

SELF-ADHESIVE MODIFIED BITUMEN WATERPROOF MEMBRANE WITH CROSS-LAMINATED PE FILM

Description

ONDUFLEX 3P 1.5mm pressure sensitive adhesive high polymer membrane, is a high-performance membrane compound by special technique. The structure of strong overlapped double-layer film plus vertical and horizontal mesh make the performance of tensile strength, dimensional stability, heat stability and UV resistance largely improved. The adoption of patent wet-applied construction technique makes the PSA of the membrane crosslink chemically with the cement slurry, which form a powerful waterproof "skin" on the substrate. The "skin" will never separate from the substrate which make sure of the durability of the waterproof course and non-water channeling.

Product Feature

- Double-Layer Waterproofing, Double Assurance
- Dimensional Stability, Tear Resistance
- Softness, Puncture Resistance
- Good Balance of High Elongation and Strong Tensile-Resistance
- Big improvement of thermostability

Advantages

- Automatically grows with concrete and forms long-lasting bonding effect
- Automatically heals the damage under ϕ 2mm and expresses excellent water tightness to nail.
- Automatically locks the leakage position, avoids water channeling
- Automatically absorbs and remove the structural pressure, avoids deformation and make the waterproof course to be long-lasting
- Automatically protects itself; the cross-layered film can prevent from being damage



Main Application

- Underground construction, underground garage top plate, planted roof, roof garden
- Subway, tunnel, pond, roof construction
- The waterproof construction of anti-corrosion and largely-deformed structure
- The constructions like warehouse, workshop etc. Which have higher requirements for waterproofing and damp proof

Installation

Wet apply

Substrate Preparation

The substrate should be strong, tight, smooth, clean and flat without flaws like bulge, looseness, sands, pitted face and rebar; The joints like internal & external corner, pipe root etc. should be plastered to be arc by cement mortar; The substrate needs to be moisture but without water flow. Spray some water if the substrate is too dry.

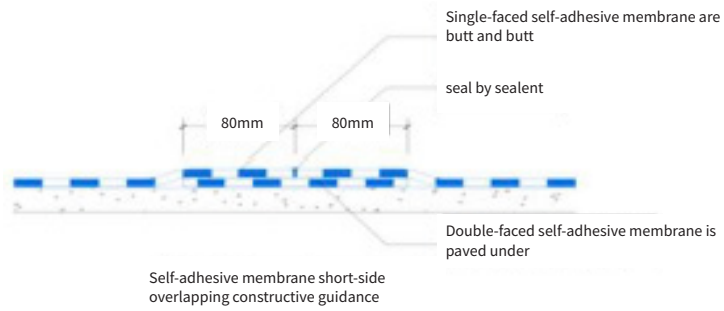
Application:

- Wet the substrate if the it is too dry
- Prepare the cement slurry
- Before widespread paving, make reinforce sheet on the internal & external corners, pipe root and outfall etc.
- Roll the membrane forward while coating the cement mortar
- Pave the first membrane: cut the release film lightly by paper-knife. Lift up the film and make it be at an angle of 30 degree with the membrane
- For the second membrane: pre-apply the membrane and overlap it with the previous membrane's lapping guide line. Make sure the lap seam is not less than 80mm
- Overlap the long end of the membrane: Press the border by the rollers to vent the air from the lap seam
- Overlap the short end of the double sides membrane: the width of the lap seam is 80mm.
- Using the double sides membranes for sealing the short end of the single side membrane, as below,

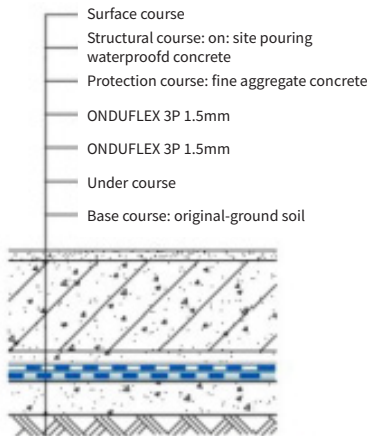
onduline.co.id

Komplek Spectra Blok 23C No. 16-17
Jalan Jalur Sutera, Alam Sutera,
Serpong Tangerang 15143 - Indonesia

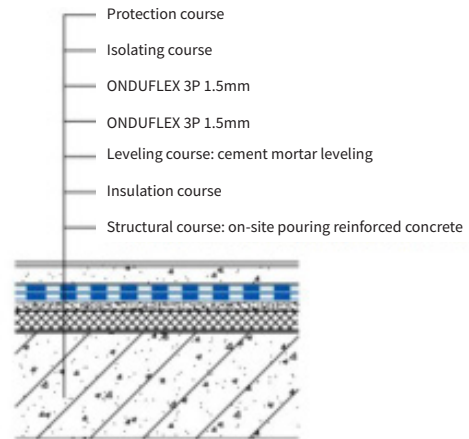
Onduline®
Lightweight roofing systems



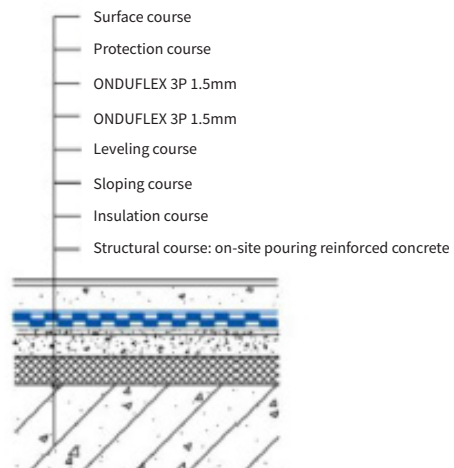
Detail Drawings



A grade waterproof structure of basement bottom plate (dry/wet)



A grade waterproof structure of basement top plate



A grade waterproof structure of roofing

onduline.co.id

Komplek Spectra Blok 23C No. 16-17
Jalan Jalur Sutera, Alam Sutera,
Serpong Tangerang 15143 - Indonesia

ONDULINE®
Lightweight roofing systems

Physical Properties

Property	Mean value	Test method
Thickness	1.5mm	NA
Tensile strength of membrane	3.0 MPa	ASTM D412 modified
Elongation of membrane (to ultimate failure of rubberized asphalt)	200%	ASTM D412 modified
Tear resistance	23 N/mm	ASTM D624 (Type C)
Resistance to hydrostatic head	60m	ASTM D5385
Cycling over crack @-25°C	No effect 100 cycles	ASTM C836
Puncture resistance of membrane	200N	ASTM E154

Test item	Requirement	Result	Standard 13967:2012
Tensile strength	≥60N	Pass	En 12310-1 1999clientsrequirement
Maximum Tensile Force	≥200N	Pass	En 12311-1 1999clientsrequirement
Elongation at Maximum Tensile Force	≥150N	Pass	
Resistance to static loading	15kg. no leakage	Pass	En 12730 2001clientsrequirement Method A
Water tightness	60kpa 24h Impermeable to water	Pass	EN1928.1-2000
Flexibility at low temperature	-25°CNo crack on the tested face	No crack on the tested face	En 1109-2011 1999clientsrequirement
Tensile Strength	≥200N/50mm	Pass	En 12311-1 1999clientsrequirement
Tensile Strain at Break	≥200%	Pass	En 12311-1 1999clientsrequirement

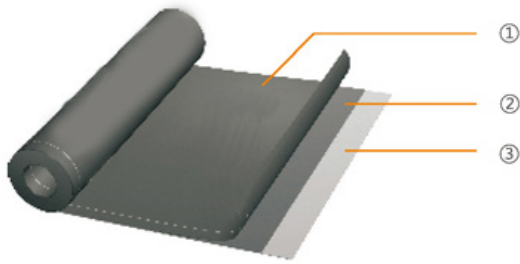
Test item		Index	
		PE	
		I	II
Expansion rate	Tension/(N/50mm) ≥	150	200
	Elongation at maximum tension %≥	200	
	Elongation at break %≥	250	
	Stretching phenomenon	No asphalt coating and membrane separation before film rupture	
Nail shank tear strength N ≥		60	110
Heat resistance		70°C sliding/flowing less than 2mm	
Low temperature flexibility °C		-20°C	-30°C
		No crack	

onduline.co.id

Komplek Spectra Blok 23C No. 16-17
Jalan Jalur Sutera, Alam Sutera,
Serpong Tangerang 15143 - Indonesia

onduline[®]
Lightweight roofing systems

Test item		Index	
		P	
		I	II
Expansion rate	Tension/(N/50mm) \geq	150	200
	Elongation at maximum tension % \geq	30	150
Tear strength N \geq		12	25
Heat resistance		70°C 2h no sliding, flowing, dripping less	
Low temperature flexibility °C		-15°C No crack	-25°C No crack



Single side adhesive

1. Valeron cross-laminated film
2. Pressure sensitive reaction self-adhesive layer
3. Isolation film

Supply

1.0m×20m/Roll
 Thickness:
 Single side 1.5mm

Storage

Store in dry conditions between +5 °C to 35°C. Rolls must be stored in their original package, in vertical position and under cool and dry conditions. They must be protected from direct sunlight, rain, snow and ice.

Attention

After the complement of the waterproof course, pay attention to protect the course and avoid any damage. During the construction and before the acceptance of the project, all the personnel are prohibited to walk above the waterproof course wearing spike.

onduline.co.id

Komplek Spectra Blok 23C No. 16-17
 Jalan Jalur Sutera, Alam Sutera,
 Serpong Tangerang 15143 - Indonesia

onduline®
 Lightweight roofing systems