



For Heavy Duty Vertical Drainage Applications

ArmorDrain 110 Protection/Drainage Mat

Description

ArmorDrain 110 is a light 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.

Purpose

ArmorDrain 110 is engineered to provide ample strength to protect waterproofing membranes against back fill soil and sediment and to provide excellent drainage capabilities providing hydrostatic relief.

AD 110 is ideal for basement foundations, retaining walls, planters or bridge abutments.

Advantages

- Resistance to hydrostatic pressure
- High flow dimpled drainage core
- Protects foundation waterproofing membrane
- Easy installation

Leeds Data

ArmorDrain 110 Core is considered a GREEN product and can be used toward LEEDS building credits.

Prep/Application

After the waterproofing membrane has been applied, start at a corner and install the 110 horizontally against the surface with the non-woven filter fabric side facing out-ward.

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, 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. 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

Backfilling should begin no sooner than 24 hours after the installation of the board, but must be backfilled within 15 days.

Technical Data

Product Name	ArmorDrain 110	Method
Color	Black	
Material	Drainage core: co-polymer polypropylene Geotextile: Polypropylene	
CORE		
Dimple Height	.25" (6.35mm)	ASTM D1777
Compressive Strength	11,000 psf (527 kN/m ²)	ASTM D1621
Geocomposite water flow rate@hydr. Grad 0.1	18 g/min/ft-223L/min/M	ASTM D4716
Drainage Core impact resistance	2.9 J mean failure energy at 5° C	ASTM D4226-09
Drainage core maximum tearing strength	MD 550N CD 800N	ASTM D5884-04a
Drainage core stress cracking resistance	504 hrs @ 156 kPa (No cracking at test termination)	SAGEOS GD 001-2012
Fabric		
Geotextile water flow rate	140 gal/min/ft ² (5704 L/min/m ²)	ASTM D4491
Geotextile grab tensile strength	100 lbs (.45kN)	ASTM D4632
Geotextile elongation	60%	ASTM D4632
Geotextile trapezoidal tear	45 lbs. (200N)	ASTM D4533
Geotextile puncture strength	250 lbs (1.1113 kN)	ASTM D6241
Geotextile mullen burst	210 psi (1446 kPa)	ASTM D3786
Geotextile apparent opening size (AOS)	70 US Sieve (.212mm)	ASTM D4751
Geotextile weight(typical)	4.0 oz-yd ² (135 g/m ²)	ASTM D5261
Geotextile UV resistance	70% strength retained	ASTM D4355
Toxicity	Non-toxic, non-polluting	
Roll size/weight	*4' x 50' (1.2 x 15.25m) 38 lbs. (15.87kg) 10/skid *6.5' or 8' widths available as special order	
Service life expectancy	>25 years (at pH between 4 and 9, and temperature below 77°F / 25°C) Do not expose to UV light for more than 30 days.	

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