

Description:

HyDrain 650 is a prefabricated product that consists of a solid, formed, three dimensional core covered with a geotextile filter fabric bonded to the dimple side of the core. The filter fabric is securely bonded to prevent soil intrusion into the core flow channel while allowing water to freely enter the drainage core. Sheet drains allow water entry from one side and are typically used to collect and re-direct water from below the growing medium of a green roof system.



Product Highlights:

- Prefabricated drains are designed with all the essential system elements needed for a successful roof garden
- Manufactured with recycled materials
- HyDrain 650 products are environmentally friendly and can contribute toward LEED design credits
- HyDrain 650 offers value solutions for sustainability and water management designs
- Increase water efficiency
- Manage storm water runoff
- Help effectively manage site issues
- Designed to withstand the additional stress demands associated with horizontal applications

Installation:

- Limit unpackaged material UV exposure to a cumulative maximum of 14 days during installation.
- Do not install materials during high wind events.
- Do not install materials when ambient temperatures are below 20 degrees Fahrenheit or above 100 degrees Fahrenheit.
- Do not expose materials to chemicals that are strong acids, strong bases, or high in solvents content
- Protect materials from site construction damage, flames, and other environmental conditions that may damage the materials.

Storage:

- Store materials in protected environment until time of installation.
- Materials not shipped in UV-resistant bags must be stored indoors or under separate UV-protective cover to protect materials from exposure to direct sunlight.
- UV-resistant bagged materials may be stored in outdoor UV-exposed environments for a cumulative maximum of 180 days.

Applications:

- Plaza Decks
- Roof Decks
- Parking Decks
- Planter Applications
- Vertical Applications

Packaging:

- 4' x 50' Rolls
- 6 Rolls per pallet
- 48 lbs. per roll



TECHNICAL DATA: **HyDrain 650**

Physical Properties	ASTM Test Method	Unit of Measure	Typical Value
FABRIC			
Material 1		PP	PP
Water Flow Rate	D-4491	gpm/ft ²	160
		Lpm/m ²	6,520
Grab Tensile Strength	D4632	Lbs.	365 x 220
		N	1,624 x 890
Permittivity	D-4491	sec ⁻¹	2.1
Apparent Opening Size	D-4751	sieve	40
		mm	0.430
Grab Elongation	D-4632	%	15
UV Resistance	D-4355	% / 500 HRS	90
CORE			
Material 1			HIPS
Thickness	D-1777	in	0.44
		mm	11
Compressive Strength	D-1621	psf	18,000
		kPa	862
	D-6364	psf	18,000
		kPa	862
In-Plane Flow Rate	D-4716	gpm/ft	21
		Lpm/m	261
Recycled Content			67%

1- PP = Polypropylene; HIPS = High Impact Polystyrene

2 - Flow rates tested @ 3600 psf (172 kPa) compressive load. Installed horizontal flow with concrete sand overburden tested at a hydraulic gradient of 0.05. Maximum in-plane flow rate tested at a hydraulic gradient of 1.0

Warranty:

Hyload warrants that the products shall be free from defects and in conformity, within normal manufacturing variations, with Hyload's physical specifications. No other portion of Hyload's published literature shall be incorporated herein except for such physical specifications. Hyload shall be responsible for such defects only if the same is noted, in writing, within one (1) year from delivery of the products.

OTHER THAN THE WARRANTY IMMEDIATELY ABOVE, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. THE REMEDIES PROVIDED HEREUNDER SHALL BE EXCLUSIVE; HYLOAD SHALL NOT BE LIABLE FOR ANY PERSONAL INJURY, OTHER DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES OF ANY KIND (INCLUDING COST OF INSTALLATION, REMOVAL OR REPAIR OF THE PRODUCT OR LOSS OF USE OR PROFIT).