



For Heavy Duty Horizontal and Vertical Drainage Applications

# ArmorDrain 150/150PF Protection/Drainage Mat

## Description

ArmorDrain 150 is a moderate duty impermeable polymeric sheet that while under heat and pressure is formed into a dimpled drainage core. The core is then bonded to a single layer of non-woven filter fabric. The filter fabric retains soil and sand particles as well as freshly placed concrete or grout, allowing water to pass into the drainage core. **The 150 PF is identical to the 150 only with the addition of a membrane protective film on the backside.**

## Purpose

ArmorDrain 150 is used as a protection and drainage roll and is engineered to provide ample strength to protect membranes against back fill soil and sediment and to provide excellent drainage capabilities.

## Advantages

- Higher compressive strength for greater depth
- Strong resistance to hydrostatic pressure
- High flow dimpled drainage core
- Protects waterproofing membrane
- Easy installation

## Leeds Data

ArmorDrain 150 Core is considered a GREEN product and can be used toward LEEDS building credits.

## Prep/Application (With Membrane)

Application of waterproofing membrane should be completed. Starting at a corner, install the ArmorDrain horizontally against the waterproofing membrane with the non-woven filter fabric side facing out-wards.

Extend the roll from the top of the footer to finished grade. When two edges come together from two separate rolls, overlap the dimples to create a continuous coverage of the wall.

For good adherence, **with** a membrane, apply uniform pressure throughout the surface area, not just the edges and corners. If needed, secure rolls to the wall using powder actuated mechanical fasteners.

For good adherence, **without** a membrane, mechanical fasteners or a suitable adhesive will be required to secure rolls to the wall. When using mechanical fasteners install top fasteners within the top 4" (102 mm).

If the roll overlaps the membrane once you have reached the grade line, a utility knife or similar tool can be used to cut the rolls to the correct height.

## Backfilling/Drainage

Residential - Backfilling should begin no sooner than 24 hours after the installation of the board, but must be backfilled within 30 days.

## Technical Data

Product Name	ArmorDrain 150	Method
<b>Color</b>	Black	
<b>Material</b>	Drainage core: co-polymer polypropylene Geotextile: Polypropylene	
<b>CORE</b>		
<b>Dimple Height</b>	.40" (10.16mm)	ASTM D1777-96
<b>Compressive Strength</b>	15,000 psf (718 kN/m <sup>2</sup> )	ASTM D6364-06
<b>Geocomposite water flow rate@hydr. Grad 0.1</b>	21 g/min/ft-260L/min/M	ASTM D4716
<b>Drainage Core impact resistance</b>	2.9 J mean failure energy at 5° C	ASTM D4226-09
<b>Drainage core maximum tearing strength</b>	MD 550N CD 800N	ASTM D5884-04a
<b>Drainage core stress cracking resistance</b>	504 hrs @ 156 kPa (No cracking at test termination)	SAGEOS GD 001-2012
<b>Fabric</b>		
<b>Geotextile water flow rate</b>	140 gal/min/ft <sup>2</sup> (5704 L/min/m <sup>2</sup> )	ASTM D4491
<b>Geotextile grab tensile strength</b>	100 lbs (.45kN)	ASTM D4632
<b>Geotextile elongation</b>	60%	ASTM D4632
<b>Geotextile trapezoidal tear</b>	45 lbs. (200N)	ASTM D4533
<b>Geotextile puncture strength</b>	250 lbs (1.1113 kN)	ASTM D6241
<b>Geotextile mullen burst</b>	210 psi (1446 kPa)	ASTM D3786
<b>Geotextile apparent opening size (AOS)</b>	70 US Sieve (.212mm)	ASTM D4751
<b>Geotextile weight(typical)</b>	4.0 oz-yd <sup>2</sup> (135 g/m <sup>2</sup> )	ASTM D5261
<b>Geotextile UV resistance</b>	70% strength retained	ASTM D4355
<b>Toxicity</b>	Non-toxic, non-polluting	
<b>Roll size/weight</b>	*4' x 50' (1.2 x 15.25m) 39 lbs. (15.87kg) *6' or 8' widths available as special order	
<b>Service life expectancy</b>	>25 years (at pH between 4 and 9, and temperature below 77°F / 25°C) <b>Do not expose to UV light for more than 30 days.</b>	

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