



VISTAGREEN

ARTIFICIAL GREEN WALLS

TECHNICAL & INSTALLATION GUIDE

EXPLORE VISTAGREEN

The market leader in artificial green walls



Where horticultural limits are reached, our artificial green walls are the market-leading solution for spaces where plants cannot grow.

Our green walls transcend the need for light and water and are at home anywhere your imagination takes them.

Manufacturing our Signature Panels to the highest standards in our own facility, we have faithfully replicated nature's beauty using colors and forms virtually indistinguishable from real plants.

Contents

	ABOUT
P. 4-5	A personal touch
P. 6-7	Research and Development
P. 8-9	The Vistagreen difference
	TECHNICAL
P. 10	Unique 3-panel solution
P. 11	Personalize with Color Boxes
P. 12-13	UV Signature Panels technical datasheet
P. 14-15	FR Signature Panels technical datasheet
P. 16	Panel profile
P. 17	How to measure
P. 18	How to measure for cut-offs
P. 19	Fixing system
	INSTALLATION
P. 20	Installation methods
P. 21	Installation tools
P. 22	Panel preparation
P. 23	6-step installation
P. 24	Fixing layout and gaps
P. 25	Panel layout
P. 26-28	How to cut the grid
P. 29-32	Other installation methods
P. 33	Maintenance and cleaning guide



A personal touch

Paul Alder leads Vistagreen and has 25 years' experience in the landscape industry. He has won multiple awards including 12 national awards, 5 Chelsea medals including the highly coveted Gold, and a Gold medal at Hampton Court Flower Show.



"As a multi-award winning horticulturalist with 25 years' experience of building gardens for prestigious commercial and residential projects, I realized there is a demand for a flexible system that creates the look of beautiful vertical garden wall planting without the hassle of using real plants that require natural light and ongoing maintenance."

Vistagreen is not simply a more cost-effective and zero-maintenance alternative to a real green wall (although both these statements are true). Vistagreen was created to solve the problem of greening spaces where real plants cannot grow.

Our panel system was created to meet the demands of designers and architects, as well as the general public who were struggling with the installation, ongoing maintenance and high cost of growing real plants vertically.

We constantly innovate to ensure that our products are an exciting blend of high style and simplicity of function. To offer as many options as possible, our designed solutions to practical greening are exceptionally customizable, allowing customers to refresh their surroundings in their own unique way.



RESEARCH AND DEVELOPMENT

COMMIT US TO EXCELLENCE

Our success depends on innovation, which means constantly improving on product design and durability, anticipating new needs for natural-looking environments and creating seamless and better interactions between our green walls and our customers.

Our highly experienced and dedicated team are committed to making the whole world beautiful, one panel at a time. Their passion, skills and knowledge are central to the success of the company.



WHERE CREATIVE ENERGY RUNS HIGH



The new Vistagreen Research and Development Center in Surrey, United Kingdom, is a multi-purpose facility for product design and testing, training, distribution and customer engagement.



THE VISTAGREEN DIFFERENCE

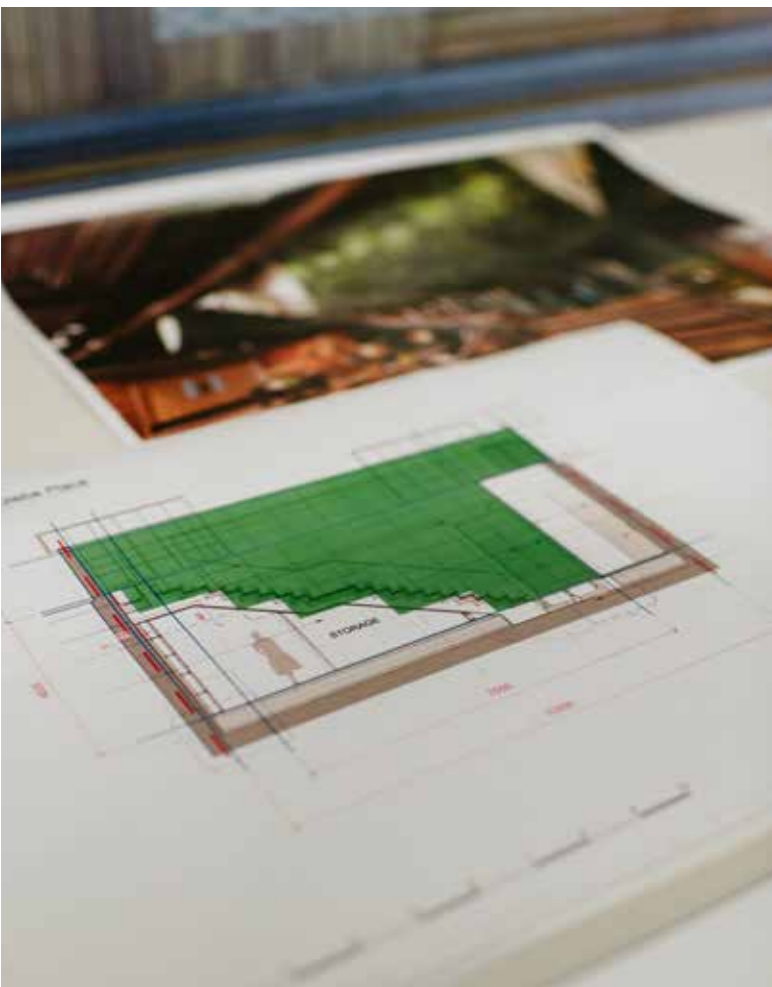


Our London-based Design team combine over 25 years of design and landscaping practice and a love of horticulture to make the Vistagreen range the best artificial greening solutions for interior and exterior spaces in the world.

Vistagreen designers work hard to capture the exact colors, shadings, dimensions and movement of real plants.

Our meticulous workmanship comes from a deep appreciation of nature. The splendour of creation inspires us to bring every leaf on our panels to life, faithfully replicating its vibrant colors, elegant shapes and mesmerizing movements.

While our Vistagreen range is engineered with rigorous technical precision, we also see ourselves as artisans who work with our hands to create beautiful and functional decor that pleases the senses.



CRAFTED WITH CARE



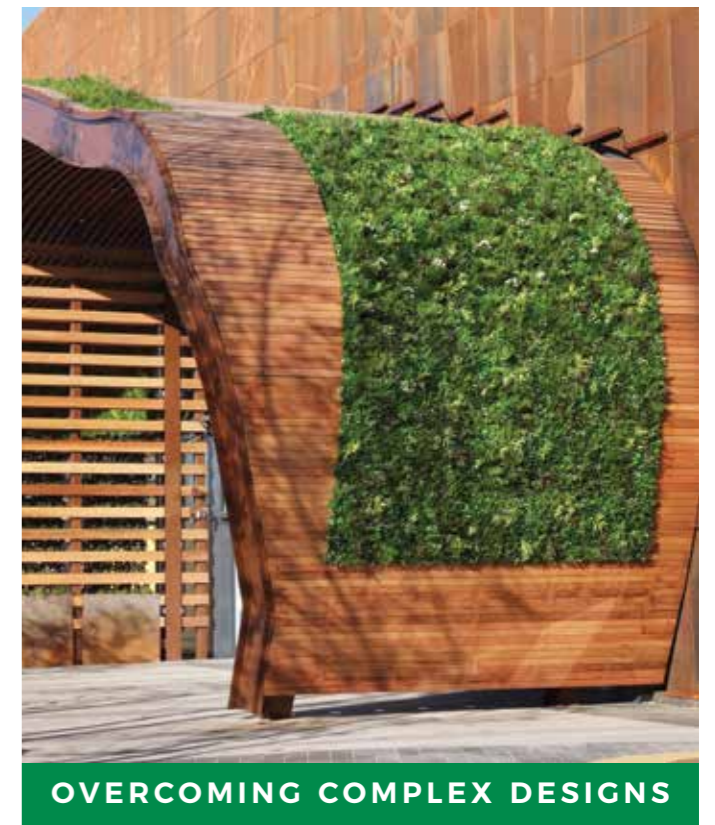
VG UV+ TECHNOLOGY*



100% PURE COLOR PIGMENTS



HYPER-REALISTIC LOOK



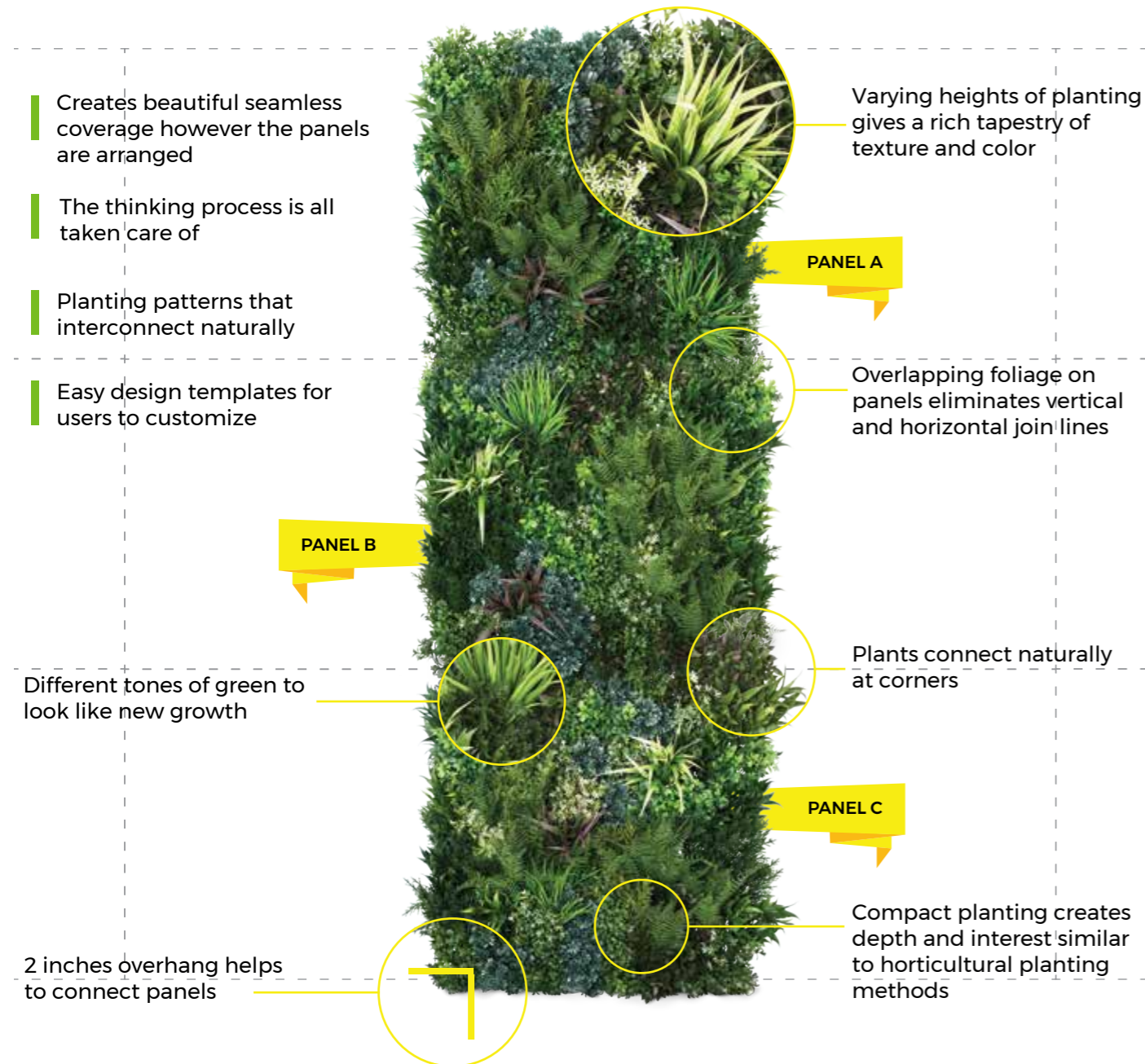
OVERCOMING COMPLEX DESIGNS

***UV and Fire Rated options available**

UNIQUE 3-PANEL SOLUTION

THE FUTURE OF ARTIFICIAL GREEN WALLS IS HERE

Vistagreen's lush artificial green wall system panels have been designed to create a beautiful green environment with a realistic effect even in the most inhospitable planting locations.



Vistagreen is supplied in packs of three panels which combine together to create a completely natural and non-repeating look. Each basic pack contains three 2'-7 1/2" x 2'-7 1/2" panels.

SIGNATURE PANEL



The key component of Vistagreen's unique artificial wall solution is the Signature Panel, which is used to create the stunning vertical gardens.



PERSONALIZE WITH COLOR BOXES

Color Box packs contain individual plants that can be tucked into the basic panels to customize the look. In addition, the beautiful Signature Panel can be enhanced with the purchase of Color Boxes.



SIGNATURE PANELS



UV+ TECHNOLOGY

PRODUCT DESCRIPTION

The standard size panel comprises UV stabilized artificial foliage fixed to a powder coated mild steel grid.

FEATURES

- Three-panel system prevents repetition in planting and removes join lines
- Durable panels manufactured to ISO 9001
- UV safe with test certificates
- REACH Compliant
- Quick and easy installation
- Fifteen different plant varieties
- Customizable with a range of color boxes

TECHNICAL SPECIFICATIONS

Standard Size Panel	Height: 2' - 7 1/2" Width: 2' - 7 1/2" Depth: up to 8"
Coverage	1 Panel = 6.88 sqf
Weight	Approx. 15.5 pounds per panel
Distribution	72 plants per panel
Color Reference	Mixed colors
Manufacturing process	Injection molded polyethylene / Foliage fixed to the grid manually
Packing	Box of three panels A,B,C
Warranty	5-year in the US

Quality Standards / Certification:

UV test: BS EN ISO 4892-2: 2013 - 'Plastics - Methods of Exposure to Laboratory Light Sources - Xenon-arc lamps.

Freeze/Thaw test: MIL-STD-810G Method 524.

VG UV+ Technology

Quality Standard

Tested & Certified

5 Year US Warranty

Low Maintenance

Recyclable



VG UV RATINGS



The majority of artificial plants on the global market are made from PE (polyethylene). PE on its own is susceptible to degradation from UV light. We add UV stabilizing additives directly into the plastic to slow the molecular break down of the polymers. These absorb the UV rays and protect the color and structure of each plant.

Our foliage is tested in xenon arc chambers for 3000 hours (equivalent to 3 years) at Mediterranean irradiance levels. These accelerated test chambers mimic the ultraviolet light levels found around the globe and test the ability of our foliage to not fade or become brittle.

The test results refer back to the gray scale which is a visual test of changes in color or hue of the material. "Gray scale consists of pairs of standard gray chips representing progressive differences in lightness or contrast - zero or no difference for grade 5 to maximum difference for grade 1. It is generally used for evaluating changes in the color of textiles while carrying out color-fastness tests."

TEST RESULT:

Here at Vistagreen we test and retest to ensure the combination of UV tolerant additives is correct and our foliage remains at 4-5 on the gray scale after 3000hrs.

Box 1: The Gray Scale is used for determining changes in color
This scale consists of five pairs of non-glossy gray color chips, which illustrate the perceived color differences corresponding to the ratings

Key to Gray Scale	
Rating 5	No change in appearance
Rating 4	Slight change in appearance
Rating 3	Moderate change in appearance
Rating 2	Marked change in appearance
Rating 1	Very marked change in appearance

SIGNATURE PANELS



FIRE RATED

PRODUCT DESCRIPTION

The standard size panel comprises Fire Rated artificial foliage fixed to a powder coated mild steel grid.

FEATURES

- Three-panel system prevents repetition in planting and removes join lines
- Durable panels manufactured to ISO 9001
- Fire Rated with test certificates
- REACH Compliant
- Quick and easy installation
- Fifteen different plant varieties
- Customizable with a range of color boxes

TECHNICAL SPECIFICATIONS

Standard Size Panel	Height: 2' - 7 1/2" Width: 2' - 7 1/2" Depth: up to 8"
Coverage	1 Panel = 6.88 sqf
Weight	Approx. 15.5 pounds per panel
Distribution	72 plants per panel
Color Reference	Mixed colors
Manufacturing process	Injection molded polyethylene / Foliage fixed to the grid manually
Packing	Box of three panels A,B,C
Warranty	5-year in the US

Quality Standards / Certification:

Reaction to fire classification: B-s1, d0. BS EN ISO 13501-1:2007+A1:2009 Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire tests. Test to flammability UL94HB classified HB.

Freeze/Thaw test: MIL-STD-810G Method 524.

Fire Rated

Quality Standard

Tested & Certified

5 Year US Warranty

Low Maintenance

Recyclable



REACTION TO FIRE CLASSIFICATION

At Vistagreen we pride ourselves not only on the realism of our foliage but also the research and development of stronger safer materials. We now boast a market-leading fire classification that meets the high demands set in the building industry regarding fire safety.

Vistagreen's range of foliage is tested as per the criteria set out in EN ISO 13501-1:2007+A1:2009 Fire classification of construction products and building elements. Not only is our foliage tested to prove its fire retardancy but also for its smoke output.

TESTING METHODS

The methods that the Vistagreen range is tested to are:

- EN 13823:2010+A1 Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item.
- ISO 11925-2:2010 Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test.

TEST RESULT AND CLASSIFICATION: B-s1,d0

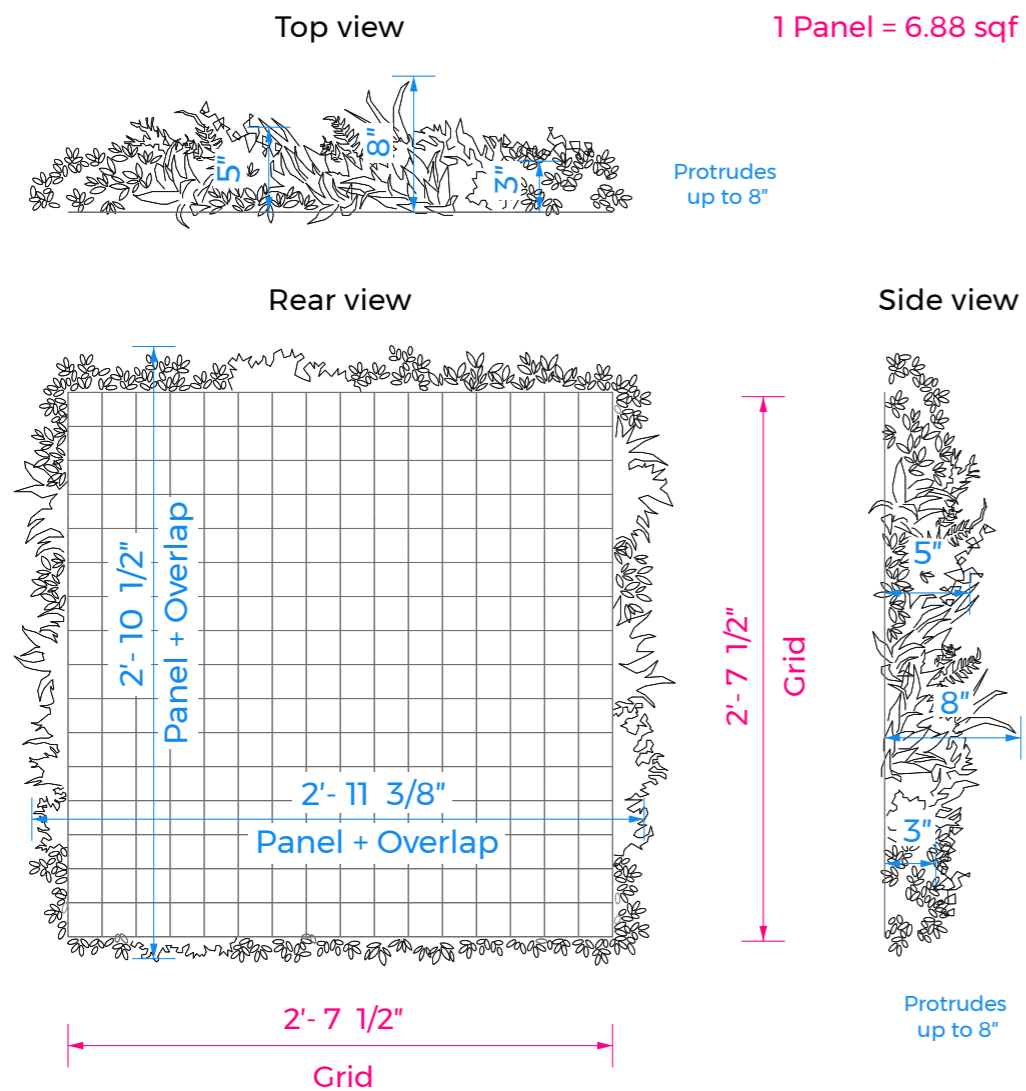
Fire behavior	Smoke production	Flaming droplets
B	s 1	d 0

These tests measure the flame spread and propagation of a fire and measures the smoke levels released during a test.

Class	Test method(s)	Classification criteria	Additional classification
B	EN 13823 and	FIGRA ≤ 120 W/s and LFS < edge of specimen and THR _{600s} ≤ 7,5MJ	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ¹ : Exposure=30s	F _s ≤ 150mm within 60s	

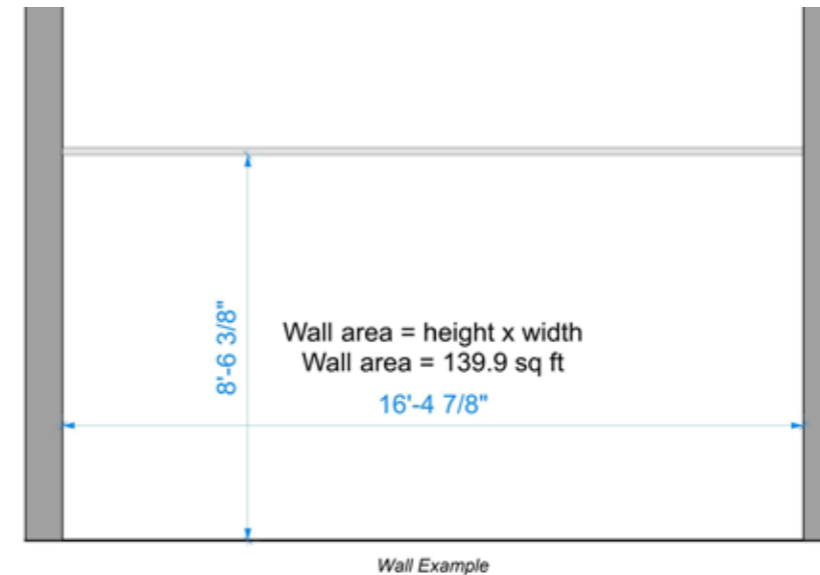
This allows our clients peace of mind, safe in the knowledge that our product will meet the demands of the increasingly stringent requirements of the fire safety industry.

PANEL PROFILE



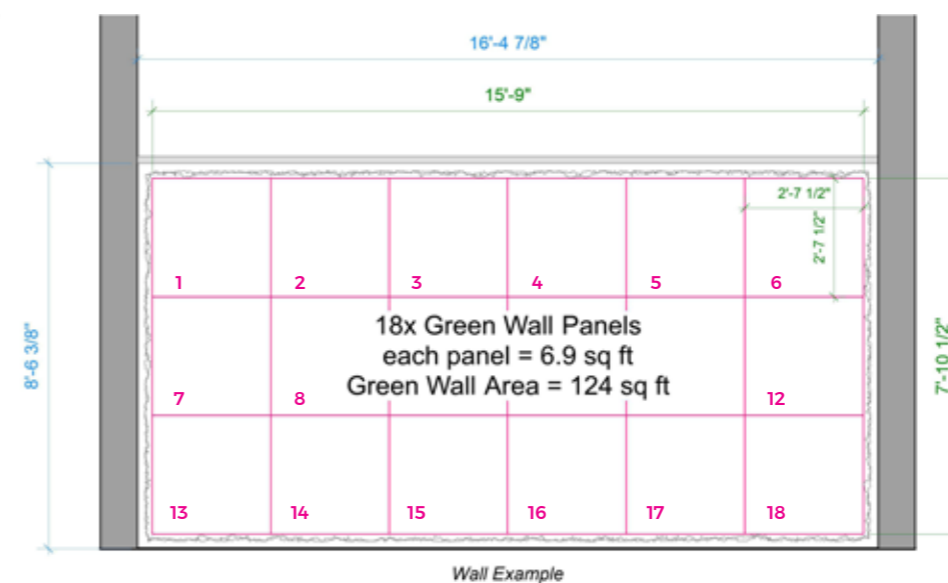
The Signature Panel was designed with a small allocation of 'planting overlap' to allow for seamless installation of multiple panels. The top overlap is slightly greater than the bottom one whereas the side overlaps are the same. The overlap also serves to disguise the grid that holds the plants.

HOW TO MEASURE



1. MEASURE THE WALL

Height and width.

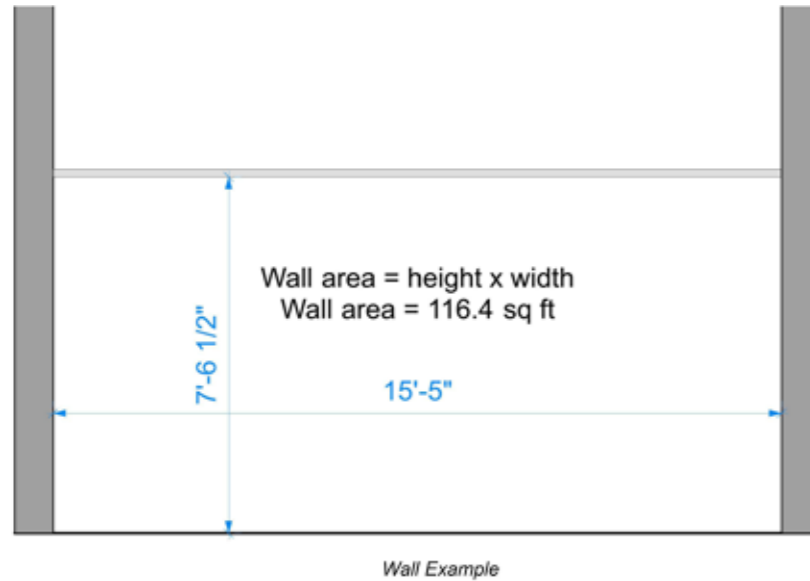


2. COUNT THE PANELS

Count the number of complete panels that you will need. You may need to estimate for any extra panels to fill to the edge of your space.

For how to measure for cut-off panels, see guide overleaf.

HOW TO MEASURE FOR CUT-OFFS



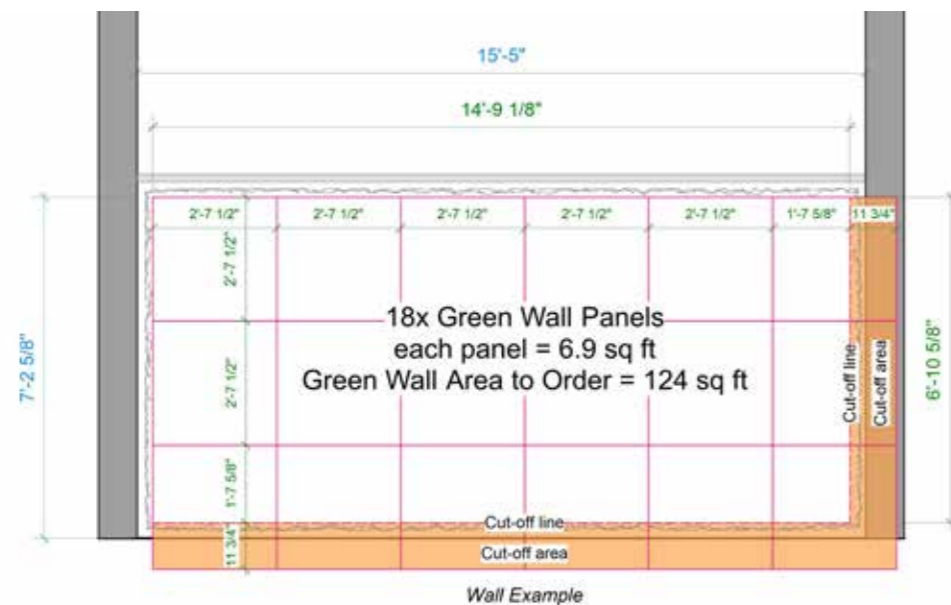
1. MEASURE THE WALL

Height and width.



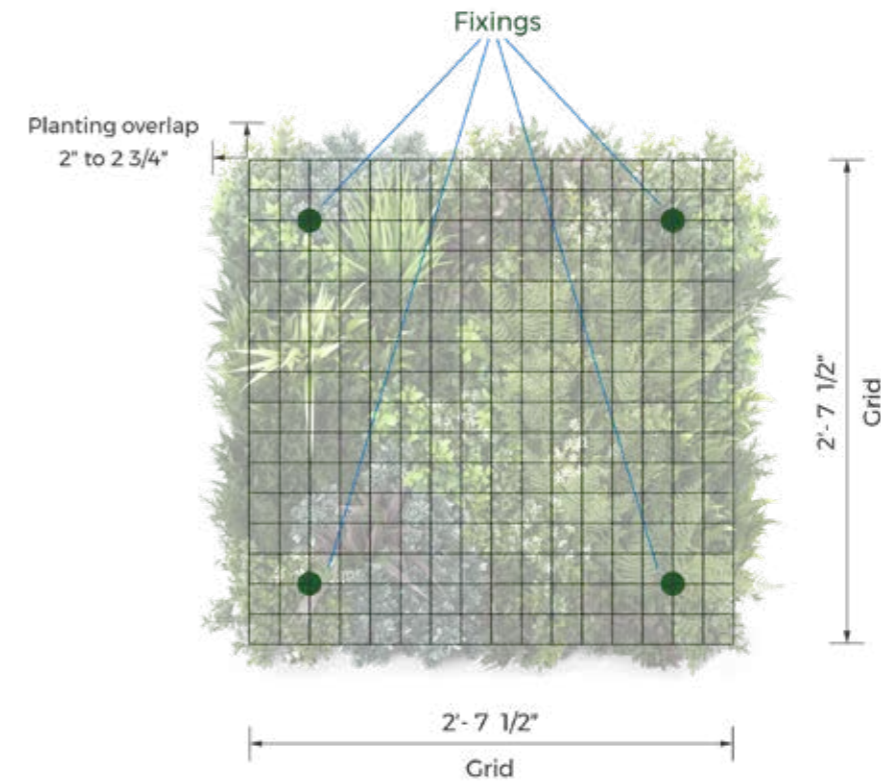
2. ESTIMATE CUT PANELS

If panels will not fit your space exactly, allow for extra panels which can be cut to size using this guide. See page 26.



FIXING SYSTEM

The Vistagreen Fixing System has been specifically designed to securely hold panels in the optimum position and to give the best result in a wide variety of applications.



Use our fixings for a neat and reliable installation. Each Signature Panel requires a minimum of 4 fixings. The fixings can be attached to the vertical or horizontal wires or placed at the joins.

FIXINGS

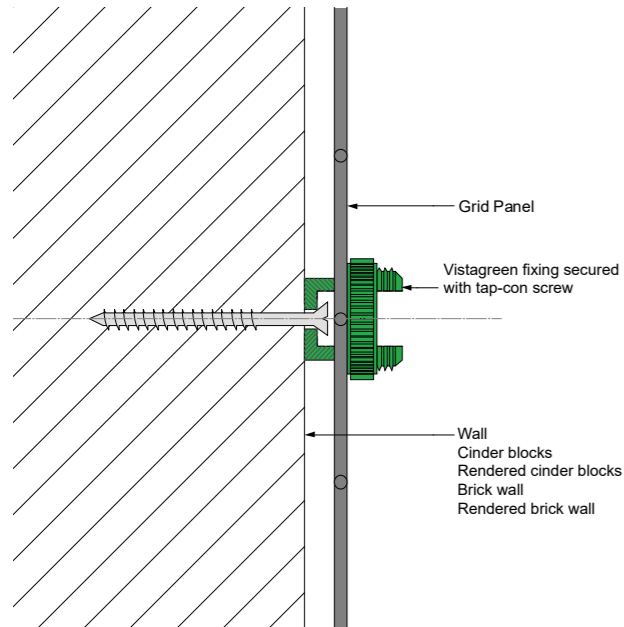


- Can be attached to most surfaces simply and quickly using standard tools.
- Create a gap between the panel and the mounted surface to allow a free flow of air.
- Enable panels to be removed and remounted easily to allow for cleaning and maintenance.
- Available in two convenient pack sizes containing either 12 or 120 fixings.

INSTALLATION METHODS

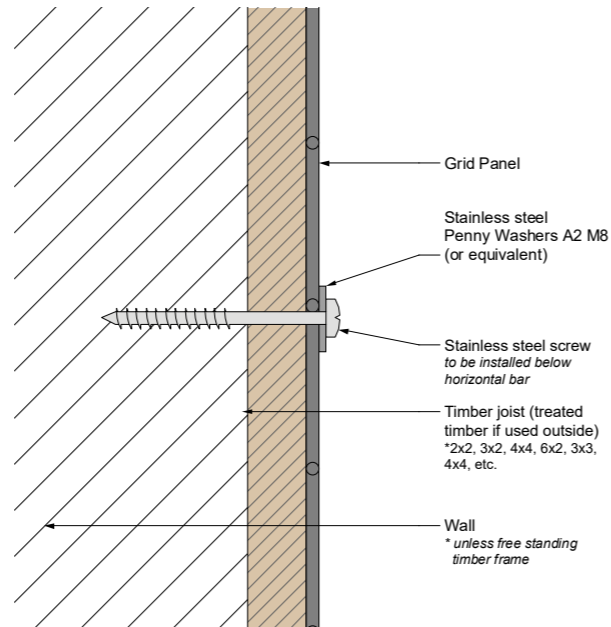
METHOD 1:

Brick/Cinder Block wall using Vistagreen fixing



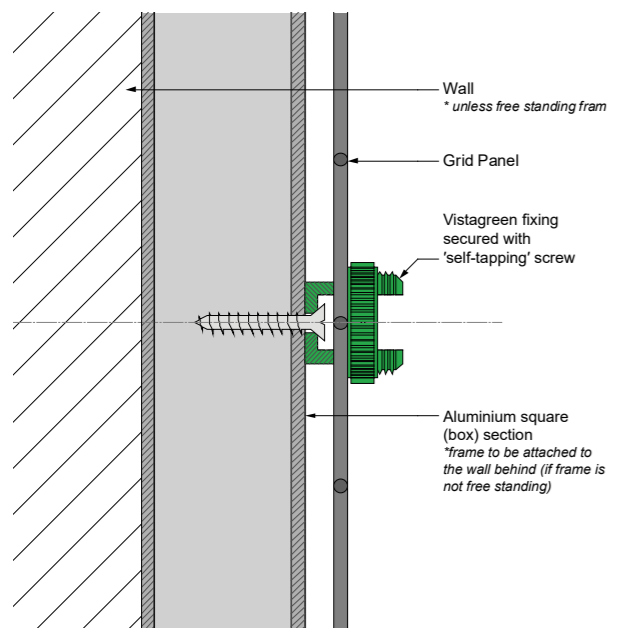
METHOD 2:

Timber frame using screw and washer



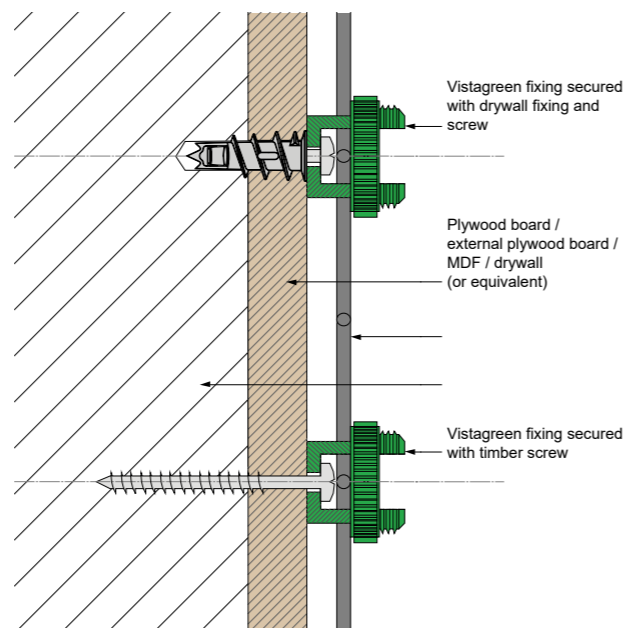
METHOD 3:

Aluminium (metal) bar



METHOD 4:

Drywall / Plywood board / MDF



INSTALLATION TOOLS

These are the tools that you need to install Signature Panels.



Safety goggles



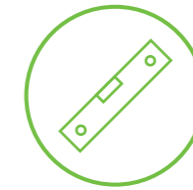
Tape measure



Drill



Safety gloves



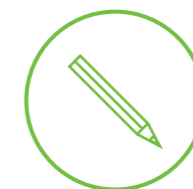
Spirit level



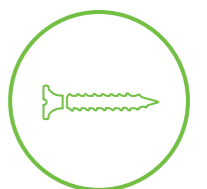
Drywall fixings



Ladders or mobile tower



Pencil



Screws

PANEL PREPARATION

PREPARING THE PANELS IS THE MOST IMPORTANT STEP IN THE INSTALLATION PROCESS



**OPTION 1:
BEFORE INSTALLATION**

1. Lay the boxes flat. Open the boxes and ensure all parts of your order are present.
2. Panel will appear flat and compressed.
3. Unfold the foliage manually by hand to increase volume and depth of the panel.



**OPTION 2:
AFTER INSTALLATION**

1. Install all the panels to the wall.
2. Unfold the foliage as panels will look flat and compressed.
3. Pull the larger plants away from the panel to make them stand up. Although the plants should be secure enough so as not to come loose, do not use excessive force.

APPLICABLE FOR OPTIONS 1 & 2

1.
Manipulate the foliage with your fingers. Pulling the plants in different directions will add to the realism and replicate natural, random growth.

2.
Once you have prepared the larger plants, do the same with the smaller ones.

3.
Repeat the same process until all panels have been taken out of the boxes or installed.

NOTE: Some of the smaller leaves may come loose during preparation, this is to be expected. As extra leaves are added during the manufacturing process to compensate for any small loss, this will not affect the look of the product.

6 EASY STEPS TO FOLLOW



Measure & mark



Drill the holes



Plug & screw the fixing



Attach the panel



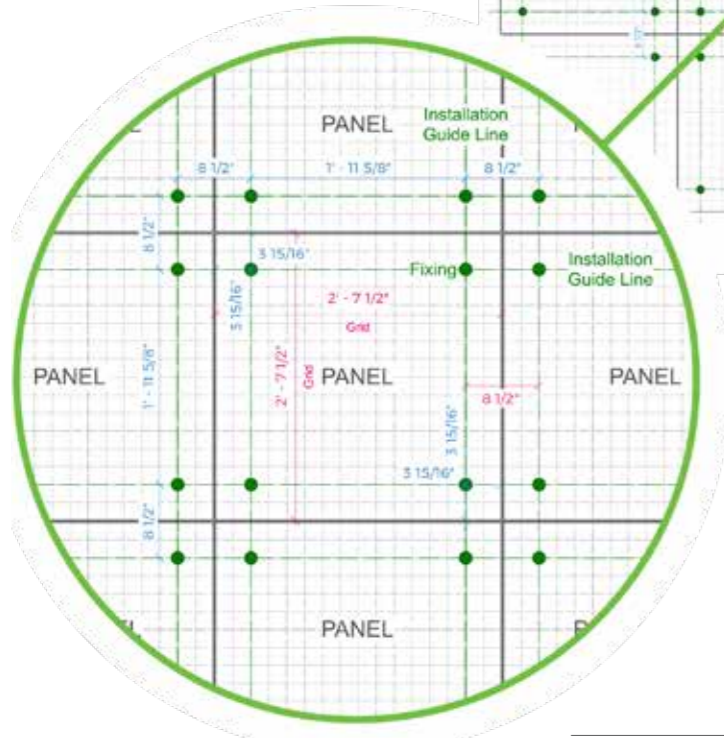
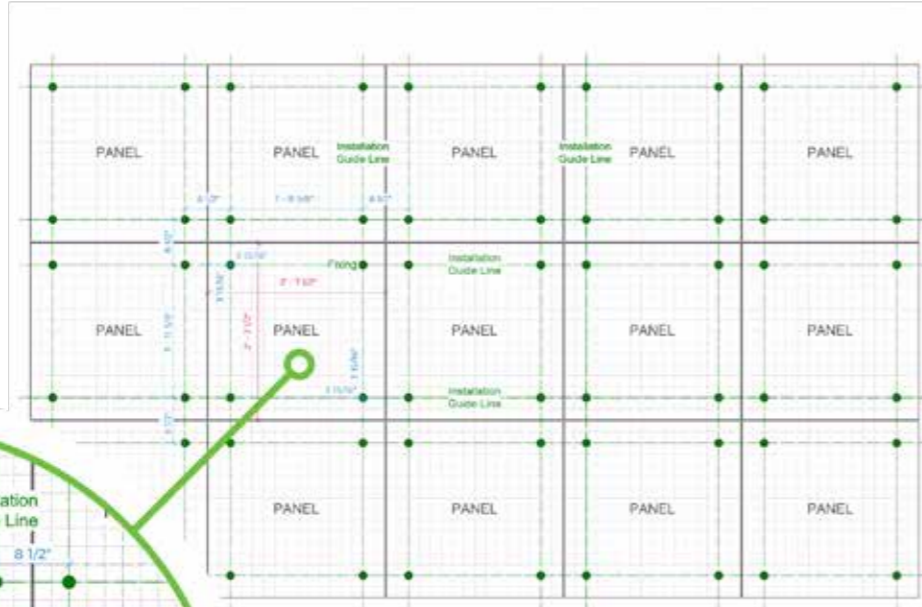
Secure the fixing



Ruffle & bend the foliage

FIXING LAYOUT

MEASURE AND MARK THE HOLES IN THE WALL



GAPS BETWEEN THE PANELS

We recommend to leave a gap between panels to allow for easier installation and to reduce bunching of foliage on joins.

The maximum gap between 2 panels can be : 0.8125" | 13/16"

Gap left in the drawing = 0.6" (optimum)

STEP 1

At top left of the panel, measure 3 15/16" down and mark this as first point.

STEP 2

Measure 1' - 11 5/8" across horizontally from first marked point and mark as second point.

STEP 3

Measure 1' - 11 5/8" down vertically from first marked point and mark as third point.

STEP 4

Measure 1' - 11 5/8" across from third point and mark as fourth point.

STEP 5

Measure 8 1/2" from point 2 and 4, which become points 1 and 3 of the second panel. This process can be continued throughout installation.



PANEL LAYOUT

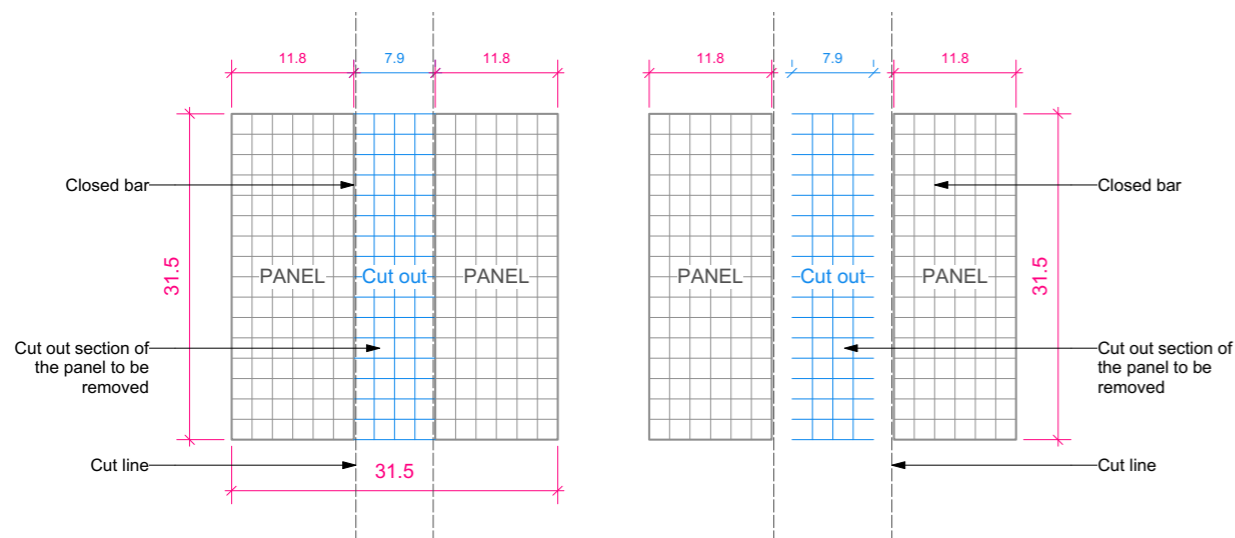
Make sure you mix the panels so you don't have the same panel against to another.



The fixing should ideally be installed on the cross joint of the grid as shown on the pictures below; however, it is possible to secure the Signature Panels with fixings on the horizontal or vertical bars, with the latter being the least recommended option.



HOW TO CUT THE GRID



NOTE: Signature Panels are best cut using a bolt cutter. Cutting discs cause damage to foliage and the sparks may leave scorch marks and black marks. A disc cutter also leave very sharp edges on cut grids. Personal Protection Equipment is recommended to be worn prior to cutting, safety glasses and gloves as a minimum.



STEP 1
Measure carefully and mark the area to be trimmed.



STEP 2
Clip off the excess as close as possible to a grid section and separate the parts.



STEP 3
File the grid after cutting.



STEP 4
Protect cut point with metal paint.



STEP 5
Re-attach loose from the vertical off-cuts with cable ties.



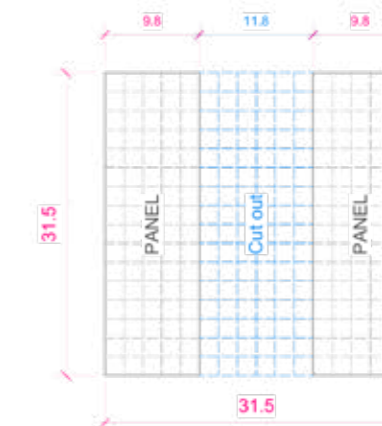
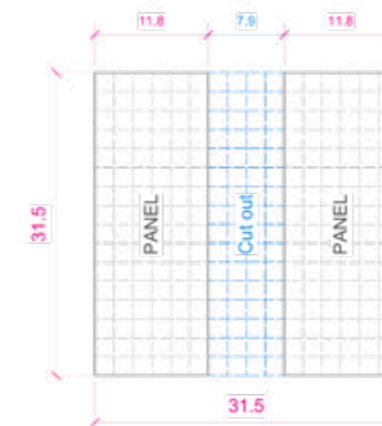
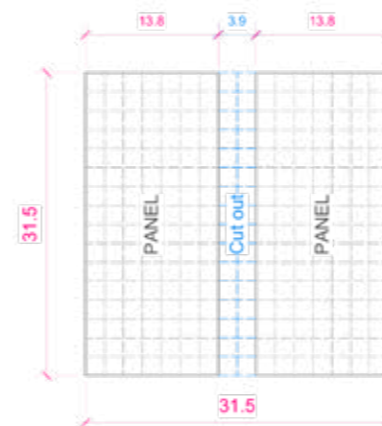
STEP 6
Re-adjust any plants on the cut parts and fill in all the gaps with loose foliage.

CUTTING TIPS

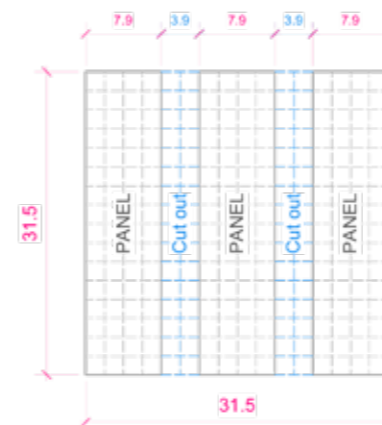
- 1) All cut panels to finish on a **closed bar**, so the plants don't slip off.
- 2) Spare foliage from the offcuts to be re-attached to the rest of the green wall where required.
- 3) Plastic ties to be removed from the off-cut parts of the panels.
- 4) Vertical cuts are easier to make than horizontal cuts.
- 5) Horizontal cuts to be started from the top of the panels (unless otherwise required).
- 6) Always cut from the inside out.

VERTICAL CUTTING

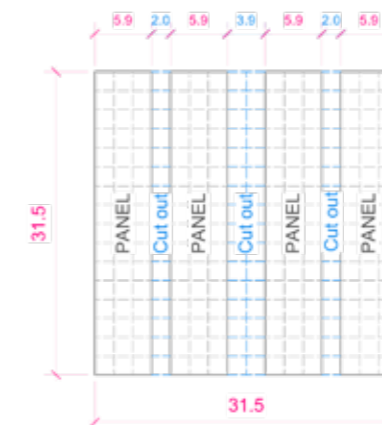
2x Sections from 1x Panel



3x Sections from 1x Panel



4x Sections from 1x Panel

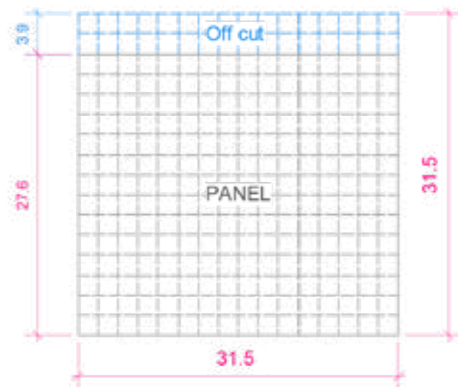


5x Sections from 1x Panel

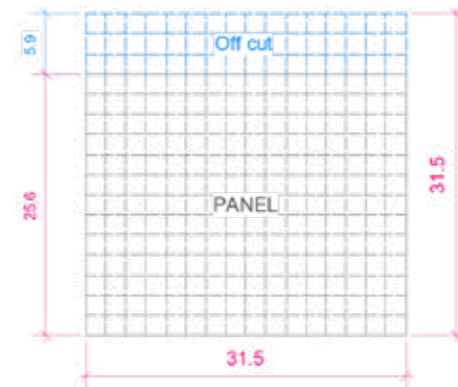


HORIZONTAL CUTTING

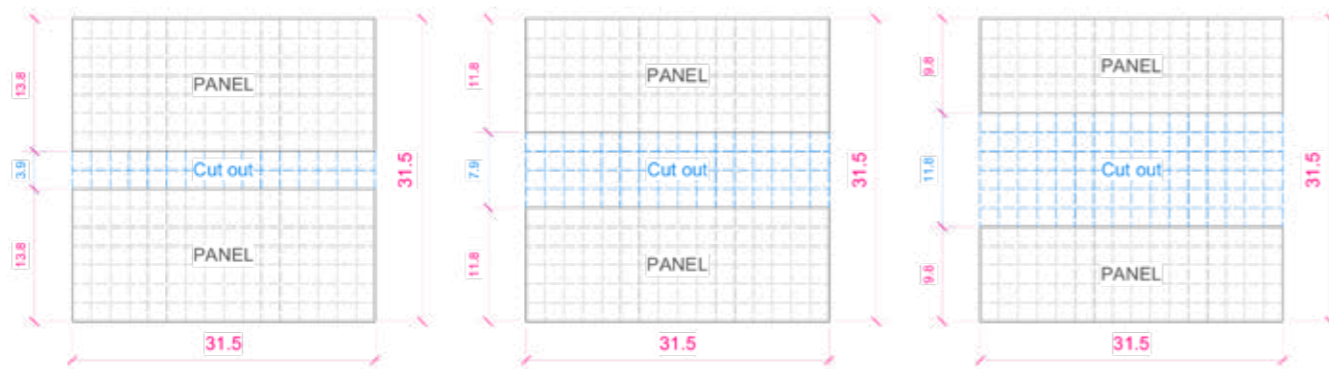
1x 3.9" end off-cut



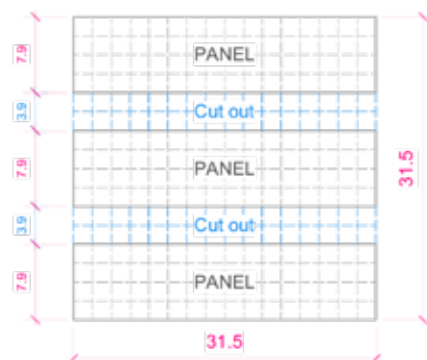
1x 5.9" end off-cut



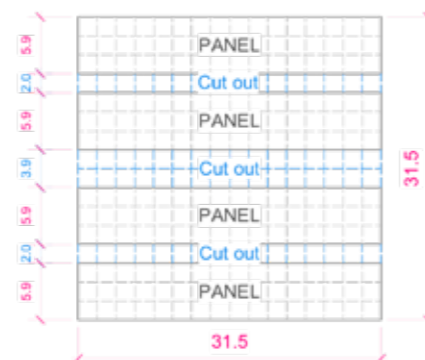
2x Sections from 1x Panel



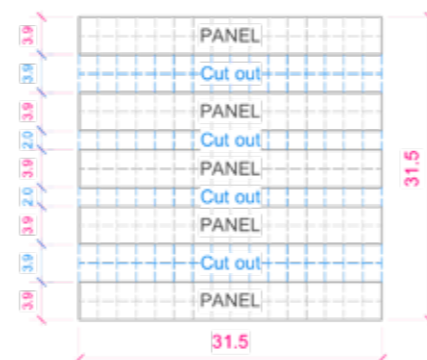
3x Sections from 1x Panel



4x Sections from 1x Panel



5x Sections from 1x Panel



TIMBER FRAME FOR THE SIGNATURE PANELS

In some cases, a timber frame needs to be arranged in order to have a fixed and sturdy base for the Signature Panels, such as:

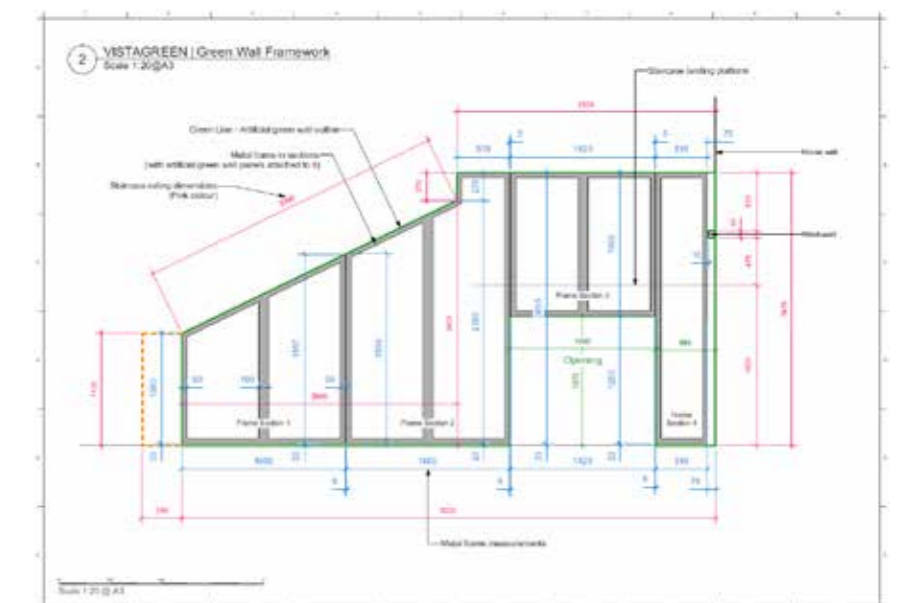
- Existing fence is not strong enough for installation
- The existing wall or fence is uneven
- Waterproof membrane wall (note: specialist advice should be sought prior to any installation where a waterproof membrane exists. See p.30).



METAL FRAME FOR THE SIGNATURE PANELS

The metal frame system needs to be arranged in a similar way to the timber frame. The main difference is timing. While the timber frame can be done by the installer/contractor on the same day of installing the Signature Panels, the metal frame needs to be fabricated prior by a professional metal fabricator which takes time since it is bespoke for each specific project.

If the panels need to be cut obliquely like on the project with the metal frame below, then we recommend to use silicone end caps to cover any sharp edges of the steel grid.



Metal frame layout plan advice: (needs to be approved by the architect)

WATERPROOF MEMBRANE FOR THE SIGNATURE PANELS / DELTA PLUG LAYOUT ADVICE

ARRANGING INSTALLATION ONTO WATERPROOF MEMBRANE

- Site visit to discuss with the contractor where the green wall panels are going and advice on the location of the Delta Qwik-Seal Plugs or US equivalent.
- Contractor to mark and install Delta Qwik-Seal Plugs onto the waterproof membrane
- Contractor to install timber frame onto the Delta Plugs
- Signature Panels can be installed onto the timber frame with simple screws and washers

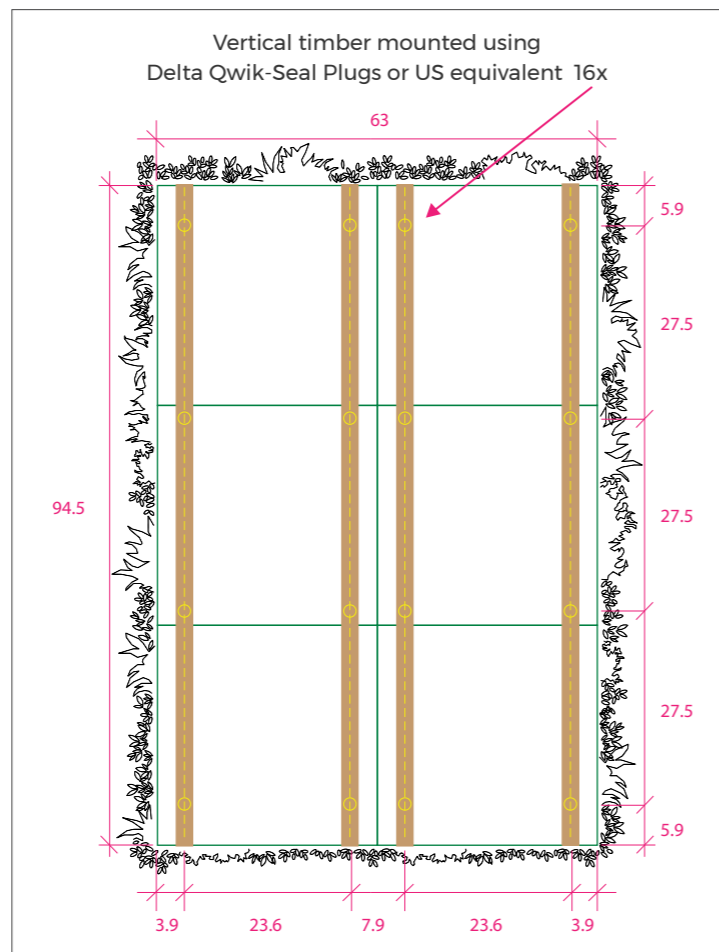
The reason for fixing a baton into the membrane is that usually a separate contractor would be employed to fix through the waterproof membrane (to protect the warranty) and fixing vertical batons leaves tolerance for the final fix of the Signature Panel. It may also be possible to use an adhesive to affix timber batons. Contact Vistagreen to discuss prior to any installation.



US equivalent to Delta Qwik-Seal Plug



Delta Qwik-Seal Plug installed into the waterproof membrane



Layout plan advice for the Delta Plugs and timber

INSTALLING ONTO RAILINGS

The panels can be also installed onto metal grids or balcony railings as well. Instead of using the Vistagreen Fixings the panels can be simply attached with high quality UV Stable (if outdoor) heavy duty cable ties.



UV Stable heavy-duty cable ties

EXAMPLE:



Metal cage before Signature Panel installation



Completed project dressed with Delicate White Color Box prior to install due to complicated access to the wall

LOGO IN FRONT OF THE SIGNATURE PANELS

For clients that would like to arrange a sign/logo in front of the Vistagreen Wall, we usually ask to have the sign or logo company to go to site first and install the fixings of the sign/logo and any electrical cables the logo requires.

Once the sign/logo fixings + cables are in place the Vistagreen Wall can be installed on top of it, allowing any existing fixing to go through on the Vistagreen panel grid. After the Vistagreen installation the sign/logo company needs to return and attach the sign/logo onto their fixings.

EXAMPLE:



Fixings of the sign - letters to be removed before panel installation



Completed Vistagreen wall with the sign/logo on top (Dressed with Lush Green Color Box)

MAINTENANCE AND CLEANING GUIDE

INDOOR GREEN WALLS

- Indoor Vistagreen Green Walls require occasional, gentle cleaning with a microfibre brush to keep the panels free from dust and dirt.
- Frequency of cleaning will depend on location. Water can be used to clean the foliage using a light spray and then allowed to dry naturally without wiping the surface with a cloth.
- Do not use chemicals / detergents.

NOTES

- Do not use excessive force. This may cause damage to plants.
- Do not jet wash / vacuum.
- Occasionally foliage may come loose from the panels. This is to be expected. Larger plants can be re-attached to the frame with cable ties.



OUTDOOR GREEN WALLS

- Outdoor Vistagreen Green Walls require occasional hosing to keep the plants free of dust and dirt.
- Frequency of cleaning will depend on location, areas of high traffic should be cleaned regularly.
- Do not use chemicals / detergents.

- Ladders or mobile towers should not be placed directly on the foliage or green wall as this could damage some of the delicate foliage when cleaning.



- For advice and information on keeping your Vistagreen Artificial Green Wall in perfect condition contact us at info@vistagreen.com

All our products come with a US 5 year warranty. Please see our standard terms and conditions for more detail at:

www.vistagreen.com



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