# HYDRODUCT® 200

## Pre-fabricated geocomposite layer for use on sub-structure without waterproofing

## Product Description

Hydroduct® 200 is a strong preformed, 0.433 in. (11 mm) thick, geocomposite drainage sheet system. It is comprised of a hollow studded polystyrene core, covered on one side with a nonwoven, needle punched polypropylene filter fabric.

## Advantages

- **Efficient water collector/deflector**—can be used as a sandwich drainage layer between lagging and the reinforced concrete structure
- **Geotextile fabric filter**—allows ground water to pass into the drain core while restricting the movement of soil particles
- **High flow capacity**—drains 16 gal/min./ft (200 L/min./m) width
- **Rot proof**—unaffected by permanent immersion in water, bacteria, dilute acids and alkalis
- **Economical**—eliminates imported aggregated drainage layers
- **Studded core**—allows water to flow to designated drainage collection points

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- High flow capacity
- Rot proof
- Economical
- Studded core

## Use

Hydroduct 200 has been specially developed to provide a simple and highly practical collector and deflector of unwanted ground water on foundation walls, retaining walls, bridges, tunnels and planters. Hydroduct 200 is acceptable for use with Preprufe®, however is not recommended for use over Bituthene® or Procor® waterproofing membranes. Hydroduct 200 has been designed to withstand ground pressures and the compaction forces of wet concrete to maintain a high water flow capacity. The drainage sheet must be connected into the site drainage system to minimize hydrostatic build-up and collect infiltrated water using Hydroduct Coil 600 or traditional perforated pipes wrapped and linked with the geotextile filter fabric to prevent clogging.

## Application Procedures

### Safety, Storage and Handling Information

All construction products must be handled properly. Material Safety Data Sheets (MSDS) are available at graceconstruction.com and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the MSDS before use.

### Installation

In vertical applications, Hydroduct 200 Drainage Composites can be applied to the substrate vertically or horizontally but, in either case, should extend from the perimeter discharge pipe to a point approximately 6 in. (150 mm) below the anticipated grade line.

## Supply

| | |
|---|---|
| **Hydroduct 200** | |
| Roll size | 4 ft x 50 ft (1.2 m x 15.2 m) 200 ft² (18.6 m²) |
| Packaging | 6 rolls/pallet |
| Weight | 42 lbs (19 kg)/roll |
| **Complementary Materials** | |
| Hydroduct Tape | 1 in. x 200 ft (25 mm x 61.0 m) rolls<br>[2 x 50 ft (15.2 m) strips per roll of Hydroduct] |
| Hydroduct Coil 600 | 50 ft (15.2 m) roll |

## Physical Properties

| Property | Typical Value | Test Method |
|---|---|---|
| **Drainage Core** | | |
| Polymer | High impact polystyrene | |
| Thickness | 0.433 in. (11 mm) nominal | ASTM C366 method B |
| Compressive strength | 15,000 lbs/ft² (732 kPa) | ASTM D1621 |
| Flow rate (gradient 1.0, load 172 kPa) | 16 gal/min./ft (200 L/min./m) | ASTM D4716 |
| **Geotextile** | | |
| Type | Nonwoven | |
| Polymer | Polypropylene | |
| Weight | 4.0 oz/yd² (136 g/m²) | ASTM D3776 |
| Tensile strength | 110 lbs (485 N) | ASTM D4632 |
| Apparent opening size | 150 U.S. sieve (0.100 mm) | ASTM D4751 |
| Flow rate | 150 gal/min./ft² (6095 L/min./m²) | ASTM D4491 |
| Mullen burst | 215 lbs/in.² (1430 kPa) | ASTM D3786 |
| Puncture strength | 65 lbs (285 N) | ASTM D4833 |

Hydroduct 200 should be attached to the substance with Hydroduct Tape. When installing directly to concrete or wood, mechanical fasteners can be used. When using Hydroduct Tape, press firmly to ensure good adhesion. Substrate and job site conditions will determine the attachment pattern. Additional consideration should be given in high wind exposures. Abut adjacent rolls with excess fabric overlapping in shingle fashion.

For inside and outside corners, abut adjoining drainage composite at the corner. Cover open core with extra geotextile filter fabric.

The exposed core along the top terminations should be covered with a strip of geotextile to prevent intrusion of soil into core. At the bottom termination extend the Hydroduct 200 Drainage Composite out from the structure so that it passes behind and under the perimeter discharge pipe. Additional geotextile should be wrapped over the pipe to prevent soil intrusion.

To secure Hydroduct 200 Drainage Composite around protrusions, apply Hydroduct Tape around the protrusion in a picture frame configuration. Cut Hydroduct 200 Composite to fit snugly around the protrusion. Press the cut edge firmly into Hydroduct Tape.

Hydroduct 200 should be covered promptly. Do not leave Hydroduct 200 exposed to sunlight for more than two weeks. Motor vehicles, construction equipment or other trades should not be allowed directly on the Hydroduct 200.

## www.graceconstruction.com

**For technical assistance call toll free at 866-333-3SBM (3726)**


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