

USES: BITUMINUOUS GEOMEMBRANE

Roll Lengths	262.47 ft (80 m)	295.28 ft (90 m)
Roll Width	Avg: 13.12 ft (4.0 m)	
Coverage	3441 sq ft (320 m ²)	3875 sq ft (360 m²)
Coverage Weight per Square Foot	Min: 1.09 lb (5.3 kg/m²)	
Selvage Surfacing	Removable Kraft Paper	
Top Surfacing	Silica Parting Agent	
Back Surfacing	Polyester Film	

TERANAP[®] 431 4M

Commercial Product Data Sheet

Teranap 431 4M is a high performance modified bitumen geomembrane waterproofing ply designed for use in geotechnical applications requiring additional subgrade protection or direct concrete placement. Teranap 431 4M consists of a nonwoven polyester mat impregnated and coated with high quality styrene-butadiene-styrene (SBS) modified bitumen.

Contact Siplast for information on approved product uses.

PRODUCT INFORMATION

Application

Refer to the applicable Siplast Technical Guide for detailed application information and slope limitations. Teranap 431 4M is lapped 8 inches (202 mm) side and end.

Storage and Handling

All Siplast 4 meter geomembrane products should be stored on end on a clean, flat surface. Rolls should not be dropped on ends or edges. Deformation resulting from these actions will make proper installation difficult. All products should be stored in a dry place out of direct exposure to the elements. Rolls are supplied with metal mandrels 15.7 ft (4.8 M) long with an internal diameter of 6.3 in \pm 0.02 in (159 \pm 0.5mm).

See product packaging and the Safety Data Sheet for specific information on the safe handling of this product.

Packaging

Rolls Per Container: 9 Shipping Weight Per Roll: 80m Roll: 3748 lb (1700 kg) 90m Roll: 4217 lb (1913 kg)

Current copies of all Siplast Commercial Product Data Sheets & Safety Data Sheets are posted on our website at www.siplast.com Rev Date 6/2022 Physical and Mechanical Properties

TEST STANDARDS

Property (as Manufactured)	Values / Units	Test Method
Thickness (minimum)	154 mils (3.9 mm)	ASTM D5147 Section 6
Thickness (average)	161 mils (4.1 mm)	ASTM D5147 Section 6
*Peak Load @ 73°F (23°C) (average)	90 lbf/in (15.8 kN/m)	ASTM D5147 Section 7
*Elongation @ Peak Load 73°F (23°C) (average)	45%	ASTM D5147 Section 7
*Ultimate Elongation (average)	100%	ASTM D5147 Section 7
Elongation at Break % (nominal)	55% x 60%	ASTM D7275
Tensile Strength at Break (nominal)	29 x 21 kN/m	ASTM D7275
Static Puncture Resistance (nominal)	550 N	ASTM D4833
Tensile Tear Resistance (nominal)	940 x 720 N	ASTM D4073
Tearing Strength Resistance (nominal)	130 x 105 N	ASTM D5884
*Tear Strength (average)	100 lbf (0.45 kN)	ASTM D5147 Section 8
Water Absorption (maximum)	1%	ASTM D5147 Section 10
Dimensional Stability (maximum)	1%	ASTM D5147 Section 11
Low Temperature Flexibility (maximum)	-15°F (-26°C)	ASTM D5147 Section 12
Compound Stability (minimum)	225°F (107°C)	ASTM D5147 Section 16
Gas Tightness	27.6E-6 M ³ /(M ² /.j)	ASTM D1434
Water Permeability	> 2.10 ⁻¹⁴ m/s	ASTM E96
*The value reported is the lower of either MD or XD.		·