



Insulates buildings
and reduces heating
and cooling costs.



GacoFlex[®]

GardenRoof System



800 331 0196
gaco.com



What is a Green Roof?

A green roof is an area of planting/landscaping that's built on a waterproof surface.

Within that definition there is a further breakdown:

Extensive Green Roof

No irrigation needed and little maintenance is required for mosses, ornamental grasses, herbs and succulents. Soil depth is less than 6".

Intensive Green Roof

Landscaping maintenance required on a wide variety of plants, shrubs and small trees. A garden on your roof! Soil depth is greater than 8".

Why consider a Green Roof?

A green roof...

- Insulates buildings and reduces heating and cooling costs
- Increases the life expectancy of a roof by 2-3 times by shielding the roofing membranes from UV rays and fluctuating temperatures
- Absorbs sound
- Reduces and delays stormwater runoff
- Helps improve air quality by reducing CO₂ levels
- Filters airborne dust while providing increased habitat for birds
- Reduces the urban heat effect by cooling the surrounding air



Components of Green Roof.

Gaco Western's GacoFlex GardenRoof System contains everything you need to make your roof ready for lightweight soil and plants.

The most important element of any roof, particularly a green roof, is the one that keeps your building dry.

The peace of mind waterproofing element of the GardenRoof System is the GacoFlex solvent-free polyurethane coatings that can be applied by roller or spray over most existing roof materials. No hot kettles of asphalt and no fumes. Most importantly, no seams!

As an added bonus, one of our solvent-free polyurethanes, LM60, carries the NSF International approval for potable water; water runoff from the roof is safe for people, pets, wildlife and plants.

Along with the GacoFlex polyurethane membrane, other accessory products of the GardenRoof system includes primers and sealers, fabric reinforcing, neoprene sheet*, water retention mats, drainage mats, root barriers and filter fabric.

* where required



Installing the GacoFlex GardenRoof System

Prepare the Roof Surface

Gaco offers a variety of primers for just about every type of substrate: plywood, metal, masonry, concrete, spray polyurethane foam and various vitreous surfaces. Our primers cure to a hard finish but should not be used on their own; they are designed to improve adhesion for GacoFlex coatings.

Make potential trouble spots water tight

To ensure waterproof joints around walls, parapets and curbs, Gaco offers an array of products: GacoFlex 66S Reinforcing Polyester Mesh (woven), GacoFlex 66B Parchment-Like Texture Tape (non-woven), GacoFlex NF621 Neoprene Sheet (and its adhesive N1207). GacoFlex NF621 Neoprene Sheeting is highly pliable, allowing for easy application to all kinds of shapes and irregularities.

Best of all, GacoFlex NF621 sheeting is shipped in an uncured state; it cures in place after approximately 90 days, making it easy to ensure proper placement.

Soil

OSHA estimates that a cubic foot of soil (7.48 gallons) weighs 114 pounds - definitely not what you want on top of your roof. It may be waterproof but your roof is not impervious to excessive weight!

A light mix of native soil and humus (20%) with crushed slate and clay (80%) will provide the perfect growing medium by having essential draining and soil aeration capabilities. Green roof suppliers offer several types of engineered mixes or a local soil expert can provide the right mix.

Keep in mind that the shallower the growing medium, the greater physical demand on whatever plants are installed. Hardy grasses and sedums are popular plants for green roofs.

Sealing the roof

The main waterproof coatings are GacoFlex LM60 and GacoFlex U8782. Both can be used on flat, low-slope and vertical surfaces as conditions require, making it perfect for green roofs.

An added bonus is that GacoFlex LM60 has zero VOCs and has been approved for potable water by NSF International, making roof water run-off safe for people, pets and wildlife. Rain barrels and/or irrigation systems using this water will save your plants in times of drought and decrease your water bills.

All GacoFlex membranes have excellent durability up to 180°F; however, GacoFlex LM60 is not UV stable and must be top-coated. GacoFlex U8782 should be used where the membrane will be exposed to sunlight. It's time for planting!

Complete the transformation

Green roofs are categorized as intensive or extensive. Intensive are similar to landscaping found at ground level and needs more than 6" of growing media. Extensive green roofs use less than 6" of growing media - very different plants grow in those two conditions.

There are many things to consider when choosing plants for a roof including aesthetics, environmental conditions and maintenance needed. Then there's storm water and insulation considerations. Also keep in mind the factors that will provide success in growing plants on roofs: average high and low temperatures, precipitation,

wind, surrounding structures, exhaust vents. Survival and stress tolerance are the desired attributes.

Rules of thumb: less than 6" of soil dries out fast and typically won't support trees, bushes, deep-rooted grasses or flowering plants; succulent plants such as sedum are often found on extensive green roofs because of their ability to store excess water.

Don't forget to consider how fast certain plants get established, spread or re-seed, as well as disease resistance and plants that can thrive with little or no irrigation (depending on which green roof style you choose).





Gaco Western

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Gaco Western is a recognized leader in innovative silicone roofing systems, and offers best-of-class waterproofing and insulation solutions for a variety of commercial, industrial and residential applications. Founded in 1955, Gaco Western remains today a family-owned business with its roots in technology and product innovation.

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