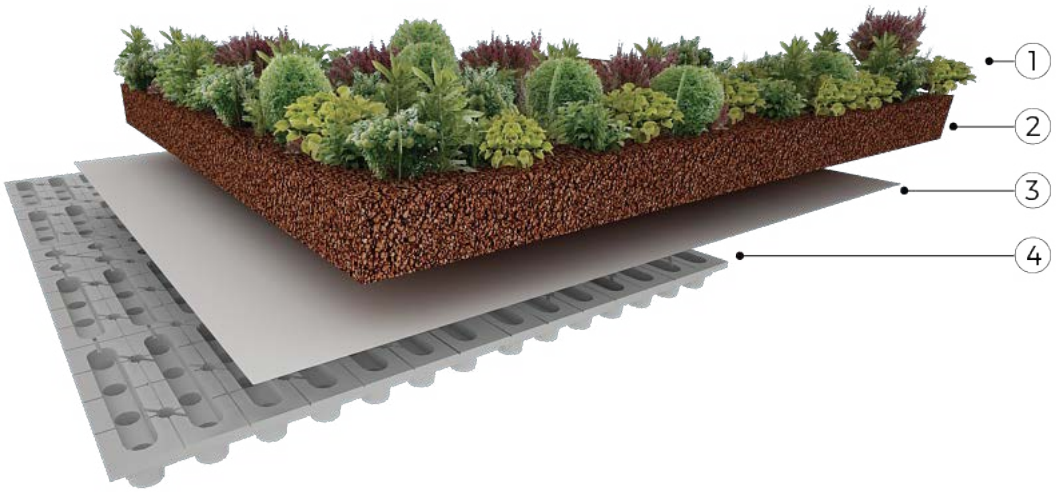
DAKU
LA NATURA SUL TETTO

DAKU EXTENSIVE BASIC is a system designed for installing rooftop gardens on flat roofs with limited structural capacity and low thickness.

The hydric supply has been designed to guarantee water for three weeks in case of drought (in the Mediterranean climatic conditions). If the drought was to last for more than three weeks, it would be necessary to provide an emergency irrigation. However, in order to avoid the growth and proliferation of noxious plants, the irrigation must be carefully planned and limited in time.

The extensive system is installed mainly for technical reasons, like improving the functionality of the building. Only a limited variety of plants can be used, as they need to be extremely resistant.

All DAKU EXTENSIVE BASIC systems comply with the UNI 11235/2015 standards and respect their parameters of efficiency and sustainability.



EXTENSIVE BASIC

SYSTEMS

SYSTEM COMPONENTS

1. DAKU SEDUM (Mixture of Sedum)
2. DAKU ROOF SOIL 2 (substrate, 8 cm thick)
3. DAKU STABILFILTER SFE (Filter)
4. DAKU FSD 10 (component for drainage and water storage)

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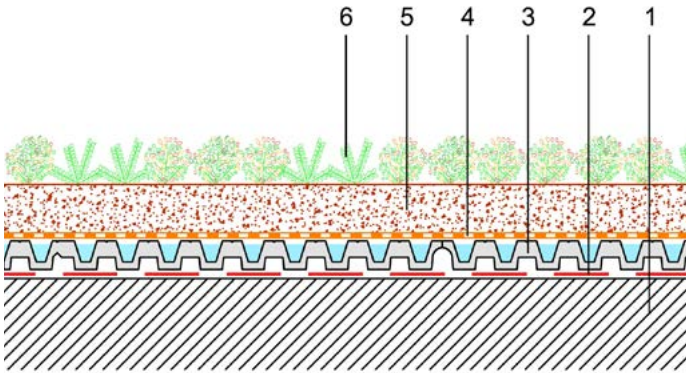
rev. 04-2017

STRATIGRAPHY

1. Sloped floor
2. Waterproof anti-root covering
3. DAKU FSD 10
4. DAKU STABILFILTER SFE
5. DAKU ROOF SOIL 2 (8 cm thick)
6. DAKU SEDUM



SYSTEM COMPOSITION

DAKU FSD 10: it is the fundamental basis and engine package. It is a component made of prefabricated sintered expanded polystyrene, which performs a threefold function of protection, drainage and water storage. It has a gross mass of 25 kg/m3, a thickness of 47 mm and a hydric storage capacity of 5 l/m2. The horizontal drainage capacity at 20 kPa (i=0.01) is not inferior to 1.44 l/m2. The vertical drainage capacity is not inferior to 14.74 l/m2. The air volume of the system when fully saturated is of 18.8 l/m2.

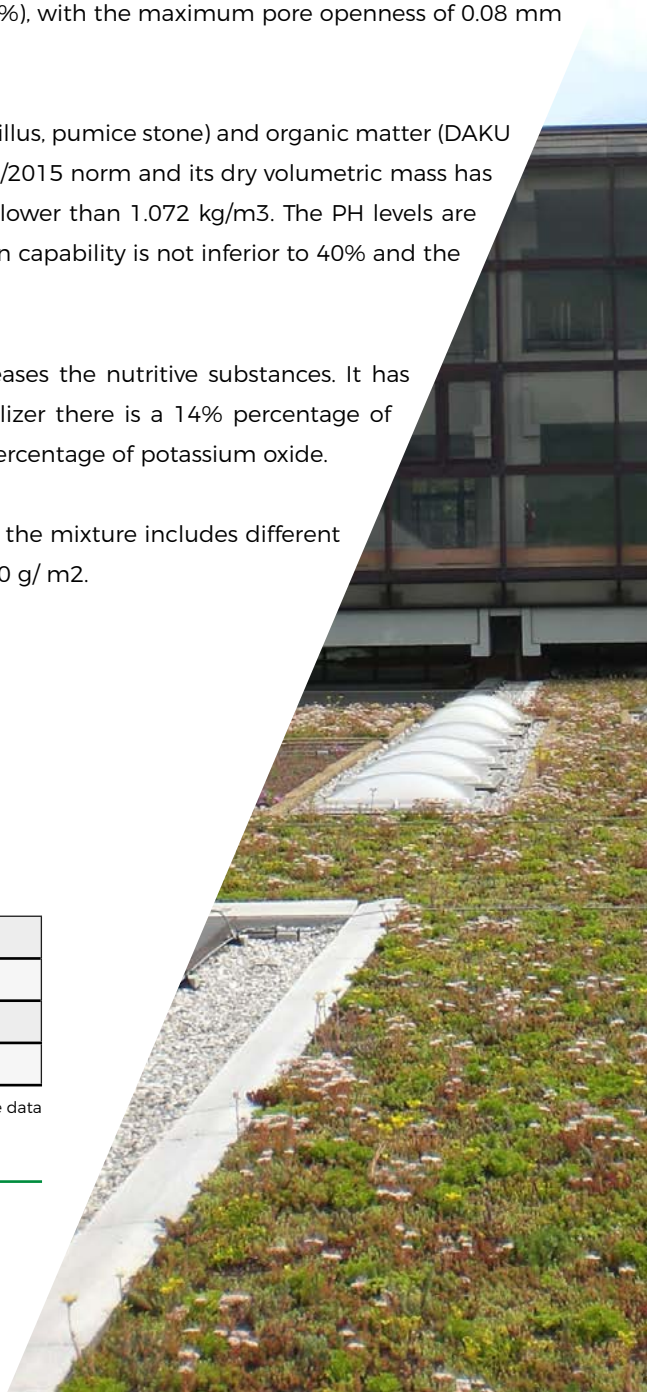
DAKU STABILFILTER SFE: it is a geotextile stabilizer in polypropylene with filtering capabilities. It has a thickness of 1.35 mm (at 2k Pa) and weights 220 g/m2 (+/-10%). The filtering speed is of 85 mm/s (-30%), with the maximum pore openness of 0.08 mm (+/-30%).

DAKU ROOF SOIL 2: it is a substrate mainly composed of volcanic material (lapillus, pumice stone) and organic matter (DAKU KOMPOST). Its granulometry respects the levels established by the UNI 11235/2015 norm and its dry volumetric mass has a value between 650 e 750 kg/m3. The substrate weight, when saturated, is lower than 1.072 kg/m3. The PH levels are between 7/8 and the CEC is not lower than 16.3 m2/100g. The water retention capability is not inferior to 40% and the usable water is never less than 30%. The substrate thickness is of 8 cm.

DAKU PLUS E: it is a fertilizer, in the form of granules, which gradually releases the nutritive substances. It has a concentration of 8 g/m2 for each centimeter of the substrate. In the fertilizer there is a 14% percentage of nitrogen, a 13% percentage of phosphorous pentoxide (soluble) and a 12% percentage of potassium oxide.

DAKU SEDUM TALEA: it is a vegetal substrate composed of perennial grasses. the mixture includes different species of Sedum with different length and size. The minimum density is of 80 g/ m2.

All DAKU's products comply with the UNI 11235/2015 standards.



TECHNICAL DATA

Thickness of the system (without vegetation)	cm ca.	13,00
Weight when saturated (without vegetation)	kg/mq	93,00
Total amount of water for the vegetation	l/mq	30,50
Air volume at pF1	l/mq	46,50

All technical data in this document are indicative values, used to describe the product. DAKU might modify the data when improving to product: clients should verify to have the latest versions of the documents.

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