



## PolyFlow® 15-P DRAINAGE MAT FOR VERTICAL DRAINAGE



**POLYGUARD PolyFlow® 15-P DRAINAGE MAT** is three-part prefabricated geocomposite drain consisting of a formed polystyrene core covered on one side with polypropylene 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® 15-P** is designed for vertical applications.

**Polyflow® 15-P** has a built-in Polymeric film protection layer for use as required by the manufacture of some waterproofing materials in order to be a compatible protection layer.

The many uses of **PolyFlow® 15-P DRAINAGE MAT** include foundation walls, retaining walls, inclined drains, french drains, trench drains, interceptor drains, embankment drainage, earthen dams, and planters. Virtually anywhere an aggregate drainage system has been used to relieve hydrostatic pressure **PolyFlow® 15-P** 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® 15-P
<b>DRAIN PROPERTIES:</b>			with soft waterproofing
Flow Capacity	D 4716	gpm/ft of width l/min/m of width	16 / 200
Roll Length, feet	-	Feet / m	50 / 15.24
Roll Width, feet	-	Feet / m	4 / 1.22
Roll Weight, lbs	-	Lbs / kg	45 / 20.4
<b>CORE PROPERTIES:</b>			
Material	-	-	Polystyrene
Thickness	D 1777	Inch / cm	.375 / .952
Compressive Strength, lbs/ft <sup>2</sup> (+ or - 5%)	D 1621 (modified)	lbs/ft <sup>2</sup> / kPa / m <sup>2</sup>	15,000 / 719
Polymeric film layer	-	-	yes
<b>FABRIC PROPERTIES:</b>			
Material	-	-	Polypropylene
Grab Tensile Strength	D 4632	Lb / kg	110 / 50
Grab Elongation	D 4632	Percent	60
Puncture Strength	D 4833	PSI	65 psi
EOS (AOS)	D 4751	US Sieve / mm	100 / 0.152
Flow Rate, gpm/ft	D 4491	gpm/ft <sup>2</sup> / (l/min/m <sup>2</sup> )	150 / 6110
UV at 500 hours (strength retained)	D 4355	percent	70

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This information is based on our best knowledge, but POLYGUARD cannot guarantee the results to be obtained.



## Vertical Installation:

### Measuring:

If using **TotalFlow™**, measure perimeter of wall and place a two foot section of **TotalFlow™** around the perimeter. Measure wall height from top of **TotalFlow™**, unroll the **PolyFlow® DRAINAGE MAT**, and cut to length.

If using perforated pipe, measure wall height or lift, adding sufficient material for overlapping pipe detail. Unroll **PolyFlow® DRAINAGE MAT** and cut to length. Peel back fabric from drainage core and remove 4 " of core. Drain core should remain 6"-12" below backfill.

If using drain tile, measure wall height, adding sufficient material so that there is enough fabric, when fabric is peeled back from drainage core, to wrap around the drainage tile.

### Installing:

At the top termination, glue fabric to wall or, if using a furring strip or **Polyguard** termination bar, tuck fabric under core. Furring strip / termination bar can be removed after backfill is completed.

Glue or tape adjacent panels at the vertical joints, making sure the fabric overlaps to prevent soil intrusion during backfill.

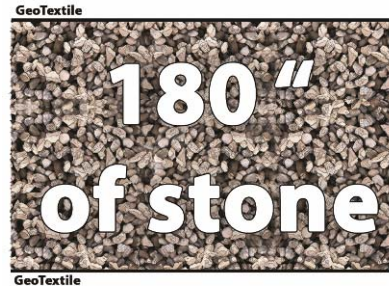
Tie-in to the collection system can be done with a simple fabric overlap (if using the **TotalFlow™** system). If using perforated pipe, peel back fabric from **PolyFlow® DRAINAGE MAT** core and remove 4" of core. Drain core should remain 6"-12" below backfill. If using drain tile, wrap fabric which has been pulled away from the core completely around the drain tile. Tuck excess fabric back behind the core. Make sure the drain tile is in direct contact with the **PolyFlow® DRAINAGE MAT** core.

Backfill as soon as possible after drain installation.

**PolyFlow® DRAINAGE MAT** is a green product with over 60 per cent of the product made from recycled materials.

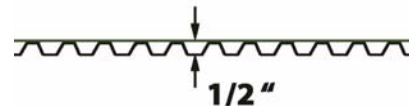
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## Cost Reduction Opportunity



VS.

**PolyFlow® 15-**



**PolyFlow® 15-P**, 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*)