

TECHNICAL SPECIFICATIONS

Tipping Point is a complex installation due to the multiplicity of techniques used; it's a fragile artistic object. It is a deliberate, both aesthetic (appealing to the sensitive), technological (it seems absurd to deploy an energy monster to talk about the environment).

Space: the environment in which the installation is deployed must be controlled. If the refrigeration device is relatively robust, it will not withstand prolonged extreme temperature peaks; the external temperature of rupture is estimated between 27 ° c and 30 ° c.

Description of the installation: the visible part of the installation is in the form of a double glass bell equipped with a vacuum drawn air blade (insulation) placed on a stand. A tube made of glasses (diameter of 6mm, thickness of the glass 1.5mm) comes out of the base to meet the top of the glass bell. This tube is used to transport the drop of water. The assembly is insulated via a silicone plug (at the top) and a layer of silicone cast at the base (seam) of the bell, serving as both an airtight seal and a hydrophobic surface.

The invisible part of the installation (in the base) contains the entire technical device, both for the production of cold (Peltier cell, heat sinks, ventilation), the water tank and the delivery of the drop (Mariotte vase, valve and pump), the control system (arduino), the 12v power supply and aeration system.

Power consumption: the average power consumption of the installation is 70 watts for a given temperature of -10 ° c to -17 ° c at the base. A temperature sensor is used to regulate the installation. The venue must provide a stable 220v line, equipped if possible with an inverter. This line can never be disconnected during the duration of the exhibition. An electrical cut would result in an extremely rapid heating of the bell, due to the Peltier cell which would no longer be powered. This electric line can never be disconnected during the duration of the exhibition.

Switching on / off the installation: automatic.

Monitoring: a dedicated web page is set up. The web page allows you to check the correct operation of the installation as well as the time remaining before the next drop.

URL: <http://tippingpoint.local:2019>

Frequency of the drops: each 30 minutes.

Type of water: demineralized water only.

Lightning: if possible, light sources that do not emit heat.

Glacier starter: access to a freezer is necessary to create (freeze) the « first glacier » (a cube about 6 cm wide) which will be used as a starter for the installation.

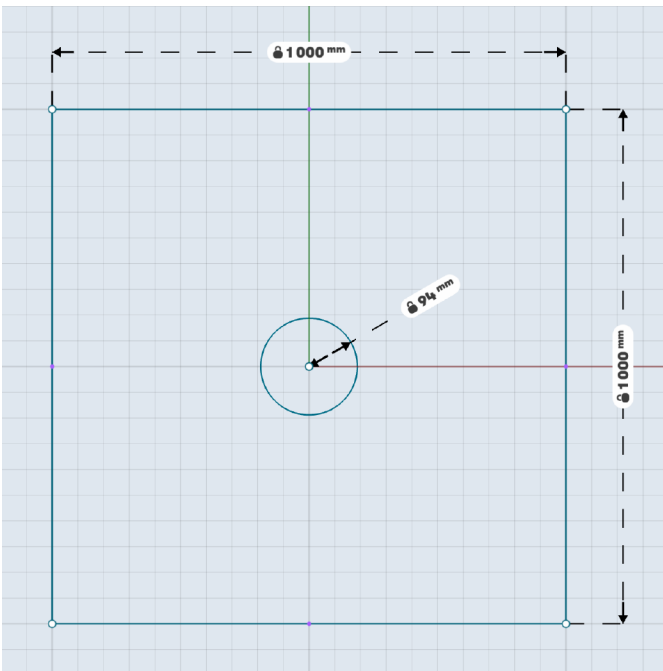
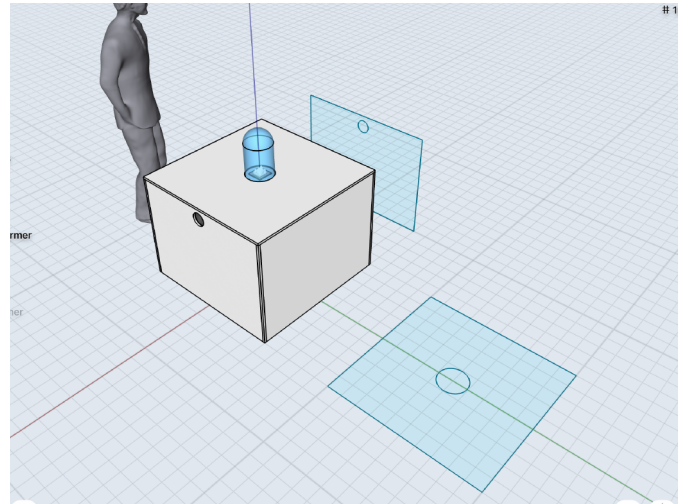
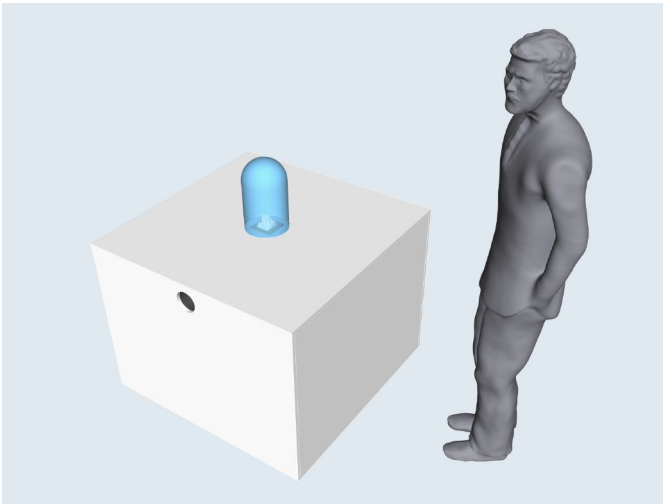
External dimensions of the base: (l) 1000 mm x (L) 1000 mm x (h) 750 mm

Provide a technical hatch that can be dismantled (technical reserve) and accessible in case of problems.

Color of the base: white

Dimensions of the transport box: 1 box, size 66 x 66 x 54 cm, weight 45kg

Dimensions of the pedestal if needed: 1 socle, dim. 1000cm * 1000cm * 70cm, poids 42kg

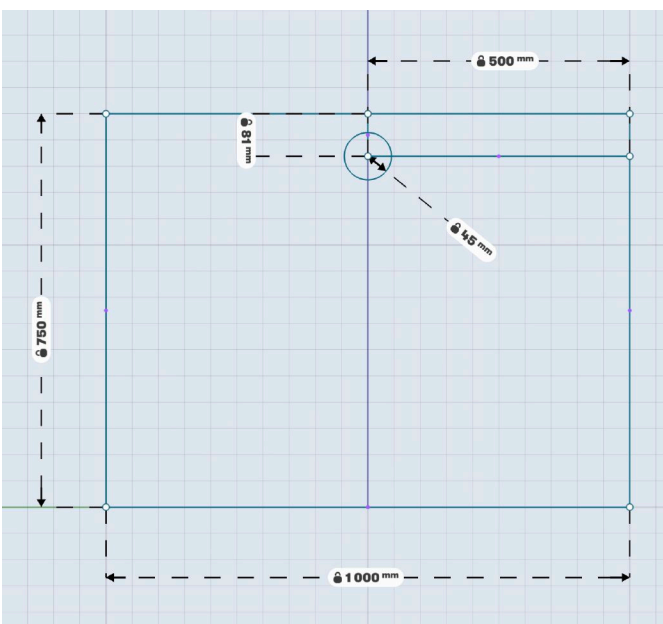


Top of the base:

Thickness: about 17 mm

Central cut of a circle with a diameter of 188 mm (radius 94 mm).

This cutout allows the refrigeration device to be placed and held from below while securing the glass bell.



Right and left faces of the base:

Cutting a circle 90 mm in diameter (45 mm radius).