single component--no mixing required
- Easily applied--can be applied by non-skilled labour
- Flexible--capable of bridging stationary cracks
- Barrier against salts and atmospheric gases
- High build--masking imperfections in substrates
- Waterproof-versatile and multi-purpose
- U.V stable--long service life and maintains its appearance

Product Type	Product Grade	Packsizes	Finishing	Color	Substrate
Liquid Apply Waterproofing	Nippon FLEX 200	20kg/pail 5kg/pail	low sheen	White, Grey, Green, etc	Concrete

Application Data

Application temperature	: 0°C to 45°C
Service temperature	: -5°C to 80°C
Theoretical coverage	: 0.25-0.35kg/m ² /coat (note: the actual coverage depends on the type of substrate, substrate surface porosity, substrate texture, and whether a primer is used)
Special Notes	: Limits to heavy traffic and heavy traffic

Typical Technical Data

Properties	Nippon FLEX 200	Test Standards
Drying time at 30°C, minutes	30(torch), 60 (full)	-
Specific Gravity	1.34	-
Tensile Strength at Break, N/mm ²	>2.5	ASTM D412
Elongation at Break, %	>600%	ASTM D412
Adhesion to Concrete, N/mm ²	>1.5	ASTM D4541
Water immersion	No blistering and delamination	-
Shelf Life	12 months	-

*All values given are subject to 5-10% tolerance

Application Method
Substrate Preparation
Concrete and Masonry Substrate

The substrate must be thoroughly clean and dry, free from dust, algae, mildew, fungal, grease and oil. All the contaminants, previous waterproofing and impurity must be removed till bare substrate. Any cracks, honey combs, water leakage area should be repaired by Nippon Repair System (for more detail, please refer to Nippon Technical Department) before the waterproofing work proceed. The substrate must be sound. The concrete surface should be flat and free from holes and undulations. Any holes and undulations should be resurfacing with Nippon Scratch Coat System. The surface should be clean smooth and have a slope of at least 1-2% to allow water run-off.

Mixing

Stir the product thoroughly using mechanical mixer at a slow speed drill at 300-400 rpm fitted with suitable paddle for 1-2minutes. Do not add any additional water or solvent to the product.

Application

Apply the first coat at a rate of 0.25-0.35kg/m²/coat to completely cover the holes, cracks and etc with a soft bristled brush or roller. Once the first coat is torch dry, apply the second and subsequent coats at a rate of 0.25-0.35kg/m²/coat in order to achieve the required total dry film thickness at 1mm. The second coat shall be applied at right angles to the first coat.

For a reinforcement waterproofing system, apply a layer of **Nippon LM Mat**, an alkali resistant mat, onto the first coat of **Nippon FLEX 200** at 0.5kg/m² while still wet, firmly embed the mat into the **Nippon FLEX 200**, and ensure no air is trapped beneath. Immediately apply second and forth saturated coat of **Nippon FLEX 200** at a rate of 0.35kg/m²/coat to achieve a total final dry film thickness at 1.5-2.0mm. Each subsequent coat shall be applied at right angles to the previous coat.

Detailing Treatment

All detailing should be applied before proceeding with the large field area. Right angle and corner should have 25mm **Nippon Latex** modified cement sand angle fillet. Extra treat the expansion joint with de-bonding tape before apply reinforcement. Extra treat all upstands, penetrations, joints with reinforcement waterproofing system. Use wet on wet application, and ensure the Nippon LM Mat overlaps at 75mm.

Recommended Waterproofing System
Concrete Substrate

Waterproofing (standard)	: Nippon FLEX 200 at 0.25-0.35kg/m ² /coat : Nippon FLEX 200 at 0.25-0.35kg/m ² /coat : Nippon FLEX 200 at 0.25-0.35kg/m ² /coat
Waterproofing (reinforcement)	: Nippon FLEX 200 at 0.5kg/m ² /coat : Nippon LM MAT at 75g/m ² /layer : Nippon FLEX 200 at 0.35kg/m ² /coat : Nippon FLEX 200 at 0.35kg/m ² /coat : Nippon FLEX 200 at 0.25-0.35kg/m ² /coat

Environmental Conditions During Application

1. Apply temperature: 0-45°C. Do not apply when the surface to be coated is less than 3°C above the dew point.
2. The humidity for application is 30-80%

Storage and Transportation

This product should be stored in original container in a shaded or cool and adequate ventilation warehouse. The storage temperature should be 15-35°C. This product should be away exposure from rain, UV, sunlight, source of flame and heat. When transporting, care must be taken. Failure to comply with the recommended storage may result in considerable premature deterioration of the product and shorten its shelf life. While reopen for reuse, if skin has formed, remove the skin and stir well before reuse.

Cleaning

Clean up equipment or tools with **Water** immediately after use. Cured material can be removed mechanically.

Safety Precautions

- Keep it tightly closed in original packed container
- Away from direct expose to sunlight
- Always use protective hand gloves, google and dust mask when handling or applying **Nippon FLEX 200**
- Dispose off any waste in accordance with the appropriate Environment Quality Regulations

Note

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself. We reserve the right to alter the given without prior notice