# PlantBox

The cleverly simple vertical garden



In partnership with













### Benefits of Living Walls

We all have an innate affinity with the natural world, a connection known as 'biophilia', which is scientifically proven to provide emotional, cognitive and physical benefits.

The incorporation of living walls into urban areas where space is at a premium positively impacts people, the economy and the environment, from cleaning the air and improving health and wellbeing to increasing dwell time and improving biodiversity.

Living walls can bring texture, form and colour to otherwise plain walls and instantly transform them, creating attractive, enriching areas without losing any floor space.

Ideal for both residential and commercial environments, living walls are highly versatile and can be successfully incorporated both internally and externally.

- Remove air pollutants
- Increase local biodiversity
- Muffle noise and improve acoustics
- Solution Enhance productivity and creativity
- Improve sense of wellbeing
- Reduce blood pressure

"The mere insertion of plants into the built environment can enhance comfort, satisfaction, wellbeing and performance."

Kellert et al, 2008

### **About PlantBox**

Blending clever patented design with immediate visual impact, PlantBox is a revolutionary stackable, modular living wall system. It can instantly transform residential courtyards, balconies, and boundary walls, as well as be applied to commercial projects including schools, offices, roof gardens and construction hoardings to give just a few examples.

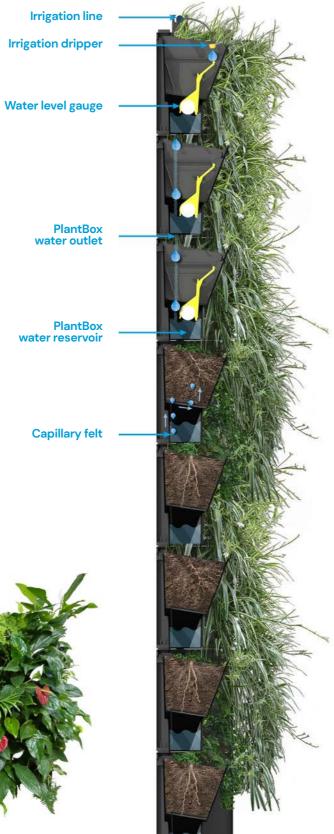
PlantBox could not be simpler to install, with each trough easily clicking and stacking together vertically, and clipping together horizontally to fit any space. It can be installed up to 8 metres in height and is designed to be ground bearing, only requiring restraint fixings.

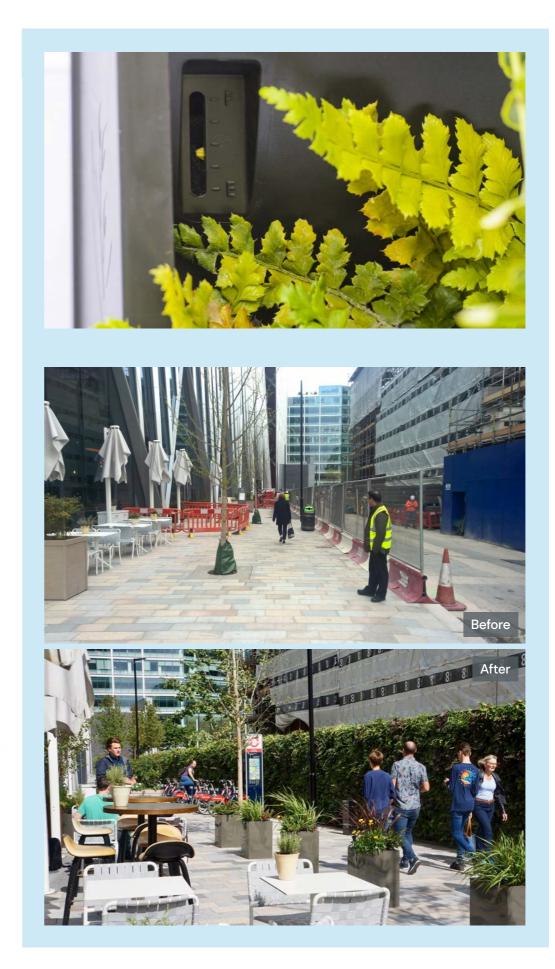
The in-built 1.8L water reservoir and capillary felt enable plants to take up the water they need to thrive, with topping up only required on a weekly or monthly basis which can be done by the client or as part of an ongoing maintenance programme.

What's more, the overflow watering system means you only need to water from the top, and it is almost impossible to over-water.

PlantBox is responsibly manufactured in the UK from 100% recycled materials, ensuring short lead-in times and a low carbon footprint. It was a finalist in the RHS Chelsea Sustainable Garden Product Awards 2021.









Made from 100% recycled materials



Easy to assemble



No daily watering



Integrated water reservoir



Overflow watering system



Tells you when to top up

# Application Examples

PlantBox is highly versatile, combining biology with technology to bring walls to life and life to walls. It can be installed in multiple locations, from waiting rooms and construction site boundaries to residential courtyards.

#### **Exterior living walls**

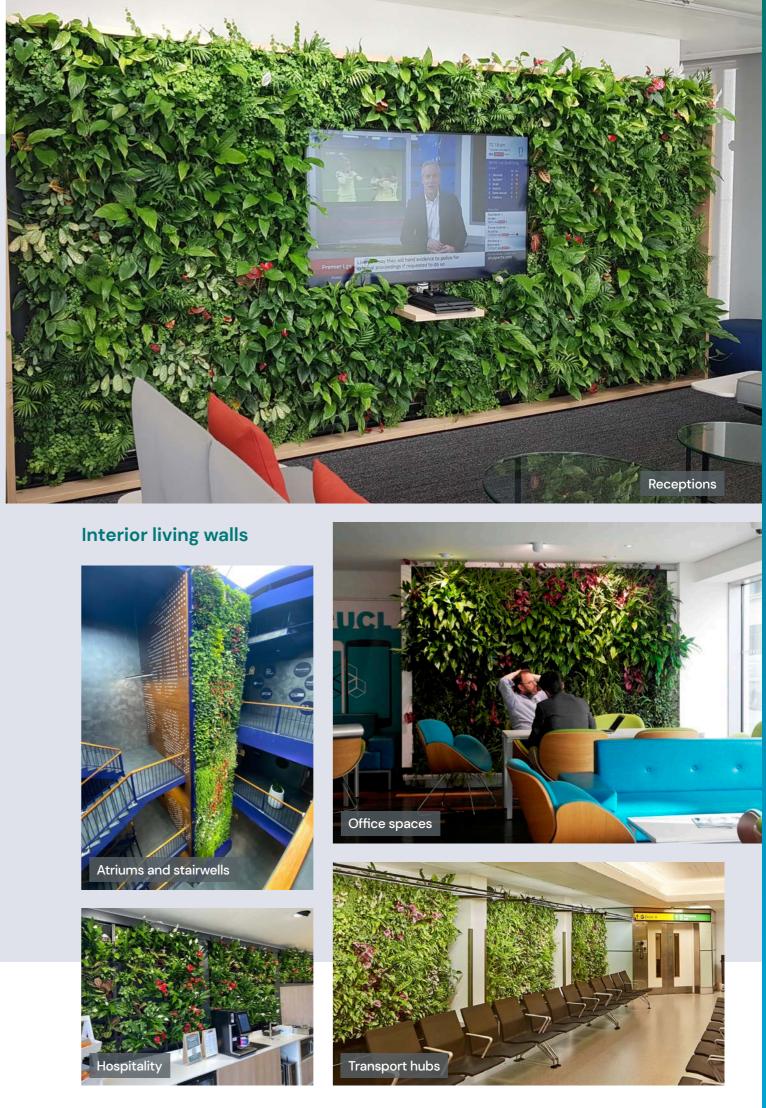


















### Technical Specification

PlantBox is straightforward to assemble and install due to its modular design and pre-moulded troughs. As PlantBox is ground bearing, only restraint fixings are required to prevent toppling. Simple irrigation pipework is available for larger walls with a one-point fix for hose connections.





#### **PlantBox** Specification Details

Unit dimensions: 600mm x 200mm x 150mm

Fully loaded weight: 70kgs per m<sup>2</sup>

Base material: 100% recycled polypropylene

Trough depth: 200mm

Reservoir capacity: 1.8 litre

**Recommended support structures:** Treated timber (plywood), aluminium, steel, masonry, concrete

Recommended restraint fixings: Plywood (wood screws), aluminium/steel (8.8 bolts), masonry/concrete (resin anchors). 2 fixings per trough (not included).

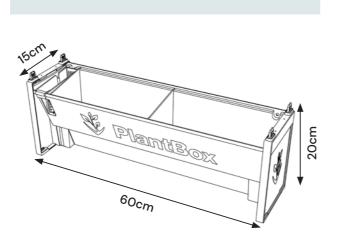
Plants per m<sup>2</sup>: 33 plants (8.33 troughs per m<sup>2</sup>)

Pot size: Anything up to 13cm (1 litre) – 4 plants per trough

Design life: >10+ years

**Compost type:** Peat-free multi-use. 4–5 litres compost per trough

Nutrient feed: Drip feed or slow-release pellet compost



# Product Sustainability

In addition to the environmental benefits living walls bring, sustainability has driven the design of PlantBox to minimise its own impact on the environment.

#### **Embodied carbon**

PlantBox is manufactured in the UK from durable 100% recycled polypropylene, which derives from UK post-consumer waste. Compared to virgin polypropylene, there is a saving of 50% of embodied energy just in the manufacture of PlantBox, and it saves materials from going to landfill.

#### Water usage

Each PlantBox trough has a 1.8 litre reservoir and there is a cascading overflow watering system that links each of the troughs without the water passing through the growing medium. Water then reaches the growing medium to suit the plants requirements through capillary felt. We are therefore watering directly at the rootzone to minimise losses, and it is almost impossible to overwater.

The top PlantBox trough of external living walls can capture rainwater and also be incorporated into rainwater harvesting systems.

#### **Electricity consumption**

PlantBox is designed to be simple to maintain and can be watered via irrigation pipework with a one point fix hoselock connection which doesn't require electricity. If pumps are required, rated at 0.8kW, we have calculated the annual energy use for a 200m<sup>2</sup> wall to be c.£6.

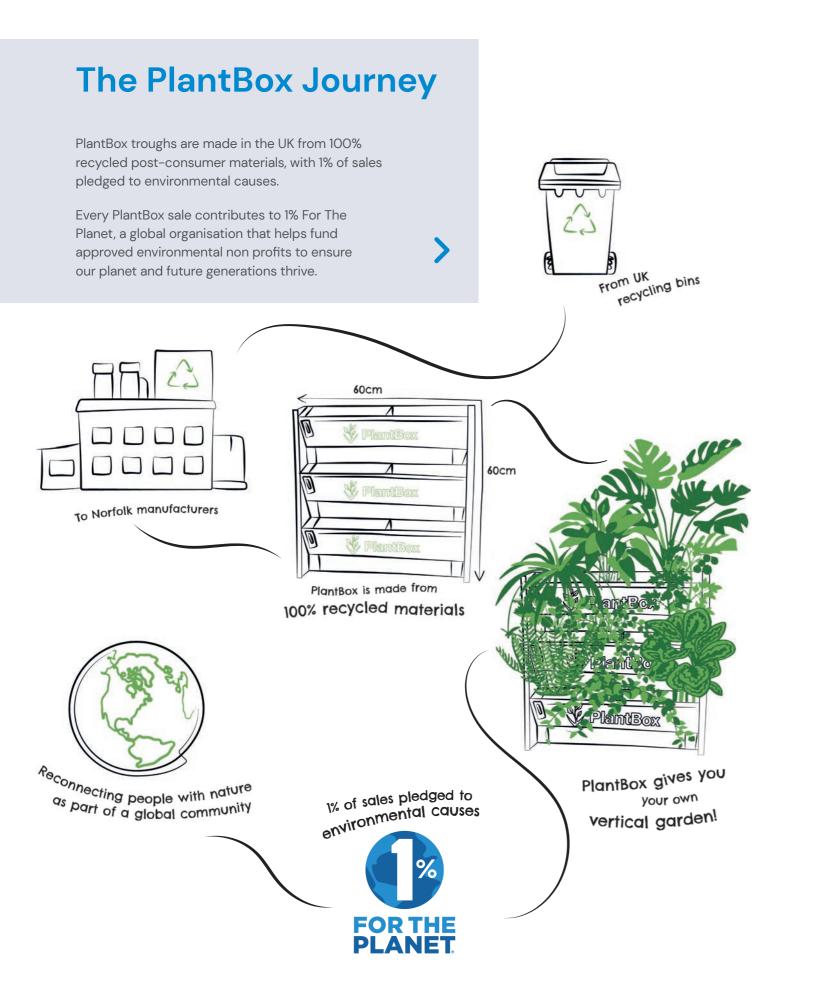
#### **Product Sustainability**





#### **Product life cycle**

PlantBox is highly durable with a design life of 10+ years. Its modular design means walls can be disassembled and reinstalled in new locations or restacked in a new configuration.



# "

The PlantBox system has visually and spiritually lifted my small but lush exotic garden. The system immediately enhanced my garden biodiversity with bees, hoverflies, and dragonflies. Easy to maintain and lush 100% green cover."

Peter Chmiel, Landscape Architect, Grant Associates (Winner of Best in Show at 2021 RHS Chelsea Flower Show)

# What a transformation!

The living wall softens the look of a plain rendered block wall of the compact patio space." Private resident – London

# Brilliant living wall system.

My team and our customers love the living wall as it has brought nature to our client's courtyard." Pride Landscaping and Design

#### **Customer Testimonials**



# "

I looked at several vertical gardening systems and found the PlantBox system with hidden reservoir and clever wicking material an easy to use, effective, solid and lightweight growing system. Fixing was easy – I have created a whole new garden in an area of our patio. I highly recommend PlantBox to gardeners, designers, specifiers and architects."

Mark Lane, Landscape Designer and BBC Morning Live Presenter

#### Great product,

well designed and like nothing else available."

Online consumer via TrustPilot

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