



GARDEN ROOF ASSEMBLY

BEAUTY MEETS PERFORMANCE



BUILDING TRUST



HYDROTECH'S HISTORY

Since 1963, Monolithic Membrane 6125® waterproofing and roofing membrane has been used in numerous parking structures and plaza applications where large areas of planting were part of the overall design. These structures were engineered to accept the heavy loads because several feet of soil and various hardscape components were incorporated into the design. These installations were not

referred to as vegetated or green roofs back then, but are today by many. The difference between those early applications and the current vegetated roof market is weight. Advancements in drainage/water retention technology and lightweight engineered growing media have greatly reduced the weight of a vegetated roof, allowing it to be used on a wider range of structures.

THE HYDROTECH ADVANTAGE

Hydrotech's first Garden Roof® Assembly, Mashantucket Pequot Museum was installed in 1996; the first "single source" green roof assembly (everything from the deck up) in America. With more than 25 years of experience with all kinds of vegetated roofs, Hydrotech is in a unique position

to assist you with all aspects of your project. Whether you are faced with a flat or steep slope roof, need to address stormwater retention as part of the project's BMP/LID requirements, or need assistance in choosing the right vegetation...Hydrotech can help.

A QUALITY GREEN ROOF STARTS WITH THE MEMBRANE



Hydrotech's flagship product Monolithic Membrane 6125 (MM6125®), a fluid applied rubberized asphalt, has been keeping buildings watertight for 60 years. Monolithic

Membrane 6125® is formulated with up to 40% post-consumer recycled content and is the membrane of choice for Hydrotech's Garden Roof applications. MM6125 has been used in fountains, pools, reflecting ponds, planters and other

applications where contact with water is to be expected. In addition to MM6125's ability to perform in a wet, submerged condition, MM6125 has many other unique features that make it the best choice for green roof applications...

- There are no seams to fail; the membrane is completely monolithic
- Bonded directly to the substrate - restricts lateral water movement if damaged
- Can be installed on substrates with little or no slope
- Easy to detail all critical penetrations and terminations
- Resistant to fertilizers and other mild acids
- No VOC restrictions; contains no PVCs
- Installed ONLY by authorized, trained applicators

experience matters...

25+ years, thousands of projects around the world...



1996... Mashantucket Pequot Museum - Mashantucket, CT



Bellevue City Hall - Bellevue, WA



Tri-City Wastewater - Oregon City, OR

GARDEN ROOF® ASSEMBLY ADVANTAGES

Besides being aesthetically pleasing, a vegetated roof can provide numerous ecological, technical and owner benefits.

Owner Benefits

- Increased Life Expectancy of the Roof
- Additional Usable Space
- Create a Therapeutic Environment
- Financial Incentives (Government)
- Contribute Toward LEED® points
- Image / Prestige

Technical Benefits

- Storm Water Retention / Detention
- Additional Thermal Resistance
- Reduced Noise Transmission

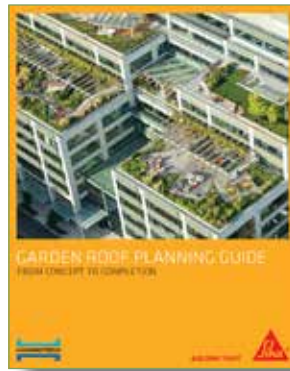
Ecological Benefits

- Mitigates the Urban Heat Island Effect
- Natural Habitat for Plants and Animals
- Reduction of Dust and Smog Levels
- Oxygen Producing / Carbon Dioxide Sink
- Urban Agriculture

RESOURCES

Hydrotech's experienced sales representatives and staff work closely with your design team, and can offer assistance in the early design stage, through specification and detail development. Each project is unique, therefore each Garden Roof® Assembly is designed to meet specific objectives. Hydrotech has a variety of tools and resources available

which may assist you in meeting your project goals. Visit our website www.hydrotechusa.com to access our specifications, details, Garden Roof Planning Guide and more. In addition, Hydrotech's Hydrology Tool (HHT) can provide stormwater management information based on actual project conditions.



OWNER ASSURANCE

The Garden Roof Assembly consists of proven components from the deck up, including the following; waterproofing/ roofing membrane, insulation, architectural pavers (hard-scape), green roof components, growing media and even the vegetation for extensive applications. Hydrotech offers a

range of warranty options to an owner providing long term assurance and peace of mind from the watertightness of the membrane, up to and including the plants, as well as removal and reinstallation of the overburden.

Contact Hydrotech for specifics.

...10's of millions of square feet installed



LDS Conference Center - Salt Lake City, UT



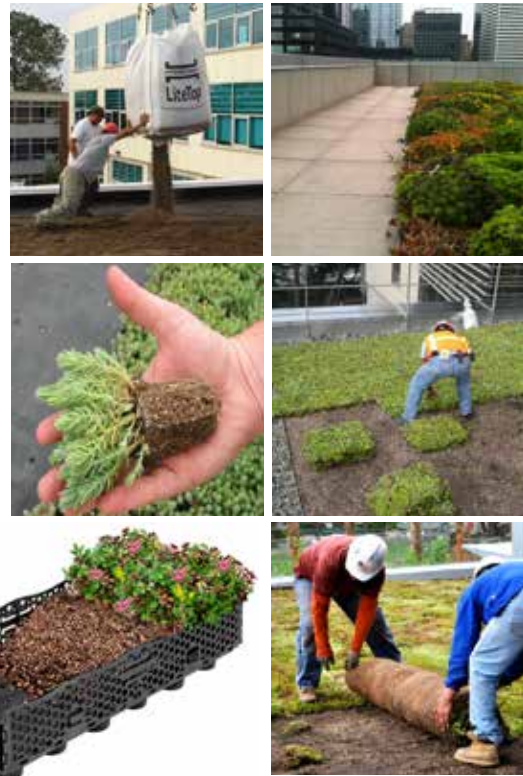
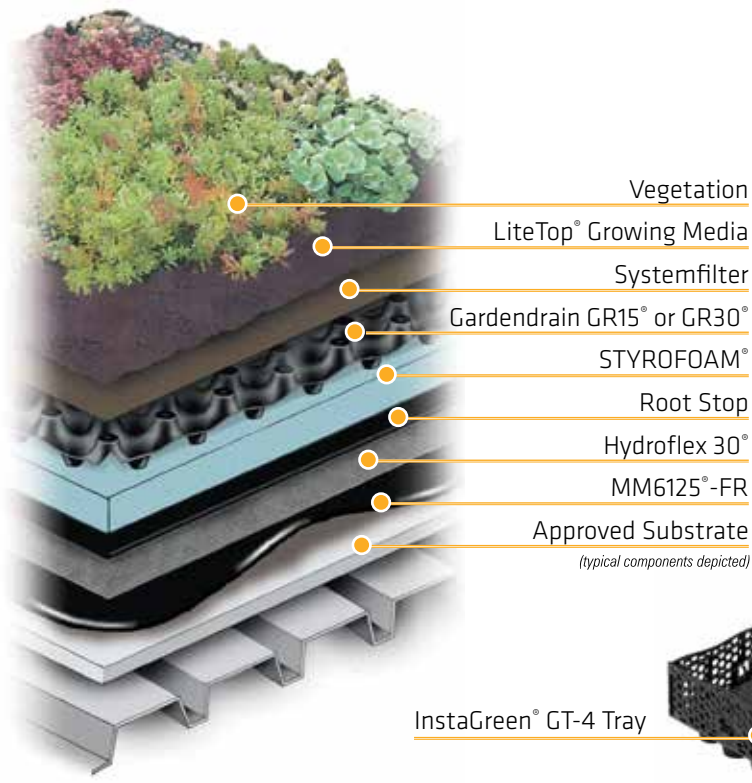
Optima Old Orchard Woods - Skokie, IL Photo Credit: Optima



1101 Dexter - Seattle, WA

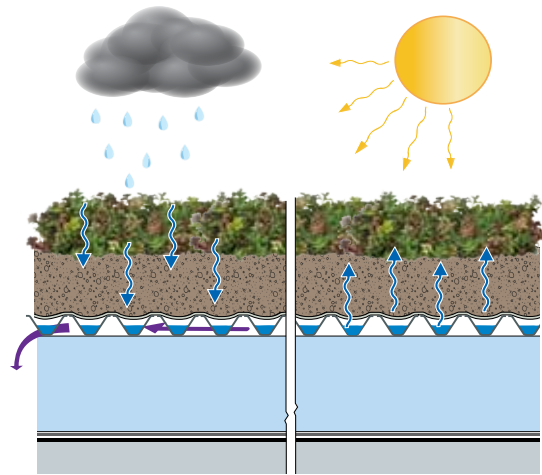
...2018

EXTENSIVE



Features:

- Typical depth: 3" - 6" of growing media
- Depths and related weights are regionally dependent (in warmer climates, greater growing media depth is required)
- Reduce and delay stormwater runoff volumes and rates
- Can be used on flat or roofs with max. 2:12 slope
- InstaGreen® GT-4 Tray available for modular applications
- Permanent irrigation is highly recommended (sufficient water is required for establishment and maintenance)
- Requires minimal maintenance once established
- Rock Wool can be added for increased water holding capacity



Typical Application

An extensive Garden Roof® Assembly uses a select range of hardy plants, making it attractive to look at while requiring little maintenance after the establishment period. Extensive roofs are typically lightweight and can be installed over a variety of structures including metal roof decks. They are not intended for recreational use and are usually installed to minimize stormwater runoff and help reduce the "urban heat island" effect.



550 W. Adams - Chicago, IL

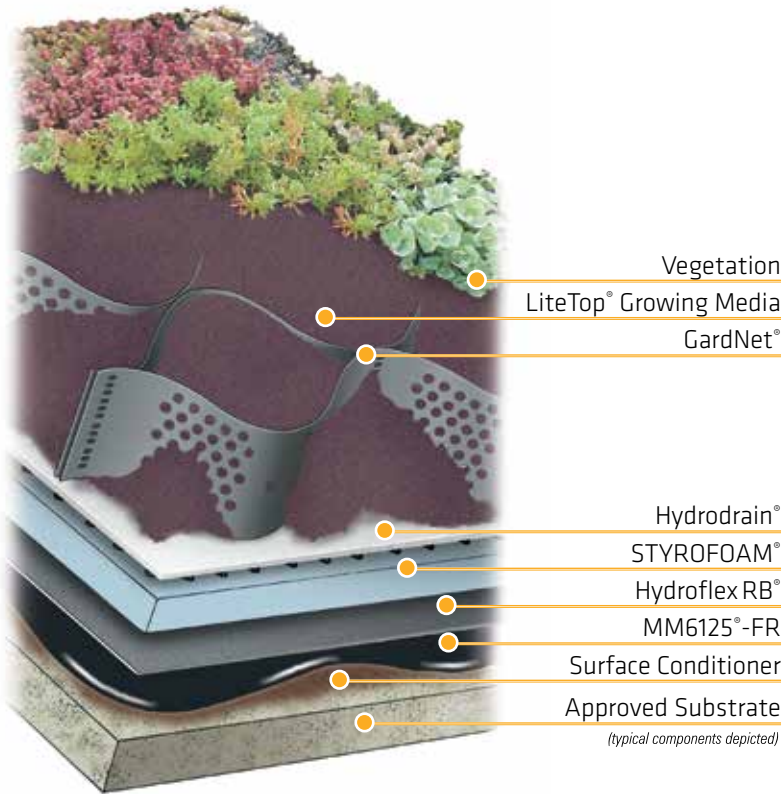


Dow Headquarters - Midland, MI



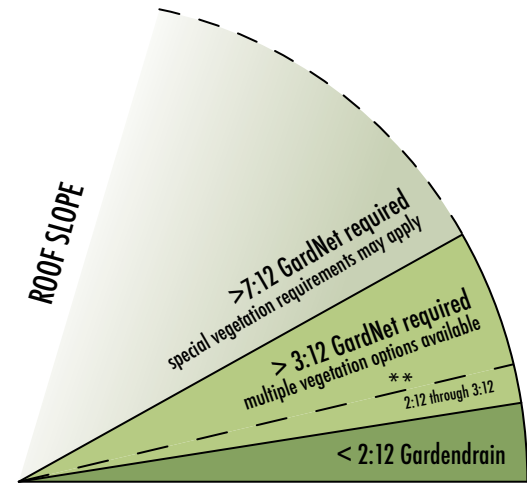
Gates Foundation Garage - Seattle, WA

SLOPE



Features:

- Depth: 3.5" - 13" of LiteTop® growing media; stackable for greater depth
- Weight dependent upon local and regional media blends
- Visibility can be an architectural design feature
- Easily conforms to complex roof slope shapes involving convex, concave and other compound surfaces
- Permanent irrigation is highly recommended (sufficient water is required for establishment and maintenance)
- Requires maintenance depending on vegetation selection
- **Project specific engineering is required, contact Hydrotech**



** Gardendrain may be acceptable, contact Hydrotech for specifics.

Typical Application

Architects, designers, and owners are no longer limited to designing flat or low sloped vegetated roofs. Hydrotech's GardNet Garden Roof Assembly can be installed on steep sloped or undulating roof structures to create a dynamic architectural statement. GardNet, a soil confinement system which ensures soil and plant retention can easily accommodate slopes up to 7:12 and beyond.



ASLA Headquarters - Washington, DC Photo Credit: ASLA

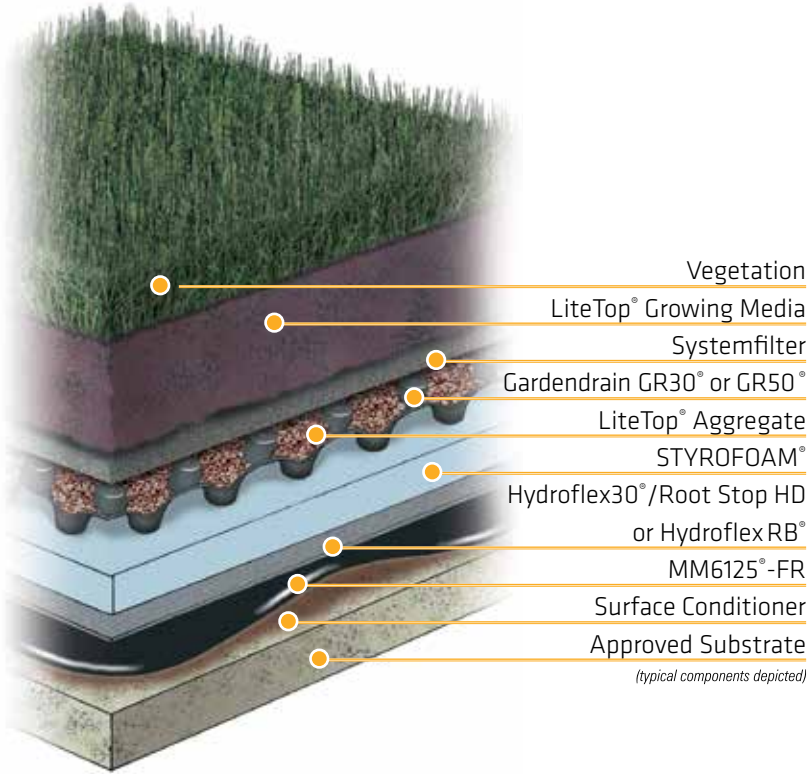


Hypar Pavilion at Lincoln Center - New York, NY



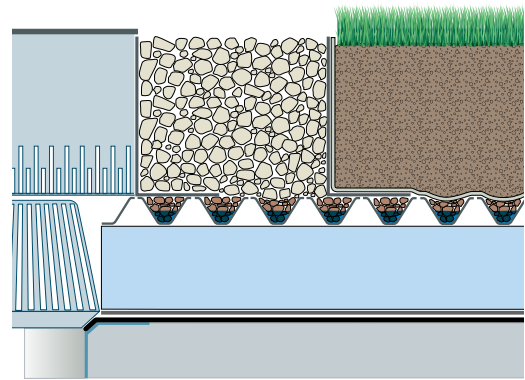
h2hotel - Healdsburg, CA

LAWN



Features:

- Typical depth: 8" - 12" or more of LiteTop® Lawn growing media
- Depths, related weights and types of grass used are regionally dependent
(in warmer climates, greater growing media depth is required)
- Ideal for increasing usable space
- Can be used on flat or sloping roofs
- Hardscape options can be integrated into assembly
- Irrigation is strongly recommended
- Requires maintenance similar to at-grade lawn areas



Typical Application

A Garden Roof® Assembly can expand the livable space of a building through the integration of hardscaped areas with lush landscaped areas of lawn and other vegetation. The maintenance required for these spaces is similar to the care that would be required to maintain this space at grade.



Sherman Plaza - Evanston, IL

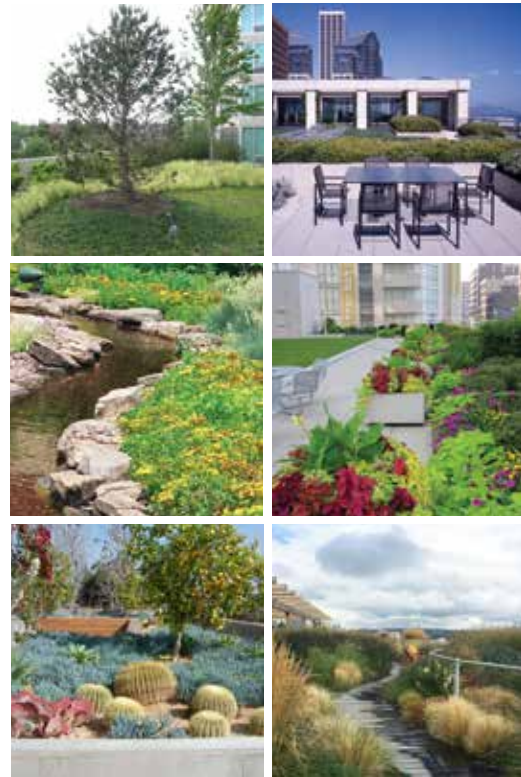
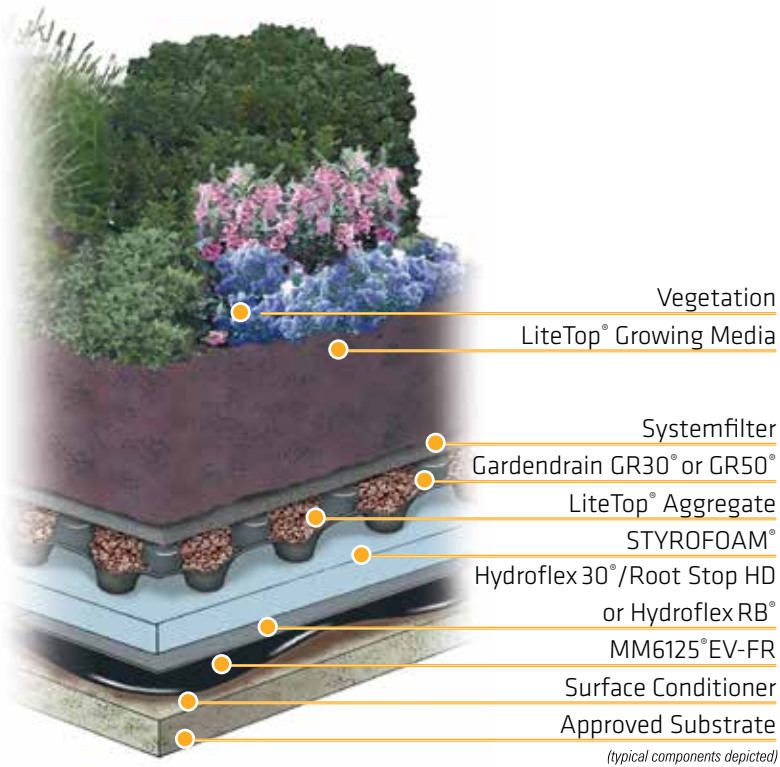


Patewood Hospital - Greenville, SC Photo Credit: Design Strategies



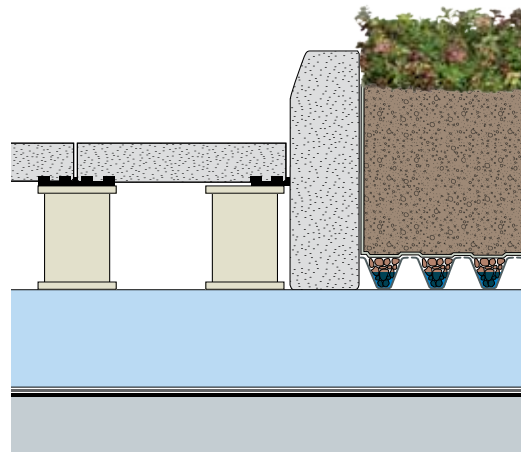
Memphis Bioworks - Memphis, TN

INTENSIVE



Features:

- Requires greater LiteTop growing media depths: 6" - 36" or more of growing media
- Depths and related weights are regionally dependent
- Accommodates a wider variety of plants/shrubs/trees
- Hardscape options, site amenities and water features are possible
- Unlimited design possibilities
- Irrigation is strongly recommended
- Requires regular maintenance
- Required Root Stop HD or Hydroflex RB II to resist woody plant root intrusion



Typical Application

The landscape possibilities with an intensive Garden Roof® Assembly is virtually limitless. Intended for recreational, sporting and leisure purposes, they are often indistinguishable from natural gardens in appearance. It is not uncommon to see water features, significant topography changes, trees and other large plantings that add character and interest to the roof.



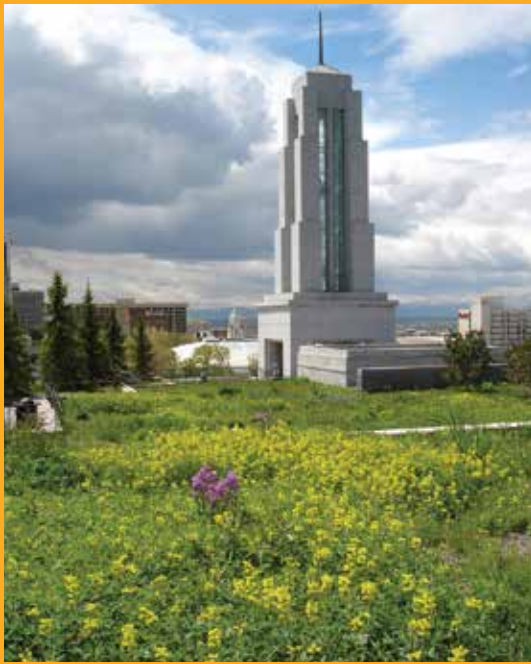
Millennium Park - Chicago, IL



Optima Biltmore - Phoenix, AZ



The Solaire - New York, NY



LDS Conference Center - Salt Lake City, UT



California Academy of Sciences - San Francisco, CA

In 1980, American Hydrotech, Inc. purchased the Construction Products Division of Uniroyal Ltd. in Canada, giving the company exclusive worldwide ownership for the manufacture and distribution of Monolithic Membrane 6125®.

One early strength of American Hydrotech, Inc., that continues today, is its established relationships with the architectural community. The highly respected architectural firm Skidmore, Owings and Merrill first used MM6125® in the late 1960's for the Finance and Management Center at the Illinois Institute of Technology in Chicago. Since that time, SOM and countless other design firms have counted on MM6125® and other Hydrotech products to help keep some of the world's most recognized structures watertight.

Continuing the history of innovation, in 1997 Hydrotech introduced the Garden Roof® Assembly, to transform underutilized roofs, podium decks, and plazas into landscaped and recreational environments. This was the first single source green roof assembly (everything from the deck up) in the United States. Since then, Hydrotech has provided various green solutions on roofs of over 10,000 projects.

In 2021, Sika Corporation acquired American Hydrotech for its position as the market leader in the development and production of premium waterproofing and roofing products and assemblies. With more than 100 years of experience, Sika is a worldwide innovation and sustainability leader in the development and production of systems and products for commercial and residential construction, as well as the marine, automotive, and renewable energy manufacturing industries.

Sika has offices in over 103 countries with over 400 manufacturing facilities and more than 33,000 employees worldwide. With annual sales of 12 billion dollars in 2023, our commitment to quality, innovation, and the environment as well as putting our customer's needs first, encompasses why Sika is the global leader in our industries. Sika, beyond the expected.

Cover Photo - Church Street Station - Evanston, IL

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STYROFOAM is a registered trademark of DuPont
The management system governing the manufacture of MM6125 is ISO 9001:2015 certified

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