

# Data Sheet

## Drainage Board Type FKD 25 (W)

Plastic panel made from deep-drawn regenerated HDPE with water storage functionality, bottom-sided canal system for drainage and drill holes for diffusion and irrigation.



### Technical details and properties:

<b>Material:</b>	Recycled HDPE
<b>Nominal thickness:</b>	Approx. 25 mm
<b>Surface weight:</b>	Approx. 1.35 kg/m <sup>2</sup>
<b>Colour:</b>	Black/grey

**Max. compression strength unfilled** approx. 200 kPa (=kN/m<sup>2</sup>) at 35% compression strain (as per DIN EN ISO 25619-2)

**Compression strength filled:** approx. 175 kN/m<sup>2</sup> at 10% compression strain and 3.5 cm overfill

**Water discharge capacity:**  
(as per DIN EN ISO 12958)

Measured at:  $\sigma = 20$  kPa, soft/hard, MD, with a Type 105 filter fleece on the upper side

$I = 0.01$ (=1 % incline):	0.99	$I/(m^*s)$
$I = 0.02$ (=2 % incline):	1.41	$I/(m^*s)$
$I = 0.05$ (=5 % incline):	2.2	$I/(m^*s)$
$i = 1$ (vertical):	10.03	$I/(m^*s)$

**Impact sound reduction:**

Tested according to EN ISO 10140  
Rated according to ISO 717-2

Impact sound improvement index\* for below layer structure:

RMS 900, FKD 25, 30 mm stoen chippings, 40 mm concrete paving:  $\Delta L_w$  31 dB  
(\* new as "rated impact sound reduction" identify)

**Fill volume:**

Small nipple facing up (mirror writing) = Approx. 14.5 l  
Large nipple facing up (normal writing) = Approx. 7.5 l

**Water storage:**  
(unfilled)

Small nipple facing up (mirror writing) = Approx. 3.6 l  
Large nipple facing up (normal writing) = Approx. 5.0 l

**Delivery form:**

Panels on special pallets 2 x 1 m  
Panel dimensions: 2 x 1 m  
Panel surface: 2 m<sup>2</sup>

**Quantity per delivery unit:**

700 m<sup>2</sup>/pallet

**Area of use:**

- Beneath single or multi-layer extensive green roof build-ups on roof inclines up to 5°; small nipple facing downwards
- Beneath pedestrian pathways in gravel beds without compacted support layers; small nipple facing upwards

**Installation**

Unfilled panels with filter fleece on top and abutting edges  
Filled panels overlapping by two flutes  
Apply substrate immediately after installation to protect against wind drift  
Alternatively, fill panels with water instead of substrate  
(recommendable in summer for cooling)

**Storage:**

Flat, dry, protected from sunlight during extended storage

*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. Errors and omissions excepted.*