

# Construction readiness of the Flora Urbanica green wall



## GREEN WALL

We mainly use OSB 18 as a structural system which is anchored to the flat bearing wall. The depth of the Flora panel itself is 19 cm. In the case of plants installation, the depth is increased by 10 - 25 cm according to the particular types used.

## BEARING WALL

The Flora panel is mainly anchored to the wooden constructions via a self-drilling screw. The bearing wall must have a bearing capacity of 50 kg/m<sup>2</sup>. The ideal anchoring element is a self-drilling screw (4.8 x 25) mm.

**Bearing wall: min. 50 kg/m<sup>2</sup>**

**Wooden construction: OSB18**

## IRRIGATION SYSTEM

Irrigation of the green wall is conducted mostly in the two following ways. In case of inflow of the water, irrigation is performed via the electromagnetic valve; in other cases, irrigation is done via a sludge pump from the tank. The inflow of water may be located under the wall in the technological box. The irrigation system is switched on via a switch box or a control unit located in the technological box from which the lighting system may be controlled as well.

## SEWAGE SYSTEM

Excess water from the wall is taken away via floraxtend and the sewage pipeline **min. DN 50 HT grey**. For every 6 m of the length of the wall we must install at least 1 sewage system with the orifice ended on the floor level.

## Illumination of the green wall

The power supply of the green wall may be done from the switch cabinet in the technological box of the green wall. It is usually illuminated with LED lights with the average lighting time of 10-12 hours every day. The light source is 3000 - 3500 K. The **minimum intensity of lighting on the whole area of the green wall is 800 LX**. The power cable leading from the lights to the switch cabinet is located in the technological box.

# The content of the technological box of the green wall



## TECHNOLOGICAL BOX

The technological box serves for the water and electricity supply and for installing sensors and irrigation from the green wall. If the water and electricity supplies are located at different places, it is necessary to arrange interconnection via diameter holes or via hidden supply.

Minimum dimensions: **1 x 0.25 x 0.25 m (l x w x d)**

Location: Under the wall, behind the wall, but in case of implementation of diameter holes, it may be located also outside the green wall.

## WATER SUPPLY

It is necessary to provide the supply of cold drinking water into the technological box with regular pressure of the water mains being 3 bars leading into the technological box; **the water supply must have a ball valve with the thread G 3/4**. The lightness of the supply pipeline is min. DN 20.

## ELECTRICITY SUPPLY

The technological box must be equipped with one socket with 230 V.  
Fuses - 16A/1B.

In case of light supply from the technological box:

- there must be a CYKY cable (3 x 1.5 mm) leading from the lighting system to the switch cabinet
- cabling to the lighting system may be led behind the panels of the green wall.

## DIAMETER HOLES

There is a diameter hole with the dimension of 30 mm (intended for the irrigation supply and sensors supply) leading from the technological box to the green wall.

## SUPPLEMENTARY INSTALLATION OF NETWORKS BEHIND THE PANELS

The Flora panel has the side and inside space for horizontal and vertical cable networks:

Horizontal cable networks behind the panels: **max. ø: 25 mm**

Vertical cable networks between the panels: **max. ø: 20 mm**