



THE SOLUTION

FLEXCOAT

WATERPROOFING PRODUCTS



ROOF GARDEN SYSTEM



ROMTECH
CONSTRUCTION, INC.

INTRODUCTION

WHAT IS ROOF GARDEN SYSTEM?

In its simplest form a roof garden system comprises a number of specialised polymer bitumen membranes from which the appropriate waterproofing system is constructed to protect the flat or sloping roof deck below. A water retention/drainage mat is then laid to sustain the vegetation layer which has been selected to top the installation.

Roof garden systems are suitable for all types of buildings (industrial, commercial, public or domestic) with either flat or sloping roofs up to a gradient of 50 degrees in refurbishment or new build applications.

Benefits

Whether climate change is being brought about by increased carbon emissions or we are merely in a cycle of natural change, the British Isles are experiencing more extremes of heavy rainfall and high temperatures. The installation of green roofs can help to redress the balance of nature by drastically reducing the amount of immediate rainwater run-off to the local drainage system and limiting the chances of flooding in times of heavy rainfall. Much of this water is initially retained by the green roof's vegetation and substrate allowing it to slowly fall to the drains. The various chemical substances carried in the rainwater are also absorbed by green planting which eventually metabolises them.

SNAPSHOT ADVANTAGES OF GREEN ROOF

LIFE EXPECTANCY

A green roof increases the life expectancy of the waterproofing system by protecting it from climate extremes, exposure to UV and mechanical damage. This can more than double the life span of the system, reduces the level of pollutants associated with the manufacturing process and slows the depletion of raw materials.

STORM WATER MANAGEMENT

A green roof controls rainwater run-off by absorbing a high percentage of the immediate discharge to outlets, drains and sewers, reducing the possibility of flooding.

AIR QUALITY

The moisture retained in the green roof mass slowly evaporates attracting dust particles to the damp surfaces of vegetation and substrate at the same time as reducing thermal activity above the roof. The plants absorb gaseous pollutants and during the natural process of photosynthesis convert carbon dioxide to oxygen which improve air quality even more.

HEAT

A green roof reduces convection heat losses by up to 50% when compared with a traditional roof. This improvement in thermal insulation allows energy savings to be made in heating or air conditioning costs over a yearly cycle.

SOUND

A green roof lowers noise levels by reducing reflective sound at the same time as improving sound insulation. The improvement level is dependent on the thickness of the landscaping.

SPACE

A green roof utilizes what might be otherwise expensive 'dead' space, improving the environment and providing a wild life habitat that aids biodiversity action plan targets.

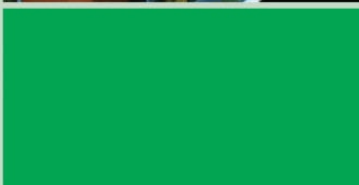
EXTENSIVE GREEN ROOFS

These are designed to be light in weight adding little structural load to the roof. The shallow rootzone of 40-80mm will support low maintenance hardy plants such as sedums, herbs and grasses which are low in height and drought, wind and frost resistant. Access to the installed roof is limited to maintenance traffic.

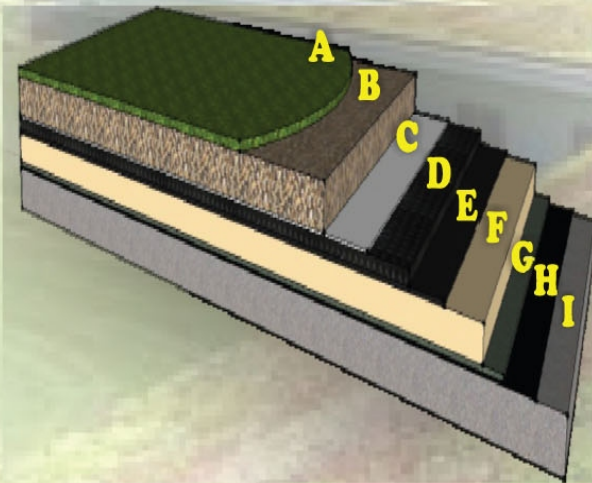


INTENSIVE ROOF GARDEN

With a greater depth of growing medium the landscape variation of these accessible gardens can be designed for recreation, sport and leisure purposes. The only limitation to the plantings on this type of green roof i.e. flowers, shrubs, trees and hard landscaping, is the overall wet weight and live loadings likely to be imposed on the roof structure. These gardens in the sky need not differ from any landscaped gardens we can enjoy at ground level.

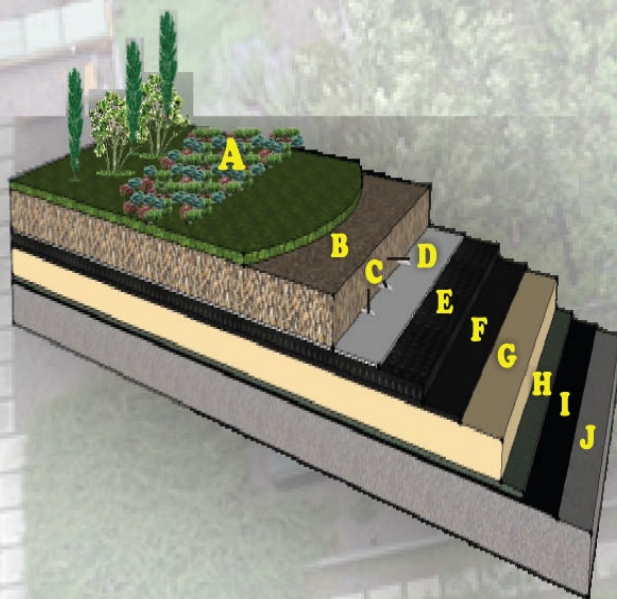


GREEN ROOFS OR EXTENSIVE SYSTEM



- A** Drought resistant regenerating varieties of sedum with a mature growth height of between 50-150mm.
- B** Substrate will be of a well balanced structure and be low in weight.
- C** Geo-textile Filter.
- D** Danodren/drainage mat. This non rotting fleece retains moisture and nutrient sand provides mechanical protection to the root barrier or waterproofing membrane system below.
- E** Defend Anti-roots H membrane are achieved by adding phenoxi fatty acid ester to the polymer bitumen mix during manufacture.
- F** Sprayed Polyurethane foam.
- G** Argo P 4 kg/m² or Nova P 4 kg/m².
- H** Indever quick drying bituminous primer.
- I** Substrate/ Lightweight roof deck.

ROOF GARDEN OR INTENSIVE SYSTEM



- A** Intensive landscape of perennials, lawns, shrubs and bushes; water features and hard landscaping are possible.
- B** Potential soil depths of 150mm to 300mm for perennials, lawns and small shrubs. From 300mm upwards where large shrubs and trees are added to the planting medium.
- C** Irrigation system.
- D** Geo-textile.
- E** Danodren/drainage mat. This non rotting fleece retains moisture and nutrients and provides mechanical protection to the root barrier waterproofing membrane system below.
- F** Defend Anti-roots H membrane are achieved by adding phenoxi fatty acid ester to the polymer bitumen mix during manufacture.
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We have the world's best GREEN ROOF

Since being established in 2001, **ROMTECH CONSTRUCTION, INC.** has introduced a wide range of innovative products from sprayed polyurethane foam, epoxy coatings, mineral membranes and anti-root membranes and remains at the forefront of technical developments to meet the most stringent demands of the modern waterproofing industry. Our technological strength and recent expansion have led to **ROMTECH CONSTRUCTION, INC.** becoming one of the largest waterproofing- company in the Philippines. Continuous research and development of new products in collaboration with the world's best manufacturers and bold investments in technology has allowed us to succeed in gaining a big share of the Philippine market. With our extensive experience and know-how coupled with our deep pool of skilled workforce, we can service every sector with excellent quality and innovative waterproofing solutions.

Romtech's Environmental Commitment Going for the Green Building initiatives



in partnership with



LIST OF PRODUCT AND SERVICES

Fast Set Sprayed Elastomer Polyurea

Polyurethane Waterproofing System

Structural Strengthening System

Retaining Wall Waterproofing System

Roof Garden System

Flextorch Waterproofing membrane

Flextorch Mineral Design Membrane

Cementitious Type Waterproofing System

Flexible Acrylic Waterproofing System

Sprayed Polyurethane Foam System

Structural Epoxy for Concrete Crack Repair

Special Coating Formulation

Protective and Reflective Paint



OTHERS



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