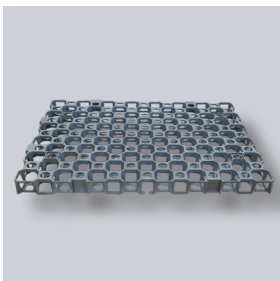


TECHNICAL DATA SHEET

ND WSE-50 Water Retention Element

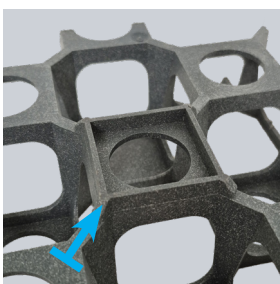


ND WSE-50 Water Retention Element

Water storage and retention element made from recycled LDPE, designed for targeted water storage or area drainage in Nophadrain retention roof systems beneath intensive green roofs with accessible surfaces (roof gardens). Within the system, it can be combined with the ND KS Capillary Strips and flow control devices (e.g., ND AFC-100) to regulate water evaporation and water discharge as required.

Application

The ND WSE-50 Water Retention Elements have been developed for use in intensive green roof systems with water retention and a roof pitch of 0°. In combination with a flow control device, the water retention element provides temporary and, where required, permanent storage of rainwater. This combination enables a controlled, delayed discharge to the roof drainage system, thereby reducing peak runoff rates. The ND WSE-50 Water Retention Elements are equipped with an integrated coupling system, allowing all elements to be connected directly to one another easily and securely, preventing displacement during installation and operation.



The top side of the ND WSE-50 is equipped with an anti-slip locking system

When used in an inverted roof construction, all specific requirements for retention roofs with inverted insulation (e.g., installation of the waterproofing membrane, connection of the flow control device, etc.) must be strictly observed.

Note: For retention roofs designed for trafficable surfaces on structures—including those combined with intensive green roofing—we recommend the use of ND WSE-50hd Water Retention Elements together with application-specific protection and filter layers

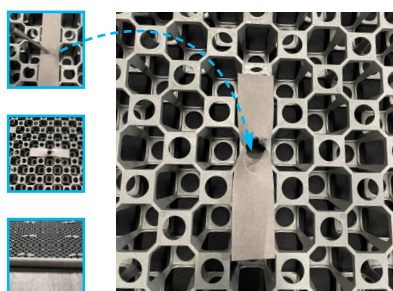
Accessories

For improved water supply to the plants, additional ND KS Capillary Strips can be installed. These transport the stored water directly into the substrate layer. When capillary strips are used, they must be installed in combination with the special ND KV-200 Capillary Geotextile. For applications without capillary strips, the GRK5-classified ND FV-300 Filter Geotextile should be used.

To protect the waterproofing membrane, the ND SV-500 or ND SV-500M Protection Geotextiles are recommended in cases of intensive vegetation. Additional accessories can be recommended by our Sales Team according to the project-specific requirements relating to water retention and roof build-up design.

Properties

- Material: Recycling-LDPE
- Compressive strength: approx. 245 kPa
- Colour: green
- Cavity volume: > 90 % / Retention volume: approx. 45 l/m²
- Open surface: > 65 %
- Durability: 50 years



ND WSE-50 with ND KS Capillary Strips

Product	Dimensions (L x W x H)	Weight
ND WSE-50 Water Retention Element	approx. 785 x 580 x 50 mm approx. 0.46 m ² per element	approx. 2.2 kg/piece, approx. 4.8 kg/m ²

Packaging

- Dimensions pallet: approx. 120 x 80 x 250 cm
- Elements per pallet: 96 pieces at 50 mm / approx. 44.16 m² per pallet / approx. 0.46 m² per element
- Weight per pallet: approx. 192 kg
- Standard FTL load: 33 pallets, approx. 1,457.28 m²