

TECHNICAL DATA SHEET

DELTA®-DRAIN 6200 HI-X

For Heavy Duty Vertical Drainage Applications with Waterproofing.

MATERIAL

DELTA®-DRAIN 6200 HI-X is a high performance, 3-dimensional drainage composite with three layers. It consists of a dimpled drainage core and a high strength needle-punched polypropylene (PP) geotextile (non-woven) with excellent filter characteristics. A polymeric protection sheet adhered to the backside of the drainage core provides protection against die-cutting of waterproofing membranes. The drainage core is made from a special co-polymer polypropylene that provides high impact and tear resistance, and is unaffected by environmental stress cracking. The non-clogging geotextile is fully bonded to the dimpled drainage core, which prevents it from being pushed into the flow channels by the load of the backfill material.

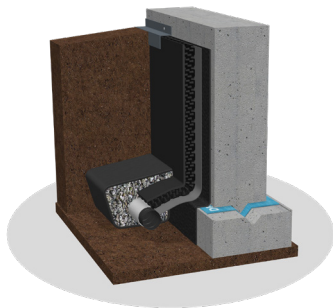
PROPERTIES

DELTA®-DRAIN 6200 HI-X has been specifically designed for use over waterproofing membranes where added protection is needed. The high strength polymeric film adhered to the back side of the drainage core helps to protect from die-cutting into the waterproofing membrane when under load from backfill. DELTA®-DRAIN 6200 HI-X provides a continuous path for water discharge and relieves hydrostatic pressure buildup. The non-woven geotextile allows water to pass freely into the drainage core. At the same time it prevents the passage of soil particles to ensure that the drainage core doesn't get clogged. The geotextile meets AASHTO M288 Class 3 for elongation > 50%. DELTA®-DRAIN 6200 HI-X is the ideal solution for applications where high drainage capacity is required. Subsurface water can pass easily into the drainage core where gravity feeds it into the drainage system at the bottom of the foundation.

DELTA®-DRAIN 6200 HI-X is highly pressure resistant and able to withstand loads of up to 15,000 psf (723 kN/m²). The product is rot-proof.

APPLICATION

It is suitable for applications in underground wall construction, and as relief layer for hydrostatic pressure on any subsurface structure. It is specifically designed to function as a protection board in a waterproofing system. DELTA®-DRAIN 6200 HI-X comes in two roll sizes (4'x50' or 6'x50'). Its flat side is installed directly against the waterproofing membrane on wall surfaces.



Technical Data

Product name	DELTA®-DRAIN 6200 HI-X	
Color	black	
Material	Drainage core:	
	co-polymer polypropylene	
	Geotextile: Polypropylene	
	Protective backsheet: LDPE	
Dimple height	approx. 2/5" (10 mm)	ASTM D1777-96 ASTM D5199
Compressive strength	15,100 psf (723 kN/m ²)	ASTM D6364-06
Drainage core impact resistance	2.9 J mean failure energy at 5°C	ASTM D4226-09
Drainage core maximum tearing strength	MD 550 N CD 800 N	ASTM D5884-04a
Drainage core stress cracking resistance	504 hours @ 156 kPa (No cracking at test termination)	SAGEOS GD 001-2012
Geotextile grab tensile strength	120 lbs (534 N)	ASTM D4632
Geotextile elongation	50%	ASTM D4632
Geotextile trapezoidal tear	50 lbs (223N)	ASTM D4533
Geotextile CBR puncture strength	50 lbs (223 N)	ASTM 6241
Geotextile apparent opening size (AOS)	70 sieve size (0.212 mm)	ASTM D4751-99
Geotextile water flow rate	135 gal/min/ft ² (5500 l/min/m ²)	ASTM D4491
Permittivity	1.70 sec ⁻¹	ASTM D4491
Geotextile weight (typical)	4.0 oz/yd ² (135 g/m ²)	ASTM D5261-92
Geotextile UV resistance	70% @ 500 h	ASTM D4355
Geocomposite water flow rate @ hydr. grad. 1.0	18 gal/min/ft (223 l/min/m)	ASTM D4716-99
Geocomposite water flow rate @ hydr. grad. 0.1	3.2 gal/min/ft (40 l/min/m)	ASTM D4716-99
Toxicity	non-toxic, non-polluting	
Roll size / weight	4' x 50' (1.2 x 15.25 m) 43 lbs (20 kg)	
	6' x 50' (1.83 x 15.25 m) 63 lbs (28 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.dorken.com.