

Hydroduct® 660

High impact, creep-resistant geocomposite and protection layer for use with Grace waterproofing membranes on all horizontal applications

Advantages

- **Universal horizontal application** – suitable for all overburdens including concrete
- **Damage and creep-resistant** – high compressive strength core resists traffic loads and site damage to maintain drainage flow
- **High flow capacity** – drains 186 L/min./m (15 gals./min./ft) width
- **Enhances waterproofing** – eliminates hydrostatic head build up
- **Securely bonded fabric** – restricts intrusion into core
- **Polymeric backing film** – compatible with both sheet and liquid waterproofing membranes
- **Lightweight** – easy to install without special equipment
- **Simple, convenient, drainage and protection layer** – robust membrane protection

Description

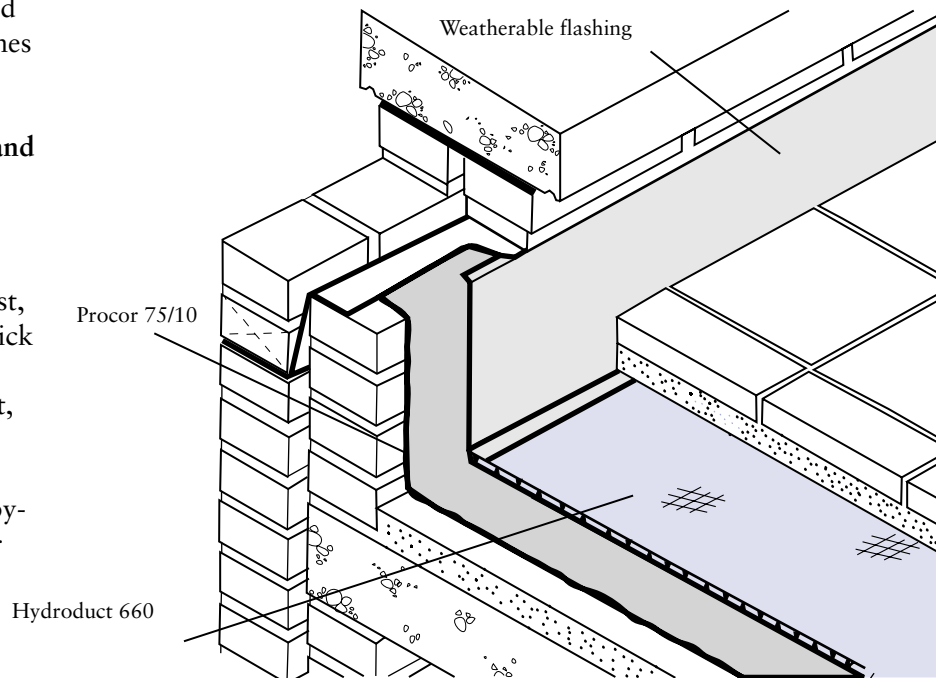
Hydroduct® 660 is a highly robust, preformed, 10 mm (0.375 in.) thick geocomposite drainage sheet system, comprising a high impact, studded polystyrene core. This is covered on one side with a nonwoven, needle punched polypropylene filter fabric and on the other side with a high backing film.

Use

Hydroduct 660 Drainage Composite is designed to collect and transport water to drainage outlets. It can be used on all horizontal applications regardless of the type of overburden and serves as a combination drainage and protection course for all Grace waterproofing membranes.

The high strength, nonwoven geotextile is designed to maintain permittivity while protecting the drainage composite from job site damage prior to, and during, the

installation of the overburden. The high permittivity of the nonwoven geotextile facilitates the removal of water from a concrete pour, thus enhancing the concrete cure, as well as providing drainage after installation. The geotextile is securely bonded to the core to prevent intrusion of the fabric into the core during service. The high modulus backing film ensures compatibility when used with either Procor® fluid applied waterproofing membranes, or with Bituthene® waterproofing membranes.



Supply

Hydroduct 660

Roll Size	1.2 m x 15.2 m (4 ft x 50 ft) 18.6 m ² (200 ft ²)
Packaging	6 rolls/pallet
Weight	21 kgs (50 lbs)/ roll

Complementary Materials

Hydroduct Tape	25 mm x 61.0 m (1 in. x 200 ft) rolls [2 x 15.2 m (50 ft) stripes per roll of Hydroduct]
Hydroduct Coil 600	15.2 m (50 ft) roll

Physical Properties

Property	Test Method	Typical Value
Drainage Core		
Polymer		High Impact Polystyrene
Thickness	ASTM C 366 Method B	9.5 mm (0.375 in.) nominal
Compressive Strength	ASTM D 1621	860 kPa (18, 000 lbs/ft ²)
Flow Rate (gradient 1.0, load 172 kPa)	ASTM D 4716	186 L/min./m (15 gal/min./ft)
Geotextile		
Type		Nonwoven
Polymer		Polypropylene
Weight	ASTM D 3776	270 g/m ² (8.0 oz/yd ²)
Tensile Strength	ASTM D 4632	1000 N (225 lbs)
Trapezoidal Tear	ASTM D 4533	555 N (125 lbs)
Apparent Opening Size	ASTM D 4751	0.147 mm (100 U.S. sieve)
Permittivity	ASTM D 4491	3050 L/min./m ² (80 gal/min./ft ²)
Mullen Burst	ASTM D 3786	4750 kPa (690 lbs/in. ²)
Puncture Strength	ASTM D 4833	68 kg (150 lbs)

remain as placed. Additional ballast consideration should be given in high wind exposures. Abut all edges tightly with the excess geotextile placed over the adjacent roll in shingle fashion.

To secure Hydroduct 660 around protrusions, apply Hydroduct[®] Tape around the protrusion in a picture frame configuration. Cut Hydroduct 660 to fit snugly around the protrusion. Press Hydroduct 660 core firmly into the Hydroduct Tape.

Hydroduct 660 should be covered promptly. Do not leave Hydroduct 660 exposed to sunlight for more than two weeks. Motor vehicles, construction equipment or other trades should not be allowed directly on the Hydroduct 660.

Application Procedures

Safety, Storage and Handling Information

All construction products must be handled properly. Grace Protection Board Adhesive is extremely flammable. Material Safety Data Sheets (MSDS) are available at www.graceconstruction.com

and users should acquaint themselves with this information. Carefully read detailed precaution statements on product labels and the MSDS before use.

Installation

Hydroduct 660 can be placed over waterproofing membranes, concrete or wood providing job site conditions allow the composite to

For Technical Assistance call us toll free at 866-333-3SBM (3726).

 Visit our web site at www.graceconstruction.com

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W. R. Grace & Co. - Conn.

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