

The Company

Mobilane International

As a leading developer of ready-made green and sustainable systems, Mobilane has grown into an international enterprise. Mobilane has subsidiaries in Great Britain, Belgium, Luxembourg, Germany, Asia and South Africa and 10 manufacturing locations around the world. Mobilane products are available in 22 countries in Europe and many more countries beyond.

Development of the company

Since 2001 **Mobilane** – Mobilane Green Screen

The Mobilane 'Green Screen' is a metal grid that is completely covered with plants. These plants are contained in potting soil in a coco planter, which is placed on the underside of the grid. The planter is made up of coconut fibres that are held together by natural latex. After installation of the 'Green Screen' the completely natural planter biodegrades within one or two years. Within weeks of installation the hedge is rooted in the ground.

Since 2004 **WallPlanter®** - Facade Greening

In 2002 Mobilane took its first steps into green facades. Developed since 2004 and installed in many projects as MobiCare, the system is now known as WallPlanter.

Since 2008 **Mobiroof®**

- Cultivated green roof cassettes

This internationally proven system for extensive green roofs consists of cassettes filled with substrate and fully cultivated with various species of Sedum. These cassettes are placed directly onto the roof, creating an instant, fully-grown look. Mobiroof has an insulating effect on buildings and retains water.

ESTABLISHED

2001

HEADQUARTERS

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MOBILANE OFFICES WORLDWIDE

- Netherlands
- Belgium
- Great Britain
- Germany
- Hungary
- South-Africa
- Asia
- United States

Since 2008 **NoiStop® - AcousticWall system**

The NoiStop sound barriers have a core of specially moulded, waterproof and UV resistant mineral wool with a unique sound-absorbing and sound-isolating function. By applying NoiStop, ambient noise can be reduced up to 70%. NoiStop acoustic wall system can be shielded in greenery, instantly, if combined with the Mobilane Green Screen.

Since 2010 **WallPlanter® - Green façade system (previously Mobicare)**

WallPlanter is an instant green façade system and can be mounted on both new and existing wall faces. Its structure is that of an aluminium planter into which Mobilane Green Screens are placed. These planters are mounted on the facades of buildings such as multi-storey parking facilities, hotels or office buildings. Thanks to a superbly-designed irrigation and drainage system, the Mobilane Green Screens are provided with the correct amount of water and nutrients.

Since 2010 **LivePanel® - Living green wall system**

The first LivePanel system was introduced in 2010, followed in 2014 by a modular cassette system. These cassettes are easy to fit and are secured by a lightweight aluminium construction of gutters. Because of the extreme flexibility of the LivePanel system it is ideal for many applications in indoor and outdoor spaces. The supply of the plants with water and nutrients is made by an integrated irrigation system.

Since 2013 **LivePicture® - Living picture made up of plants**

LivePicture combines innovation, design and living green. The frame of the LivePicture includes an integrated watering system with a reservoir to ensure that the plants are provided with water for at least four to six weeks. This innovative patented construction functions without electricity or a mechanical pump. LivePicture is available in different sizes and frame colours.

Since 2014 **LiveDivider® - Green Room Divider**

LiveDivider is a room divider, set up with plants on both sides. Larger spaces are simply divided into smaller blocks by using LiveDivider. The frame of this dividing system includes an integrated watering system with a reservoir to ensure that the plants are provided with water and nutrients. This works without electricity or mechanical pump. With exchangeable plant cassettes, you can choose your own plant selection, change and update to suit. As well as a reduction of ambient noise pollution, the plants in the LiveDivider help maintain appropriate humidity and can remove carbon dioxide and clean polluted air particles.



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.



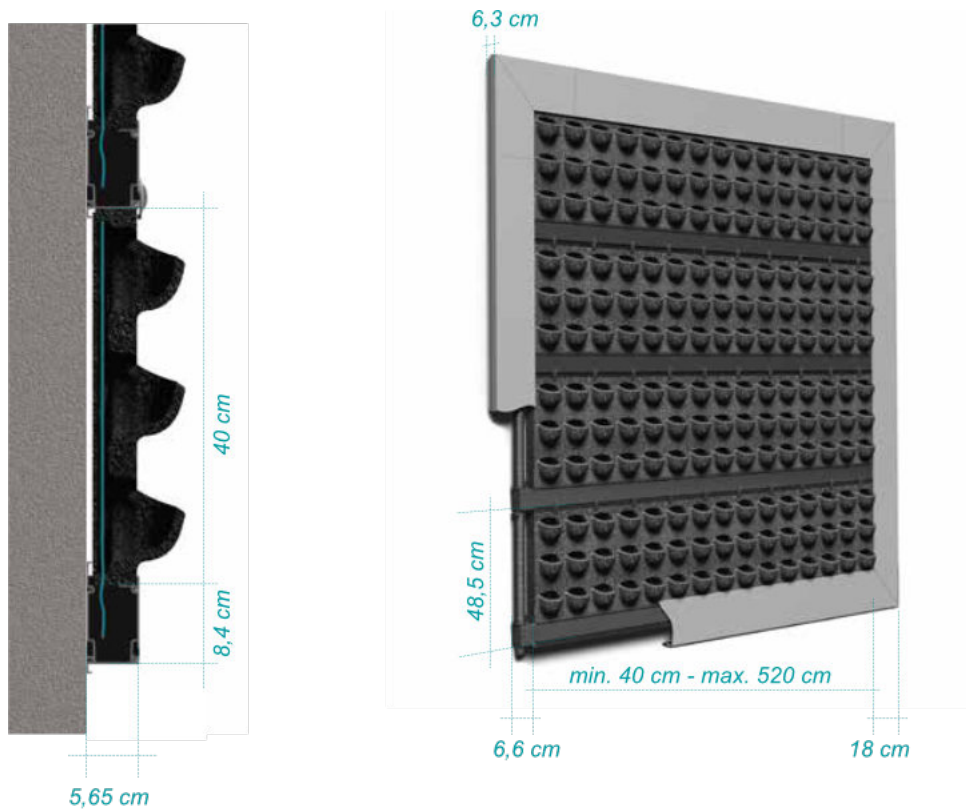
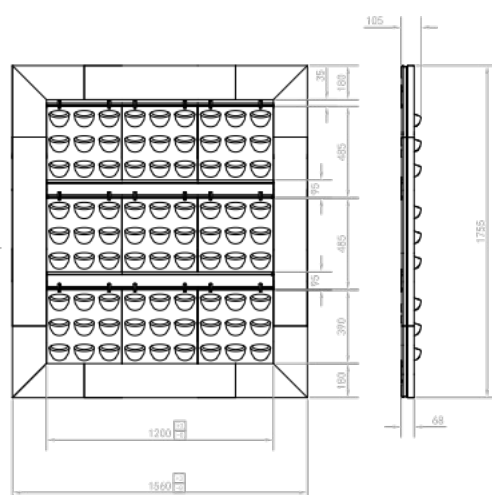


Fig 6.1

LivePanelwith frame



LivePanelwithout frame

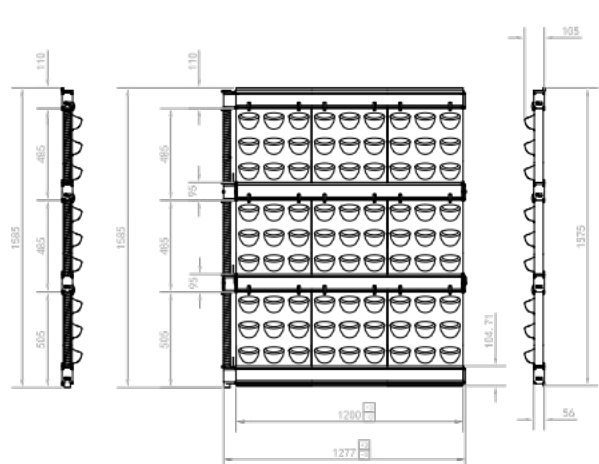
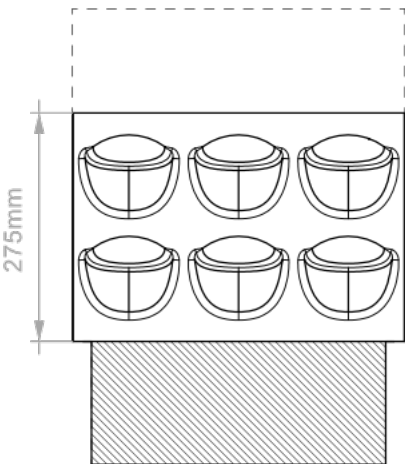
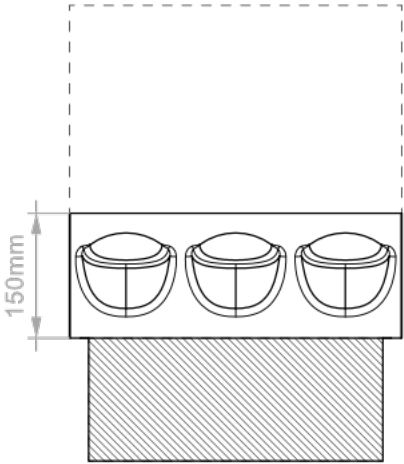
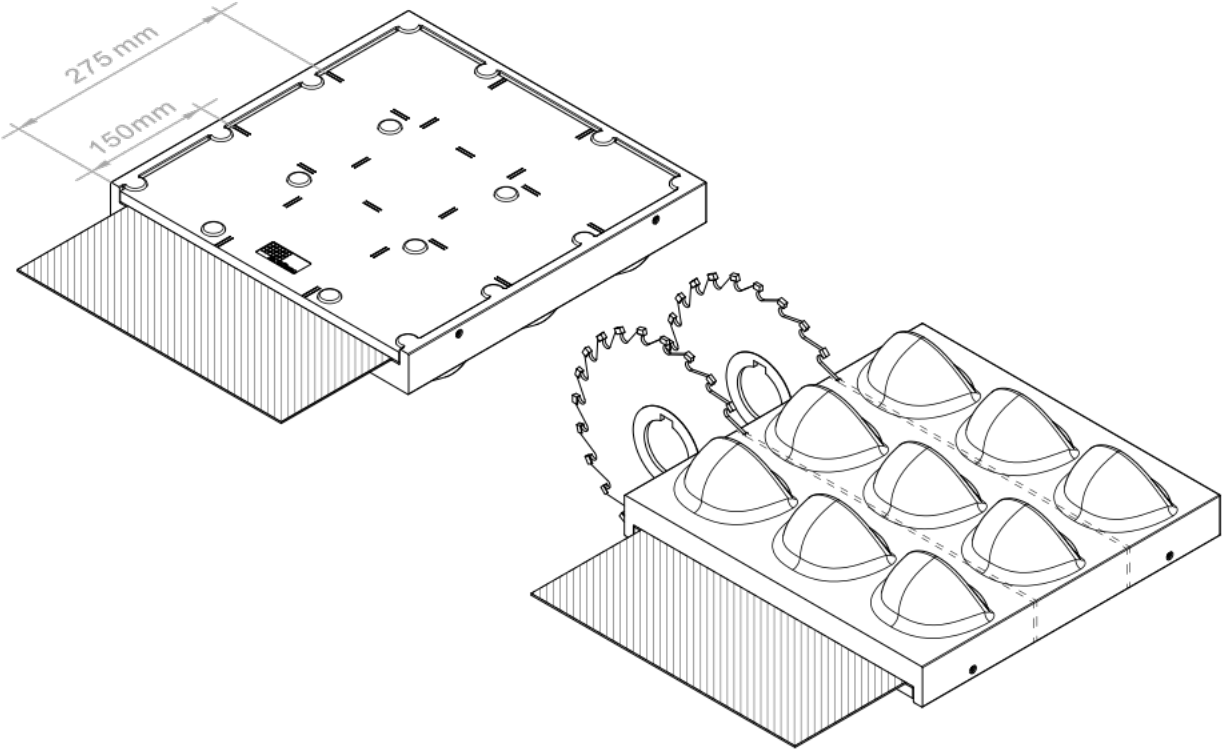


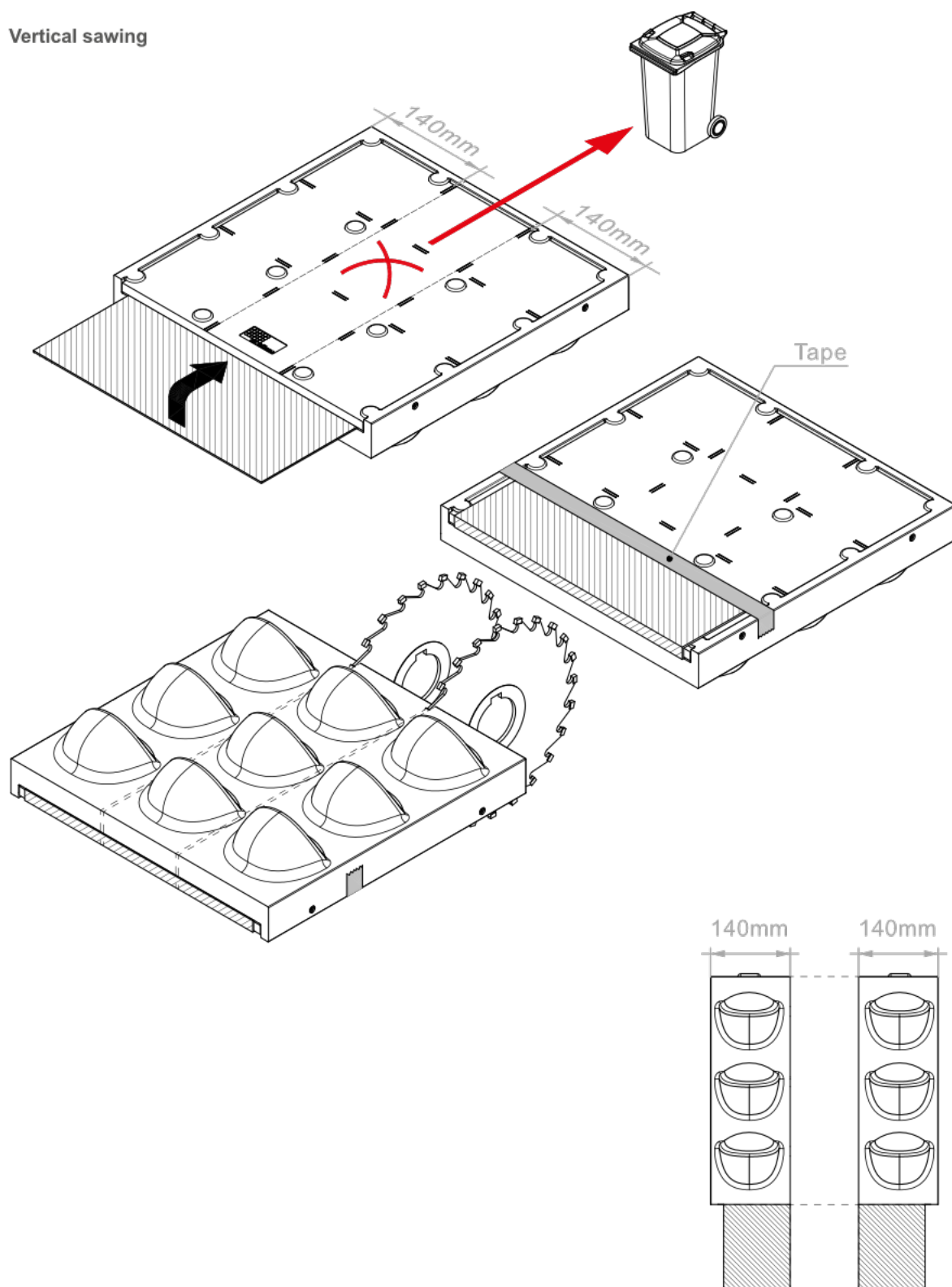
Fig 6.2

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 CKA2 stainless steel screws. (RAL colour table is optional available)