

# Cascade Garden

## *Technical Specification*

### **CASCADE GARDEN STRUCTURE**

1. Underneath construction made out of 18mm Plywood boards with a minimum bearing load of 60kg/m<sup>2</sup>.
2. Interconnected water containers
3. Self-watering pots with plants fixed to the water containers
4. Automatic irrigation system

The depth of the Cascade Garden is 20cm including the plywood boards. Another 10 – 20cm will be added by the actual plant (depending on selection).

### **IRRIGATION SYSTEM**

Irrigation system is controlled automatically through a safety valve which is connected to several sensors that are monitoring the water levels. The safety valve is controlled by a LOGO control unit.

### **LIGHTING**

Additional lighting is necessary for interior gardens. For every 1m<sup>2</sup> of Cascade Garden it is essential to install a 40 – 50W metalhalogenic lamp (or LED equivalent). These lamps need to be switched on for a least 10 hours per day. Light specification is available upon request.

### **CONSTRUCTION AND OTHER TRADE REQUIREMENTS**

#### **Statics**

1. The total weight is approx. 60Kg/m<sup>2</sup> including the plants.

#### **Electricity**

1. 1 x socket 230V for the safety valve Belimo - 3x1,5 CYKY - 10A - category B. Socket should be placed near the irrigation control unit – top part of the Cascade Garden.
2. Electric current supply – total wattage will be approx. 40-50W/m<sup>2</sup> for 10 hours/day

### **Water and Drain**

1. It is necessary to have access to drinking water closed off with a ball valve near the irrigation control unit.
2. Drain is recommended, but not necessary.

### **BUILDING REQUIREMENTS**

1. It's important to choose the place for the irrigation control unit
2. Ideally this should be in the empty top water container but can be anywhere. The distance from the Cascade Garden is not that important. The following needs to be in close proximity.
  - Drinking water closed off with a ball valve
  - 1 x socket 230V 10A
  - Data cable (optional)

In the event that the irrigation control unit is not near the Cascade Garden, it is necessary to secure the following:

1. Water hose with a diameter of at least 1/2". The hose can end anywhere along the length of the top container, but at least 5cm from its edge.