

NIPPOSEAL FLEX 200 FIBRE PRO
Updated May'24

Description:

NIPPOSEAL FLEX 200 FIBRE PRO is a single-component water-based liquid-applied elastomeric waterproofing coating. It is specially formulated with acrylic copolymer integrated with micro-fibre reinforcement to form breathable, seamless, UV-durable waterproofing membrane. It resists ageing against heat, UV, sunlight, rain and wind. Its micro-structure keeps water out but allows water vapour to escape through it. The incorporated micro-fibre composite leads to the formation of a higher dry film build which is able to accommodate better expansion and contraction stresses, and ultimately promote enhanced strength and a durable reinforced waterproofing membrane layer.

Uses:

NIPPOSEAL FLEX 200 FIBRE PRO is a reinforced waterproofing membrane 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
- RC walls
- Fiber cement board
- Asphalt/Bitumen
- Metal Roofing

Advantages:

- Single component, ready to use and easily applied
- Fibre reinforced that increased tensile strength even without the overlay with fiberglass
- Flexible with stationary crack bridging capability
- Barrier against salts and atmospheric gases
- High build
- Versatile and multi-purpose
- UV stable with long service life and durable
- Green Label certified

Product Type	Product	Pack Size	Standard Color	Finishing	Substrate
Liquid Applied Waterproofing Membrane	NippoSEAL FLEX 200 Fibre Pro	5kg & 20kg	White, Grey	Matt	Concrete

Composition

Composition	: Mainly Titanium Dioxide, Iron Oxide, Carbon Black, and Mineral Extender
Binder	: Acrylic Copolymer
Thinner	: Dilution is not recommended (except use as primer coat to have better penetration into substrate)

Application Data

Application temperature	: 0°C to 45°C
Service temperature	: -5°C to 80°C
Theoretical coverage*	: 0.20 - 0.30kg/m ² /coat (for vertical surfaces) : 0.60 - 0.70kg/m ² /coat (for flat horizontal surfaces) <i>(Note: The actual coverage depends on the type of substrate, substrate surface porosity, substrate texture, or whether a primer is used)</i>
Special Notes	: Limit to foot traffic (i.e., periodic maintenance)

Technical Data

Recoating time	: Minimum 2-3 hours <i>(Subject to temperature and humidity)</i>
Specific Gravity, kg/L	: ~ 1.32
Volume Solid, %	: ~ 55
Tensile Strength at Break, N/mm ² (ASTM D412)	: ~ 2.5
Elongation at Break, % (ASTM D412)	: ~ 700
Adhesion to Concrete, N/mm ² (ASTM D4541)	: >1.5
Water Immersion (in-house)	: No blistering and delamination
Green label Compliance	: Compliance
Shelf Life	: 12 months in a tight sealed container

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

Application Method
Substrate Preparation

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 Paint Repair System** (for more detail, please refer to Nippon Paint Technical Department) before the waterproofing work proceeds. The substrate must be sound. The concrete surface should be flat and free from holes and undulations. The surface should be clean smooth and cast to fall 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 1-2 minutes.

Application
Primer

For concrete **porous surface**, prime before further coatings to act as an adhesion promoter. Prepare the priming coat by diluting **NIPPOSEAL FLEX 200 FIBRE PRO** with clean water at a ratio of **30 - 50%** water dilution (depending on the surface porosity). Apply the primer at the rate of 0.20 – 0.30kg/m²/coat and allow the primer to dry about 30-60 minutes prior to the neat subsequent coat application.

Waterproofing

A minimum of two coats (excluding primer) must apply to achieve the dry film thickness. Apply the first neat coat of **NIPPOSEAL FLEX 200 FIBRE PRO** at a rate of 0.60 – 0.70kg/m²/coat with a long-haired roller, soft bristled brush or roller. After the first coat is dried for a minimum of 2 hours, apply the second coat of **NIPPOSEAL FLEX 200 FIBRE PRO** at the same rate. The second coat shall be applied at right angles to the first coat.

Note: Protect **NIPPOSEAL FLEX 200 FIBRE PRO** from rain until it has completely dry. Do not add water to the product for optimum performance.

For vertical wall application, apply a minimum of two coats (excluding primer) of **NIPPOSEAL FLEX 200 FIBRE PRO** at a rate of 0.20 – 0.30kg/m²/coat with a long-haired roller, soft bristled brush or roller.

Detailing Treatment

All detailing should be applied before proceeding with the large field area. Right angle and corner should be pre-treated with 25mm **NippoBOND** latex modified cement sand angle fillet. Further treat the expansion joint with debonding tape before any coating application.

Recommended Coating System	
Concrete Roof Substrate	
Primer	: NIPPOSEAL FLEX 200 FIBRE PRO (with 30 - 50% water dilution) at 0.20 – 0.30kg/m ² /coat
1 st neat coat Waterproofing	: NIPPOSEAL FLEX 200 FIBRE PRO at 0.60kg/m ² /coat
2 nd neat coat Waterproofing	: NIPPOSEAL FLEX 200 FIBRE PRO at 0.60kg/m ² /coat
Concrete Roof Substrate (Reinforcement)	
Primer	: NIPPOSEAL FLEX 200 FIBRE PRO (with 30 - 50% water dilution) at 0.20 – 0.30kg/m ² /coat
1 st neat coat Waterproofing	: NIPPOSEAL FLEX 200 FIBRE PRO at 0.60kg/m ² /coat
Fibre Reinforcement	: NIPPON PAINT LM Mat
2 nd neat coat Waterproofing	: NIPPOSEAL FLEX 200 FIBRE PRO at 0.60kg/m ² /coat
3 rd neat coat Waterproofing	: NIPPOSEAL FLEX 200 FIBRE PRO at 0.60kg/m ² /coat
Vertical Wall Substrate	
Primer	: NIPPOSEAL FLEX 200 FIBRE PRO (with 5 - 10% water dilution) at 0.20 – 0.30kg/m ² /coat
1 st neat coat Waterproofing	: NIPPOSEAL FLEX 200 FIBRE PRO at 0.20kg/m ² /coat
2 nd neat coat Waterproofing	: NIPPOSEAL FLEX 200 FIBRE PRO at 0.20kg/m ² /coat
Decorative Finishing Coat	: NIPPON PAINT WEATHERBOND at 2 coats
<i>Note</i>	
: NIPPOSEAL FLEX 200 FIBRE PRO reinforced elastomeric waterproofing is used to cover hairline cracks.	
: NIPPON PAINT WEATHERBOND is highly recommended as the decorative top finishing coat to provide better durability and dirt pick-up resistance.	
Environmental Conditions During Application	
Apply temperature: 0-45°C. Do not apply when the surface to be coated is less than 3°C above the dew point. 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	
<ul style="list-style-type: none"> • Ensure good ventilation during application and drying. • When applying paint, it is advisable to wear eye protection. • In case of contact with eye, rinse with plenty of water immediately and seek medical advice. • Remove splashes from skin by using soap or water. • Paint must always be stored in a cool place. • When transporting paint, care must be taken. Always keep container in a secure upright position. • Dispose off any paint 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.	