




Natural Vertical Gardens

WE BRING NATURE CLOSER TO YOU



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LIVE GREEN WALLS TOWARDS A SUSTAINABLE ENVIRONMENT

Our live green walls are more than just about aesthetics; they're a vital component in achieving net-zero goals. With their modular design and efficient drip irrigation system, these structures serve as natural air purifiers, sequestering carbon dioxide and releasing oxygen, thus contributing to carbon neutrality. Their versatility allows for installation in various settings, indoors or outdoors, providing insulation and reducing energy consumption. By incorporating these green walls into your space, you're not only enhancing the environment but also taking significant steps towards achieving net-zero emissions.





SELF-STANDING TYPE LIVE GREEN WALLS FOR INDOORS



SELF-STANDING LIVE GREEN WALLS FOR INDOORS



Our self-standing live green wall is a perfect option for indoor spaces that require integrating nature and building a sustainable, aesthetically appealing environment. With a self-contained water tank, the need for a drainage point or water connection is completely eliminated. Thanks to the integrated full-spectrum LED grow lamp, the natural photosynthesis activity of plants is perfectly facilitated even without natural sunlight.

This system ensures minimal maintenance, allowing you to enjoy the goodness of lush greenery hassle-free.





SKYGROW TECHNOLOGY

1



AUTOMATIC CONTROLLER PANNEL FOR IRRIGATION AND GROW LAMPS

The Automatic Controller panel must be set to turn on the Grow light for 12 hours straight and water the plants for approx. 15 to 20 minutes each day.

2



WATER TANK 70 LITERS

Water is filled in the tank and topped up every week using a hose pipe.

3



IRRIGATION LINES 1 & 2

At set times, water will flow to Irrigation lines 1 and 2. This water will then move to all the planting pockets, making sure all the plants get enough water within 15 minutes. Any extra water will be collected back into the tank.

4



FABRIC POCKET PLANTING PANELS

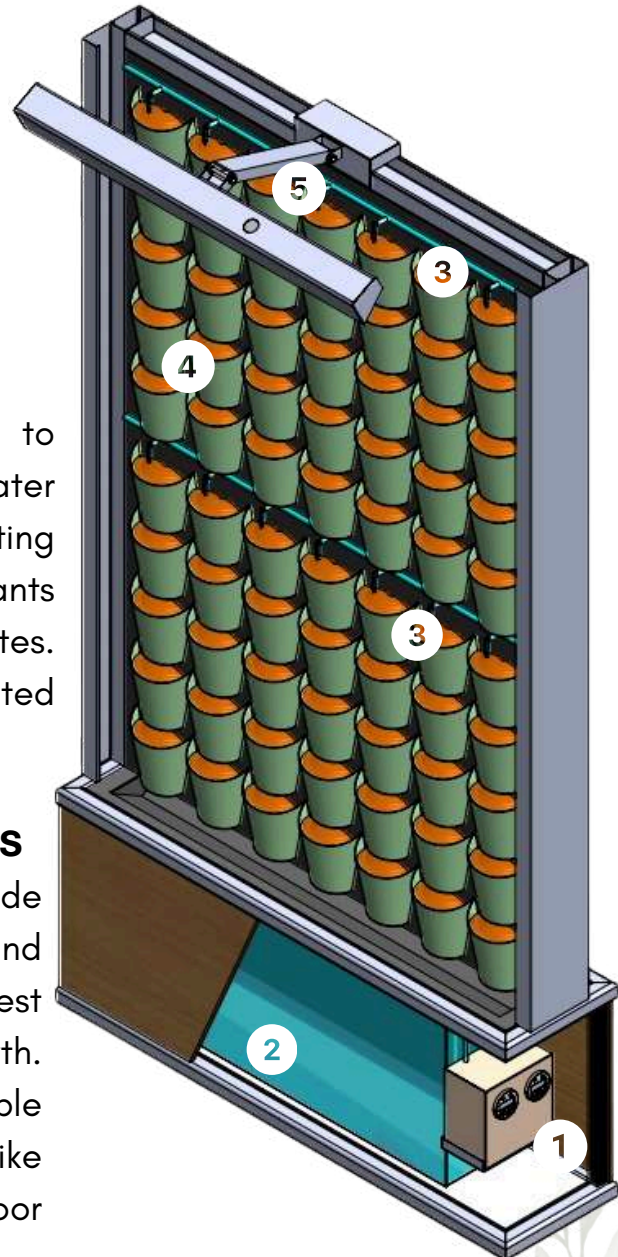
Fabric planting pockets provide better air flow to the plant roots and drain excess water, creating the best conditions for plant growth. Additionally, fabric pockets enable absorption of harmful pollutants like VOCs and PMs from your indoor environment.

5



FULL SPECTRUM GROW LAMP

The Full Spectrum Grow lamp helps plants perform photosynthesis, which lets them absorb CO₂ and release O₂ into your indoor environment.



PRODUCT SPECIFICATION



Model Name	220 SS 50 SINGLE SIDE PLANTING	220 DS 50 DOUBLE SIDE PLANTING
Dimension of the Whole Unit (L x H)	1200mm x 2200mm	1200mm x 2200mm
Dimensions of the Tank (L x W x H)	1200mm x 300mm x 500mm	
Capacity of the Water Tank	80 L	
Number of Planting Pockets	70	140
WiFi Assisted Self Watering Timer	Yes	
LED Grow Lamps	Yes	
Waterproof type White Board for Rear Side	Yes	No
White Marker Bord Dry Erasing Type	Optional	-
Weight Excluding Planting	90KG	96KG



Miniature

SMART INDOOR GREEN WALL STRUCTURE

Elevate your space with this sleek and compact smart live plant wall, specially designed to fit perfectly on Kitchen countertops or any other place of your choice. Whether you're an aspiring home chef or a plant enthusiast, this unit allows you to effortlessly grow your own herbs and small plants indoors.

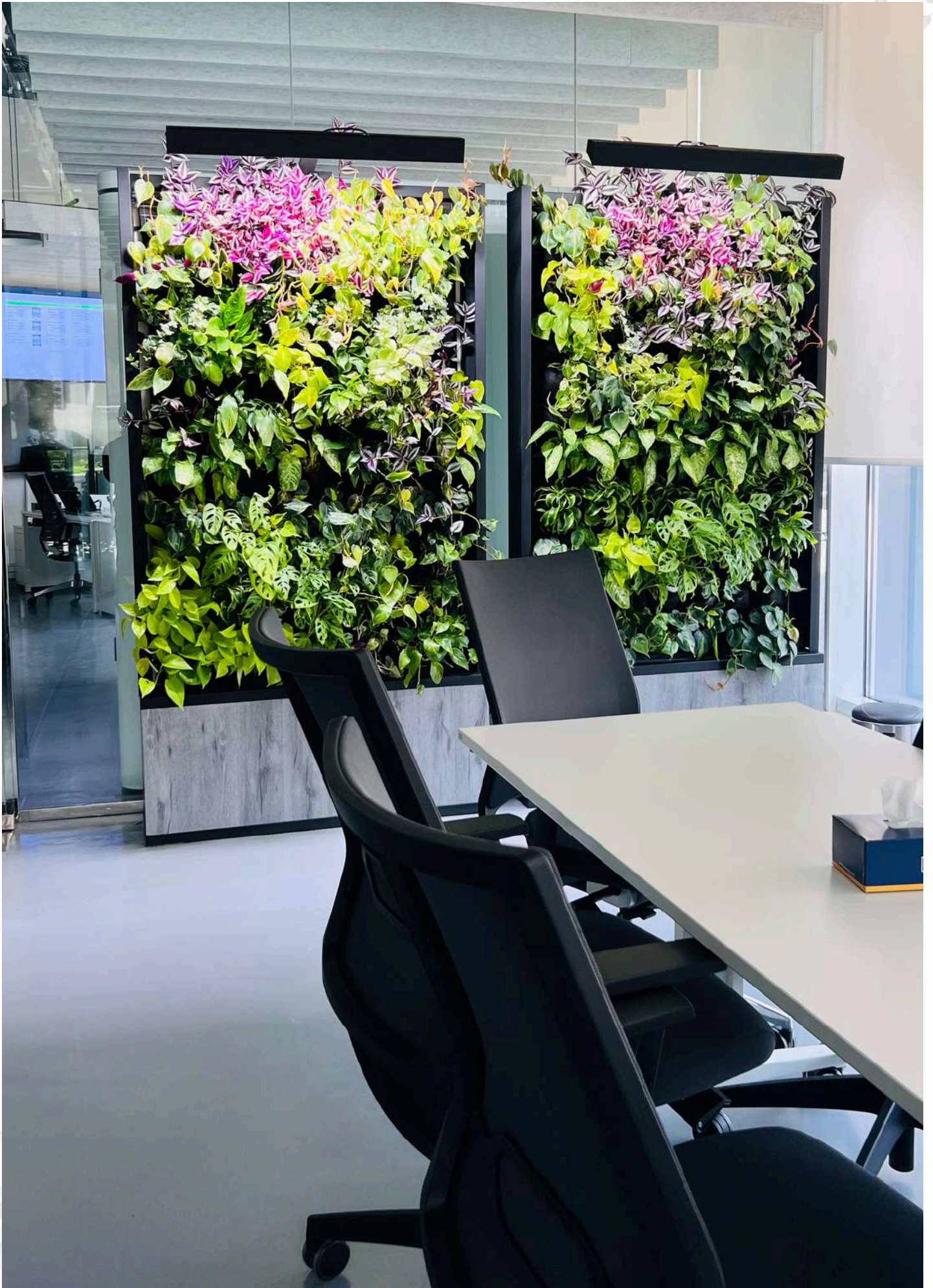
Equipped with integrated lighting and a self-watering system, it ensures your plants thrive with minimal maintenance. Perfect for adding a touch of greenery to your kitchen, office, or living space, this stylish and functional unit brings nature indoors, enhancing both your environment and well-being.



Model	M15P	M21P
Dimensions of the Whole unit	630mm(L)x210mm(W)X650mm(H)	635mm(L)x210mm(W)X650mm(H)
Number of Planting Pockets	15	21
Capacity of the Water Tank	20L	25L
Self Watering Timer	Yes	Yes
LED Grow Lamps	Yes	Yes













WALL-MOUNTED TYPE LIVE GREEN WALLS



Our prefabricated, wall-mounted live green wall structures are easy to install, perfect for both indoor and outdoor environments where a water connection and drainage point are available. The product comes in four standard sizes, and customization is possible.



STEEL REINFORCED TYPE GREEN WALL STRUCTURES

Steel Framework - Reinforcement

Our galvanized and painted steel framework provides robust reinforcement for easy wall mounting.

Fabric Pocket Panels- Grow Easy, Grow Fast!

SkyGrow's specially designed fabric pocket structure enables plant roots to receive sufficient air from the entire pot wall system while efficiently discharging excess water.

Most importantly air barrier created within the thick fabric wall, protect the roots structure from the outside heat.



Automated Drip Irrigation System - Water On Time!

SkyGrow's drip irrigation systems ensure the precise supply of water to each pocket, promoting optimal hydration for every plant.



PRODUCT SPECIFICATIONS



WM4X1

WM5X1

WM6X1

WM7X1

Model	WM4X1	WM5X1	WM6X1	WM7X1
Dimensions of Structure (W X H)	1262mm(H) 1080mm(W)	1756mm(H) 1080mm(W)	1918mm(H) 1080mm(W)	2280mm(H) 1080mm(W)
No of Planting Pockets Per Panel	42	60	66	78
Fabric Material	UV Stabilized PP Made in Italy			
The Soil Holding Capacity of Each Pocket	2.5 liters of Soil per pocket			
Steel Structure	Galvanized and painted			
Water Inlet	¾ Inch			

Customization is also available

FABRIC AND BRACKET TYPE GREEN WALL PANELS

Enhance your vertical gardening experience with our cost-effective fabric pocket wall mounting system. This system features a fabric pocket panel, designed without a steel framework, making it lightweight and easy to install using two steel brackets. Each sqm panel includes 36 pockets, perfect for growing a variety of plants with installation know-how for setting up the drip irrigation system. This system offers a practical solution for creating a lush, green wall at an affordable price.



FABRIC AND BRACKET TYPE GREEN WALL PANELS	Model FB6X6
Dimensions of the Fabric pouch panel (with designated channels for drip irrigation system)	1mX1m
Fabric planting pocket panel	36 pockets
Wall-mounting Steel Brackets	2

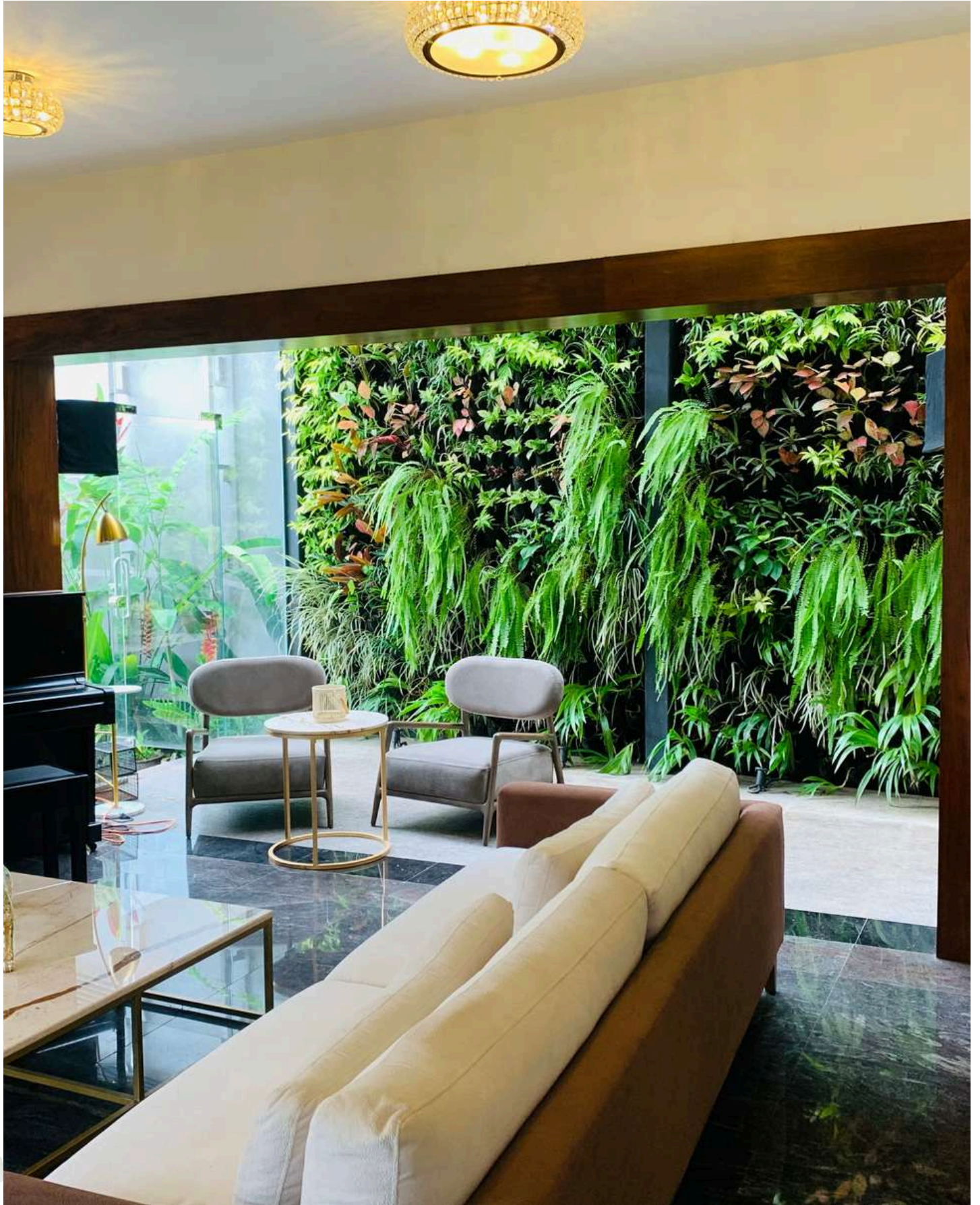


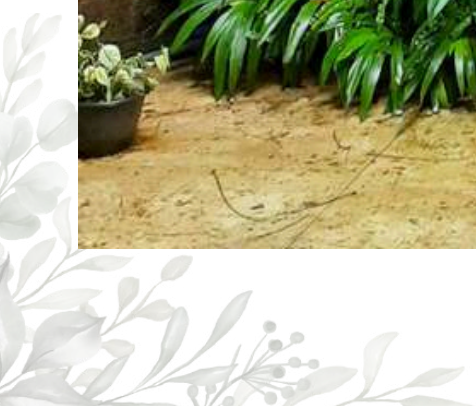
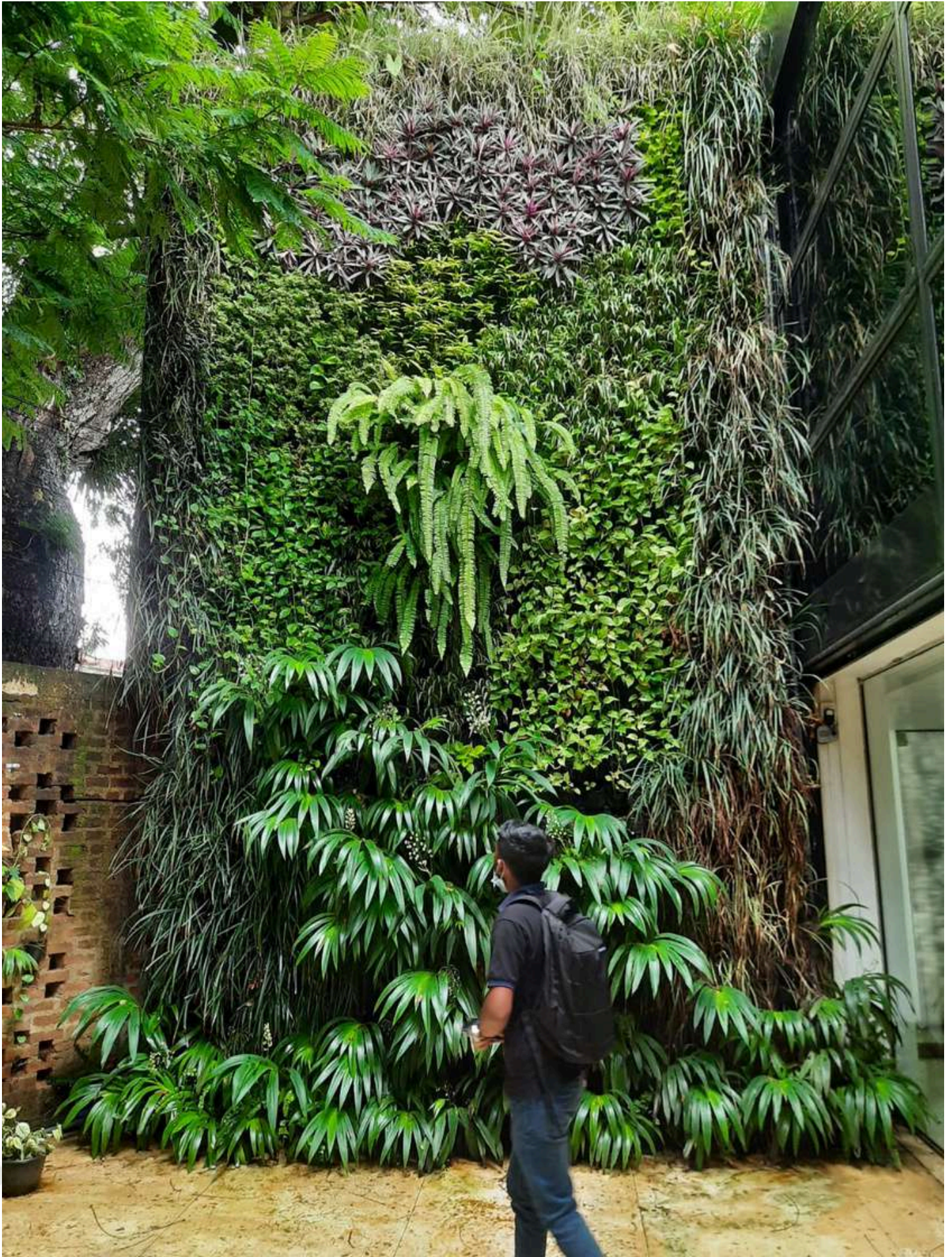
SMART WALL-MOUNTED GREEN WALL STRUCTURE

The Smart Wall-Mounted Green Wall System is a compact and efficient vertical garden solution designed for effortless plant care. Featuring a 1 sqm fabric panel with 36 pockets, it comes with an integrated micro-irrigation system and an automated unit with a built-in water tank, ensuring consistent watering with minimal effort. Lightweight and easy to install, this system brings nature into any space.

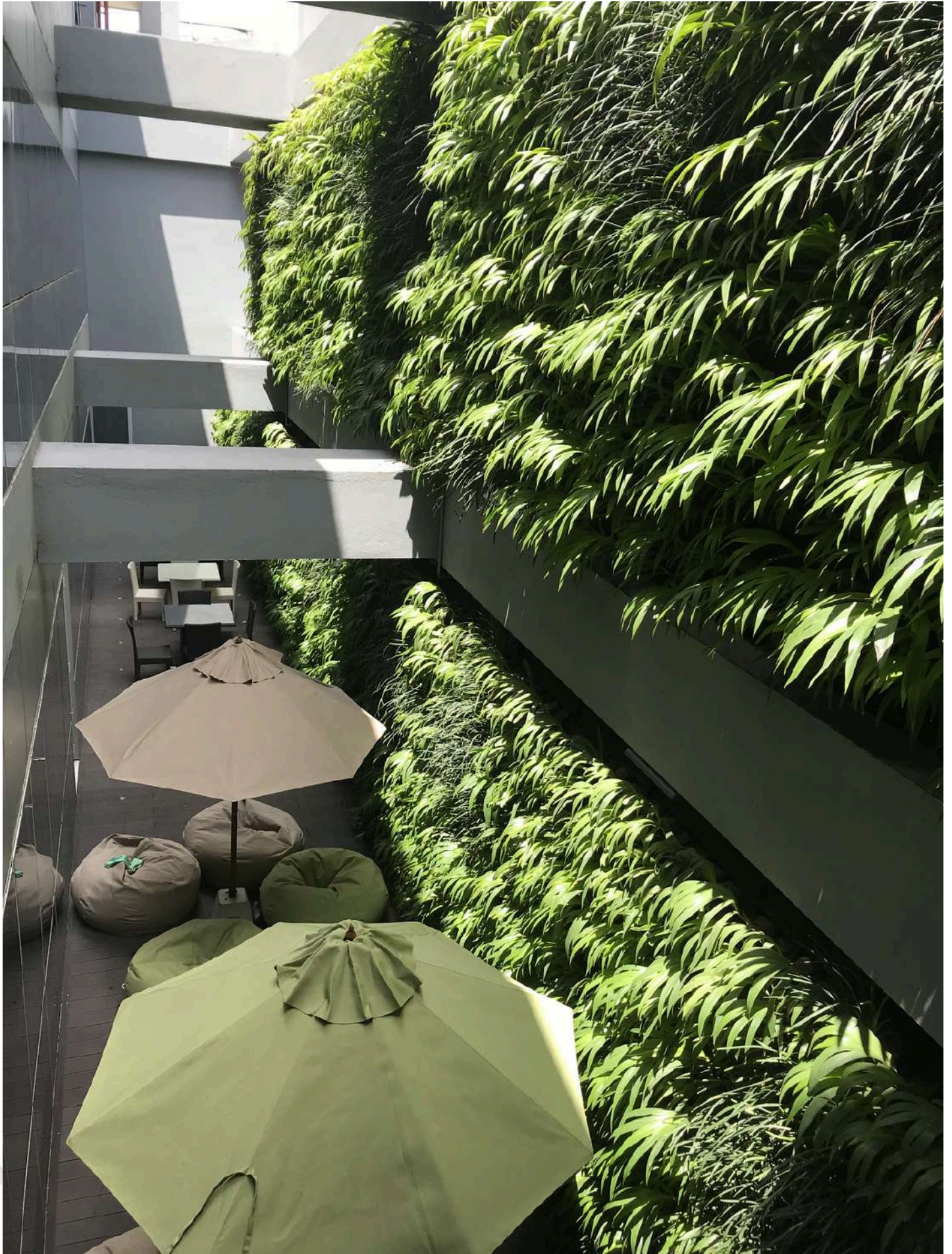


Model	SWM36
Product Dimensions	1000mmX1180mm
Panel Size	1 sqm (1m x 1m)
Number of Planting Pockets	36 pockets
Water Tank Dimensions	1000mmX200mmX180mm
Water Tank Capacity	30L
Irrigation	Wi-Fi Assisted Automated Irrigation System with options to work both with battery or AC current.









Indoor Green Walls As An Energy Saver

Live Plants in our Green Walls absorb significant part of Co₂ from the indoor environment, reducing the load on the mechanical ventilators of the HVAC system.

Recent studies indicated that a green wall measuring just 1 square meter, filled with Chlorophytum plants, can effectively remove up to 13% of CO₂ from a 15m³ indoor space within 40 minutes, when exposed to 50umol full spectrum artificial grow light. Furthermore, by increasing the illumination to 100umol, CO₂ absorption escalates to 20%.

(Torpy F.R, Zavattaro M, Irga P.J, 2016)

Incorporating appropriate green plant design could reduce HVAC energy loads by 10-20% (Afrin 2009)

Moreover, a research also demonstrated that passive green walls can reduce relative humidity by 2.6%, showcasing their harmonious interaction with air conditioning systems. (Xi Meng, Lianyu Yan, Fudan Liu 2022)



Indoor Green Walls to Improve Indoor Air Quality

Live plants with its natural technology efficiently eliminate pollutants such as VOC's, PM's and Formaldehydes from the indoor environment.

(Torpy, Zavattaro 2018)

Green Walls: Enhancing Well-being and Boosting Productivity

In 1996, Lohr et al.¹² performed a study on productivity in a working environment and concluded that interior plants may improve worker productivity and reduce stress in a windowless environment.

The outcome suggested that the reaction time of workers in the presence of plants was 12% faster than in the absence of plants, indicating that plants contributed to an increased productivity.



Heat Absorption and Temperature Reduction

When used as facades, outdoor green walls contribute to a significant 3.5 to 5 degrees Celsius reduction in building surface temperature.

ALL-IN-ONE SKYGROW VERTICAL AQUAPONIC SYSTEM

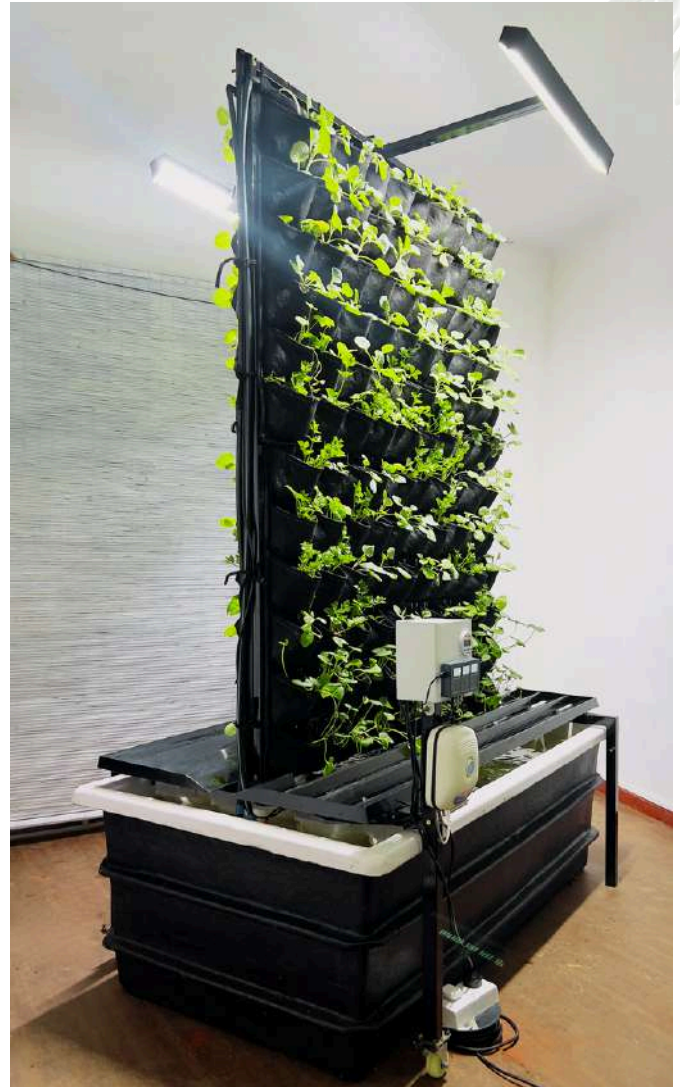
What is Aquaponics?

Aquaponics is an innovative, sustainable method of food production that integrates aquaculture (raising fish) with hydroponics (growing plants in water).

This system operates on the principle of establishing a natural biological symbiosis between fish, a colony of beneficial bacteria, and plants.

Fish waste is transformed into nutrient-rich fertilizer for the plants by a colony of beneficial bacteria, while the plants, in turn, purify and oxygenate the water for the fish.

This process not only enhances efficiency but also supports eco-friendly, organic agriculture, making it an excellent choice for sustainable food production.



When developing our All-in-One SKYGROW Vertical Aquaponic System, we focused on four key objectives:

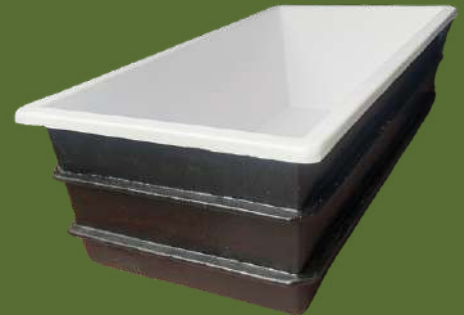
- Promote organic growing practices for home gardeners
- Enable indoor cultivation, reducing the need for pesticides
- Maximize growing space, making the most of limited indoor floor space
- Reconnect people with nature

The result is this All-in-one Aquaponic solution can grow 240 plants with around 2 dozens of fish with the use of just 2 sqm indoor floor space. This system is easy to manage and allows you to cultivate chemical-free, organic greens for your daily meals.



1000 Liter Fish Tank:

The system includes a 1000-liter fish tank divided into three compartments. In the first and main compartment, you can raise fish species such as tilapia, catfish, trout, or carp. Fish waste, primarily consisting of ammonia, can be harmful in high concentrations. This waste is sucked into the second compartment, the Bio Filter, for primary filtration. Filtered water is pumped up from the third compartment.



Biofilter the System's Fertilizer Factory:

The Biofilter is a crucial component of the system because it provides a habitat for beneficial bacteria that play a key role in the nitrogen cycle. These bacteria by nature convert Ammonia from fish waste and feed into Nitrites, and then into Nitrates a process known as nitrification. Nitrates are essential nutrients for plant growth. Additionally, the specialized K1 filter media offers an expanded Biological Surface Area, allowing more bacteria to thrive within a compact space. Furthermore the sponge Pre-filter absorbs the particles from the water.



Water Circulation:

Nutrient-rich filtered water is absorbed into the third compartment of the tank and circulated to the planting pots with the use of a powerful Submersible Pump. Plants absorb these nutrients, promoting robust growth.



SKYGROW AQUAPONIC TECHNOLOGY

Clean Water Return:

After plants absorb the nutrients, the water is further filtered in its secondary filtration process within the plant growing media. The cleansed and oxygenated water is then returned back to the fish tank, creating a closed-loop system.



LED Grow Light System for Indoor Plant Growth

This system includes four LED grow lamps designed to provide a full spectrum of light, enabling plants to thrive entirely indoors by stimulating natural photosynthesis. The lights are intended to be kept on continuously for 12 hours each day to support optimal plant growth.

WiFi-Assisted pH and Temperature Monitor with Message Notifications

This system helps you monitor sudden pH fluctuations and temperature changes in real-time. With WiFi connectivity and message notifications, you can take immediate action to maintain optimal conditions for your system.



BENEFITS OF INDOOR AQUAPONICS

- Sustainable Food Production: Aquaponics uses up to 90% less water than traditional farming.
- Reduced Waste: Fish waste is repurposed as fertilizer for plants, minimizing waste output.
- Chemical Fertilizers: The natural nutrient cycle reduces the need for chemical fertilizers.
- Efficient Space Utilization: Vertical farming techniques enable efficient Space Utilization and making it suitable for urban areas.
- Fresh and Organic Produce: The system can produce fresh vegetables and fish, free from harmful chemicals.
- No Pesticides: Indoor cultivation eliminates the need for chemical pesticides.



Model	ALL-IN-ONE AQUAPONIC 240
Dimensions of the Whole unit (WxH)	2000mm(L)X1115mm(W)X2700mm(H)
Steel Support Structure with two wheels	1520mm(L)X1115mm(W)X2670mm(H)
Fabric Planting pocket panel- Model D5X6	240 planting pockets comprising of 4nos of Model D5X6 fabric pocket panels, each containing 60 Pockets.(on both sides)
Capacity of the Water Tank	1000L
Bio Filter Model-240	Filter Fabric Dimensions 900-1000mm(L)X230mm(W)X620mm(H) with 6kg of K1 type filter media and 40mm sponge Pre-filter
Water Pump	6800L per hour H max 5.5m
Wifi Assisted pH meter - Model W218	7 in 1 ph Meter
Timer controlled 02 Sets of LED Grow Lamps with Dimmer	Yes

FABRIC GROW BAGS

Introducing Fabric Grow Bags, crafted to optimize plant growth through improved aeration, efficient water drainage, and protection of roots from external heat. These bags provide ideal conditions for plant development, fostering healthier and more robust growth compared to traditional containers. These Fabric Grow Bags are available in various sizes to match your unique growing needs.



FABRIC RAISED BEDS



Engineered to enhance plant growth with superior aeration, efficient water drainage, and root protection from external heat. Designed with these features in mind, this product offers an ideal environment for cultivating tomatoes or any other vegetable. Whether you're a seasoned gardener or just starting out, Fabric Raised Beds provide the perfect solution for healthy and thriving plants. These Fabric Raised Beds are available in two sizes to match your unique growing needs.

COCO PEAT

Coco peat, also known as coco pith, is completely a natural substance that is produced as a byproduct of the coconut fiber extraction process.

Coco peat has become the best soil conditioner due to its amazing capacity to hold both liquids and air. Additionally, coco peat is the perfect product to use in greenhouse cultivation as a soil-free growing media. Also, identified as one of the best natural materials for animal bedding.





SkyTech
Natural Vertical Gardens

