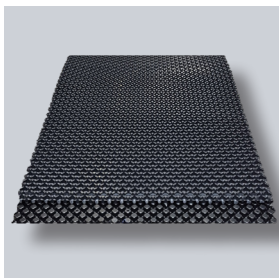


TECHNICAL DATA SHEET

ND WSE-80 Water Retention Element



ND WSE-80 Water Retention Element

Water storage and retention element made of impact-resistant recycled polystyrene for targeted water retention or surface drainage in Nophadrain retention roof systems with extensive green roof vegetation. Can be combined with a flow control device (e.g. ND AFC-100) for appropriate regulation of water discharge. The ND WSE-80 Water Retention Element is created by stacking two drainage elements, each 40 mm high. For this purpose, the flat drainage sides are placed against each other. Thanks to the innovative design, the elements interlock, providing automatic shear-resistant installation.

Installation note: Install the panels so that the studs point away from each other when the elements are stacked. The flat drainage sides placed against each other interlock in a slip-resistant manner.

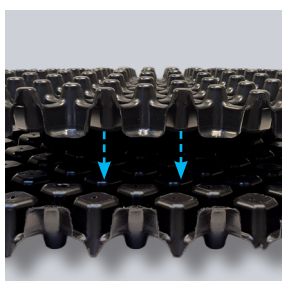
Application

The ND WSE-80 Water Retention Elements are designed for use in extensive green roof areas with water retention and a roof slope of 0°. In combination with a flow control device, the retention elements provide temporary and, where required, permanent storage of rainwater. This combination enables a controlled, delayed discharge to the roof water outlet, thereby reducing peak runoff rates.

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.

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. The capillary strips must be installed in accordance with the installation instructions, using three stripes per panel and following the specified laying direction. When capillary strips are used, they must be installed in combination with the special ND KV-200 Capillary Geotextiles. To protect the waterproofing membrane, the use of ND SV-300 or ND SV-300M Protection Geotextile is recommended for extensive green roof applications.



Lower and upper elements stacked shear-resistant



ND WSE-80 on pallet

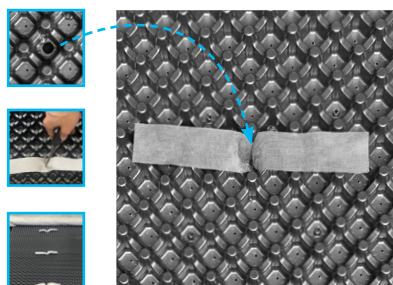
Properties

- Material: Recycling-Polystyrol (HIPS)
- Compressive strength: approx. 140 kPa
- Retention volume: approx. 72 l/m²
- Colour: black
- Cavity volume: > 90 %
- Drainage capacity at fall ratio 2% at 20 kPa: approx. 4.2 l/(s.m)
- Drainage capacity at fall ratio 1% at 20 kPa: approx. 3.0 l/(s.m)

Product	Dimensions per panel (L x W x H)	Weight
ND WSE-80 Water Retention Element	approx. 2,300 x 1,200 x 80 (2 x 40) mm	Per piece: approx. 2.5 kg, approx. 4.8 kg/m ²

Packaging

- Dimensions pallet: approx. 240 x 120 x 100 cm
- Elements per pallet: 65 units at 80 mm thickness / approx. 179.4 m² per pallet / approx. 2.76 m² per element
- Weight per pallet: approx. 450 kg
- Standard FTL load: 22 pallets / approx. 3,947.8 m²



ND WSE-80 with ND KS Capillary Strips