

NIPPOGARD ROOFLEX PP1500 PLUS (formerly known as Nippon SM PPL1500)

Updated Apr'23

DESCRIPTION

NIPPOGARD ROOFLEX PP1500 PLUS is a UV-resistant, polyester reinforced, multi-layer, synthetic plastic waterproofing sheet based on premium quality polyvinyl chloride (PVC) containing ultraviolet light stabilizers. This membrane comes with fleece backing on the bottom surface, is specially designed for all kind of exposed flat roofing projects, with additional protection against accidental puncture/damage when applied to horizontal areas.

USES

NIPPOGARD ROOFLEX PP1500 PLUS is suitable for below usage:

- Inverted roofs
- Vehicle trafficable roofs (conceal membrane)
- Green roof and planters
- Ballasted flat roofs

ADVANTAGES

- High mechanical performance
- High resistant against impact load.
- High workability and weldability
- Excellent low temperature bending
- Excellent solar reflection performance
- Excellent UV-resistance and anti-aging
- Vapor permeable
- Flexible, tough, and consistent thickness.

Product Type	Product	Pack Size	Finishing	Standard Color	Substrate
Sheet Form Membrane	NIPPOGARD ROOFLEX PP1500 PLUS	40m ² /Roll	Top – PVC Bottom – Fleece backed	White/Grey	Concrete

Typical Technical Data

Top Surface	: Synthetic PVC
Bottom Surface	: Fleece backed
Side lap joint (mm)	: 50mm
End lap joint (mm)	: 50mm
Thickness, mm (EN1849-2)	: 1.5 (-5/ +10%)
Width, m (EN 1848-2)	: 2.0 (-0.5/ +1%)
Length, m (EN 1848-2)	: 20 (-0.5/ +2%)
Mass per Unit Area, kg/m ² (EN1849-2)	: 1.90 (-5/ +10%)
Tensile Strength, N/50mm (EN12311-2)	: ≥ 1250
Elongation at break, % (EN12311-2)	: ≥ 20
Tear Resistance (nail shank), N (EN12310-2)	: ≥ 250
Joint Peel Strength, N (EN12316-2)	: ≥ 300
Joint Shear Resistance, N (EN12317-2)	: ≥ 800
Resistance to Impact, mm (EN12691)	: 900
Dimensional Stability, % (EN1107-2)	: ≤ 0.1
Resistance to Artificial Weathering (UV), (EN1297)	: Pass
Watertightness (EN1928B)	: Watertight
Static Loading Resistance (EN12730B)	: Pass
Root Puncture Resistance (EN14416)	: Pass
Fire Resistance (EN13501-1)	: Class E

Cold flexibility, °C (EN495-5) : ≤ -25

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

Application Method

Substrate Preparation

The substrate must be thoroughly clean and dry, free from dust, 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 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 Paint Scratch Coat System. The surface should be clean smooth and cast to fall.

The supporting layer must be compatible with the membrane. The material is not compatible with direct contact with bitumen, tar, solvents, and polymeric polystyrene such as expanded polystyrene (EPS), expanded polystyrene (XPS), polyurethane (PU), and Polyisocyanurate (PIR).

Installation

Membranes can be loose-laid. For fully-bonded application, the adhesive shall be industrial grade PVC membrane adhesive or approved equivalent.

Unroll **NIPPOGARD ROOFLEX PP1500 PLUS** on the horizontal prepared substrate. To release entrapped air (if any), use a rubber roller or bloom and press firmly at the centre of the membrane towards the edges. Ensure overlap are clean, dry and free of foreign contaminants prior to welding. Overlap seams shall be welded with hot air at temperature of 470°C to 570°C using a purpose made handheld hot air gun, such as Leister Triac.

End laps are to be staggered to prevent excessive build-up. End laps and side laps shall overlap by a minimum of 50mm.

Recommended Waterproofing System

Concrete Substrate (Exposed roof)

Waterproofing : **NIPPOGARD ROOFLEX PP1500 PLUS** : 1 layer (1.5mm thickness)

Storage and Transportation

- Store rolls on horizontal position to prevent damage.
- Avoid direct sunlight and rain, store rolls in a clean and dry location
- Cover to protect rolls from environment damage, heat, cold and moisture.

Cleaning

Clean up equipment or tools immediately after use.

Safety Precautions

- Keep membrane tightly closed and upright, and keep out of reach children or away from food and drink.
- Ensure good ventilation during installation.
- Always use protective hand gloves when handling or applying the product.
- When applying, it is advisable to wear eye protection.
- 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.