

SECTION 3: Living Wall East Elevation

1.1 General Elevation

1.2 Architects details & Sections

1.3 Subcontractor Mobiplanter Brochure

1.4 Subcontractor drawings

1.5 Subcontractor Case study photos

1.6 Subcontractor Statement for Fire Rating

1.7 Supporting structure for green wall

1.8 Maintenance Schedule for South and East green walls

Ss_45_40_28_85

External planting systems

Systems

Ss_45_40_28_85 External planting systems Eastern Elevation

1. Description: Vertical Planting System. Aluminium planters fully supported back to wall structure with brackets as shown in the drawings- **Wall Planter System**
2. System manufacturer: Mobilane UK
3. Size (hxw): 2850mm x 3900mm
4. System reference: Mobilne Wallplanter
 - 4.1. Planting:
 - 4.1.1. Type:: Green Screen
 - 4.1.2. Format: Hedera helix, Woemer
 - 4.1.3. Dimensions: 1205x2200mm
 5. Container:: Aluminium
 - 5.1. Size:: 3900mm x 500mm x 500mm, 3mm thick. Container provided with insulation, drainage and drainage socks
 - 5.2. Colour: : RAL-Colour optional
 - 5.3. Fixing:: In accordance with manufacturers details
 - 5.3.1. Irrigation:: In accordance with manufacturers details - computerised irrigation system
 6. Standards:
 7. Certification:
 8. Products:
 9. Execution: pre planted containers

Ss_45_40_28_85 External planting systems Southern Elevation (A)

1. Description: Vertical Planting System. Aluminium planters fully supported back to wall structure with brackets as shown in the drawings- **Live Panel**
2. System manufacturer: Mobilane UK
3. System reference: Livepanel
4. Gutter Profile:: 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;
5. 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;
6. Waterflow:: Flow caps have a hose adapter and are connected with plastic tubing, fixed with a stainless steel hose clamp;
7. Plant Cassette:: - Front plate with 9 cups made of EPP, 50kg/m3;
 - 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;
8. Planting: Plant Selection in consultation with the supplier.
9. Utilities Irrigation:: - Water supply capacity 2.0 bar 0.6 m3/h
 - 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);
- 10. **Irrigation Unit:** Mobilane irrigation unit with manual main valve, filter, control unit, compost injection pump, flow meter and fertiliser tank.
- 11. **Accessories:** - Frame made of aluminium, AL6063 T5, blank anodised.
 - Frame is fixed with list clips which are securely fixed with Fischer UX8 plugs and Fischer 5,0x60 CK A2 stainless steel screws. (RAL colour table is optional available)

Ω End of System

1.3 Subcontractor Mobiplanter Brochure



WALL-PLANTER



WALLPLANTER



In 2002 Mobilane developed the WallPlanter living wall system incorporating the innovative Mobilane Green Screen fencing. WallPlanter is now a tried and tested product providing an instant fully planted finish which has proven to be highly successful over a number of years on both new and existing facades. WallPlanter consists of large specifically designed customized aluminium planters in which fully grown hedge elements (Mobilane Green Screen) can be placed.

IRRIGATION AND DRAINAGE SYSTEM

These planters are placed on the facade of the project. These buildings include: car parks, hotels, office buildings. Using a fully automated irrigation and drainage system, hedges receive water and nutrients, allowing the hedge to develop, keeping the green facade looking spectacular year after year. A green facade adds to the attraction of the area for residents, visitors and potential buyers.

WALLPLANTER MATERIALS



Coconut fibre container: The coconut fibre container consists of coconut fibre held together by natural latex. This container is made from 100% biological material and is 100% degradable.

Steel grid and brackets: Steel grid and brackets: The Mobilane Green Screen consists of a galvanised steel grid that is 100% recyclable. The brackets for the wooden posts are made from galvanised iron. The brackets for the metal posts are galvanised and green coated. Both are fully recyclable.

Aluminium planters: The planters in which the Green Screens are placed are made of recyclable aluminium. The planters include insulation, a drainage system and a specially composed substrate. According to preferences, the planters can be supplied with front cover planting and/or a powder coat.



Planting: The plants that are used in the pre-grown aluminium planters in the WallPlanter system are grown at the Dartplant production site under "On the way to PlantProof" certification. This independent certification proves that the plants for the WallPlanter have been produced more sustainably and therefore a better choice for nature, climate and animals.

UNIQUE FEATURES

Suitable for all surfaces and planes

Equipped with automatic irrigation system

Fully grown

Low water consumption

Reduces fine dust by 40 - 60%

Fully recyclable

Low maintenance

Double-sided greenery
(on multi-storey car parks)



BENEFITS

Contributes to the greening of urban areas

Contributes to a healthy environment

Contributes to biodiversity

Improves air quality

Increase in value for real estate

Insulating effect

Prevention of graffiti

INSTALLATION

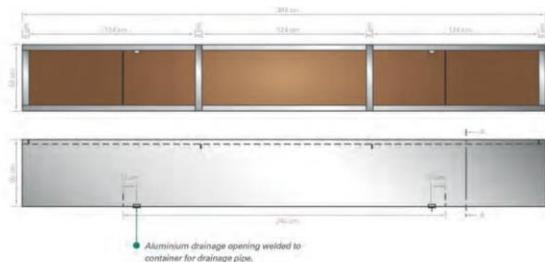


SUPPORTING STRUCTURE

Due to the weight of the WallPlanter elements, a robust support structure is necessary. This supporting structure, depending on the strength of the wall and the foundation, is attached to the wall or resting on the base. Apply to support construction: The planters will be installed on the support structure using a crane.

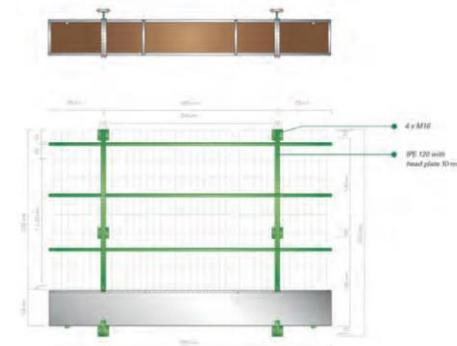
IRRIGATION

Each planter is supplied with water and nutrients through an irrigation system. In order to avoid too much water remaining in the plant (for example, in heavy rain), each plant container is also provided with drainage. This also ensures the supply of oxygen to the plant roots. For the supply of water and nutrients a technical area of at least 4 m² is required. Ideally, this technical is situated as close to the living wall as possible. The containers are made of high quality aluminium and all sides include an insulation layer with a drainage layer at the bottom. If desired, the containers can be supplied in any RAL colour.



DIMENSIONS

The standard planter has the following dimensions: 50x50x390 cm. Other lengths (260 cm, 130 cm, and customised sizes) are possible. The Mobilane Green Screens in the planters are up to 220 cm high. The total height of an element (including Planter and support points) is 285 cm. The total weight of a standard container of 390 cm length and 220 cm high Mobilane Green Screen is 1450 kg (maximum saturated state). This is equivalent to the weight of approximately 140 kg per m² green wall surface.



PLACING AND WATERING

Indoo

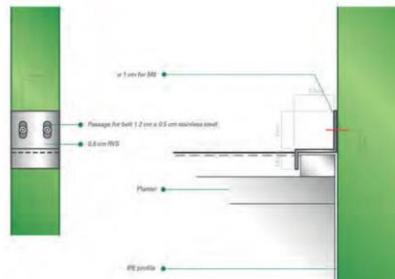
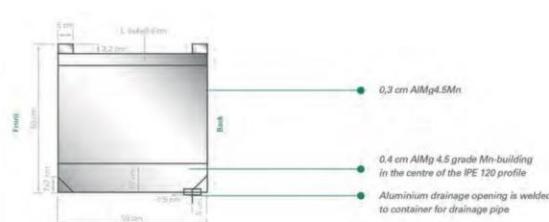
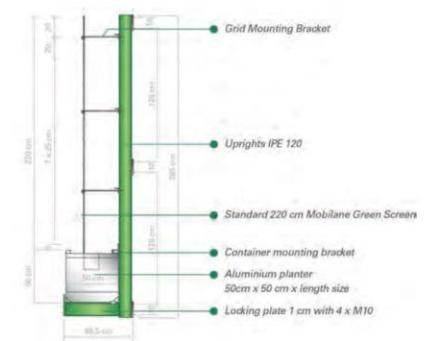
Outdoor

Watergif

Manual

Tank

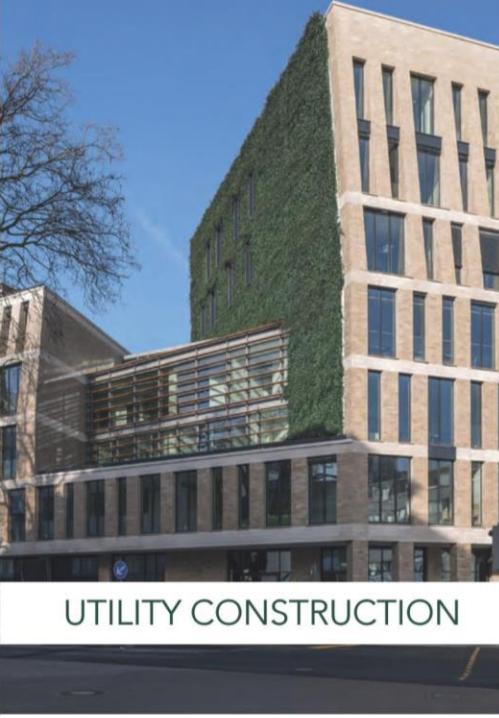
Irrigation system



REFERENCES AND APPLICATIONS



MULTISTOREY CAR PARK



UTILITY CONSTRUCTION



MULTISTOREY CAR PARK



UTILITY CONSTRUCTION



CASE STUDY



PROJECT INFORMATION

Commissioned by The Bracknell Regeneration Partnership (BRP), a dull, grey and run-down residential area with post-war architecture has been transformed into a hypermodern shopping centre with lots of green elements. In England Lexicon Bracknell, more than 1500 m² of green façade has been realized with the WallPlanter system. The green transformation is an important development in the creation of a sustainable and natural environment within the Lexicon shopping centre. The Lexicon has a retail area of approximately 11 football fields. The large-scale application of greenery is a key part of the project developer's philosophy.

FULLY GROWN

The WallPlanter system consists of aluminium planters in which Mobilane Green Screens are placed. A fully covered green façade is created immediately upon delivery without having to wait for years. The ground floor, elevator shafts and walkways, among other things, get a friendly and natural appearance. In addition, the Mobilane Green Screens also capture fine dust and reduce CO₂.

CLIENT : Bracknell Regeneration Partnership (BRP)

ARCHITECT: BDP

CONTRACTOR: Hedera Screen

YEAR OF CONSTRUCTION : 2017

LOCATION : Bracknell, UK

