# DATA SHEET VERTISS PLUS

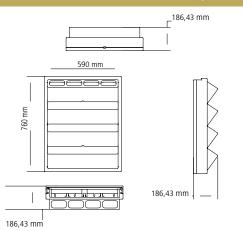




### VERTISS PLUS MODULE



### DIMENSIONS of the module only



#### CROSS SECTION



- Easy to install and to maintain.
- Protects existing walls against UV rays and weather damage (but does not act as a watertight seal).
- The 32 l of growth medium benefit all 16 plants of the module which is not partitioned inside.
- The angle of inclination of the planting cells respects the plant's phototropism and geotropism (growth in a direction determined by gravity).
- The ergonomic design of the planting cells makes planting and plant replacement simple.
- Light and robust EPP Material (High Density Expanded Polypropylene).
- Insulates the growing medium and the roots against extreme temperatures.
- Thermal benefits (evapotranspiration of plants on the building shell + high insulation EPP material of the module).
- Airborne Sound barrier.
- Corrosion resistant module.

<b>EPP Material (high</b>	density	expanded	aoravloa	vlene), de	nsitv 80ar/L
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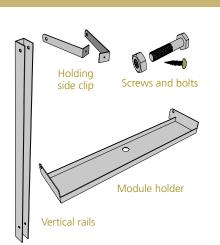
211 material (ingli delisity expanded polypropylene), delisity obg.,2	
Dimensions of the module only	590 /190 /760 mm
Tare weight	2,25 kg
Weight with dry growing medium	21,78 kg
Weight with saturated growing medium	36,66 kg
Weight with saturated growing medium + plant cover (perennial type at 10 kg /sqm)	41,66 kg
Maximum water-holding capacity	14,88 L
Number of drainage holes	1
Growing medium	32 L

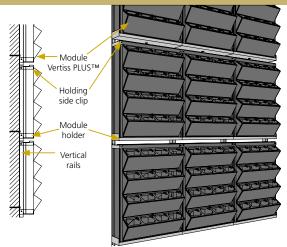
## DATA SHEET VERTISS PLUS





### THE VERTISS + OFFER INCLUDES THE PLANTING MODULE, THE MOUNTING ACCESSORIES AND THE GROWING MEDIUM







32 L - Spécial growing medium for green walls

## Vertical wall rail + Side-Clip

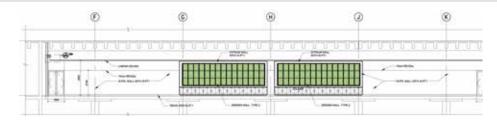


### METAL STRUCTURE FOR LOADBEARING SUPPORT (CONCRETE MASONRY)

Fixing rails	Made of 20/10th galvanized steel (stainless steel available on request)
Module Side-Clip	Made of 15/10th stainless steel 304 – black
Module Holder	Made of 15/10th stainless steel 304 – black
Module- Rail fixing with	Thread rots $8*40$ mm, resistance $8.8$ , brake nut, self-drilling stainless steel screws $3.9$ x $32$ mm



### LAYOUT EXAMPLE - PROJECT TOYOTA - KOWEIT - 250 m<sup>2</sup>



## DATA SHFFT GROWING MEDIUM





### SPECIAL GROWING MEDIUM FOR GREEN WALLS

Vertical planting systems are very demanding in terms of substrate this is why we supply with the Vertiss + module our growing medium which was specifically developed for green walls and their constraints linked to verticality.

#### GOOD WATER RETENTION CAPACITY

Pozzolan and clay balls provide excellent root anchorage and water retention while also ensuring good aeration and drainage even when saturated.

The organic component (garden peat) provides good all-round water retention and ensures good plant recovery after planting. Water-holding agents improve water retention with the growing medium able to absorb up to 300 times its weight in water, leading to water savings. In the form of colloids, they enhance the structure of the growing medium and minimize leaching.

All these properties stand for a watering requirement of only a few minutes each day via an automated drip system designed for your living wall.

#### BENEFITS

- Very good root growth.
- Excellent anti-compaction properties, limited root asphyxiation.
- Good water retention capacity.
- Good drainage.
- High porosity (allows microbial activity).
- Free of disease, fungus, weeds, insects, ...
- Minimizes leaching of fertilizing substances.
- Good resistance to frost heave.
- Durability.
- Appropriate particle size.
- Good CEC (good adsorption and desorption of nutrients in soil colloids and water).

### SPECIFICATIONS PER BAG

Part number	JVSUB16	JVSUB16L	
Volume	L	16	
Dry weight	kg	10,08	
Saturated weight	kg	17,75	

### **AVERAGE PHYSICO-CHEMICALS SPECIFICATIONS**

Density when water-saturated	kg/m³	1110	
Density when dry	kg/m³	633	
Particle size	mm	0,063 - 8	
Permeability	cm/s	0,15	
Maximum water-holding capacity (field capacity)	35 - 50 % du volume		
Air-filled porosity at water capacity (at pF1)	40 - 50 % du volume		
рН	5,6 - 6.2		
Organic components	4 % de la ma	isse	

70 % of mineral components (modified pozzolan, modified clay balls...) +/- 2% 30 % of organic components (garden peat, compost) +/- 2% Specific water-holding agents

#### PACKAGING

Bags	L	2 x 16
Big-Bags	$m^3$	1,5



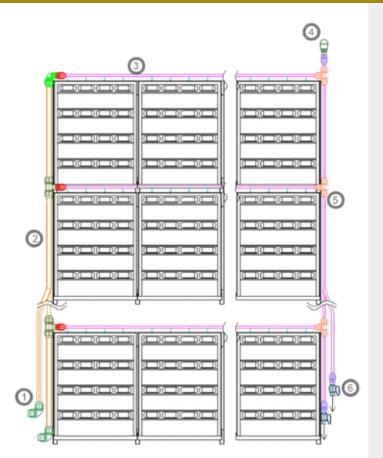


## **EXEMPLE IRRIGATION**





IRRIGATION OF MODULES - Principle of the secondary network - Network(s) of drippers.



- Connection to the technical station.
- PE or PVC hose
- Self-regulating drip lines 2 or 4 l/H
- Air vent (for each irrigation zone).
- 5. PE Hose.
- Drain valve (for each irrigation zone). 6.

IRRIGATION IS ESSENTIAL FOR THE SUCCESSFUL COMPLETION OF EVERY GREEN WALL PROJECT



TECHNICAL ROOM - Principe du réseau primaire

This secondary system is connected to a primary system with a fertigation station which automatically launches watering and injection of nutrients. The lines should simply be placed over the upper part of each module. The drip lines are therefore spaced at intervals of approximately 80 cm. Due to capillary action and gravity, the water spreads through all the growing medium contained in the module.

The irrigation station controls frequencies and durations for watering and adding nutrients to the green wall thanks to a programmer and electro (flow control) valves(s), remotely operated or not.