EGR DBR40N

Water Reservoir & Drainage Board

M-4017/2011

EGR DBR40N is an extremely durable Black 40mm high water reservoir and multidirectional run-off relay drainage board thermoformed on both sides with an outstandingly accurate 2mm perforations known as diffusion openings, precisely allocated in the centre of the studs that constitute the top side of the drainage board. It is made of recycled high impact polystyrene (i.e. recycled HIPS). With stormwater management protocols in mind, EGR DBR40N has been designed to mitigate water run-off substantially owing largely to its double-moulded structure and the overlying tile pattern in which the boards are installed. Consequently this decreases the strain on urban sewage systems by multiples. EGR DBR40N exceeds the requirements set forth by the German FLL Guidelines.

Application Area

EGR DBR40N is the ultimate drainage and water reservoirs layer for all types of green roofs ranging form simple lightweight extensive green roofs to the most intensive landscaped roof garden.

Application of EGR DBR40N include:

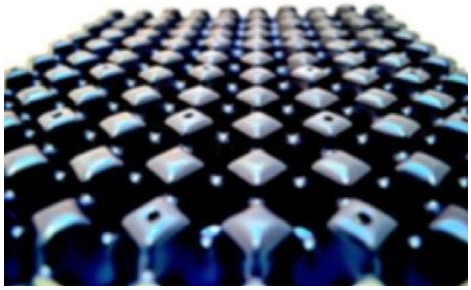
- Attenuation of stormwater runoff
- Large water storage capacity of over 7.3 litre/m²
- Prevention of water building up to levels which cause problems
- Extreme load bearing capacity – can be boosted with infill
- 2mm diffusion openings secure irrigation through diffusion, the aeration of the root space and the complete green roof build-up.

Specification Suggestion

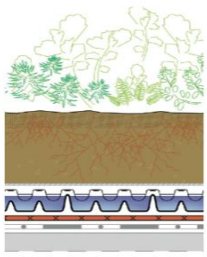
EGR DBR40N is a black double-sided water reservoir and multi-directional drainage board with precise diffusion openings in the centre of each of the crowns of the studs peaking at the top side of the board. The board is 40mm in thickness and is made of recycled high impact polystyrene. EGR DBR40N is to be used as a water retention and drainage layer on extensive, semi-intensive and intensive green roofs. Size 2000 x 1000 x 40mm (L x W x H) [EN ISO 9863-1:2005]. Weight 1.7kg/m² [EN ISO 9864:2005]. Retention capacity (water): 7.3 litres/m². Maximum load pressure (empty) at 10% compression: 280 kN/m² [EN ISO 25619-2:2009]. Water discharge capacity at i = 0.010 i.e. at roof slope 1% : 0.978 litres/(mxs), i = 0.020 i.e. at roof slope 2%: 1.600 litres/(mxs), i = 0.030 i.e. at roof slope 3%: 2.333 litres/(mxs) and i = 1 i.e. at roof slope 100%: 20.226 litres/(mxs) [EN ISO 12958:2010]. The drainage performance and the attenuation is stormwater run-off reduction EGR DBR40N exceeds the requirements set forth in German Building Standard DIN 4095, EN 13252:2000/A1:2005, and the German FFL Guidelines. Delivery and installation is in accordance with the manufacturers instructions.

Size (L x W x H)	2000 x 1000 x 40mm
Weight	1.7 kg/m²
Colour	Black
Material	Recycled polystyrene
Retention Capacity Water	 7.3 litres/m²
Max Compression Strength Empty	 280 kN/m²
Waterflow Rate i = 0.010 (1% fall) i = 0.020 (2% fall) i = 0.030 (3% fall)	 0.978 litres/(mxs) 1.600 litres/(mxs) 2.333 litres/(mxs)
Environmental Aspect	Fully Recyclable

Illustration



Installation Example



Carefully selected vegetation
Growing Medium to suit plants
EGR filter layer
EGR DBR40N water reservoir/drainage
Root-resistant waterproofing

Tools Required

For safety purposes a hook cutter is advised when cutting the boards to size. Never cut directly on the waterproofing or the root barrier

Packaging Unit

EGR DBR40N is dispatched in boards of size 2000 x 1000 x 40mm (L x W x H) with 200 of these boards being stacked up on a single pallet. The pallets are stackable.
A standard pallet comprises 400m² of EGR DBR
Standard pallet: 350 boards (2000 x 1000, 680kg)