EPDM Waterproofing Membrane

Standard type | Fully vulcanised EPDM rubber

PRODUCT CODE WP-MEM-000001 **DOCUMENT** NB-TDS-MEM-WP-MEM-000001

01 Product description

Nexbride-Waterproof EPDM Waterproofing Membrane is a fully vulcanised rubber sheet for building waterproofing. The standard type has no self-adhesive layer. It can be installed in fully adhered, ballasted or mechanically fixed systems, with compatible components selected for the substrate, exposure and project design.

02 Key features

- Fully vulcanised EPDM rubber with high elongation.
- Resistance to weathering, ultraviolet radiation and ozone.
- Low-temperature flexibility with no cracking at -40 °C in testing.

03 Recommended uses

Waterproofing of concrete roofs and basements. Roofs with pedestrian access require a suitable protective assembly. Artificial lakes, landscape ponds and fishponds require confirmation of the lining system and water-contact suitability. Other substrates require system compatibility checks.

04 Product information

Item	Specification
Material and construction	Fully vulcanised EPDM sheet; no self-adhesive layer.
Appearance and colour	Black, with an even surface.
Nominal thickness	1.0 mm, 1.2 mm, 1.5 mm, 1.8 mm or 2.0 mm; rubber sheet thickness. 1.5 mm variant: tolerance ±5%.
Width and length	Standard: 1.2 m x 20 m (width x length). 1.5 mm variant: width ±1%; no negative length deviation.
Roll coverage	24 m² per standard roll, before deduction for laps and cutting.
Packaging	Woven-bag roll packaging. 1.2 mm and 1.5 mm: 1 roll / 24 m² per package.

Standard supply variants

Thickness	Width	Length	Gross roll area
1.0 mm	1.2 m	20 m	24 m² / roll
1.2 mm	1.2 m	20 m	24 m² / roll
1.5 mm	1.2 m	20 m	24 m² / roll
1.8 mm	1.2 m	20 m	24 m² / roll
2.0 mm	1.2 m	20 m	24 m² / roll

Custom dimensions and thicknesses are available.

05 Technical properties

Tested specification: 1.5 mm thickness x 1.2 m width x 20 m length. MD = longitudinal direction; TD = transverse direction.

Property	Test Method	Unit	Declared Value
Tensile strength at 23 °C	GB/T 18173.1-2012	MPa	Measured: MD 11.5; TD 12.8
Tensile strength at 60 °C	GB/T 18173.1-2012	MPa	Measured: MD 6.2; TD 6.8
Elongation at break at 23 °C	GB/T 18173.1-2012	%	Measured: MD 556; TD 566
Elongation at break at -20 °C	GB/T 18173.1-2012	%	Measured: MD 412; TD 412
Tear strength	GB/T 18173.1-2012	kN/m	Measured: MD 30; TD 30
Watertightness 0.3 MPa, 30 min	GB/T 18173.1-2012	Result	Test result: No leakage
Low-temperature flexibility -40 °C	GB/T 18173.1-2012	Result	Test result: No cracking
Dimensional change on heating [1]	GB/T 18173.1-2012	mm	Measured: Shrinkage 1
Tensile strength retention after heat ageing [1]	GB/T 18173.1-2012	%	Measured: MD 92; TD 92
Elongation retention after heat ageing [1]	GB/T 18173.1-2012	%	Measured: MD 95; TD 94
Tensile strength retention after alkali exposure [2]	GB/T 18173.1-2012	%	Measured: MD 93; TD 89
Elongation retention after alkali exposure [2]	GB/T 18173.1-2012	%	Measured: MD 93; TD 93
Ozone ageing [3]	GB/T 18173.1-2012	Result	Test result: No cracking

Test conditions: [1] 80 °C for 168 h. [2] Saturated $Ca(OH)_2$ solution at 23 °C for 168 h. [3] 40 °C for 168 h, 40% elongation, ozone concentration 500 x 10^{-8}.

Measured values and qualitative test results describe the tested 1.5 mm specimens. They are not production acceptance limits and do not establish performance for other thicknesses. Test temperatures are not installation or continuous service temperature limits.

06 Application guidelines

Substrates

Concrete.

Installation

1. Install using the selected fully adhered, ballasted or mechanically fixed system and compatible components.
2. Form seams using compatible butyl lap tape and primer, and consolidate with a hand roller.

07 Limitations and compatibility

- Avoid contact with oils. During storage and transport, prevent contact with acids, alkalis and organic solvents.
- Use EPDM-compatible accessories. Alkali test results apply only to the medium and conditions in Section 05.

08 Storage

Item	Requirement
Storage conditions	Keep dry and ventilated; store horizontally on level ground, no more than five rolls high. Protect from damage, direct sunlight and fire. Keep transport packaging intact.

09 Health and safety

Keep away from fire and open flames.

10 Technical notes

Dimensions are nominal unless a tolerance is stated. Gross roll area excludes lap allowances. Performance values apply only to the 1.5 mm tested specification. This sheet does not define a warranty period.