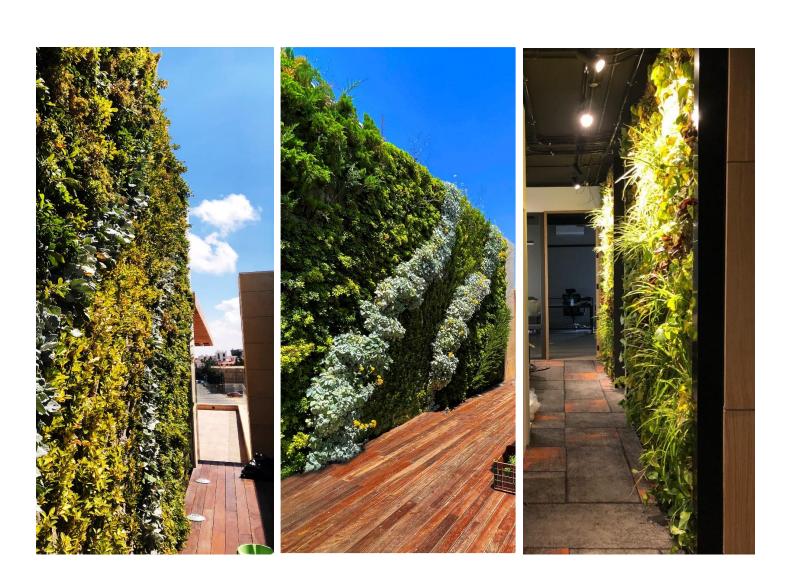


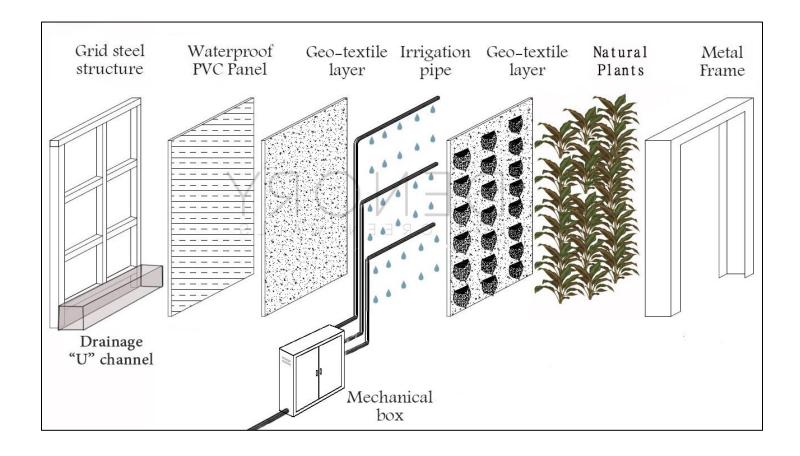
GREEN WALL TECHNICAL FILE





GREEN WALL COMPONENTS

The following are the main components of green wall:





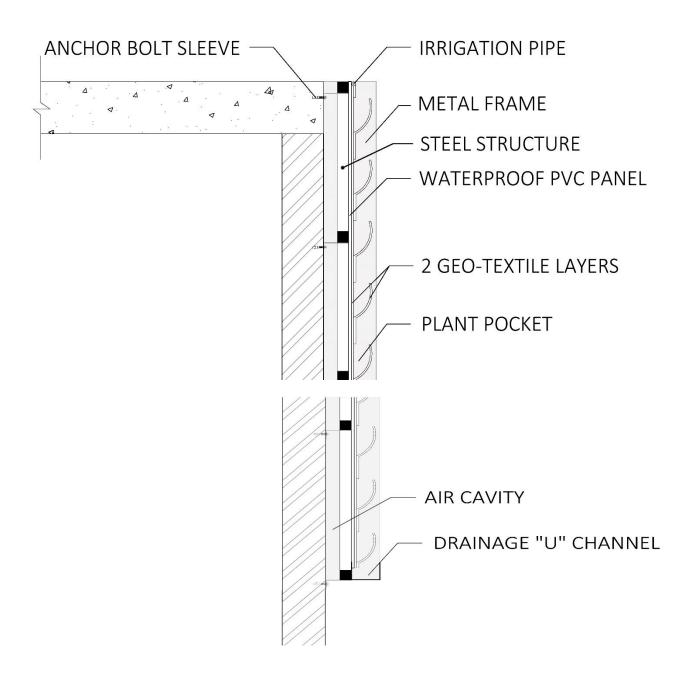
PHASES DESCRIPTION

The following are the main components and phases of green wall installation:

	PHASE	DESCRIPTION
1	Grid Steel Structure	Grid of 1180mm x 560mm made of powder coated Steel structure: 40mm x 20mm or (40mm x 40mm) tube bars, thickness of 1.5mm or 1.8mm. will be fixed to the wall structure by anchor bolt sleeves.
2	Metal frame	Powder coated galvanized sheet metal plate, thickness of 1.5mm, which will be installed at the sides of the green wall and/or (around windows) to prevent water leak. Will be attached to grid steel structure by welding.
3	U Channel Water Drain	Made of Powder coated galvanized sheet metal plate, thickness of 1.5mm, or a premade trench drain made of plastic or stainless steel which will be installed along the wall at the bottom, to collect the excess water and drain it.
4	Waterproof Panels	2440mm x 1220mm moisture and water proof PVC foam board, thickness of 10mm. will be fixed to the grid steel structure.
5	Greenwall Special Felt	Two layers of 1000 gm/sqm Non-Woven Fabric Geotextile Custom made for planting purposes where plants will be planted (soilless). Will be fixed to the waterproof panels. Plants pockets will be formed in the 2 nd layer.
6	Automated Irrigation System & Mechanical Equipments	A mechanical Box: (H:1000mm, W:1000mm, D: 300mm) made of galvanized sheet metal plate will be placed on the roof or in remoted/hidden space and contains: Advanced Automated Timer, injector, water filter and solenoid valves. In addition to a water pump and water supply pipes.
7	Green Wall Irrigation Pipes	irrigation pipe with drippers will be placed horizontally along the wall.
8	Natural Plants	Different types of Natural outdoor or Indoor ornamental Plants. Will be installed to form pockets in the 2 nd layer of the green wall special felt.

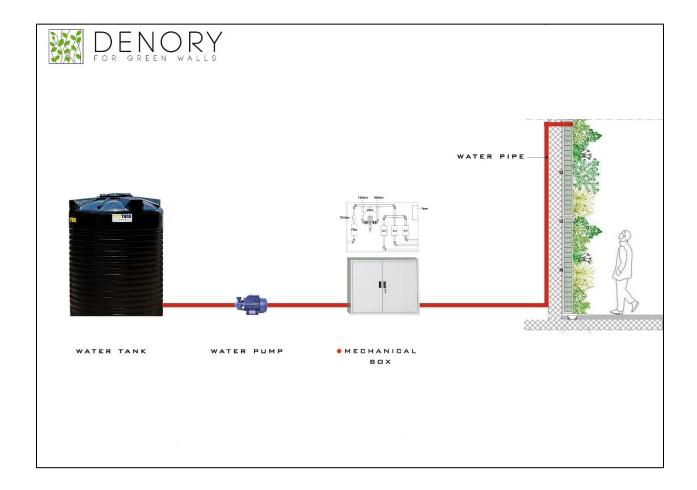


GREEN WALL DETAILED SECTION





MECHANICAL DETAILS



Mechanism of the automated irrigation system: the programmed advanced timer will send signals to the solenoid valve to switch on. Then, water flow begins through water pipe to reach the drippers on the irrigation pipe.



GREEN WALL CHARACTERISTICS

Thickness	15 – 20cm
Weight	40 kg/m²
Plants Quantity	30 plant/m²
Irrigation & nutrients	Through Automated system
Air Cavity	5 – 10 cm. Physically separates the system from the wall (preventing moisture issues)

REFERENCES



















