

DELTA® protects property. Saves energy. Creates comfort.

## TECHNICAL DATA SHEET

### DELTA®-DRAIN

**Horizontal Drainage for Garden Roofs or Paver Applications.**

#### MATERIAL

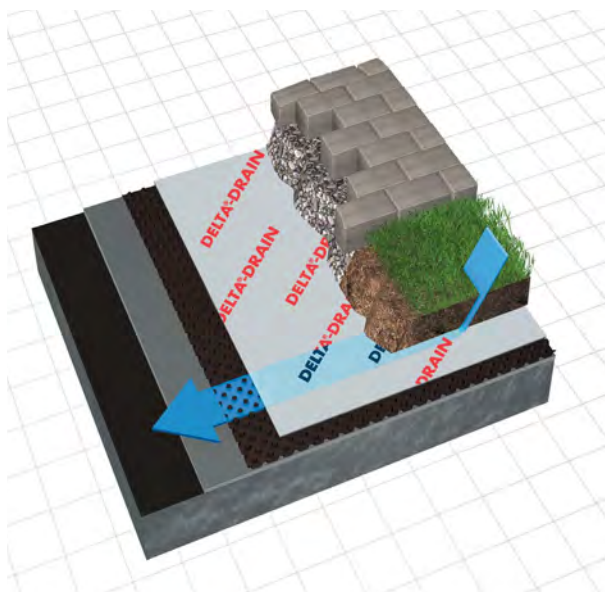
A dimpled membrane made of special high-density polyethylene (HDPE) and polypropylene (PP) non-woven TYPAR® geotextile. The HDPE drainage core with a specially designed dimple pattern provides high compressive strength and drainage capacity. DELTA®-DRAIN is manufactured with an exclusive co-extrusion 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

DELTA®-DRAIN acts as a surface drainage course. The product is comprised of a 2-layer geocomposite. The first layer is the high-density polyethylene drainage core that drains incoming water freely. The second layer is a heatbonded PP geotextile. The geotextile is highly water permeable and prevents clogging of the flow passages in the drainage core. DELTA®-DRAIN is highly pressure resistant, able to withstand loads of up to 5200 psf (250 kN/sqm). DELTA®-DRAIN is rot-proof.

#### 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: gray	
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/m²)	ASTM D6364-06
Air-gap volume between dimples	0.13 gal/ft² (5.3 l/m²)	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/yd² (715 g/m²)	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" (2.45m x 20m) 73 lbs (33.1 kg)	
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.cosella-dorcken.com](http://www.cosella-dorcken.com).