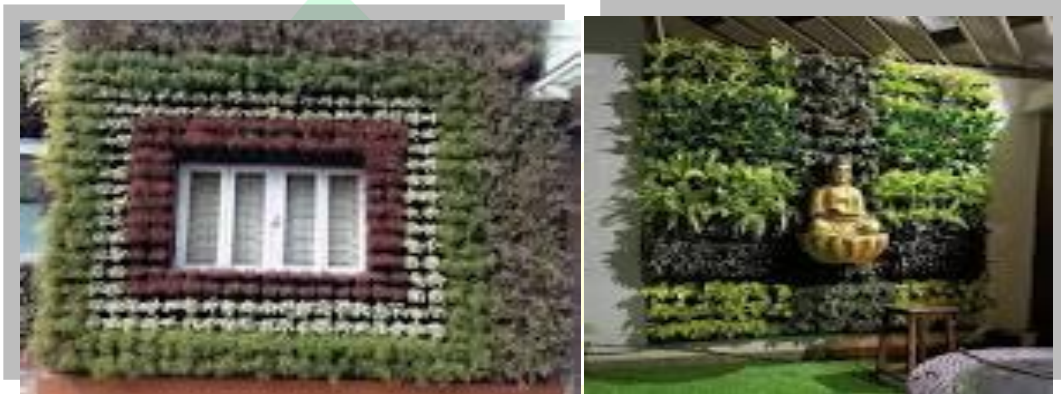


Importance of Vertical Gardening

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Vertical Gardening is a special kind of urban gardening suitable to small spaces, particularly for decorating the walls and roofs in various styles. In Vertical garden plants are supported to grow along vertical, often tiered surfaces, especially fences, posts, trellises, and walls

Importance of vertical garden

A vertical garden keeps a building cool in summer and warm in winter, thus enabling you to save electricity. Aesthetic benefits: Vertical gardens enable you to maximise limited space and reclaim disregarded space. A green wall can transform empty space into aesthetically pleasing and creatively stimulating eye candy.



Benefits of vertical gardening

Vertical gardens provide several aesthetic, economic, physiological and environmental benefits. A vertical garden enables you to maximise and fully utilize limited space, especially in congested urban areas.

benefits of a green wall:

1. **Food security:** Vertical gardening is an excellent method of growing food in areas where space is limited. The different vertical garden technologies provide effective, simple and sustainable methods of growing fruits, vegetables and herbs, thus enhancing food security for urban communities and populations that face lack of agricultural spaces.
2. **Improvement of air quality:** Vertical gardens improve both indoor and outdoor air quality by removing harmful VOCs (volatile organic compounds) and absorbing pollutants. Growing plants vertically, even in compact spaces such as windowsills, balconies, front entrances, and so forth, makes an appreciable difference to the air that you breathe in.
3. **Thermal insulation:** Green walls provide insulation to buildings, so there is less demand for power to heat or cool them. A vertical garden keeps a building cool in summer and warm in winter, thus enabling you to save electricity.
4. **Aesthetic benefits:** Vertical gardens enable you to maximise limited space and reclaim disregarded space. A green wall can transform empty space into aesthetically pleasing and creatively stimulating eye candy.



Vertical Garden Metro-station, Nagpur



Vertical Garden Metro-station, Pune

Arka-Vertical Garden

Indian Institute of Horticultural Research (IIHR), Bengaluru

This structure can also be used by anyone to grow vegetables, medicinal and flower crops using vertical space



The vertical garden structure is useful for safe growing of the selected vegetable requirement of a family and can be accommodated in sunlit utility area, balcony and terrace. This structure can also be used by anyone who desires to grow vegetables, medicinal and flower crops using vertical space. Effective utilization of maximum area for growing plants. Plants like tomato (pot size- 16” dia. and 12” height), chilli, brinjal, French bean, peas etc., (pot size- 12” dia. and 10” height) which need bigger size pot, grow to a height about 2 feet and require more growing media are placed at the base of the structure. Leafy vegetables like amaranthus, coriander, palak etc., (pot size- 26” x 8” x 6” (LxWxH)) and medicinal plants like brahmi, pudina, pepper mint, amruthaballi, doddapatre, madhnashini, thippali, ashwagandha, shatavari etc., (pots size -14” x 8”x6” (LxWxH)) are placed upper levels. A 25 litre plastic container at the top of the structure with necessary drip laterals, microtubes and drippers are also provided to water the plants. Yield of 200 g to 5 kg of produce (depending on the crop) can be harvested per crop cycle. The cost of vertical garden structure is Rs. 22,000.

Best Plants for Vertical Garden ·



1. Money Plant or Golden Pothos, Succulents, Ferns , Baby's Tears · , Elephant Ear Plant , Lipstick Plant , Bromeliads , Goliath lilyturf, English ivy.
2. Cabbage, Beans Cucumbers (miniature), Eggplant (miniature), Garlic, Onions (miniature), Peppers (compact varieties), Tomatoes Leaf Lettuce, Mustard Greens, Romaine Lettuce, Spinach, Swiss Chard etc.

