

HYDRODUCT® 225

Heat and hydrocarbon resistant drainage geocomposite

Product Description

Hydroduct® 225 consists of a nominal 0.433 in. (11 mm) drainage core, a high performance geotextile and a high strength backing film. The high impact, creep resistant drainage core has a compressive strength of 21,000 lbs/ft² (1000 kPa).

Advantages

- **Hydrocarbon resistant**—suitable for contaminated environments
- **Heat resistant**—use below hot asphalt bedding for pavers
- **Enhances waterproofing**—eliminates hydrostatic pressure build-up
- **Efficient water collector/deflector**—can be used as a sandwich drainage layer between lagging and the reinforced concrete structure
- **Smooth polymeric sheet**—compatible with Preprufe®, Procor® or Bituthene® membranes
- **Simple convenient drainage and protection layer**—serves as robust membrane protection and drainage
- **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

Use

Hydroduct 225 is designed to collect and transport water in hydrocarbon contaminated environments. It can be used on horizontal applications which will be exposed to hydrocarbons such as airports and parking decks. Hydroduct 225 can also be used on foundation walls, retaining walls, bridge abutments, tunnels, earth sheltered structures and soil retention systems. The discharge of water collected from contaminated soil must comply with federal, state and local regulations.

Hydroduct 225 can also be used in conjunction with hot asphalt as a setting bed for pavers. Temperature of the asphalt during installation should not exceed 325°F (183°C). Hand tamp pavers into hot asphalt. Do not use mechanical or vibratory compactors. Discontinuous wearing surfaces such as bricks, cobblestones, etc. should be set in a minimum 3 in. (75 mm) setting bed.

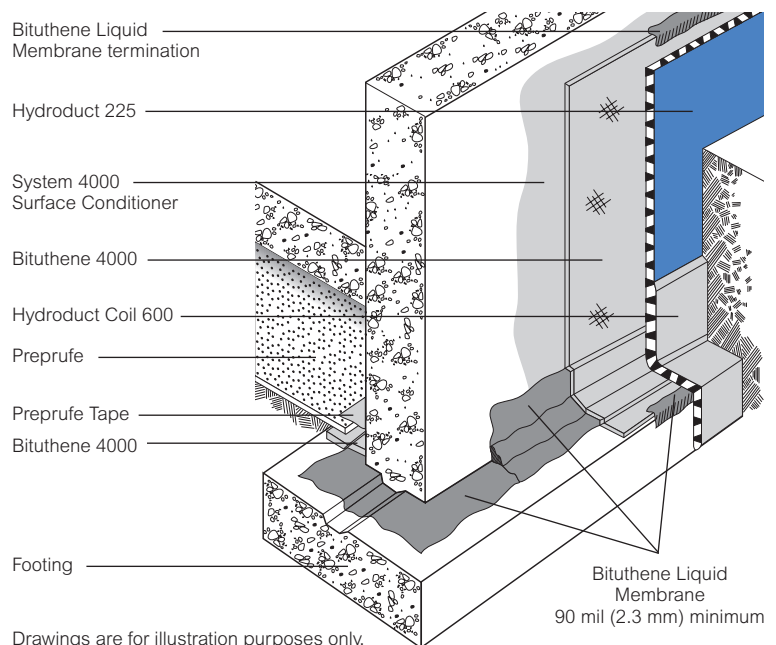
Hydroduct 225 is uniquely designed to maintain compressive strength and flow rate upon exposure to hydrocarbon contamination in the soil or in the presence of elevated temperatures. The geotextile retains the soil while allowing water to pass from the soil to the core and is securely bonded to the core to prevent intrusion of the fabric into the core during service. The high strength backing ensures compatibility of the Hydroduct 225 with all Grace waterproofing membranes.

Hydroduct 225 is designed to withstand exposure to hydrocarbon contaminated soil at the maximum contamination level allowed by the U.S. Environmental Protection Agency (Federal Register, Vol. 52, No. 74, April 17, 1987, pp. 12662–12786 – Comprehensive Environmental Response, Compensation and Liability Act).

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.



Drawings are for illustration purposes only. Please refer to graceconstruction.com for specific application details.

Supply

Hydroduct 225	
Roll size	4 ft x 50 ft (1.2 m x 15.2 m) 200 ft ² (18.6 m ²)
Packaging	6 rolls/pallet
Weight	50 lbs (21 kg)/roll
Complementary Material	
Hydroduct Tape	1 in. x 200 ft (25 mm x 61.0 m) roll/6 rolls per carton [2 x 50 ft (15.2 m) strips per roll of Hydroduct]

Physical Properties

Property	Typical Value	Test Method
Drainage Core		
Polymer	Polyvinyl chloride	
Thickness	0.433 in. (11 mm) nominal	ASTM C366 method B
Compressive strength	21,000 lbs/ft ² (1000 kPa)	ASTM D1621
Flow rate (gradient 1.0, load 172 kPa)	16 gal/min./ft (200 L/min./m)	ASTM D4716
Geotextile		
Type	Woven	
Polymer	Polypropylene	
Weight	6.0 oz/yd ² (203 g/m ²)	ASTM D3776
Tensile strength	290 lbs (1290 N)	ASTM D4632
Apparent opening size	40 U.S. sieve (0.42 mm)	ASTM D4751
Flow rate	100 gal/min./ft ² (4074 L/min./m ²)	ASTM D4491
Mullen burst	480 lbs/in. ² (3304 kPa)	ASTM D3786
Puncture strength	105 lbs (470 N)	ASTM D4833

Installation

In vertical applications, Hydroduct 225 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.

When adhering Hydroduct 225 directly to Bituthene waterproofing membranes, Hydroduct Tape should be used. When using Hydroduct Tape, press firmly to ensure good adhesion. Substrate and job site conditions will determine attachment pattern. 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 225 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 225 around protrusions, apply Hydroduct Tape around the protrusion in a picture frame configuration. Cut Hydroduct 225 to fit snugly around the protrusion. Press the cut edge firmly into Hydroduct Tape.

In horizontal applications, adhere Hydroduct 225 with Hydroduct Tape. Substrate and job site conditions will determine attachment pattern. Additional consideration should be given in high wind exposures. Abut all edges tightly with the excess geotextile placed over the adjacent roll in shingle fashion.

Hydroduct 225 should be covered promptly. Do not leave Hydroduct 225 exposed to sunlight for more than two weeks. Motor vehicles, construction equipment or other trades should not be allowed directly on the Hydroduct 225.

www.graceconstruction.com

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

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HYD-073F Printed in U.S.A. 7/07

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