

DAKU FSD BGR elements are rigid panels in white sintered expanded polystyrene, produced with regenerated-free virgin raw material. They are panels with a total thickness of 195 mm with a raw mass of 25 kg/m<sup>3</sup>.

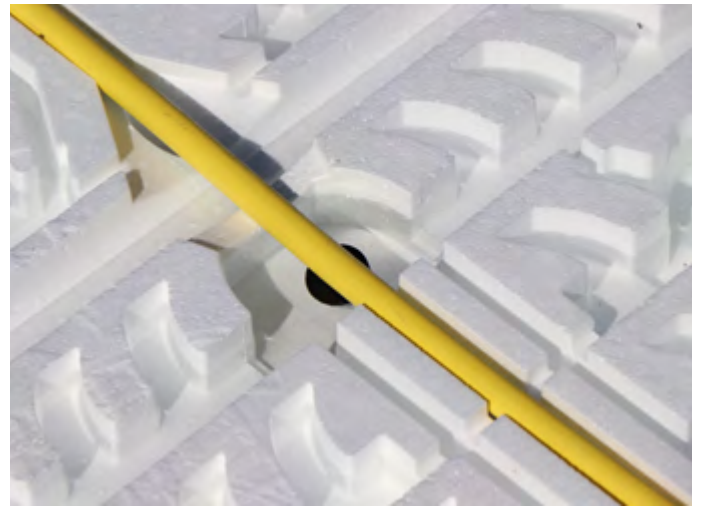
Used for water drainage and water storage in roofs, they are supplied in low-flammable white slabs measuring 80 x 125 cm. DAKU FSD BGR elements protect the waterproof stratigraphy, storing rainwater and the water supplied through the DAKU IRRIGA irrigation system made up of collectors in rigid PVC pipes with a diameter of 32 mm and derivations in flexible PVC pipes with a diameter of 16 mm equipped with self-compensating variable flow regulators.

The DAKU FSD BGR panel constitutes the primary water storage basins - which allows a water accumulation per m<sup>2</sup> of not less than 100 l/m<sup>2</sup> - and secondary.

The accumulated water is transmitted from the primary basin to the secondary basin via the pre-assembled pumping system, from the secondary basin to the vegetation via 8 capillary chimneys consisting of cylinders in synthetic polymers for the balanced capillary rise of the water.

Compliant with UNI 11235/2015, they create a protective layer against mechanical stress for the waterproof stratigraphy. They can be used for the creation of extensive and intensive green roofs.

The upper part of the panel has a series of cells, equipped with overflow, which perform the task of accumulating



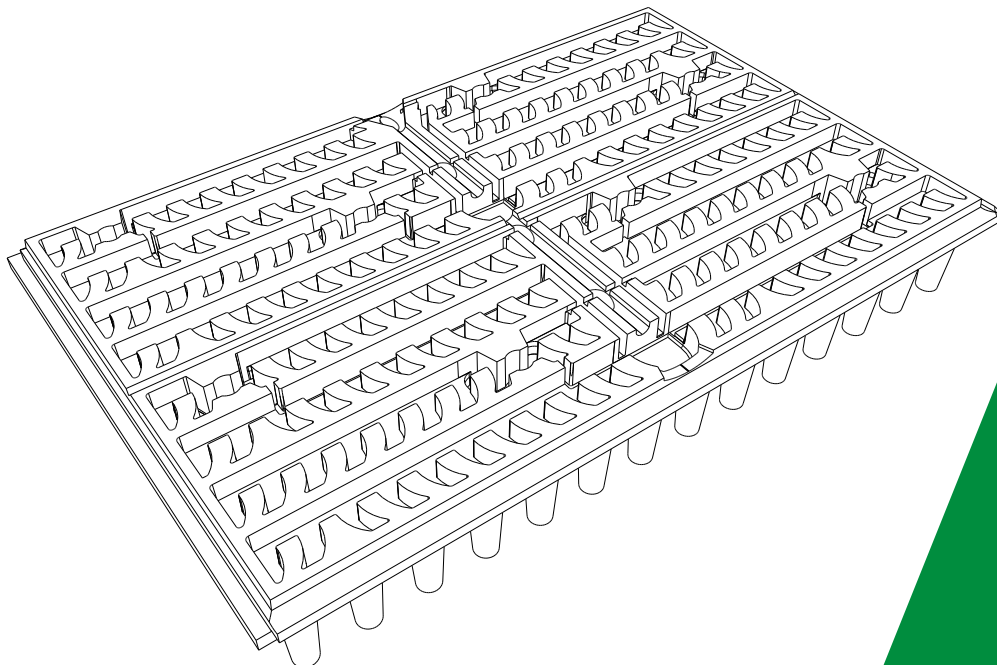
**WATERPROOF MEMBRANE PROTECTION**  
**DRAINAGE**  
**WATER STORAGE**  
**THERMAL INSULATION**

water with a maximum capacity of ca lt. 11.3.

The 10 mm space between the maximum level of the overflow and the extrados of the slab represents the upper aeration layer, necessary to prevent contact of water with the substrate.

The lower part raised from the top by 98 support feet creates a continuous drainage chamber necessary to allow the outflow of water that cannot be stored inside the system.

The DAKU FSD IRRIGA element complies with the requirements of the UNI 11235/2015 standard.

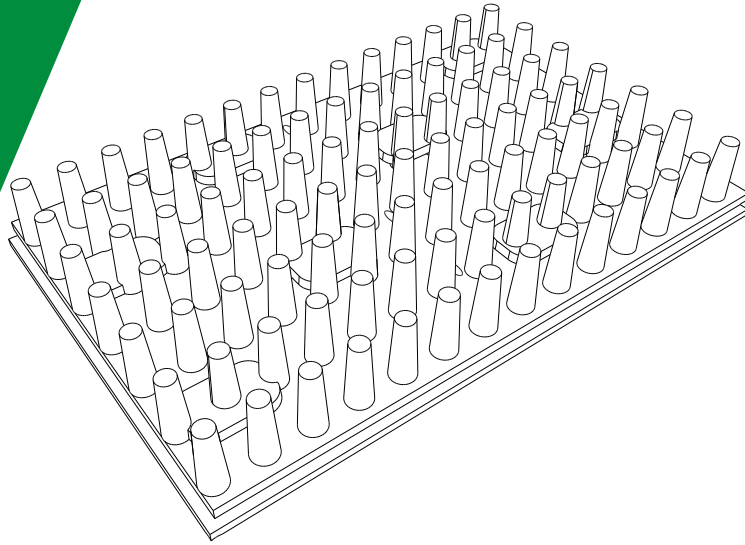


**FSD BGR**

**PRODUCTS**

## METHOD OF APPLICATION

DAKU FSD BGR elements are laid dry directly on the waterproof stratigraphy. In particular cases, a layer of separation between the waterproofing and the DAKU FSD BGR elements may be necessary if the specifications of the covering require its division; the characteristics of the separating layer must not prevent or compromise the regular flow of water.



They are usually filled with water to ensure their stability during processing and to allow for the initial water storage necessary at the time of planting.

For critical points and wherever it is not possible to install whole slab modules, cuts can be made with cutters or hacksaws, taking care to damage the least number of cells, to allow for the least possible loss of water reserve.

## TECHNICAL DATA

Dimensions	800 x 1250 mm
Thickness	195 mm
Raw mass	25 Kg/m <sup>3</sup> (+/-10%)
Maximum water storage capacity	11,3 liters/sqm
Gap between water and filter	10 mm
Free air volume with maximum water accumulation	22,5 liters/sqm
Horizontal drainage with 20 kPa(EN ISO 12958) i=0,01	1,50 l/ms
Vertical drainage (EN ISO 11058)	0,85 l/m <sup>2</sup> s
Supports's height	130 mm
Number of supports	nr. 98
Support surface	943 cm <sup>2</sup> /sqm
Flammability	E secondo EN 13501
Packing	pallet with 20 elements (20 sqm)



The product is made up exclusively of recyclable components

Complies with the requirements of UNI 11235:2015

The technical data given in this data sheet are average values of production and product description. DAKU ITALIA Srl reserves the right to make any changes at any time, for an improvement of the product: the user is required to verify to have the updated data sheets.

