

# OPTIGRÜN WRB 85v

## Water Retention Box

Infiltration trough made from recycled PP for surface drainage on roof areas with inverted insulation and with the requirement for a high water retention potential with 0° roof pitch and heavy layer structures above 500 kg/m<sup>2</sup> (e.g. intensive green roofs and public areas with high layer thicknesses). Can be combined with patented flow control system for targeted regulation of the water discharge.



Material	PP (polypropylene)
Nominal thickness	approx. 85 mm
Grammage	approx. 9.0 kg/m <sup>2</sup>
Dimensions/element	708 x 354 x 85 mm
Area/element	0.25 m <sup>2</sup>
Colour	black
Number of elements per m <sup>2</sup>	4 pieces
Compressive strength (DIN ISO 25619-2)	715 kN/m <sup>2</sup>
Usable accumulation volume	approx. 95.0 Vol. %
Water reservoir	up to 80 l/m <sup>2</sup>
Quantity/delivered unit	0.25 m <sup>2</sup> /element = 704 x 354 mm 29.25 m <sup>2</sup> /117 elements/disposable pallet Disposable pallet 1.2 x 1.1 m
Delivery weight	approx. 2.25 kg/individual element approx. 295.0kg/pallet/ individual elements

### Area of use

Specifically designed for 0° roof areas with inverted insulation and heavy layer structures (see comment above) with an on-site requirement for the temporary storage of excess water based on property-related restrictions on discharge into the drainage system e.g. after heavy rainfall. Usually combined with the retention roof structure with the patented flow control system from Optigreen for controlled water discharge.

### Comment

Compared with the WRB 85i, the WRB 85v element is reinforced with a stable base panel with a fine meshed structure. This results in a greater pressure transmission area the application of greater loads from the layer structure above on inverted insulation with min. 300 kPa compressive strength. E.g. for intensive green roofs with substrate layer thicknesses greater than 200 mm and/or heavy public roof structures e.g. with gravel base layers, underlay with chippings and surfaces made from natural stone or precast concrete.

### Specific properties

- 100% recycled PP (polypropylene)
- Approx. 95.0 Vol. % cavity volume for water retention
- Coordinated via super structure above
- High water storage volume
- Low weight
- Recyclable

### Accessories

- Plastic connectors with double dove-tails to connect the longitudinal and transversal sides of the infiltration trough
- Flow control system to regulate water discharge. In this case, planning and calculation by Optigreen is required

The preceding details are guideline values established under laboratory conditions. These values are subject to a certain manufacturing tolerance. The data contained in this product information sheet represents Optigreen's technical knowledge at the time of publication. Optigreen reserves the right to change and update details in accordance with new insights and to modify specified properties accordingly. No liability accepted for misprints.

#### Optigrün international AG

Am Birkenstock 15 – 19,  
72505 Krauchenwies-Göggingen  
Tel. +49 7576 772-0, Fax +49 7576 772-299, info@optigruen.de

#### Optigreen Limited (Service UK only)

Suite G5 Albany Chambers, 26 Bridge Road East  
Welwyn Garden City (Herts), AL7 1HL  
Phone +44 203 5899400, Fax +44 207 1171664, info@optigreen.co.uk

