

TECHNICAL DATA SHEET FOR

PROOF-SEAL 1301-SA
HDPE Pre & Post-applied Membrane

PROOF-SEAL 1301-SA is a 1.2mm high-performance HDPE waterproofing membrane with a unique pressure-sensitive adhesive designed to be applied before concrete casting. It is a fully bonded system that prevents both the ingress and lateral migration of water, making it unaffected by ground settlement beneath the slab.

FEATURES

- Excellent adhesion to poured concrete
- High hydrostatic pressure resistant
- Unaffected by wet conditions
- No lateral water migration
- High resistance to tears and punctures
- Protection screed not required
- No Priming
- Consistent thickness

APPLICATION AREAS

- Basement slabs and walls
- Ground slabs
- Tunnels
- Zero-lot-line constructions (Diaphragm wall / CBP / SBP / Sheet pile)
- Post-applied application to external wall after concrete cast

PHYSICAL PROPERTIES

Chemical Composition	HDPE
Appearance	White Membrane
Roll Dimension	1.0m x 20.0m

PERFORMANCE DATA

Properties	Test Method	Typical Value
Membrane Thickness	DIN EN ISO 2286-3: 2016	> 1.2 mm
Dimensional Stability	SS 374: 1994 (2017) Appendix A	< 0.4%
Tensile Strength	SS 374: 1994 (2017) Appendix B	> 31 MPa (long.) > 32 MPa (trans.)
Elongation at Break	SS 374: 1994 (2017) Appendix B	> 1150% (long.) > 1200% (trans.)
Resistance to Hydrostatic Head	DIN 16726: 2017	> 50 m
Resistance to Water Penetration	DIN 1048 PT 5: 1991	0
Puncture Resistance	ASTM E154/ E154-08a (2019) Section 10	> 1100 N
Peel Adhesion to Concrete	ASTM D903-98 (2017)	> 2400 N/m

Lateral Water Migration	ASTM D5385/ D5385M-20 & ADM/CE/022: 2016	No Water Leakage at 7 Bar
Water Vapour Transmission	ASTM E96/ E96M-16	< 0.021 g/hr/m ²

SURFACE PREPARATION

Substrate should be smooth without cavities, pitted surfaces, cracks, gaps, sharp protrusions and holes. Ensure sound substrate to prevent movement during pouring of concrete

APPLICATION METHOD

Unroll the membrane with the HDPE layer on the substrate and the coated layer / self-adhesive layer (with plastic release) to receive concrete pour.

Side and end laps shall be a minimum 80mm overlap. **PROOF-SEAL 1301-SA** side laps are indicated in blue-coloured strips at the top and bottom seam areas for easy and strong overlapping. End laps are to be staggered to prevent excessive build-up. Ensure both membranes are clean with damp cloth (if necessary) and allowed to dry before attempting to overlap. Where required, use **PROOF-SEAL 7402 Dual-sided Tape** for overlapping of membranes.

For vertical areas, mechanical fasten the membrane using appropriate fixings. Fastening can be made through the selvedge before installing subsequent layers. Any additional fixings or penetrations can be covered with **PROOF-SEAL 7402 Dual-sided Tape**.

Please contact Nippon Paint Singapore representative for the latest detailed drawing and application instructions (Method Statement).

STORAGE AND SHELF LIFE

Storage:

- **PROOF-SEAL 1301-SA** should be stored at room temperature between 5°C to 25°C in a cool, dry and away from direct sunlight and rain, and at least 1m away from heat source

Shelf Life:

- Expected shelf life is 12 months with the above-mentioned storage condition

HEALTH AND SAFETY

Refer to the product Safety Data Sheet for more information

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.