



For Light Duty Vertical Drainage Applications

ArmorDrain 110 Protection/Drainage Mat

Description

ArmorDrain 110 is a light duty impermeable polystyrene sheet that while under heat and pressure is formed into a dimpled drainage core.

The core is then bonded to a single layer of polypropylene 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, and planters.

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 outward.

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

Physical Properties	ArmorDrain 110 Values	Test Method
CORE	Polystyrene	
Color	Black	
Dimple Height (Thickness)	.25" (6.35mm)	ASTM D1777
Compressive Strength	11,000 psf (527 kN/m ²)	ASTM D1621
Flow Capacity	9 g/min/ft-112L/min/M	ASTM D4716
Fabric	Polypropylene	
Flow rate	150 gal/min/ft ² (6110 L/min/m ²)	ASTM D4491
Geotextile grab tensile strength	110 lbs (50kg)	ASTM D4632
Geotextile elongation	60%	ASTM D4632
Geotextile puncture strength	65 psi	ASTM D4833
Geotextile apparent opening size (AOS)	100 US Sieve (.152mm)	ASTM D4751
Geotextile UV resistance	70% strength retained	ASTM D4355
Toxicity	Non-toxic, non-polluting	
Roll size/weight	*4' x 50' (1.2 x 15.25m) 35 lbs. (15.87kg)	
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.	