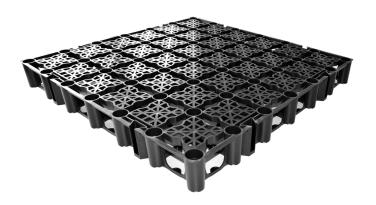
# **OPTIGRÜN WRB 85i**

## **Water Retention Box**

Infiltration trough made from recycled PP for surface drainage with the requirement for a high water retention potential with 0° roof pitch. Can be combined with patented flow control system for targeted regulation of the water discharge.



Material	recycled PP (polypropylene)
Nominal thickness	approx. 85 mm
Grammage	approx. 5.6 kg/m <sup>2</sup>
Weight/element	approx. 2.8 kg/pc.
Dimensions/element	approx. 710 x 710 x 85 mm
Area/element	approx. 0.5 m <sup>2</sup>
Colour	black
Compressive strength (DIN ISO 25619-2)	approx. 825 kN/m² with approx. 10 % compression
Usable accumulation volume	approx. 95.0 Vol.%
Water reservoir	up to 80 l/m²
Discharge capacity	roof pitch $0\% = 2.00 \text{ l/s*m}$ Roof pitch $1\% = 4.52 \text{ l/s*m}$ Roof pitch $2\% = 6.30 \text{ l/s*m}$ Roof pitch $3\% = 7.70 \text{ l/s*m}$
Quantity/ delivered unit	$0.5 \text{ m}^2/\text{element} = 0.71 \text{ x } 0.71 \text{ m}$ $36 \text{ m}^2/72 \text{ elements}/\text{disposable pallet}$ Disposable pallet $2.1 \text{ x } 1.4 \text{ m}$
Pack size extensive segment	pre-installed extensive segment consisting of 6 individual elements 3.0 m² (2.13 x 1.42 m) including connectors and 6 pre-fitted capillary columns. 12 extensive segments on one disposable pallet = 36.0 m² disposable pallet L 2.13 x W 1.42 x H 1.2 m 18 disposable pallets per truck = approx. 648 m²
Delivery weight	approx. 2.8 kg/individual element approx. 16.8 kg/extensive segment approx. 190.0 kg/pallet/ individual elements

approx. 240.0 kg/pallet/ extensive segment

#### Area of use

On roofs with 0° pitch and different layer structures (e.g. extensive and intensive green roofs and/or public areas). Especially designed for the temporary storage of excess water e.g. following heavy rainfall and additional guidance of excess water from adjacent roof areas into the drainage level. Together with controlled water discharge with the help of the patented flow control system from Optigrün, requirements on the restriction on discharge into the drainage system, for example, can be observed. Also suitable for permanent water accumulation to supply water to green roofs with a high water requirement (e.g. lawn areas). If necessary, several layers of infiltration troughs may be stacked to obtain greater storage capacities

## Specific properties

- 100% recycled PP (polypropylene)
- Approx. 95.0 Vol. % cavity volume for water retention
- High pressure stability
- Coordinated via super structure above
- High water storage volume
- Low weight
- With capillary columns
- Recyclable
- Has a European Technical Assessment (ETA-13/0557) as part of the Optigrun system solutions

### Accessories

- Plastic connectors with double dove-tails to connect the longitudinal and transversal sides of the infiltration troug.
- Capillary columns for the vertical transporting of water between the drainage level and vegetation layer. 2 pieces/m² with extensive green roof, 4 pieces/m<sup>2</sup> with intensive green roof.
- 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 Optigrün's technical knowledge at the time of publication. Optigrün reserves the right to change and update details in accordance with new insights and to modify specified properties accordingly. No liability accepted for misprints.

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