# GREEN ROOF

# Technical Data Sheet MOY\_100mm Water Retention Box for Green Roofs

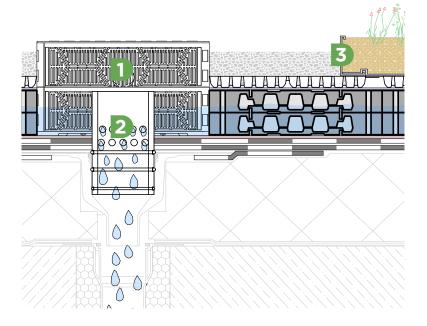


## **Product Description / Use:**

This structural element for blue roofs slows the flow of large amounts of rainwater above the waterproofing layer, by enabling the temporary retention of sudden rainfall, preventing overload on the building's drainage system. The system can be used under green roofs as well as under paved surfaces designed for pedestrian and vehicular traffic. For blue roof application, a key component of the system is the project specific weir, designed to control the precise run-off rate required (I/s).

## **Key Features:**

- Modular system which does not require on-site assembly. The height can be increased in 5cm increments
- Made from 100% recycled and recyclable plastic, so it is environmentally friendly
- Light structure with high load capacity; the design offers superlative compressive strength (over 80 tonnes per m²) in addition to distributing the load
- Provides buffer capacity of 96% net water volume
- Easy to install and create a stable and strong structure using the built-in connection slots



- MOY Vegetation
- MOY Growing Media
- MOY Filter layer

MOY Filtration Fleece 110g

MOY Drainage layer

MOY 25mm Drainage & Reservoir Board

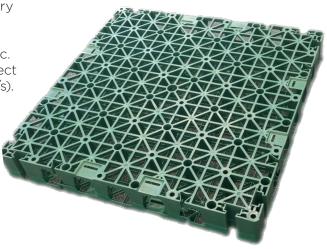
- MOY Filter layer
  - MOY Filtration Fleece 110g
- MOY Water Retention layer

**MOY 100mm Water Retention Box** 

MOY Protection layer

MOY Protection and water storage fleece 500g

- MOY Waterproofing System
- Roof construction
- 1. MOY Inspection chamber
- 2. MOY Water-flow control element
- 3. MOY Aluminium Edge Trim 8/12





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## **Technical Specification:**

| Technical Data                                    |  |           |                |
|---|--|-----------|----------------|
|   |  | Tolerance | Standard       |
| Material  | 100 % Polypropylene                        |           | -              |
| Colour  | Green                                      | -         | -              |
| Length (mm)                                       | 600  | +/- 2%    | -              |
| Width (mm)  | 600  | +/- 2%    | -              |
| Height (mm)                                       | 100  | +/- 2%    | -              |
| Weight (kg/pcs)                                   | 2,5  | +/- 2%    | -              |
| Weight (kg/m²)                                    | 6,9  | +/- 2%    | -              |
| System (element filled with water) weight (kg/m2) | 101,9                                      | +/- 2%    | -              |
| Compressive strength (kN/m2)                      | 400  | +/- 2%    | EN ISO 25619-2 |
| Cavity volume (%)                                 | 95   | -         | -              |
| Retention volume (I/m2)                           | 95   | -         | -              |
| Accessories                                       | Plastic Connector (4 pieces per element)   |           | -              |
| Pack size   | LxWxH 1200x1200x2550 mm<br>96 pcs / pallet |           | -              |
| Water flow capacity i=0,01* (I/m*s)               | 0,64                                       | ±0,05     | EN ISO 12958   |
| Water flow capacity i=0,02* (I/m*s)               | 0,94                                       | ±0,05     | EN ISO 12958   |

#### **Application:**

The MOY 100mm Water Retention Box system is used to create a run-off buffer area above the waterproofing membrane, where the rainwater can accumulate safely until it drains. The elements can be assembled into a complete system using the special connectors. The system is installed on the protective geotextile or on the thermal insulation layer.

#### **Delivery form:**

Pallet

## Storage:

Store on pallets. Pallets can be stacked.

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