

TREMDrain 1000 Series

Multi-Composite Drainage and Protection Board

Product Description

TREMDrain 1000 is a multi-composite prefabricated drainage material and protection board consisting of a formed polystyrene core covered on one side with a non-woven needle-punched polypropylene filter fabric. The fabric allows water to pass into the drainage core while restricting the movement of soil particles. The plastic core provides compressive strength and allows high capacity flow to the TREMDrain Total-Drain.

TREMDrain 1000 is available in several variants as well. TREMDrain 1000PF (Polymeric Film) has a thin plastic film backing that provides additional protection to the membrane and acts as a separation layer between the membrane and drainage core. TREMDrain 1000T has a spun-bound polypropylene filter fabric in place of the standard non-woven (this fabric is known as Typar) that filters extremely fine particulates. Finally, TREMDrain 1000RS (Root Shield) has a copper-hydroxide treated filter fabric that stops root penetration and promotes the growth of feeder roots. TREMDrain 1000RS is specifically designed for use in planters because of this special fabric or any other application where aggressive root growth is of concern.

Basic Uses

TREMDrain 1000 is used in conjunction with TREMproof 250GC, TREMproof 201/60, TREMproof 260, TREMproof 6100 and all Paraseal Membranes. TREMDrain 1000 is designed for vertical and selected horizontal installations requiring high compressive strength and where high flow capacity is necessary.

Packaging

- 4 ft x 50 ft (1.22m x 15.3m) rolls.

INSTALLATION

Vertical

Attach the core side of the TREMDrain 1000 to TREMproof 250GC, TREMproof 201/60, TREMproof 260 or TREMproof 6100 utilizing an approved commercial construction adhesive. For Paraseal membranes, attach TREMDrain 1000 by nailing along alternating edges every 18" (45cm) o.c. Install the filter fabric facing the soil with the polystyrene core against the waterproofing. TREMDrain 1000 may be installed starting at either the top or bottom of the wall. Also, the roll may be installed either horizontally or vertically. When installed horizontally, the edge of the core with the flange should be at the top. When installed vertically, the flange should be at the upstream edge. This flange position minimizes seepage of water behind the drain.

Horizontal

The edge of the core with the flange should be at the higher edge (or areas) of the plaza (away from the drains).

Corners

Bend TREMDrain 1000 to make side corners. For outside corners, cut the drain core to reach corner and provide 3" (7.5cm) of extra fabric to wrap around the corner. Attach TREMDrain 1000 to the wall and overlap fabric.

Backfilling

Soil should be placed and compacted directly against the drain. Direct compactor exhaust away from the drain to prevent damage. Backfill to minimum 6" (15cm) above drain to allow for coverage after settlement.

Availability

Immediately available from your local Tremco Field Representative, Tremco Distributor or Tremco Warehouse.

Warranty

Tremco warrants its TREMDrain products to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, express or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, with respect to TREMDrain products. Tremco's sole obligation shall be, at its option, to replace, or refund the purchase of the quantity of TREMDrain products proved to be defective and Tremco shall not be liable for any loss or damage.

TYPICAL PHYSICAL PROPERTIES

Physical Properties	Value	SI Value	Test Method
Fabric Properties (TREMDrain 1000)			
Material	Polypropylene	Polypropylene	
Weight	4 oz/yd ²	136 gm/m ²	ASTM D3776
Grab Tensile strength	110 Lbs.	485N	ASTM D4632
Puncture strength	65 Lbs.	285N	ASTM D4833
Trapezoidal tear	50 Lbs.	220N	ASTM D4533
Mullen burst strength	215 psi	1430 kPa	ASTM D3786
Grab elongation 60% 60% ASTM D4632			
AOS	100 sieve	150 micron	ASTM D4751
Permittivity	1.6 sec ⁻¹	1.6 sec ⁻¹	ASTM D4491
Permeability	0.39 cm/sec	0.39 cm/sec	ASTM D4491
Flow rate	150 gpm/ft ²	6,110 lpm/m ²	ASTM D4491
Fabric Properties (TREMDrain 1000T)			
Material	Polypropylene	Polypropylene	
Weight	4 oz/yd ²	136 gm/m ²	ASTM D3776
Grab tensile strength	130 lbs	578N	ASTM D4632
Puncture strength	50 lbs	222N	ASTM D4833
Trapezoidal tear	70 lbs	310N	ASTM D4533
Mullen burst strength	150 psi	1034 kPa	ASTM D3786
Grab elongation	60%	60%	ASTM D4632
AOS	80 sieve	180 micron	ASTM D4751
Permittivity	.7 sec ⁻¹	.7 sec ⁻¹	ASTM D4491
Permeability	0.03 cm/sec	0.03 cm/sec	ASTM D4491
Flow rate	80 gpm/ft ²	3260 lpm/m ²	ASTM D4491
FilterFabric (TREMDrain 1000RS)			
Fabric	Needle-Punched Non-Woven		
Root Barrier Coating	Copper Hydroxide		US EPA 1812-347
Flow Rate (sec ⁻¹)	120 gpm/ft ²	4888 lpm/m ²	ASTM D4491
Tensile Strength	113 lbs	500N	ASTM D4632-91
Core Properties (All 1000 Series)			
Material	Polystyrene	Polystyrene	
Thickness 7/16 inch 11 mm			
Compressive strength (Mod.)	15,000 lbs/ft ²	732 kN/m ²	ASTM D1621
Product Properties (All 1000 Series)			
Flow capacity per unit width	16 gpm/ft	200 lpm/m	ASTM D4716
Roll length 50 ft. 15.8 m			
Roll width 4 ft. 1.22 m			
Roll weight 38 Lbs. 17 kg			



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