



PolyFlow® 18 DRAINAGE MAT FOR HORIZONTAL DRAINAGE



POLYGUARD PolyFlow® 18 DRAINAGE MAT is two-part prefabricated geocomposite drain consisting of a formed polystyrene core covered on one side with woven mono-filament filter fabric. The fabric allows water to pass into the drain core while restricting the movement of soil particles which might clog the core. The core allows the water to flow to designated drainage exits. **PolyFlow 18** is designed for horizontal applications.

PolyFlow 18 DRAINAGE MAT is compatible as a protection layer for **Polyguard** waterproofing membranes.

The many uses of **PolyFlow® 18 DRAINAGE MAT** include foundation walls, retaining walls, inclined drains, french drains, trench drains, interceptor drains, embankment drainage, earthen dams, under slabs, under foot traffic pavers, and planters. Virtually anywhere an aggregate drainage system has been used to relieve hydrostatic pressure **PolyFlow 18** can be used more efficiently.

Collection Systems:

PolyFlow DRAINAGE MATS may be used with **Polyguard TotalFlow™**, perforated pipe, or drain tile for collection of drainage to the designed exit drainage.

TYPICAL PROPERTIES	ASTM TEST METHOD	UNIT OF MEASURE (English and Metric)	PolyFlow® 18
DRAIN PROPERTIES:			with soft waterproofing
Flow Capacity	D 4716	gpm/ft of width l/min/m of width	18 / 225
Roll Length, feet	-	Feet / m	50 / 15.24
Roll Width, feet	-	Feet / m	4 / 1.22
Roll Weight, lbs	-	Lbs / kg	50 / 22.6
CORE PROPERTIES:			
Material	-	-	Polystyrene
Thickness	D 1777	Inch / cm	.375 / .952
Compressive Strength, lbs/ft ² (+ or - 5%)	D 1621 (modified)	lbs/ft ² / kg/m ²	18,000 / 862
FABRIC PROPERTIES:			
Material	-	-	Polypropylene
Grab Tensile Strength	D 4632	Lb / N	365x200 / 1620x890
Grab Elongation	D 4632	Percent	10
Puncture Strength	D 4833	PSI / N	105 / 470
EOS (AOS)	D 4751	US Sieve / mm	40 / 425
Flow Rate, gpm/ft	D 4491	gpm/ft ² / (l/min/m ²)	100 / 4047
UV at 500 hours (strength retained)	D 4355	percent	70

Horizontal Installation:

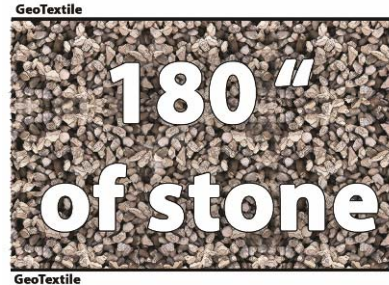
1. Clean horizontal surface of loose debris and unroll **PolyFlow® 18** fabric side up.
2. For horizontal deck installation, **PolyFlow 18** may be loosely laid directly over the waterproofing membrane. Edges of the core with the flange should be at higher side of the deck or plaza, away from any drains.
3. Attach **PolyFlow 18** to horizontal surface to be drained with double-sided tape or adhesive that is compatible with waterproofing membrane or use temporary ballast to hold drain in place during the placement of deck surface.
4. For overlaps, place adjacent panels so that core flange overlap and shingle in the direction of flow to drain collection system, scuppers, or simply daylight.
5. Secure the fabric overlap at necessary intervals with glue or tape to prevent soil or concrete intrusion.
6. Join roll ends by peeling back fabric and interlocking at least two rows of dimples and then overlap fabric and tape or secure with glue to prevent soil or concrete intrusion.
7. For underslab installation fabric side should be down or towards the soil.

RECOMMENDED ADHESIVES:

Polyguard 650 LT Liquid Adhesive, Maxbond Construction Adhesive, H B Fuller Plionail, Goodyear Liquid Nails, Miracle 297, 294.

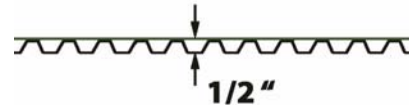
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Cost Reduction Opportunity



VS.

PolyFlow® 18



PolyFlow® 18, with 1/2" height, can move more drainage water per foot width than a layer of stone which is a foot wide and 180" high. (*Manning's equation used to calculate flow for the stone*)