



INSULATION & DRAINAGE MATS PROTECTION SYSTEM

ArmorDrain™ 110 / 150 / 150PF / 400

ArmorFoam™ 25 / 40





ArmorFoam delivers exceptional R-value and protection for even the most challenging jobs and when combined with ArmorDrain, offers a complete drainage system.

ArmorFoam's technology comes from a BASF formula where small polystyrene beads are later blown and expanded into the insulating foams. Rigorously tested and delivering best-in-class results, ArmorFoam is backed by a tradition of excellence that you can trust for effective insulation and dryness.

ADVANTAGES: ArmorDrain

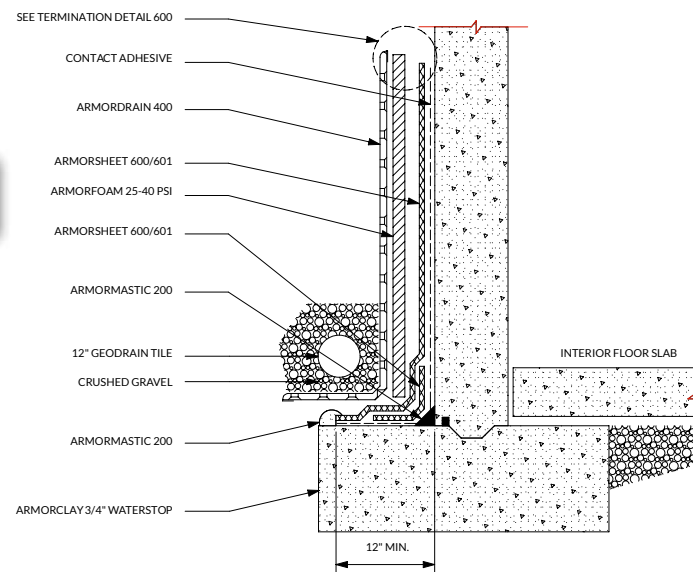
- Offering either 11,000, 15,000 or 40,000 psf of protection
- Crush resistant
- Strong resistance to hydrostatic pressure
- High flow dimpled drainage core
- Protects waterproofing membrane
- Easy installation

ADVANTAGES: ArmorFoam

- Combines high R-value, and superior moisture protection into one product (use the ArmorFoam 40 for highest R-Value)
- Offers a high compression psi rating (25psi and 40psi)
- Protects waterproofing
- Light-weight, Easy to handle and install
- Can be used in any geographical area



Footing Cross Section with Insulation



Product Description:

A high-performance, high-strength drainage composite mat consisting of a high-impact polystyrene core and a high-strength non-woven filter fabric. For vertical and horizontal applications



Product Application:

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.

ArmorDrain 150/150 PF 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.

ArmorDrain 400 is ideal under slabs, planters and roof gardens, retaining walls, foundation walls, and bridge abutments. Because of the crush proof nature of the geonet, drainage composites can be used in the most extreme cases where heavy loads and/or heavy vehicular traffic are abundant.

Product Description:

An expanded polystyrene board that has considerably better thermal insulation capacity than conventional EPS products with high compressive resistance.



Product Application:

The ArmorFoam 25 and 40 are both expanded polystyrene foam insulation boards that meet the needs of the commercial foundation and building floor slab market where a high psi is required (use the ArmorFoam 40 product where highest psi is demanded).

ArmorFoam Graphite-Enhanced Expandable Polystyrene Foam (GPS) Insulation has more than 30 years of proven performance in wet environments. The closed-cell structure of ArmorFoam Expanded Polystyrene Foam (GPS Insulation resists water pickup, enabling it to retain a high R-value* over time - a necessary property in wet, below-grade commercial foundation applications).

ArmorFoam Sample Specifications (40) (See Product Catalog for complete details on ArmorFoam 25 and 40 and Accessories)

Property	Nominal Density	Compressive Resistance ³ Minimum At 10% Deformation	R-Value Per Inch Thickness At 75 F Mean Temperature	Water Vapor Permeance	Flexural Strength Minimum	Dimensional Stability Maximum	Water Absorption Maximum	Oxygen Index Minimum	Density Minimum	Flame Spread	Smoked Developed
Results	N/A	ASTM D1621	ASTM C518	ASTM E96	ASTM C203	ASTM D2825	ASTM C272	ASTM D2863	ASTM D1622	ASTM E84	ASTM E84
ASTM C578 (40 psi)	2.5 PCF	40 PSI	4.8 ft ² •hr •°F Btu	2.5 Perm	60.0 psi	2.0 % Linear Change	2.0 % by Volume	24 volume %	2.40 PCF	25 INDEX	450 INDEX

ArmorDrain Sample Specifications (400) (See Product Catalog for complete details on ArmoDrain 110, 150, 150P, 400 and Accessories)

Product	Color	Material	CORE			FABRIC						
			Compressive Strength	Thickness	Flow (Hydraulic gradient=1)	Flow	CBR puncture	AOS (EOS)	Grab Tensile	Toxicity	Roll size/ weight	Service life expectancy
ArmorDrain 400	Black	Drainage core: co-polymer poly-propylene Geotextile: Poly-propylene	40,000 psf (1915 kN/m ²)	.25in (6.35mm)	8.5 g/min/ft (106L/min/m)	110 gal/min/ft ² (4481 L/min/m ²)	450lbs (2.0kN)	80 U.S. Sieve (.18 mm)	160 lbs. (.712 kN)	160 lbs. (.712 kN)	*4' x 50' (1.2 x 15.25m) 55 lbs. (24.95kg)	>30 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.
Method			ASTM D1621	ASTM D1777	ASTM D4716	ASTM D4491	ASTM D6241		ASTM D4632			



COMPLETE COMMERCIAL SOLUTION

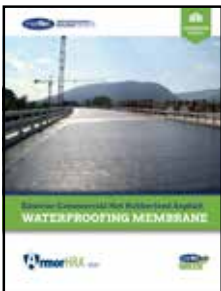
Mar-flex offers the best commercial waterproofing products in the industry.



ArmorClay



ArmorAirBarrier



ArmorHRA



ArmorMasonry Sealer



ArmorSheet



ArmorDrain



ArmorMembrane

ArmorBlock



ArmorFoam

Mar-flex® Waterproofing & Building products

We are a family-owned innovative manufacturer of commercial grade, waterproofing foundation and air barrier products. We offer unsurpassed quality and reliability with time tested solutions for the building industry.

Complete waterproofing systems

Mar-flex has set the industry standard for offering superior water-based and solvent-based waterproofing membranes, an extensive “green” product assortment and a wide range of drainage and insulation boards to complete the job based on your market’s needs.

Visit our website, www.mar-flex.com/armor for more information:

- Detailed Product Sheets
- Detailed Spec Sheets
- Detailed Application Descriptions
- Detailed Installation Guides

Mar-flex Warranty

Mar-flex Waterproofing & Building Products warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any Armor Series materials prove to contain manufacturing defects that substantially affect their performance, Mar-flex Waterproofing & Building Products will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by Mar-flex Waterproofing & Building Products with respect to its materials. There are no other warranties including the implied warranties of merchantability and fitness for a particular purpose.

Mar-flex Waterproofing & Building Products specifically disclaims liability for any incidental, consequential or other damages including, but not limited to, loss of profits or damages to a structure or its contents arising under any theory of law whatsoever.

The dollar value of Mar-flex’s liability and buyer’s remedy under this limited warranty shall not exceed the purchase price of the Mar-flex Waterproofing & Building Products material in question.



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 Drainage Mats | Fluid-Applied Dampproofing | Air & Vapor Barriers | Hot-Applied Waterproofing
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