



6.1.1

LivePanel

Create living walls

The patented Mobilane system LivePanel is an innovative application for vertical greenery. With 90 years experience in green solutions Mobilane have developed a unique system for green facades and walls. LivePanel is a sustainable 'living wall' system for existing and new buildings. As well as being beneficial to the environment (including its ability to capture fine dust particulates), a green wall provides a stunning view and backdrop.

With LivePanel, you can bring the outdoors inside and add a natural element to your internal walls. The system easily transforms your wall into an attractive surface, full of natural plants. LivePanel is a modular living wall system with exchangeable plant cassettes. The cassettes consist of cups in which plants are inserted. Each row of cassettes is placed in a gutter profile that also serves as a water reservoir. The plants absorb water from the gutter through a capillary system. For larger walls it is advisable to install an automatic irrigation unit.

Because of its flexibility, LivePanel modules can be used for numerous applications of vertical greenery. LivePanel can be easily installed on new or existing walls. Both in- and outside. For installation, Mobilane works with selected partners who have the appropriate product knowledge, experience and licenses.



6.1.2

The benefits

- Flexible system for indoor and outdoor applications
- Creative freedom in design and plant selection
- Exchangeable plant cassettes
- Contributes to a healthy indoor climate through oxygen production and fine-dust capture
- Easy installation and quick assembly
- Slim and solid construction
- Temperature and sound insulation properties
- Low water use
- Low maintenance
- Low odour levels
- Recyclable



Technical specifications

Dimensions: The maximum profile length is 520 cm excluding the end caps. Larger walls are therefore made up of a series of profiles, placed next to each other. There are two types of end caps (blind and flow caps), which are installed mirrored to one another on the wall. For each 520 cm wall length a water passage is needed. Modular system based on plant cassettes of 40 x 40 cm.

Weight: Weight including plants 35kg-40kg/m²

Profiles: Both the profiles and the (optional) frame are easy for the installer to customize in the required size. The cassettes are flexible and can be cut horizontally and vertically by using the indicated sawing lines at the back side of the cassettes.

Frame Colour: The standard frame is available in blank anodized aluminium. On request also other RAL colours are available.

Recommendations

- If LivePanel is applied to the inside of outer walls (façade) which are not sufficiently isolated ($R_c = 4.5 \text{ m}^2\text{K/W}$), an XPS insulation with a thickness of at least 20 mm has to be fitted at the inner wall. Both these plates as well as the intermediate seams need to be completely air-tight and vapour-inhibiting. This ensures a thermal shield of the outer wall thereby reducing the risk of fungal attack and condensation.
- An overflow / drainage should always be provided for internal applications.
- For larger walls it is advisable to install an automatic irrigation unit. Take into account an average water consumption of 5 L/m² of green surface per week. This depends on local circumstances such as type of planting, ambient temperature, air-conditioning and the amount of light.
- In the calculations it is necessary to take into account tolerances in the aluminium profiles.



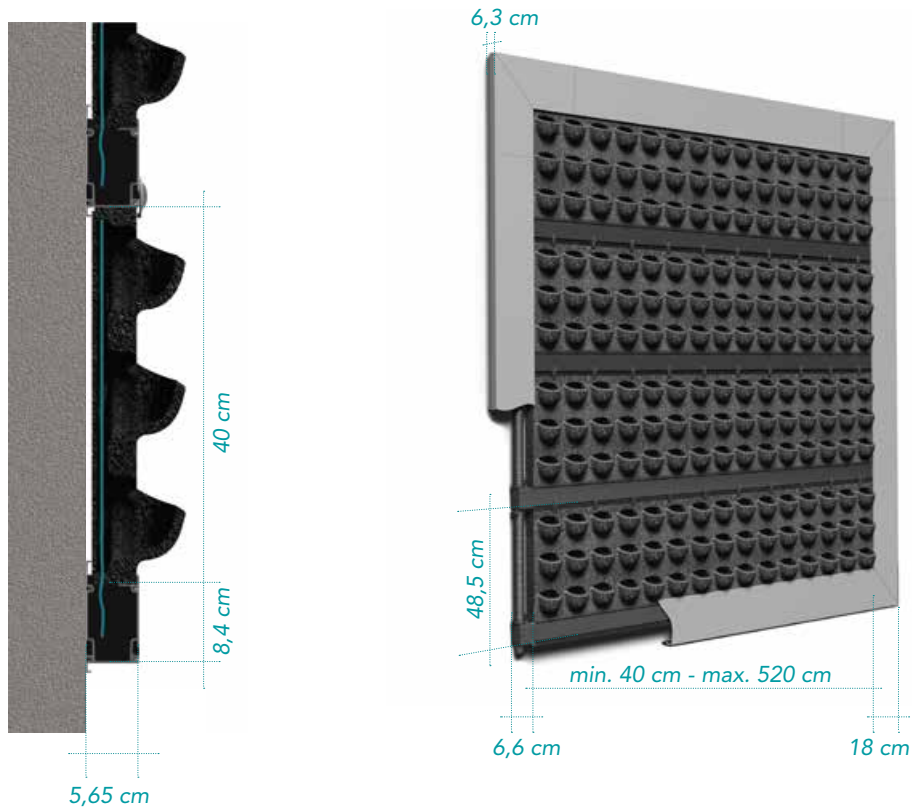
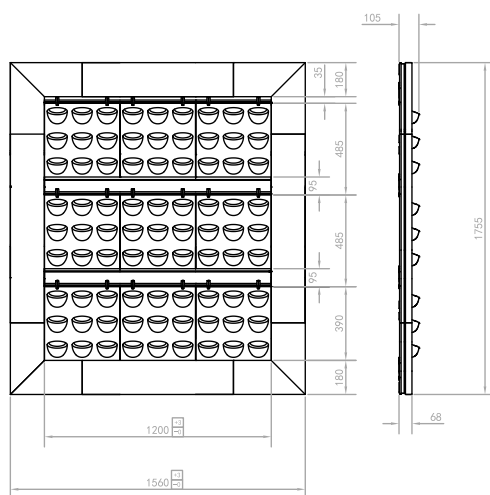


Fig 6.1

LivePanel with frame



LivePanel without frame

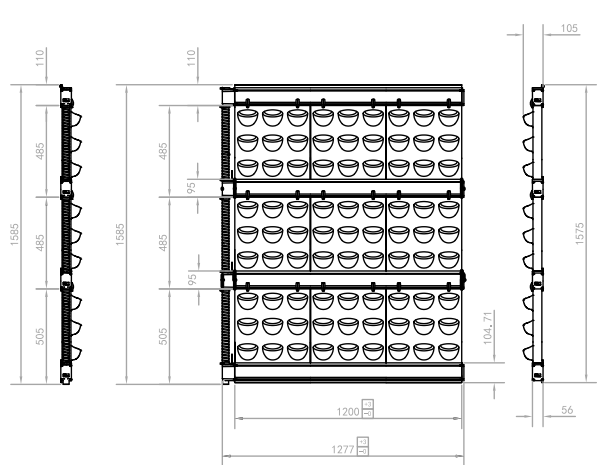
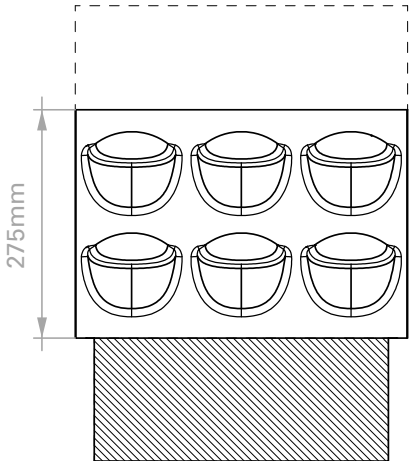
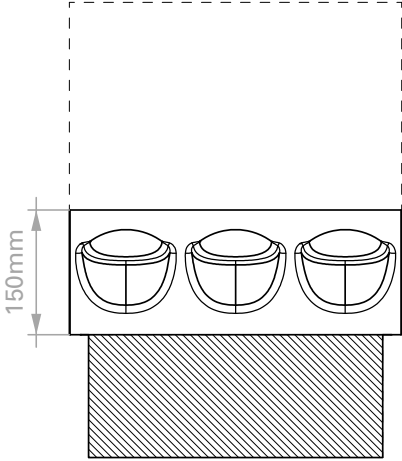
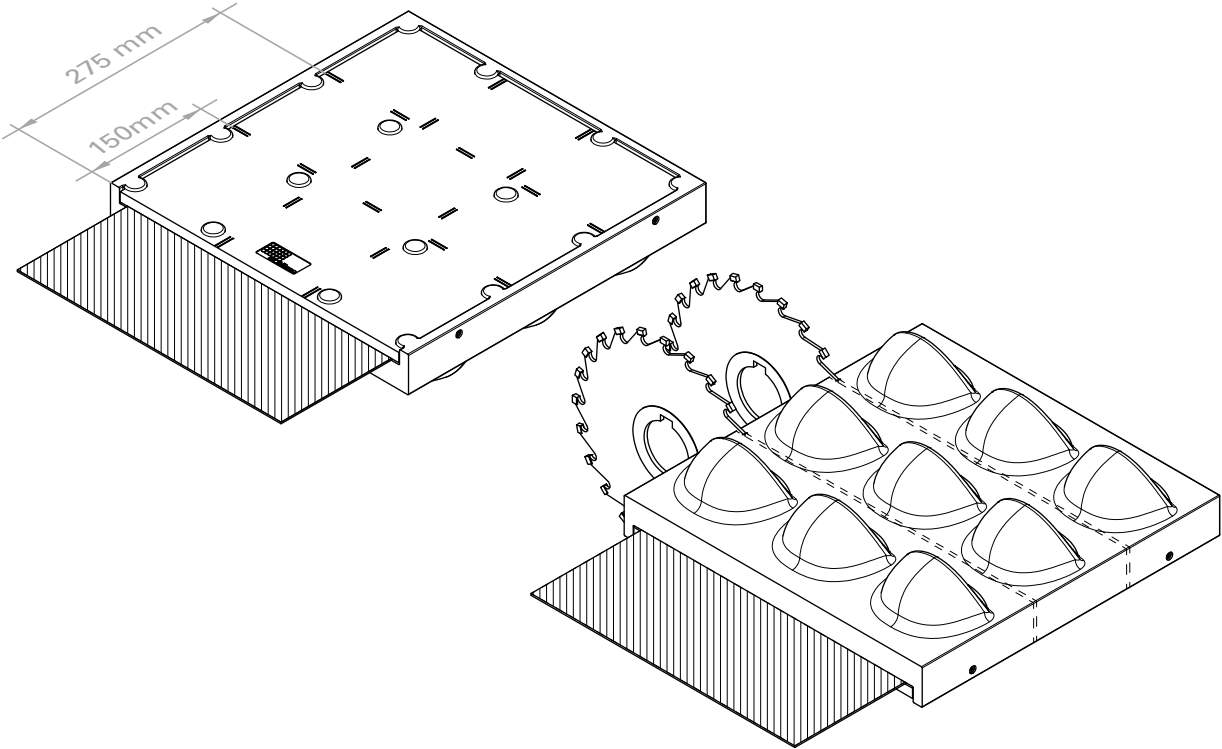


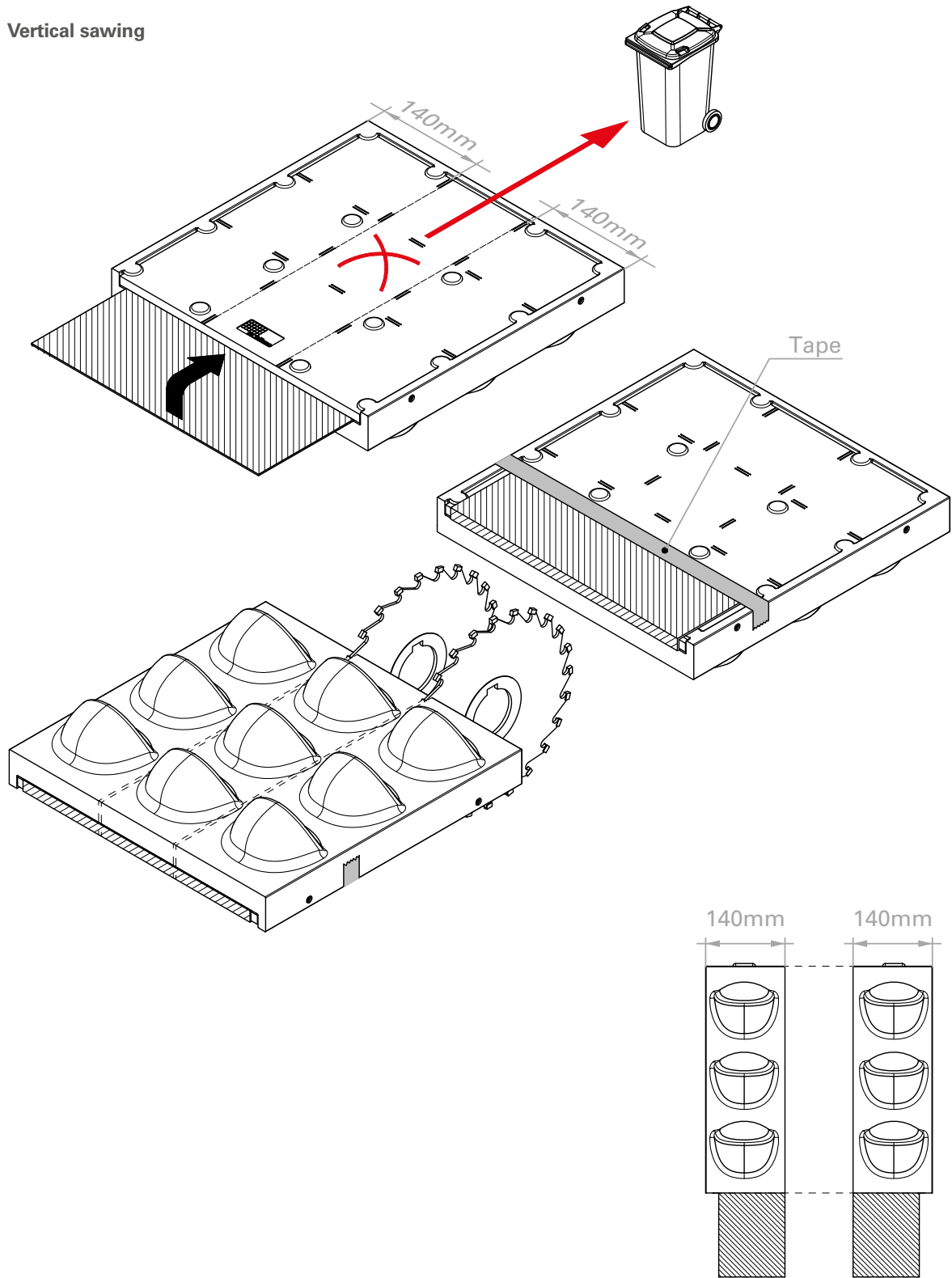
Fig 6.2

CAD drawings of LivePanel are available on our website

Horizontal sawing



Vertical sawing



References and examples of applications





6.3.1



6.3.2



6.3.3

SPECIFICATION MOBILANE LIVEPANEL

LANDSCAPING SYSTEM, INTERIOR/EXTERIOR

Manufacturer: Mobilane

Type: LivePanel

- Construction:**
- **Gutter profiles:** Aluminium profiles, AL6063 T5, matt black anodised. End and flow caps made of glass fibre reinforced nylon, fixed with self-tapping screw thread on the profiles;

 - **Fixation:** Aluminium profiles are directly fixed to the wall by using Fischer plugs Fischer UX8x50R and Fischer screws 5.0x60 CK stainless steel A2, the gutter profiles are pre-drilled with grid size 40 cm;

 - **Waterflow:** Flow caps have a hose adapter and are connected with plastic tubing, fixed with a stainless steel hose clamp;

 - **Mobilane:**
 - Front plate with 9 cups made of EPP, 50kg/m³;
 - **Plant Cassette:**
 - Capillary cloth made of microfibre fabric 80% PES/20% PA;
 - Back plate with reinforcing ribs, and clamping projections made of PP;
 - 6 self-locking countersunk screws made of stainless steel A2;

 - **Planting:** Plant Selection in consultation with the supplier.

 - **Utilities**
 - Water supply capacity 2.0 bar 0.6 m³/h
 - **Irrigation:**
 - Double power point 16 amp 230V;
 - Water drainage under the wall for connection 32mm;
 - Internet access with one opened port (optional);
 - Space available for installing the irrigation unit (standard unit 60 x 50 x 25 cm = H x W x D);

 - **Irrigation unit:** Mobilane irrigation unit with manual main valve, filter, control unit, compost injection pump, flow meter and fertiliser tank.

 - **Accessories:**
 - Frame made of aluminium, AL6063 T5, blank anodised.
 - Frame is fixed with list clips list which are securely fixed with Fischer UX8 plugs and Fischer 5,0x60 CK A2 stainless steel screws. (RAL colour table is optional available)