

## Living Walls

Our Living Wall system

Part of the Scotscape group



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## Living Walls

Living walls also known as green walls are vertical or near-vertical structures attached to the interior or exterior of a building. Providing both aesthetic and ecological benefits, they are emerging as a vital part of green infrastructure within developing urban environments.

The Scotscape Living Wall has been designed to promote optimum plant health. It is a light-weight, semi-hydroponic, modular panel system. It is constructed from a patented, advanced Fytotextile® fabric. Each square metre holds up to 49 plants in individual pockets. Each panel incorporates a drip-line to irrigate the plants through the system. Panels can be fitted to both flat and curved surfaces. The system is designed for rapid installation by a small specialist team, minimizing on-site disruption. No lengthy pre-growing is required as all walls are planted on site.





## What we offer

- Full design service available
- For use in commercial or residential projects
- Available in 9 standard panel sizes or bespoke to suit individual projects
- Suitable for exterior or interior use
- Maintenance contracts available
- 10 year product warranty
- Fire resistant BS476 Part 6/7



#### Living Wall Benefits

#### Benefits for Buildings

Interior walls provide oxygen, environmental humidity and bio-filter volatile organic compounds (VOC's) like benzene, CO<sup>2</sup> and formaldehydes; improving indoor air quality. Exterior walls can improve the thermal and acoustic insulation of the building.



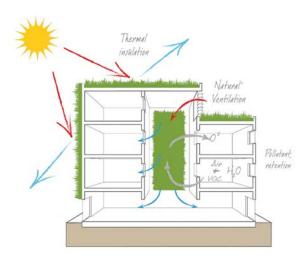


#### Benefits for People

Plants enhance the health and well-being of people, increasing concentration and productivity in the work-place. They play an important role in biophilic design which is becoming ever more important in our urbanised world. Biophilic design enables us to connect with nature within the built environment improving happiness and reducing stress.

#### Benefits for Companies

Companies that invest in urban greening systems secure an important return on investment; both through marketing and improvement of their image by communicating green credentials and investing in staff health and wellbeing.

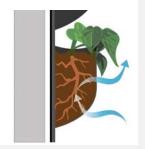




### Why Fytotextile®

Fytotextile® for Plant Health Our Living Wall system has been scientifically engineered and tested to support optimum plant health and growth. The University of Seville undertook several years of research with Scotscape to ensure that Fytotextile® provides the ideal

conditions for sustained plant growth. This patented product is the only Living Wall system which brings aeration to the root structure, encouraging healthy growth ensuring higher resistance to pests and disease.



## 01

Breathable nature provides excellent aeration to the rootzone promoting strong growth



02

Optimal multi-layer structure A Waterproof Layer B Irrigation Layer

C Breathable Layer



#### 03

05

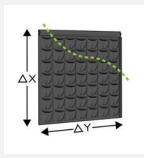
Even water distribution to the root-zone, ensuring efficient use of water



Lightweight and fully flexible syst

04

fully flexible system; can be installed on curved surfaces



Adaptable; bespoke panels can be manufactured to any shape and size



06

Quick installation and rapid plant growth post install

## Design and Consultation

Every Scotscape project is tailored to the client's needs. We create bespoke planting designs for each living wall project, paying special attention to site specific requirements and the species selection to ensure our installations flourish.

Our in-house horticulturists can assist with achieving BREEAM standards.

We provide a full dossier of technical documents and drawings necessary to support your project. Including all construction drawings, calculations and Operation Manuals for each project as required.





#### Hogarth Spa Planting Plan



Indicative planting scheme



Living Wall location



Indicative plant species



Living Wall

aureum 'Blue star'





## Installation

To date, Scotscape's specialist installation teams have installed more than 40,000m<sup>2</sup> of Living Wall systems in both commercial and domestic markets.







## The installation process:

#### Installation on-site in four steps





Modules





Irrigation

Planting





Remote control and monitoring of the irrigation system with internet controller

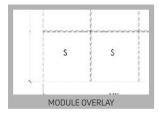


Easily accessible irrigation lines from the front of modules

## Technical documents provided

#### Module Overlay

A full module overlay is produced showing the sizes of modules used to fit the façade including any specific technical details required by the project.



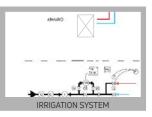
#### Sub-frame Design

A sub-frame drawing is produced in accordance with the module overlay. Including any relevant fixation details and types.

SUB-FRAM

#### Irrigation System

We design each irrigation system A full planting plan is produced bespoke to suit the project requirements. Ensuring it satisfies design stage. The wall is then the needs of the system.



#### Planting Plans

for client approval during the planted on site in accordance with the approved design.







## Irrigation and Maintenance

#### Automated System

This system suits all walls large and small. The run-off from the irrigation cycles is connected to an outlet at the base of the wall. This is the most common set-up where drainage is not an issue.

#### Recirculating System

This system suits locations where drainage is an issue. The water collected from the irrigation cycles is recirculated back through the system negating the need for a drainage outlet. Generally used on interior schemes, it can be installed with a fresh water top-up or the tank can be filled manually.

#### Maintenance

Living Wall maintenance is essential. Scotscape has the largest Living Wall maintenance division in the UK, we also work internationally. We have experience with most Living Wall systems on the market. Scotscape will keep your Living Wall healthy all year round, allowing you to enjoy the full benefits of vertical greening.

# Irrigation Zone Layout



06 /07 scotscape.co.uk

## Technical Information

Our Living Wall system is the lightest modular Living Wall system on the market. Weighing less than 40kg per square metre fully planted and saturated. We can produce bespoke modules of any shape and size, to suit the project requirements. The design of the modules allow for front access to the irrigation lines, allowing easy maintenance of the irrigation system.



## Requirements for Living Wall Installation



#### Water Supply

A fresh, unsoftened water feed is required at the point of the irrigation system installation.



#### **Electric Connection**

A 240v electrical supply is required at the point of the irrigation system installation.

#### Drainage Point

A drainage outlet is required at the base of the wall to remove run-off unless a re-circulating system is installed.

#### Irrigation Plant Room

This can be tailored to fit the available space. The requirements vary according to the size of the wall. The average space required for an automated system is 1200mm x 900mm floorspace, 1500mm against a wall.



#### Auxiliary Lighting

Our Horticulturists will take light readings on site to confirm requirements; 1500 lux @ 600mm from the wall is the general rule of thumb.

## Fytotextile® Module

