

## **Description:**

### **HyGro DB 50**

A prefabricated product that consists of a formed and perforated core covered with a soil filter layer and a fabric protection layer. 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
- HyGro DB 50 products are environmentally friendly and can contribute toward LEED design credits
- HyGro DB 50 offers value solutions for sustainability and water management designs
- Increase water efficiency
- Manage storm water runoff
- Provide a physical root barrier to prevent or minimize root penetration by plantings with low-to-moderately aggressive root structures.
- 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:**

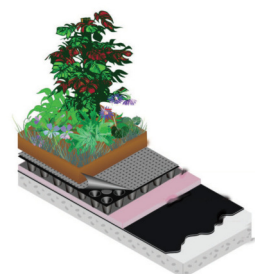
- Store materials in protected environment until time of installation.
- Materials not shipped in UV-resistant bags must be stored indoors or under separate UV-protective cover to protect materials from exposure to direct sunlight.
- UV-resistant bagged materials may be stored in outdoor UV-exposed environments 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
- 45 lbs. per roll



**TECHNICAL DATA: HyGro DB 50 Physical Properties**

FILTER FABRIC	ASTM Method	Unit Of Measure	Typical Value
Material 1		Polypropylene	Polypropylene
Fabric Type		Spunbound, Nonwoven	Spunbound, Nonwoven
Water Flow Rate	D-4491	gpm/ft <sup>2</sup>	70
		Lpm/m <sup>2</sup>	2,853
Grab Tensile Strength	D4632	Lbs.	150
		N	667
Permittivity	D-4491	sec-1	1.0
CBR Puncture	D=6241	Lbs	315
		kN	1.40
Survivability	AASHTO M 288-06	Class	3
Apparent Opening Size	D-4751	sieve	70
		mm	0.210
Grab Elongation	D-4632	%	60
UV Resistance	D-4355	% / 500 HRS	70
CORE			
Material 1			HIPS
Thickness	D-5199	in	0.44
		mm	11
Compressive Strength	D-1621	psf	15,000
	D-6364	kPa	718
		psf	15,000
		kPa	718
In-Plane Flow Rate	D-4716	gpm/ft	16
Hydraulic Gradient = 1.0		Lpm/m	200
In-Plane Flow Rate	D-4716	gpm/ft	6
Hydraulic Gradient = 1.01		Lpm/m	75
Water Storage capacity	Calculated	gpm/ft	0.06
		Lpm/m	2.4
Perforation Open Area	Calculated	gpm/ft	3.9
		Lpm/m	24,080
Recycled Content	Calculated		>68%

**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.

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