

# OPTIGREEN FKD 25

## Drainage and Storage Board

Made from deep-drawn recycled HDPE with water reservoir function, channel system on the underside for drainage, and with diffusion and drainage holes. For use on extensive green roofs with a single- or multi-layer construction and under path surfaces (can be walked on) with > 60 mm substructure. Suitable for use on inverted roofs.



<b>Material</b>	Recycled HDPE
<b>Nominal thickness</b>	approx. 25 mm
<b>Grammage</b>	approx. 1,350 g/m <sup>2</sup>
<b>Colour</b>	black/grey
<b>Max. compressive strength unfilled</b>	approx. 200 kN/m <sup>2</sup> (DIN EN ISO 25619-2) approx. 90 kN/m <sup>2</sup> with 10% compression
<b>Max. compressive strength filled</b>	approx. 175 kN/m <sup>2</sup> with 10% compression and 35 mm overfilling
<b>Water discharge capacity (DIN EN ISO 12958)</b>	Measured at: $\sigma = 20$ kPa, soft/hard, MD, with a FIL 105 filter fleece on the upper side: i = 0.01 (=1 % roof pitch): 0.99 l/(m*s) i = 0.02 (=2 % roof pitch): 1.41 l/(m*s) i = 0.05 (=5 % roof pitch): 2.20 l/(m*s) i = 1 (vertical): 10.03 l/(m*s)
<b>Filling volume</b>	small naps facing up = approx. 14.5 l/m <sup>2</sup> (surface side) large naps facing up = approx. 7.5 l/m <sup>2</sup> (greening side)
<b>Water reservoir unfilled</b>	small naps facing up = approx. 3.6 l/m <sup>2</sup> (surface side) large naps facing up = approx. 5.0 l/m <sup>2</sup> (greening side)
<b>Reduction in foot fall sound inspected in accordance with EN ISO 10140 assessed in accordance with ISO 717-2</b>	Improvement in foot fall sound for the following layer structures: $\Delta L_w$ 33 dB RMS 950 TS, FKD 25, 40 mm chippings, 40 mm concrete slab. $\Delta L_w$ 35 dB EPS insulation 120 mm/150 kPa, RMS 950 TS, FKD 25, 40 mm chippings, 40 mm concrete slab.
<b>Quantity/delivered unit</b>	2 m <sup>2</sup> /panel = 2.0 x 1.0 m 700 m <sup>2</sup> /disposable pallet
<b>Delivery form</b>	700 m <sup>2</sup> on disposable pallet 2.05 x 1.05m
<b>Pack size</b>	LxWxH 2,000 x 1,000 x 25 mm
<b>Delivery weight</b>	approx. 2.7 kg/panel - approx. 970.0 kg/full disposable pallet

### Area of use

- As a drainage and storage board under extensive green roofs in a triple-layer structure with filter fleece FIL 105 and extensive multi layer substrate E on flat roofs up to RP 5° (= 8.8%).
- As a drainage element under thin-layer pedestrian pathways in gravel beds without compacted base layer without filter fleece directly filled with bedding material. Also lay the FKD 25 with min. 1 row of naps overlapping and overfill with the bedding material (without zero grading, e.g. chippings 2/5) min. approx. 3 cm. The large naps can face either downwards or upwards.

### Specific properties

- 100% recycled HDPE
- CE-marked CE-1213-CPD-4265
- Drainage according to DIN 4095
- Safe and targeted guiding of excess water
- Depositing of water in the recesses
- Low weight
- Also suitable for non-pitched roofs
- Lightweight super structure with high drainage capacity
- Recyclable

The preceding details are guideline values established under laboratory conditions. These values are subject to a certain manufacturing tolerance. The data contained in this product information sheet represents Optigreen's technical knowledge at the time of publication. Optigreen reserves the right to change and update details in accordance with new insights and to modify specified properties accordingly. No liability accepted for misprints.

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