

TECHNICAL DATA SHEET

DELTA®-DRAIN

Horizontal Drainage for Garden Roofs or Paver Applications.

MATERIAL

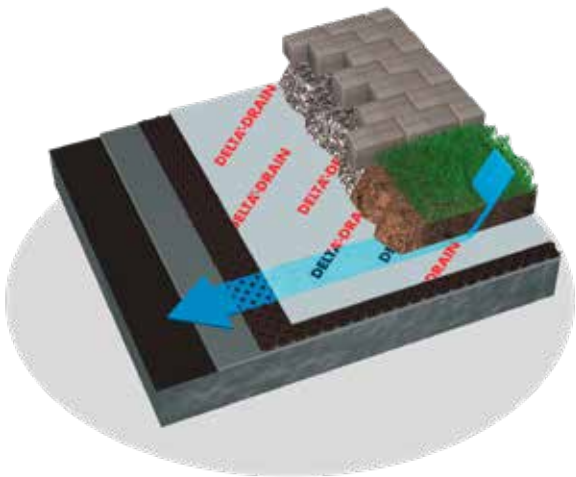
A dimpled membrane made of special high-density polyethylene (HDPE) and polypropylene (PP) non-woven TYPAR® geotextile. The HDPE drainage core with a specially designed dimple pattern provides high compressive strength and drainage capacity. DELTA®-DRAIN is manufactured with an exclusive co-extrusion process, utilizing 60% recycled HDPE from municipal recycling programs in the middle, and two thin layers of a special virgin HDPE on the outside. The encapsulation of the recycled HDPE ensures that DELTA®-DRAIN is protected against degradation caused by oxidation and environmental influences, like acidic soils or alkalinity (concrete). DELTA®-DRAIN provides high compressive strength, impact resistance, and chemical and environmental stress crack resistance.

PROPERTIES

The product is comprised of a 2-layer geocomposite. The first layer is the high-density polyethylene drainage core that drains incoming water freely does preventing the build-up of hydrostatic pressure. It also acts as a highly effective protection layer for the waterproofing material during the overburden placement operations. The second layer is a heatbonded PP geotextile. The rot-proof geotextile is highly water permeable and prevents clogging of the flow passages in the drainage core.

APPLICATION

The product is easily unrolled on horizontal surfaces. Available in 6' and 8' wide rolls, it allows for efficient coverage and fast installation. DELTA®-DRAIN is suitable for use under walkways and patios where pavers are installed over leveling bed (sand or gravel). It is also suitable for garden roofs where drainage is required.



Technical Data

Product name	DELTA®-DRAIN	
Color	drainage-core: chocolate brown; geotextile: grey	
Material	drainage-core: recycled & virgin high-density polyethylene geotextile: polypropylene	
Dimple height	5/16" (8 mm)	ASTM D6364-06
Compressive strength	approx. 5,200 psf (250 kN/m ²)	ASTM D6364-06
Air-gap volume between dimples	0.13 gal/ft ² (5.3 l/m ²)	DIN 4102
Water penetration resistance (core)	> 120 psi (815 kPa) Watertight	AATCC 127-1995
Flow rate / unit width @ hydr. grad. 1.0; 180 kPa	5.2 gal/min/ft (65 l/min/m)	ASTM D4716-08
Flow rate / unit width @ hydr. grad. 0.1; 180 kPa	1.4 gal/min/ft (17.4 l/min/m)	ASTM D4716-08
Temperature range	-22°F to +176°F (-30°C to +80°C)	
Chemical properties	Excellent chemical resistance, resistant to root-penetration, rot-proof	
Toxicity	non-toxic, non-polluting	
Weight per unit area	approx. 21 oz/yd ² (715 g/m ²)	ASTM D5261-92
Roll dimensions / weight	6' x 65' 7" (1.83 m x 20 m) 60 lbs (27.2 kg)	
	8' x 65' 7" (2.45 m x 20 m) 73 lbs (33.1 kg)	
Installation depth	up to 12' (4 m)	
Service life expectancy	> 25 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.	

DELTA® products support sustainable and energy-efficient building practices, including efforts toward achieving LEED® certification (LEED® for New Construction & Major Renovations, LEED® for Core and Shell, LEED® for Existing Buildings and LEED® for Homes).

For technical support, call our technical support team at 1-888-4DELTA4 (1-888-433-5824) extension 326, or visit www.dorken.com.