



Roof Greening Installation Guide

A. Construction Principle

Roof Greening should be safe, aesthetics, and no leakage. Construction should be based on the principles and after confirmation from the gardening department.

B. Preparation before Construction.

1. Measure the maximal weight limitation of the roof, and roof condition of the roof slope, drainage, leakage
2. Roof weight design Analysis
 - ① measure the weight of the plants, size, quantity and earth
 - ② analysis the thickness and weight of water drainage layer
 - ③ design department design the roof according to the weight design analysis to ensure the safety;

C. Materials Preparation

1. Plants. prepare the quantity of plants according to the design
2. Construction materials preparation. Prepare the water-proof layer, water drainage pipe, drainage plate, and other materials for other designs.
3. Clean the mess of roof. Redo the roof water proof layer

D. Installation Methods

1. Roof Water Proof
 - ① If the original roof is precast hollow slab, use linoleum, asphalt pour 3 layers, use glass waterproof agent brushing or doing fiberglass mat to prevent leakage.
 - ② waterproof layer thickness is generally 5-10 cm.
 - ③ the roof pitches processing into natural drainage.
- 2, Mark the spaces of the flower beds, the location of the flower, roads, drainage channels, irrigation and drainage facilities on the roof in accordance with the design requirements.
- 3, building construction:
Construction building planting beds and garden ornaments according to the design,
- 4, installation of irrigation and drainage systems:
 - ① irrigation usually use those are able to low pressure irrigation, colorful catheter, light spray device, nozzle configuration should be uniform, so that every corner can be irrigated.
 - ② drainage complete unobstructed.
 - ③ flower beds, Road must leave the water hole and even as a whole with the parapet drainage holes or roof gutter so that rain and irrigation can drain away, in a timely manner to reduce the roof load and prevent leakage.

(E) the laying of the drainage layer, filter layer

1. laying on the roof surface with drainage plate,
2. Laying the non-woven textile



3. Laying the root proof layer to prevent the root of plants destroy. And prevent the lightweight soil particles under the leak, clogged drains.

(F) laying planting layer

Laying earth in accordance with the needs of the design and planting plants planting soil.The lightweight material used pearl salt, vermiculite, saw sawdust, waste cotton seed hulls, cinder ash (sawn cut, waste cotton seed hulls must be approved by a certain percentage and soil rot heat after fermentation stirring.)

(G) plant cultivation

1. Plant cultivation should be descending gradually from the inside to the outside.
- 2, in configuration design, small trees, shrubs planted points should be in the load-bearing column.

(H) the conservation and management

1, water: green roof must be watered frequently, in order to meet the needs of plant growth.Of times in the 1st summer watering or sprinkler irrigation, drip irrigation, spring and should be the 1st poured more than 2 times the water.

2, fertilization: perennials need to be constantly replenished soil fertilizer, usually used to spend or preparation of the nutrient solution, appropriate facilities into organic fertilizer.

3, after a certain period of plant cultivation, may, at its discretion, to add artificial soil, to keep planting soil thickness, to create the conditions for the normal growth of the plant.

4, often uprooting weeds, keep the flower beds clean.

5, Green Roof Plants Winter vulnerable to frost damage, to be wrapped around the dry film covering cold protection basin (cylinder) planting the plants can be moved into the greenhouse overwinter.