

LOWFLOW™

Sustainable Waterproofing Protection and Drainage System

PRODUCT NAME

Lowflow™

MANUFACTURER

Polyguard Products, Inc.
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PRODUCT DESCRIPTION

Lowflow™ Protection and Drainage System is a high-strength, multi-layer fabric composite in a 4' x 200' roll. Its purpose is to protect underlying waterproofing membranes and provide a low cost drainage mat which is suitable for most clay soil conditions.

BASIC USES

With its thick, two-component, fabric mat structure, Lowflow can wick away water from foundation walls. With a 100x design safety factor applied to ASTM D4716 flow test results, Lowflow's drainage rate equates to an ability to remove approximately 50 gallons of water per hour from each 100 foot length of foundation.

Lowflow's drainage rate is limited compared to conventional "waffle board" drainage mat, such as Polyflow 15P. The waffle board drainage mat, with a flow rate of 15 gal/min/ft. is theoretically capable of draining over 90,000 gallons of water from a 100 foot length of foundation in an hour.

Since large numbers of construction sites have low transmissivity clay soils, water travel is minimal. Lowflow's modest drainage rate is well in excess of requirements for most clay construction sites even if a design safety factor of 100 is used.

Lowflow™ is preferable on any project to the use of no drainage at all. If project budget constraints force the elimination of higher cost conventional drainage mat from project specifications, use of Lowflow is recommended. Higher grade waterproofing membranes, such as 650 Waterproofing Membrane, are designed to withstand a temporary standing head of groundwater. The membrane can serve the purpose of holding back the groundwater during the period that the Lowflow drainage mat is catching up with the drainage. Additionally, hydrostatic head pressure should be reduced, as well as the period that the foundation is exposed to a head of groundwater.

ADVANTAGES

The lowest cost protection and drainage system available. You can generally count on a 50% (or greater) cost reduction compared to "waffle board" systems.
- The first sustainable protection and drainage system, made from 100% post-industrial recycled synthetic fibers.

Product Data Sheet

INSTALLATION

Mechanical fasteners should not be used if they penetrate the underlying waterproofing membrane. They may be used if applied above the top of the waterproofing membrane.

Adhesive fastening is an alternative for fastening the Lowflow™ system. Using a roller, apply 650 LT Liquid Adhesive to the back of the Polyguard Membrane. Two roller "stripes" along each 4-foot section of membrane should normally be sufficient. The "rough" or "stiff" surface should be on the outside, and the "smooth" or "soft" surface on the inside. After application of Liquid Adhesive, the Lowflow Protection and Drainage System should be rolled over the adhesive. If the material is applied in lifts, the upper lift should be shingled over the lower lift by 2"-3". Backfilling should be done as soon as possible after application.

ISO 9000

The Lowflow system is not covered by Polyguard's ISO 9001 Quality System.

SAFETY

SDS documents for all Polyguard products can be obtained at our website www.polyguard.com. Call Polyguard Products, Inc. at (214) 515-5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace at no charge product proved to be defective within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.
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PROPERTY	TEST METHOD	TYPICAL VALUE
COLOR		Color of the two materials in this composite will vary due to its recycled nature. Color will generally be grey, white, or black.
GRAB STRENGTH	ASTM D 4632	200 lbs.
TEAR STRENGTH	ASTM D 4533	70 lbs.
PUNCTURE RESISTANCE	ASTM D 4833	80 lbs.
FABRIC WEIGHT	ASTM D 3776	> 9.5 oz/yd ²
TRANSMISSIVITY - FLOW AT 3600 PSF PRESSURE, HYDRAULIC GRADIENT OF 1.0	ASTM D 4716	0.84 gal/min/ft Note on testing: Due to wide fluctuations (up to 10x) in ASTM D4716 test results for this type of product, Polyguard recommends against using ASTM D4716 transmissivity as a basis for design. The recommendations shown in the DRAINAGE MAT SPECIFICATION - BY SOIL TYPE matrix are based on a safety factor of 100x.

PACKAGING	PART NUMBER	UNIT SIZE
LOWFLOW™	LOWF	4' x 200' roll