

High resistence grid panel for green walls



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#### **VERTICAL GREEN**

The use of vegetation to cover buildings is rightfully becoming part of the repertoire of modern architecture. Numerous contemporary buildings are strongly characterized by plant-covered walls: while such a choice allows buildings in rural areas to harmoniously blend into the surrounding environment, it's in the urban context that vertical green expresses its full potential. In densely built-up areas, and particularly where parks and gardens are scarce, vertical green greatly improves the overall quality of the environment, and has a positive aesthetic value for residents.



Picture: detail of vertical green

WALL-Y<sup>®</sup> fits well into this philosophy: providing support for climbing plants, it's the palette on which to creatively use nature and beautify buildings, finally producing better cities. It's not just a matter of looks: the presence of vegetation is relaxing and has a positive effect on the health. Reintroducing natural elements in areas heavily affected by human activities mitigates the environmental impact of urbanisation, fulfilling the desire of city dwellers for more nature around them. Creating a green wall with WALL-Y<sup>®</sup> means having a "green" vision of the world, putting respect for the environment as a top priority: the choice of those who aspire to aesthetic and functional benefits with future in their minds.



Picture: example of outdoor vertical green

### VERTICAL GREEN WITH WALL-Y®

WALL-Y<sup>®</sup> is a grid developed for the creation of green walls. The special texture created by the irregularly shaped cells is of great aesthetic value, decorating walls even before the vegetation cover has developed. Made of plastic, the grid is light, modular and very easy to install, is moisture- and microorganism-resistant, proving robust and reliable.

A wall covered with WALL-Y<sup>®</sup> provides a better thermal performance to the building and protects it against the corrosive effects of urban pollution.





### THE ADVANTAGES OF WALL-Y®

- Gives an immediate decorative result
- Light
- Modular
- Fast to assembly and fix to the wall
- Weather- and moisture-resistant
- UV-resistant
- Resists to molds, fungi, and all other microorganisms
- Cell shape engineered for good anchoring of climbing plants
- Protects the wall from weathering



# VERTICAL GREEN WITH WALL-Y®

### THE ADVANTAGES OF A GREEN WALL WITH WALL-Y®

- Green walls improve the appearance of old and new buildings, increasing their commercial value
- Noise attenuation
- Dust filtering
- Mitigation of the "urban heat island" effect
- Creation of new environments for the life of animals and plants within cities
- Protection of walls from thermal and mechanical stress



## **TECHNICAL CHARACTERISTICS**

Dimensions	58 X 58 X 7.5 cm (3 pcs/m <sup>2</sup> ) 22.8 x 22.8 x 2.9 in (0.3 pcs/sg.ft)		58 0
Weight	1.5 Kg/pc. / 3.3 lbs	- -	
Material	Virgin PE HD *	ļ	
Type of connection between panels	Double overlap	22.8	XC
Horizontal on-centres of fixing holes	49.5 cm / 19.5 in	) mc	
Vertical on-centres of fixing holes	29 cm / 11.4 in	58 0	
Size of fixing holes	Ø 10 mm / 0.4 in	] _	VZ
Panel thickness	5 cm / 1.9 in		on-centres
Height of the integrated fixing brackets	2.5 cm / 0.9 in	5 cm 0.9 in	
Available colours**	Green, white, Transparent	N. 0	



\*Flexural modulus 780 N/mm<sup>2</sup> - Tensile strength 22 N/mm<sup>2</sup> - Coefficient of thermal expansion 0.2 mm/m/°C \*\*Custom colours are available upon request



Double-overlap connection



Interlocked panels



# HOW TO FIX TO THE WALL

The WALL-Y<sup>®</sup> grid panels are permanently fastened to the wall. Anchors are fitted through the holes in the integrated brackets, as illustrated below.





Orient the grid panel as illustrated and place it against the wall and mark the position of the holes with a felt-tip pen. Drill two holes with an 8 mm (0.3 in) tip and, as indicated in the figure, fix the grid to the wall with  $\emptyset$ 8 x 60 mm (0.3 x 2.4 in) anchors.

N.B. in case of an External Thermal Insulation Composite System or render, use specific screws depending on thickness of the insulation.

Install the WALL-Y® grid panels from the bottom up and from right to left, fixing them to the wall as you go.



# WALL-Y® POT ACCESSORY

The WALL-Y<sup>®</sup> pot is the ultimate accessory for the containement of the vegetation soil, whichever plant species is chosen. The brackets make it possible to place it at the desired height and the holes on the bottom provide drainage of excess water.

Dimensions	58 x 22 x H 20 cm / 22.8 x 8.6 x H2.8 in
Weight	1.2 kg / 2.6 lbs
Pot capacity	20   / 5.28 gallons
Available colours*	Green, white, transparent

\*Custom colours are available upon request



### INSTALLATION OF THE POT



use specific screws depending on thickness of the insulation.

N.B. in case of an External Thermal Insulation Composite System or render,

Fasten with anchors Ø8 x 80 mm (0.3 x 3.1 in).



It is possible to fit one pot only per grid.



# VEGETATION OF THE WALL-Y® GRID PANEL

For best results of the vegetated wall with WALL-Y $^{\mbox{\tiny B}}$  please follow these indications:

- No more than 5 plants per pot
- Include a drip-irrigation system in the installation
- Vertical separation between pots should be 2 meters (6.6 ft)
- Fill the pots with a blend of vegetation soil and volcanic lava (green roof soil mixture)

Spectacular effects and textures will be obtained by planting different species (seasonal flowering, grasses and perennials), ensuring colour and variety at every time of the year.

				FULL SUN 😑 LIGHT SHADE 🌗 PARTIAL SHADE 🌗		DE 🛑	
Species	Species	Hardiness	Sun exposure	Water requirements	Flowering period	Container gardening	Type of vegetation soil
<i>Jasminum</i> Jasmin	Perennial evergreen or deciduous climber	Does not stand intense cold		Water regularly	Seasonal (depends from variety)	Not suitable	Universal
Rhynchospermum jasminoides	Perennial evergreen climber	Resistant to cold		Water regularly, avoid stagnant water	April July	Suitable	Universal or silty, well- drained
<i>Clematis</i> Clematide (different varieties)	Perennial evergreen or deciduous climber	Moderately resistant to cold, avoid excessive heat		Water abundantly, avoid stagnant water	Spring Summer	Not suitable	Universal or slightly alcaline, well-drained
<i>Hedera Ivy</i> (different varieties)	Perennial evergreen climber	Resistant to cold		Water regularly, avoid stagnant water	Autumn	Suitable	Universal, well- drained
<i>Rosacee Rosa rampicante</i> (different varieties)	Perennial evergreen or deciduous climber	Moderatly resistant to cold		Water abundantly in Spring-Summer	June Autumn	Suitable	Universal, well- drained
Passifloraceae Passion flower (Maypop)	Perennial deciduous climber	Does not stand cold and high temperatures		Water regularly, increase in Spring- Summer	June September	Suitable	Universal, well- drained
<i>Parthenocissus</i> Boston Ivy and other varieties	Perennial deciduous climber	Resistant to cold		Water regularly	May July	Not suitable	Universal, well- drained
<i>Lonicera caprifolium</i> Honeysuckle	Perennial deciduous climber	Moderate resistance to cold		Water regularly, increase in Summer	April September	Not suitable	Universal, well- drained
<i>Wisteria sinensis</i> Wisteria	Perennial deciduous climber	Moderatly resistant to cold		Water regularly, increase in Summer	May June	Not suitable	Universal or silty, well- drained
<i>Nyctaginaceae</i> Bougainvillea (different varieties)	Perennial evergreen climber	Does not stand intense cold		Water normally	Spring Autumn	Suitable	Universal, well- drained
<i>Dipladenia Mandevilla</i> (different varieties)	Perennial evergreen climber	Does not stand intense cold		Water normally	Spring early Summer	Suitable	Soft, well- drained
Ficus Repens Climbing fig	Perennial evergreen climber	Does not stand intense cold		Water normally	-	Suitable	Soft, well- drained





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