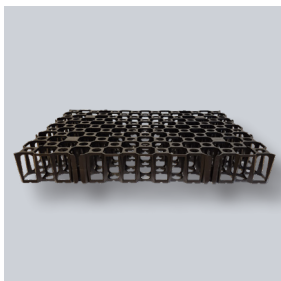


TECHNICAL DATA SHEET

ND WSE-100hd Water Retention Element



ND WSE-100hd Water Retention Element

Water storage and retention element made from recycled polypropylene, designed for targeted water storage or area drainage in Nophadrain retention roof systems beneath trafficable roofs. Within the system, it can be combined with flow control devices (e.g., ND AFC-100) to regulate water discharge as required.

Application

The ND WSE-50hd Water Retention Elements have been developed for use in retention roof systems for trafficable surfaces with 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. For trafficable roof systems incorporating vegetated areas, we recommend the use of ND KS Capillary Strips (see accessories) beneath the green roof sections.

The ND WSE-50hd 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.

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. The drainage channels arranged on the underside of the retention element support the periodic emptying of the retention layer required in inverted roof systems.

Note: Build-ups for trafficable surfaces classified as load class 3 on retention roofs must be reviewed and approved by our technical advisors.



Upper side ND WSE-100hd

Accessories

For improved water supply to the vegetated areas, ND KS Capillary Strips can be added. In this case, the GRK5-classified ND FV-300 Filter Geotextile must be replaced with the special ND KV-200 Capillary Geotextile.

To protect the waterproofing membrane, ND SV-500 or ND SV-500M Protection Geotextiles are used beneath the vegetated areas. In trafficable areas, however, the waterproofing membrane must be protected by combining the ND TSF-100 Slip and Protection Sheet with the ND TGF-20 Separation and Slip Film, in order to protect it and decouple it from shear stresses. For detailed system recommendations for inverted roofs, please contact our Technical Sales Team.



Bottom side ND WSE-100hd

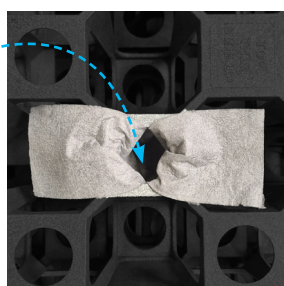
Properties

- Material: Recycling Polypropylene (PP)
- Compressive strength: approx. 725 kPa
- Colour: black
- Cavity volume: > 90 % / Retention volume: approx. 95 l/m²
- Open surface: > 65 %
- Durability: 50 years

Product	Dimensions (L x W x H)	Weight
ND WSE-100hd Water Retention Element	approx. 785 x 580 x 100 mm approx. 0.46 m² per element	approx. 3 kg/piece, approx. 6.5 kg/m²

Packaging

- Dimensions pallet: approx. 120 x 80 x 250 cm
- Elements per pallet: 48 pieces at 100 mm / approx. 22.08 m² per pallet / approx. 0.46 m² per element
- Weight per pallet: approx. 144 kg
- Standard FTL: 33 pallets, approx. 728.64 m²



ND WSE-100hd
with ND KS Capillary Strips