

# EvaDrain 25 WATER RESERVOIR & DRAINAGE BOARD

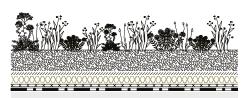
EvaDrain 25 is an extremely durable black 25 mm high water reservoir and multi-directional runoff-delay drainage board thermoformed on both sides with outstandingly accurate 2 mm perforations, known as diffusion openings, precisely allocated in the centre of the studs that constitute the top side of the drainage board. It is made of recycled high impact polystyrene (i.e. recycled HIPS). With stormwater management protocols in mind, EvaDrain 25 has been designed to mitigate water runoff 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. EvaDrain 25 is CE marked, manufactured in accordance with ISO 14001 - the most significant environmental requirement internationally, is attested to its microbiological resistance (EN 12225:2000) and exceeds the requirements set forth by the German FLL Guidelines.

## Application area

Size (L x W x H)	1910 x 955 x 25 mm
Weight	1.36 kg/m <sup>2</sup>
Colour	Black
Material	Recycled polystyrene
Retention capacity	
Water	10.1 litres/m <sup>2</sup>
Infilled: crushed brick	12.2 litres/m <sup>2</sup>
Max. compressive strength	
Empty	550 kN/m <sup>2</sup>
Infilled: 4-8 mm gravel	$> 790 \text{ kN/m}^2$
Waterflow rate	
i = 0.010 (1 % fall)	0.8 litres/(mxs)
i = 0.020 (2 % fall)	1.4 litres/(mxs)
i = 0.030 (3 % fall)	1.85 litres/(m×s)
Environmental aspect	Fully recyclable

EvaDrain 25 is the ultimate drainage and water reservoir layer for all types of green roofs ranging from simple lightweight extensive green roofs to the most intensive landscaped roof garden.

## Installation example



Carefully selected vegetation SDS extensive substrate FL 150 filter layer EvaDrain 25 water reservoir & drainage layer PL 300 protection layer Root-resistant waterproofing Insulation

### Uses

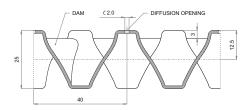
Usage of the EvaDrain 25 include:

- Attenuation of stormwater runoff
- Large water storage capacity of over 10 litres/m<sup>2</sup>
- Prevention of water building up to levels which cause problems
- Extreme load bearing capacity can be boosted with infill
- 2 mm diffusion openings secure irrigation through diffusion, the aeration of the root space and of the complete green roof build-up



# EvaDrain 25 WATER RESERVOIR & DRAINAGE BOARD

### Technical illustration



A SECTION OF EvaDrain 25 SHOWING THE DOUBLE-MOULDED SHAPE OF THE BOARD AND DEPICTING ONE OF THE THOUSANDS OF DIFFUSION OPENINGS THAT COVER THE UPPER LAYER OF THE BOARD.

## Specification suggestion

EvaDrain 25 is a black double-sided water reservoir and multi-directional drainage board with precise 2 mm diffusion openings in the centre of each of the crowns of the studs peaking at the top side of the board. The board is 25 mm in thickness and is made of recycled high impact polystyrene. EvaDrain 25 is to be used as a water retention and drainage layer on extensive, semi-intensive and intensive green roofs. This product is CE - marked.

Size: 1910x955x25 mm (LxWxH) [EN ISO 9863-1:2005]. Weight: 1.36 kg/m [EN ISO 9864:2005]. Retention capacity (water): 10.1 litres/m². Retention capacity (crushed brick infill): 12.2 litres/m². Maximum load pressure (empty) at 10 % compression: 550 kN/m² [EN ISO 802:1995]. Maximum load pressure (4-8 mm gravel infill) at 10 % compression: > 790 kN/m² [EN ISO 802:1995]. Water discharge capacity at i = 0.01 i.e. at roof slope 1%: 0.80 litres/(mxs) i = 0.02 i.e. at roof slope 2%: 1.40 litres/(mxs); i = 0.03 i.e at roof slope 3%: 1.85 litres/(mxs); and i = 1 i.e. at roof slope 100%: 15.38 litres/(mxs) [EN ISO 12958:2010]. Rate of drainage through perforations under 5 mm permanent water pressure: 0.092 litres/m² [EN ISO 11058:2010]. Microbiological resistance test: Minimum 25 years as per conditions set in the standard [EN 12225:2000]. The drainage performance and the attenuation of stormwater runoff reduction of EvaDrain 25 exceeds the requirements set forth in German Building Standard DIN 4095, EN 13252:2000 / A1:2005, and the German FLL Guidelines. Delivery and installation is in accordance with manufacturer's instructions.



#### Microbiological resistance EN 12225

25-year functionality warranted

## 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

EvaDrain 25 is despatched in boards of size 1910 x 955 x 25 mm (L x W x H) with 274 of these boards being stacked up on a single pallet. The pallets are stackable.

A standard pallet comprises 500  $\text{m}^2$  of EvaDrain 25. Standard pallet: 274 boards (2000 x 1000 x 1100 mm, 755 kg)



ICB (Waterproofing) Ltd Units 9-11 Fleets Industrial Estate, Willis Way, Poole, BH15 3SU

Tel: 01202 785200 Fax: 01202 785201

Email: info@icb.uk.com