

# NIPPON PAINT PRIMEBIT (formerly known as LM Primer BIT)

Updated Jan'23

#### DESCRIPTION

**NIPPON PAINT PRIMEBIT** is a cold-applied, single-component, jointless bitumen-based sealant with clay-stabilized waterproofing emulsion. Suitable for use on most building materials such as concrete and brickwork. It is easily applied by brushes on dried concrete surfaces, and also to green concrete. It can be applied as a built-up layer of 2-3 coats system or as a priming coat.

#### USES:

**NIPPON PAINT PRIMEBIT** is suitable for waterproofing applications such as:

- Structural walls, foundation walls, retaining walls
- Foundation slabs, tie beams, footings, copings, ramps, lift pits and etc
- Insulation board adhesive
- Lining of tanks
- For surface preparation before plastering
- Earth-covered roof
- As a primer for the concrete substrate before installation of bituminous torch-apply membrane

#### **ADVANTAGES**

- Zero VOC, non-flammable and safe to use
- Non-toxic, odourless and taint free
- Single component and ready-to-use
- High-temperature stability
- Breathable
- High build and thixotropic (prevent sagging on the vertical wall)
- Excellent resistance to chlorides, sulphates, mild acids, alkalis, oil, salts, bacteria and soil chemicals
- Excellent adhesion to green and damp concrete
- Seamless and anti-water migration
- Easy application by brush, roller, trowel and airless spray

Product Type	Product	Pack Size	Finishing	Substrate	
Liquid Apply Waterproofing Membrane	NIPPON PAINT PPRIMEBIT	20kg, 200kg	Dark Brown to Black	Concrete	
Application Data					
Drying Time (25-30°C)	: Touch Dry 4-6 hours, Hard Dry $\leq$ 24 hours (Drying time is measured at condition 25°C 60% humidity for reference. Actual Drying time depends on the actual site and substrate temperature, humidity, film thickness and substrate)				
Full Cure (35ºC) Interval Recoat Time	: 7 days (for water ponding test) : Minimum 6-15 hours, depending on coat thickness, temperature, wind conditions, humidity and substrate				
Theoretical Coverage*	For Waterproofing Application : 2.00-2.20kg per m <sup>2</sup> for 1.0mm dry film thickness (Trowel Application) : 1.00-1.10kg per m <sup>2</sup> for 0.5mm dry film thickness. (Roller Application) Always apply in two coats at right angles to each coat, allowing the first coat to dry out fully. For critical area waterproofing, minimum 1.5mm dry film thickness is advised, usually with one layer of <b>Nippon LM Mat</b> reinforcement. (Theoretical rate only applies to a smooth non-porous substrate. Actual coverage depends on non-porous substrate. Actual coverage depends on substrate condition, application method, application condition, etc.)				
	<u>As a Primer fo</u> :0.3 kg/m²/coa	<u>er bituminous torch-app</u> at	oly membrane		



# **Typical Technical Data**

Form	: Smooth and thixotropic dark brown liquid paste
Color	: Black when dry
Solids	: 47-55 %
Density	: 1.00 ± 0.05 g/cm <sup>3</sup>
Drying Time Water	: 4-6 hours under normal condition
Resistance	: No blistering or re-emulsification
Adhesion Strength	: ≥ 1.0 MPa (Concrete failure)
Soil Resistance	: Pass
Cold Flexibility at 0°C	: No cracking or flacking
Heat Resistance at 100°C	: No flowing, dripping, blistering, or sagging
Shelf Life	: Up to 12 months in the original tight sealed container stored a dry cool place
Flash Point	: None
Reaction to fire	: E (non-flammable)

# Application Method

#### **Concrete Substrate Preparation**

The substrate must be thoroughly clean and dry, free from dust, grease and oil. All the contaminants, previous waterproofing and impurities must be removed till the bare substrate is. Any cracks, honeycombs, or water leakage area should be repaired by **Nippon Paint 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 resurfaced with **Nippon Paint Scratch Coat System**. The surface should have a sandpaper profile roughness and should have a slope of at least 1% to allow water run-off.

#### Mixing

Mix for at least 2-3 minutes to achieve a homogeneous mixture, with a mechanical drill fitted with a suitable paddle prior to application. The application should commence immediately after mixing.

#### Priming

Primer is not normally required on good-quality concrete substrate. To porous and absorbance concrete, plaster, screed, cement board, block work and etc, apply a priming coat consisting of 1 part of water to 1 part of **NIPPON PAINT PRIMEBIT** to the prepared surface and allow it to dry thoroughly prior to application of a neat coat of **NIPPON PAINT PRIMEBIT**. As priming for the basement wall and foundation wall, a dilution of 20-30% with water is recommended.

#### **Application**

This product is designed for trowel, short hair pile roller, brush and air-less spray application. Allow the first neat coat of **NIPPON PAINT PRIMEBIT** to dry thoroughly, prior to the second neat coat application. The second neat coat should be applied in the opposite direction (right angles) to the first coat as this will allow the waterproofing membrane to be distributed more uniformly. Allow the final coat to cure for 24-48 hours before applying protection screed or board. Allow full cure for 7 days before the waterproofing system to actual service conditions.

#### **Right Angle and Corner Treatment**

Right angle and corner should have 25mm Nippon Latex modified cement sand angle fillet, apply **NIPPON PAINT PRIMEBIT** reinforced with a layer of **Nippon Paint LM MAT** at 1.5mm thick, overlapping 100mm.

Recommended Waterproofing System					
Concrete Substrate (Standard)					
Waterproofing First Coat	: NIPPON PAINT PRIMEBIT	1.33 kg/m²/coat			
Waterproofing Second Coat	: NIPPON PAINT PRIMEBIT	1.33 kg/m²/coat			
Concrete Substrate (Reinforcement) Waterproofing First Coat Reinforcement Waterproofing Second Coat Waterproofing Third Coat	: NIPPON PAINT PRIMEBIT : NIPPON PAINT LM MAT : NIPPON PAINT PRIMEBIT : NIPPON PAINT PRIMEBIT	1.33 kg/m²/coat 1 layer 1.33 kg/m²/coat 1.33 kg/m²/coat			



#### Basement Wall and Foundation Structure (Positive Side)

Waterproofing First Coat Waterproofing Second Coat Waterproofing Third Coat : NIPPON PAINT PRIMEBIT : NIPPON PAINT PRIMEBIT : NIPPON PAINT PRIMEBIT

# TECHNICAL DATA SHEET

0.6 kg/m<sup>2</sup>/coat 0.6 kg/m<sup>2</sup>/coat 0.6 kg/m<sup>2</sup>/coat

# **Environmental Conditions During Application**

- Apply temperature: 15-35°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%
- During the application of the paint, naked flame, welding operations and smoking should not be allowed and adequate ventilation should be provided.

# **Storage and Transportation**

This product should be stored at a shaded or cool and adequate ventilation warehouse. The storage temperature should be 15-25°C. This product should avoid exposure to rain, sunlight, flame source and heat. When transporting, care must be taken. It is always to keep the container in a secure upright position. Failure to comply with the recommended storage may result in considerable premature deterioration of the product. Stir the product thoroughly before usage. All PU-based products are greatly susceptible to moisture and humidity attack if not stored properly. It is advised to finish using all the material once opened to avoid skinning.

# Cleaning

Clean up equipment or tools with clean water immediately after use. Once hardened, it can be removed with white spirit, xylene or a similar solvent. Allow the waste to cure, seal it into a suitable container and bury it in the landfill in accordance with local authorities for disposal.

# **Safety Precautions**

- Keep the container tightly closed and keep it out of reach of children or away from food and drink.
- Ensure good ventilation during application and drying.
- When applying, it is advisable to wear eye protection.
- In case of contact with the eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from the skin by using soap or water.
- Dispose any waste in accordance with the appropriate Environment Quality Regulations.

# Note

\*Theoretical Coverage is based on a mathematical formula and does not consider the Loss Factor.

$$\left[\frac{Volume \ Solid \ \% \ x \ 10}{Dry \ Film \ Thickness \ (\mu)}\right] = m^2/lit/coat$$

Variables like the porosity of the substrate, application method, dilution ratio, dry film thickness, opacity and so on will affect the loss factor and can vary from 30% - 50% or even more.

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.