



TECHNICAL DATA SHEET  
**DB50 & DB100**

**Water Retention & Drainage Composites**

**PHYSICAL PROPERTIES**

	<u>DB50</u>	<u>DB100</u>
<u>Soil Filter Fabric Properties</u>		
- Material	Polypropylene	Polypropylene
- Flow Rate ASTM D-4491	80 gpm/ft <sup>2</sup> [3,260 lpm/m <sup>2</sup> ]	80 gpm/ft <sup>2</sup> [3,260 lpm/m <sup>2</sup> ]
<u>Core Properties</u>		
- Material	High Impact Polystyrene	High Impact Polystyrene
- Thickness	0.44 inch	1.0 inch
- Compressive Strength ASTM D1621	15,000 lbs/ft <sup>2</sup> [718 kPa]	9,000 lbs/ft <sup>2</sup> [431 kPa]
- Water Storage Capacity	0.06 gal/ ft <sup>2</sup> [2.4 l/m <sup>2</sup> ]	0.11 gal/ ft <sup>2</sup> [4.5 l/m <sup>2</sup> ]
- Perforation Open Area	3.9 in <sup>2</sup> /ft <sup>2</sup> [27,080 mm <sup>2</sup> /m <sup>2</sup> ]	8.7 in <sup>2</sup> /ft <sup>2</sup> [60,400 mm <sup>2</sup> /m <sup>2</sup> ]
- In-Plane Flow Rate - gradient =0.1 ASTM D- 4716	6 gpm/ft <sup>2</sup> [75 lpm/m <sup>2</sup> ]	21 gpm/ft <sup>2</sup> [260 lpm/m <sup>2</sup> ]
<u>Bottom Protection Fabric</u>		
- Material	Polypropylene	Polypropylene
- Fabric	Needle-punched, non-woven	Needle-punched, non-woven
<u>Recycled Content</u>	66%	75%

**Description**

**Henry DB50** and **DB100** are water retention and drainage composites. These composites consist of a high-strength dimpled water-retention polymeric core laminated with a top soil filter fabric and bottom protection fabric. The bottom fabric layer provides cushioning properties, offering protection to the underlying waterproofing membrane. Cups or 'dimples' in the core offer water storage capacity for vegetation layer between rain events, with overflow drainage once the 'dimple' storage capacity is reached. These products are used in conjunction with secondary root barrier protection from **RootBloc™20** within the vegetative roof assembly. **DB50** and **DB100** composites are manufactured with both recycled and prime plastic polymers.

**Features**

- Combined benefits of water retention for plant hydration with bulk water drainage from roof
- High compressive strength
- Protects underlying roof membrane
- Recycled content, urban heat island benefit and storm water run-off contribute to LEED certification
- Single-source warranty available for all components in the assembly

**Uses**

Combined water retention and drainage composite within vegetative roof assemblies to both retain moisture for plant and media hydration plus allow overflow off the roof through planned drainage.

## Henry DB50 & DB100 Water Retention & Drainage Composites

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### Application

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Unroll and cut to size to cover entire roof surface, butting the core while overlapping side-laps of soil filter fabric to obtain continuous roof coverage and drainage. Make sure water soil filter fabric & storage cups are pointing upward to receive and store water properly. If roof deck has slope, apply shingle fashion starting with first row at bottom of slope working upward to yield a continuous downward drainage system to roof edge, scuppers or drains.

### Limitation

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Product must be installed with soil filter fabric and drainage cups pointing upward for product to function as water retention composite.

### Precaution

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Ballast after installation to prevent wind blow-off. Protect from physical damage during media installation of from other trades.

### Packaging

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	<b>Henry DB50</b>	<b>Henry DB100</b>
- Roll Width	4 ft [1.22 m]	3 ft [0.91 m]
- Roll Length	50 ft [15 m]	100 ft [30 m]
- Roll Weight	40 lbs [18 kg]	88 lbs [40 kg]

### Limited Warranty

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Contact Warranty Department at [www.henry.com/warranty](http://www.henry.com/warranty) or location shown below for product or systems warranty information.

### STATEMENT OF RESPONSIBILITY

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The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.