

2016

# Product Guide

# Welcome

Over the past six years we've designed, installed and maintained more square metres of living wall than any other company in the world.

Along the way we've accumulated a host of experience and knowledge. We use this to make every project a success. First time, every time.

We believe in making solutions based on nature. Our living wall system uses natural soil to ensure that the plants are in their natural environment. Our bespoke module is cradle-to-cradle meaning it is made from recycled material and is recyclable too.

We hope to inspire you to enhance structures naturally.



**Scott Anderson**  
Director





### Aesthetics

Planting patterns with varied species provide a stunning alternative to common building products.



### Improved Air Quality

Plant leaves filter out pollutants from the air and absorb dust particles.



### Increased Biodiversity

Living walls provide an alternative ecological habitats for insects, bats and birds.



### Branding Opportunity

Presenting your brand logo with foliage is a unique environmental statement.



### Staff Morale

Many studies have shown the positive effect that plants can have on staff morale in the workplace.



### Sound Insulation

Whether indoors or outside, plants absorb and deflect noise.



### Property Value

Living walls have the potential to increase residential and commercial property value and can also help secure planning permission.



### Structure Protection

Outdoor structural protection from both ultraviolet rays and acid rain is increasingly important. Plants provide a natural answer to both of these considerations.



### Social Impact

Enhancing public areas can reduce vandalism including graffiti. Can have a further positive impact on both physical health and mental wellbeing.



### Temperature Regulation

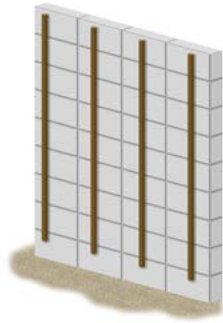
Reduces the effects of 'urban heat island' in cities. Also acts as insulation to regulate a building's temperature which can even allow for the reduction in air conditioning requirements.



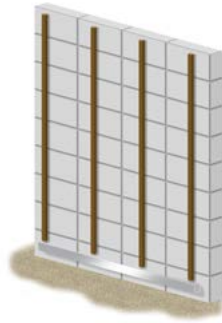
Installation



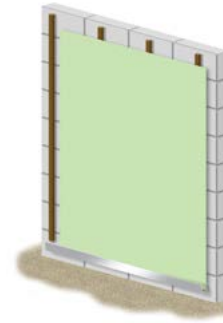
Indicative surface, can be brick, concrete, steel, frame or timber frame.



Add FSC treated softwood batons



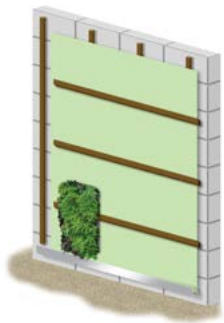
Install drainage channel of choice.



Fit breathable waterproof membrane



Add bespoke hanging rails



Place pre-grown and fully established ANS LivingWall modules



Complete first row



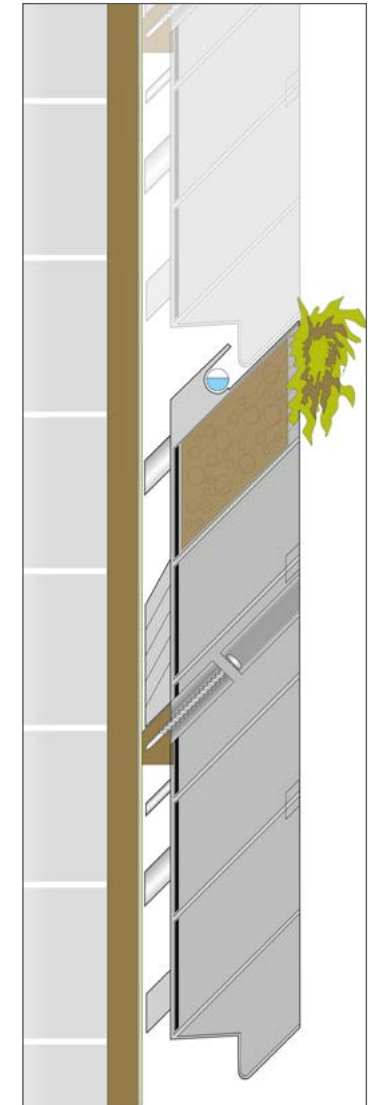
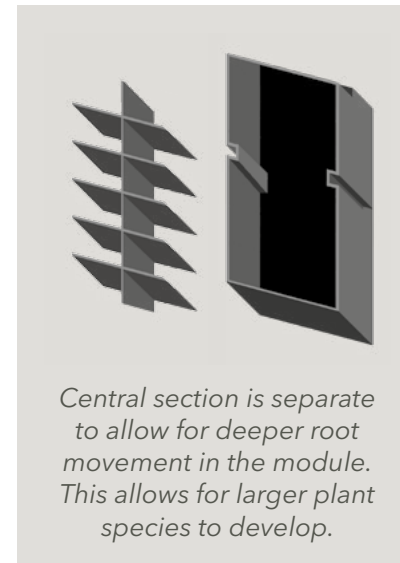
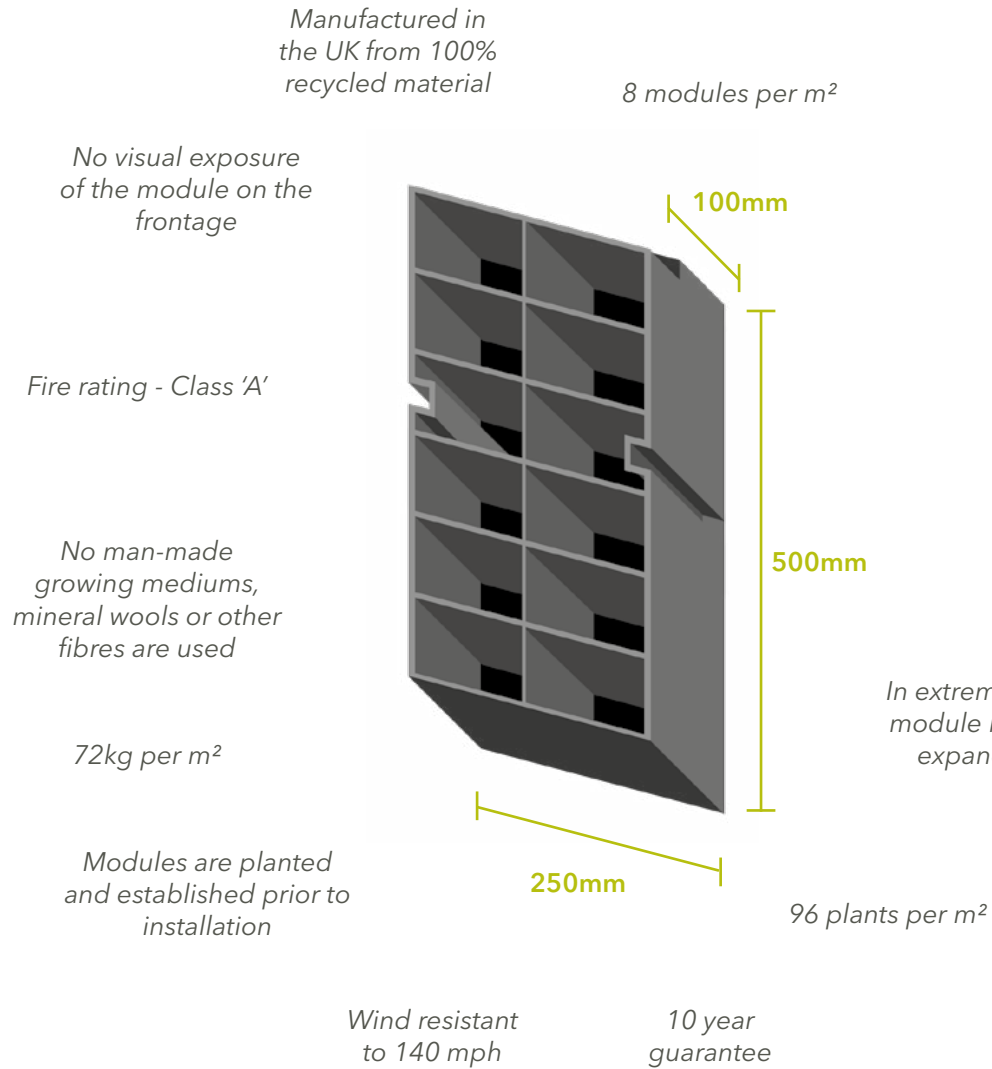
Install irrigation pipe on first row of modules



Build the living wall up layer by layer. Each module is planted to give desired effect.



Finished wall connected to irrigation system.





## Hydroponic

This living wall system uses a man-made substrate (such as rock-wool or insulation) for the plants to take root in. The wall requires an almost constant irrigation supply containing chemical based nutrients needed to feed the plants. The plants are kept alive in an artificial and unnatural way which limits the choice of plants.

The plants root hairs are offered insufficient protection and should the irrigation fail even for just two days, the entire wall is susceptible to drying out with devastating effect (pictured above).

ANS Global do not install hydroponic systems. While they can work in some applications the risk of failure is too great.



## Wire mesh

This living wall system comprises of stainless steel wires which trailing plants grow up. This method provides a cost effective solution for large areas with the added benefit of low annual maintenance.

The plants will however take a number of years to establish and are never likely to achieve full coverage. The planting is restricted to trailing plants only and it is impossible to create shapes, patterns or wording in the wall.

ANS Global can install wire systems where required, however it is not a true comparison to the ANS LivingWall system



## Natural soil

This living wall system uses a natural soil based media as the plant substrate. The plants are therefore growing in their natural environment which allows for healthy natural growth. The system allows for a huge range of plant species and the planting facilitates creativity with shapes, patterns and words. The living wall can be installed fully established giving instant impact. Natural soil is a long term stable environment for the plants, even if the irrigation should fail, the plants root hairs are protected by the contracting soil guaranteeing longevity of the wall.

The ANS LivingWall system is a patented, modular and proven natural soil system.



## Lighting is an important consideration when designing a living wall.

As in natural environments, different plant species thrive in various light levels. We can select plants to accommodate the aspect and natural light intensity of each project. In areas where no natural light is present (particularly indoors) it is essential to artificially create the right light intensity and colour temperature to support healthy plant growth.

Light intensity is measured in foot candles (FC) or lumen's. For reference a clear summer day is around 15000 FC. We require a minimum of 250 FC for a long lasting living wall.

Light colour temperature is measured in Kelvin (K). Natural sunlight provides a full spectrum of colour and indoor living walls will thrive with a similar light balance (4500 K to 6000 K). For a healthy living wall we require a minimum of 3000 K.

### Examples of additional lighting





## Plant selection is critical to the long term success of an ANS LivingWall

We can provide a comprehensive plant list for your project based on the location, aspect and design considerations of the wall.

Exterior  
(North facing)



Exterior  
(South facing)



Interior



Exterior  
(East facing)

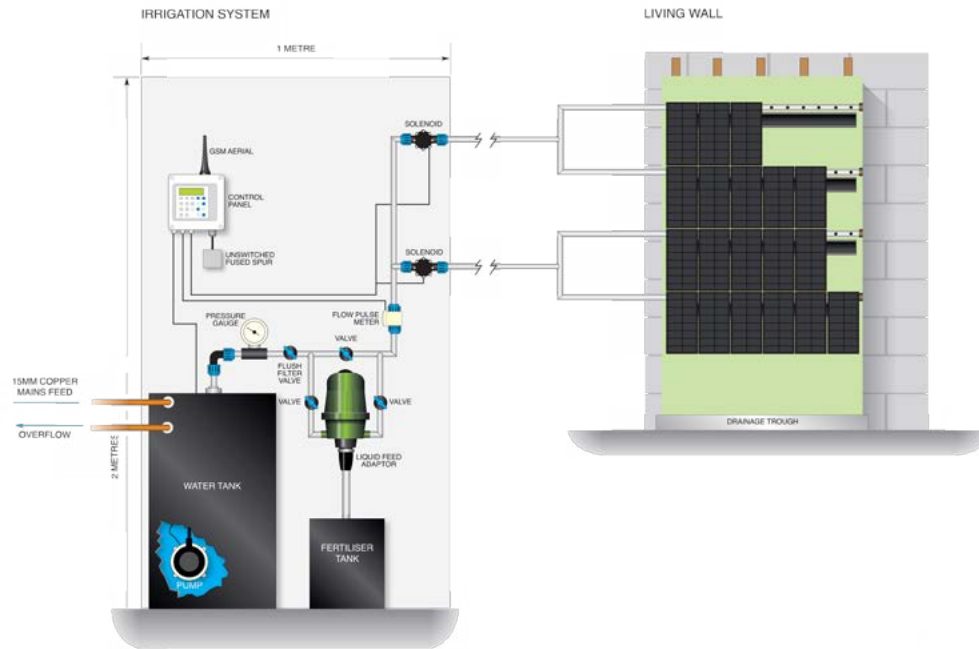


Exterior  
(West facing)



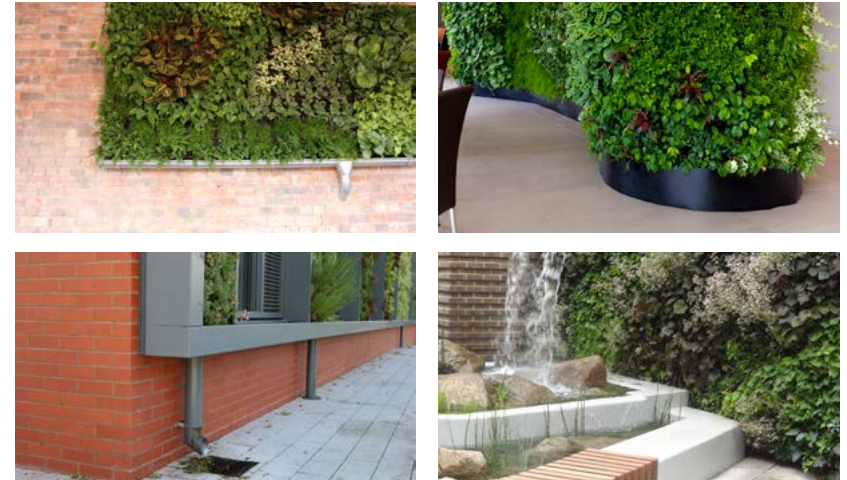
## Every ANS LivingWall includes a built in irrigation system.

The irrigation pipes are hidden from view but fulfil a critical role. The supply of water to the wall is essential to healthy plant development. The back of each living wall module is kept moist facilitating the natural composting of mature roots. Harvested rainwater from the building roof can be used for the wall.



## Drainage is needed to cater for the minimal run-off at the bottom of the living wall.

As standard practise we will install a 107mm x 51mm black plastic gutter. However there is no limit to your creativity in specifying different drainage channels, as per the following examples:



# Our Story

## Eco-architectural solutions.

More than half of the worlds population lives in cities and the number keeps increasing. As cities become more crowded, every inch of space is precious. So we've found ways to make the best use of wasted spaces.

ANS LivingWalls can clad walls both inside and out, while ANS GrufeKit turns wasted flat roofs into an ecosystem. Inside buildings we can also use ANS LivingCanvas and ANS MossArt to bring humans closer to nature.

As the name 'ANS Global' suggests we work on projects around the globe. From Dubai to Christchurch and from London to Cape Town we can assist with your project.

We hope you are inspired to enhance structures naturally.



## Some clients that we have worked with:





**ans** LivingWall

