

# ROOFING & WATERPROOFING MONOLITHIC MEMBRANE 6125®





## **60**+years of proven performance in the field.

Hydrotech<sup>®</sup> Monolithic Membrane 6125<sup>®</sup> (MM6125<sup>®</sup>), the original rubberized asphalt membrane, has been entrusted with keeping high profile structures across the country and around the globe watertight for over 60 years. With billions of square feet of MM6125<sup>®</sup> installed, it is recognized as a premium technology in the roofing and waterproofing industry.

Sika acquired American Hydrotech Inc. and expanded their offerings of complete roofing and waterproofing systems. They also became the number one supplier of green roofs in North America, supporting their global sustainability efforts.

Offering a full range of thermal and moisture protection products, drainage systems, amenity deck, green roof, and blue roof applications, we will continue to give architects and owners superior flexibility and design options.

Cover Photo – The First Church of Christ, Scientist, Boston – MA (Installed in 1970)

Scope of work included the reflecting pond waterproofing, plaza waterproofing and several Protected Membrane Roofs (PMR).



SoFi Stadium - Los Angels, CA



Liberty Memorial - World War I Museum - Kansas City, MO



Project Heat - Chicago, IL

#### HYDROTECH® MONOLITHIC MEMBRANE 6125°: BENEFITS AND FEATURES

**Thermoplastic Material** - one component, 100% solids, no solvents means no on-site cure failures, no two-part mixing and no VOC restrictions.

**Dead Level Applications** - can withstand and perform in submersed water conditions and is fully warrantable. The perfect membrane for flat, zero slope decks, water features, pools and vegetated roofs.

**Monolithic Membrane** - seamless, conforms to deck irregularities, and self-healing of minor construction damage. Since it is applied directly to the deck, water is restricted from migrating laterally between the substrate and the membrane.

**Cold Weather Applications** - can be applied to 0°F (-18°C) and is unaffected by adverse weather conditions immediately after installation.

**Recycled Content** - Hydrotech® Monolithic Membrane 6125®, is formulated with up to 40% post-consumer recycled content.

**High Viscosity Material** - applied at 215 mils (5.5 mm) or 180 mils (4.5 mm), 2-3 times thicker than most other membranes, for better crack bridging, ease of flashing and substrate acceptability.

Superior Toughness/Tenacity - means excellent adhesion to substrate and cohesive strength. Also, superb elongation and low temperature flexibility ensure the membrane does not become brittle.

**Acid Resistance** - highly resistant to fertilizers, building washes, acid rain, methane and numerous wastes - unlike other rubberized asphalt products that use various forms of inexpensive calcium carbonate fillers.

Combined, these attributes make MM6125° a membrane that performs so well that it is rated by British Board of Agrément (BBA) as "an effective barrier to the transmission of water... for the design life of the roof structure."

- Agrément No. 90/2431 & 90/2432



Millennium Park - Chicago, IL

#### **RIGOROUS QUALITY CONTROL**

Hydrotech® Monolithic Membrane 6125® is manufactured with rigid quality control under an ISO 9001:2015 certified quality management system. Besides earning the BBA Agrément Approval from the United Kingdom, MM 6125 carries approvals from North America such as CGSB-37.50-M89, CCMC, National Defense, UL & ULC Class A Ratings and numerous international certifications and approvals. Local approvals include Dade County, Florida, City of Los Angeles and New York City's MEA. MM6125 is installed only by a network of authorized and trained applicators, a key reason for the enormous success of the Sika - Hydrotech program.



#### MEMBRANE ASSEMBLY COMPONENTS

#### Flashing/Reinforcement

**Hydrotech**° **Flex-Flash F:** A spun-bonded polyester fabric reinforcement for detailing conditions with Hydrotech° Monolithic Membrane 6125° such as changes in plane, construction joints and cracks. It is also used as the reinforcement in the MM6125°-FR assembly (90 mils, fabric, 125 mils).

**Hydrotech**° **Flex-Flash UN:** An uncured neoprene flashing used at exposed walls, curbs, penetrations, expansion joints and angle changes.

**Hydrotech**° **Flex-Flash MB:** Modified Bitumen also available for exposed flashing. (not shown)

#### **Separation and Protection Courses**

**Hydrotech**° **Hydroflex**°: A fiberglass reinforced, rubberized asphalt protection course. Hydroflex will not shrink or curl, reducing the likelihood of damage and stress on the membrane.

**Hydrotech**° **Permaboard:** A superior quality, semi-rigid, waterproof protection board composed of a rubberized asphalt core, reinforced with a non-woven fiberglass mat and sandwiched between two protective polypropylene layers. (not shown)

#### **Drainage Components**

**Hydrotech** \*Hydrodrain \*composite drainage products consist of either a three-dimensional "geonet" type a crush-proof polyethylene drainage core or a "dimple" type polystyrene drainage core. There are multiple variations of this product to meet particular project requirements with both horizontal and vertical applications.

#### Insulation

**Styrofoam**<sup>™</sup> Brand Insulation board by DuPont for roofs,walls, and plazas. Available through and fully warranted by Hydrotech...

- Thermal stability R value of 5 per inch
- Styrofoam™ Brand Plazamate™ XR is available with 30% more R-value
- Excellent for exposed applications
  - moisture resistant and dimensionally stable
- High-compressive strength 25, 40, 60 or 100 psi (to fit the use)
- Environmentally friendly CFC-free and recyclable

#### **Other Products**

**Hydrotech® Hydroguard®** an integral ballast/insulation panel comprised of Styrofoam™ topped with latex modified concrete.

**Hydrotech** ThermaFlo a protection, insulation and drainage panel comprised of DuPont Styrofoam with horizontal and vertical channels on one side covered by spunbonded polyester fabric.

**SECUROCK**° a gypsum-fiber roof board with 95% recycled material made by USG Corporation, as marketed by Hydrotech.

**Hydrotech**° **VM60**™ a 60-mil (1.5 mm) thick self-adhering sheet waterproofing membrane for vertical below-grade substrates.

**Hydrotech**° **MM7800**° a single-component, cold applied rubberized asphalt membrane for foundation walls.











**Hydrotech**° **LM6090**™ a cold two-part elastomeric asphalt membrane for pre-installation of flashing or as a waterproofing for small areas.

**Hydrotech**° **HydroSeal** a high-performance two-component, fast-curing, polymethyl-methacrylate (PMMA) resin waterproofing membrane for balconies, terraces, plaza decks, and more.

**Hydrotech**\* **HydroSeal 1K** a single component, low VOC, moisture-triggered, aliphatic polyurethane resin, is fully adhered and is intended for use in applications such as balconies, terraces, plaza decks, planters, under pavers or tiles, split slab conditions, and more.

**Hydrotech**° **LM7000** a two-component, fast cure, liquid applied, asphalt extended, aromatic polyurethane waterproofing membrane, available in horizontal and vertical grades and is ANSI/NSF 61 approved for potable water. For use in balconies, terraces, plaza decks, planters, pools, and more.

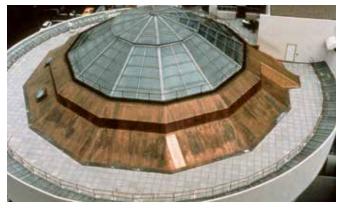
#### NEW CONSTRUCTION OR RENOVATION

While an excellent choice for new construction, Hydrotech<sup>®</sup> Monolithic Membrane 6125<sup>®</sup> is also ideal for renovation projects. If you own a building that has a roof and/or plaza deck in need of major repair, you are not alone. Deteriorating topping materials, serious leaks and loss of insulating value are

some of the problems facing many owners. These problems may be symptomatic of improper design, construction errors, inadequate material specifications or use of a product with an unknown track record...or waterproofing membranes that have exceeded their "performance life."

#### Hydrotech Monolithic Membrane 6125 is the ideal choice for renovation applications because it can easily handle:

- Rough concrete / spalled concrete
- Phased construction
- Difficult detailing conditions
- · Little or no slope



Guggenheim Museum - New York, NY

#### SUSTAINABILITY / LEED®

Construction is no longer just about building and development: it's about building smart. That entails limiting the impact of the construction process on the very environment that nurtures us, building for the long-term and catering to global needs and issues.

We have developed products, systems and alliances that reflect and reinforce our commitment to environmental sustainability. As producers of one of the industry's best performing membranes, Hydrotech has also introduced some of the industry's most sustainable waterproofing assemblies. For instance, our MM6125° is a hot-applied rubberized asphalt that contains up to 40% post-consumer recycled content.

Hydrotech Monolithic Membrane 6125, the foundation for all our waterproofing and roofing assemblies, also helps garner LEED points on projects around the country each and every day. Sika - Hydrotech assemblies feature recycled content in the membrane and reduced lifecycle costs due to product longevity (which also reduces its impact on landfills). In addition, The Ultimate Assembly delivers energy savings through reflective pavers, while our Garden Roof and Blue Roof Assemblies can assist you with stormwater management requirements to help meet a project's BMP's.

In short, we have the solutions that fit the long-term sustainability strategies savvy building owners and operators are demanding of the products and assemblies they specify.

#### Roofing, Waterproofing, Ultimate and Garden Roof Assemblies - Possible LEED V. 4 points

LEED USCHE	S Protect or Restore Habitat	S Open Space	<b>S</b> Rainwater Management	Heat Island Reduction	<b>%</b> Places of Respite	S Direct Exterior Access	A Outdoor Water Use	<b>9</b> Optimize Energy Performance**	Building Life Cycle Impact Reduction	<b>M</b> Environmental <b>Y</b> Product Declarations	M Sourcing of Raw Materials	<b>M</b> Material Ingredients	<b>T</b> Integrative Process	<b>I</b> Innovation
PMR Assembly	-	-	-	-	-	-	-	1-18	1-3	1-2	1-2	1-2	1	1-2
Ultimate Assembly	-	1	-	1-2	1*	1*	-	1-18	1-3	1-2	1-2	1-2	1	1-2
Garden Roof Assembly	2	1	2-3	1-2	1*	1*	1-2	1-18	1-3	1-2	1-2	1-2	1	1-2

#### TYPICAL WATERPROOFING APPLICATIONS

Fabric Reinforced (FR) Assembly (215 mils thick - 5.5 mm)

(typical components depicted)

Hydrotech® Hydroflex® Protection Sheet or Permaboard

Hydrotech® Monolithic Membrane 6125® (125 mils)

Hydrotech® Flex-Flash F Reinforcement

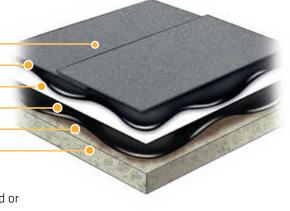
Hydrotech® Monolithic Membrane 6125® (90 mils)

Surface Conditioner (where required)

Approved Substrate

**Acceptable Substrate:** cast-in-place concrete, composite deck, precast concrete ("T", double "T" or panel), wood plank, plywood or metal deck with approved substrate board

Not Acceptable: lightweight insulating or cellular concrete



#### Vertical Waterproofing

(typical components depicted)

Styrofoam™

Hydrotech® Monolithic Membrane 6125®

Hydrotech® Hydroflex® or Permaboard

Hydrotech® Flex-Flash F

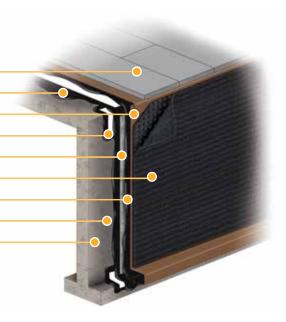
Hydrotech® Flex-Flash FV

Hydrotech® Hydrodrain® (dimple board)

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate



#### **Split Slab Construction**

(typical components depicted)

Concrete Topping Slab

Hydrotech® Hydrodrain®

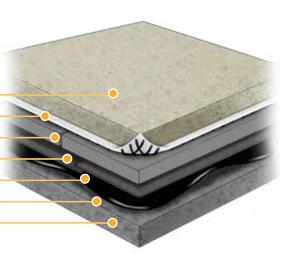
Styrofoam™

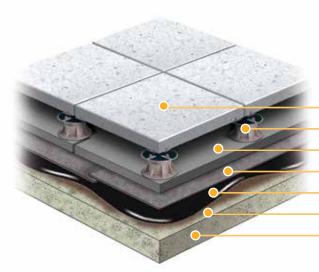
Hydrotech® Hydroflex®

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate





The Ultimate Assembly is not intended for vehicular traffic

## The Ultimate Assembly® (typical components depicted)

Architectural Paver

Pedestal

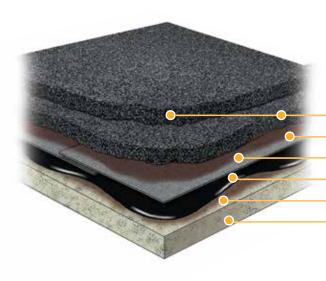
Styrofoam™ (minimum of 60 psi)

Hydrotech® Hydroflex®

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate



### Asphalt Overlay (typical components depicted)

Asphalt Paving Lift #1 and #2

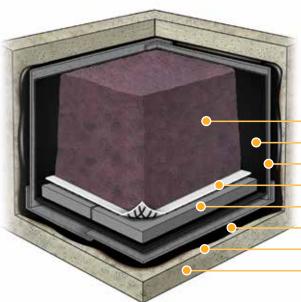
Non-Solvent Tack Coat

Hydrotech® Hydroflex®

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate



#### **Planter**

(typical components depicted)

Soil or Hydrotech® LiteTop® Growing Media

Hydrotech® Root Barrier

Hydrotech® Hydroflex®

Hydrotech® Hydrodrain®

Styrofoam™

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate

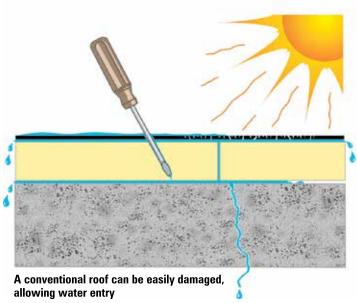
Current details and specifications for all assemblies are available online at usa.sika.com/roofing • hydrotechusa.com

#### PROTECTED MEMBRANE ROOFING

#### **CONVENTIONAL ROOFING DESIGN:**

With a conventional roof assembly the roof membrane is typically placed on top of an insulation layer and structural deck. In this configuration the roof membrane is doing double duty...protecting the contents of the building as well as the insulation below from moisture. When most insulation gets wet it loses its ability to perform as a thermal barrier. And, because the roof membrane is fully exposed to the environment in this assembly, it is subjected to extreme conditions and stresses.

A conventional roof arrangement can leave the roof membrane vulnerable to sudden temperature changes, high summer roof temperatures, low winter temperatures, ice, hail, ultraviolet rays, physical abuse from heavy foot traffic and routine maintenance. Exposure to all of these elements can weaken the integrity of the roof membrane and shorten its life expectancy.



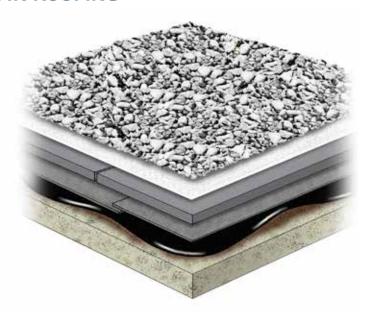
#### THERE IS A BETTER WAY - PROTECT THE MEMBRANE!

A better way is possible because of DuPont<sup>®</sup> Styrofoam<sup>®</sup> Brand Insulation, a closed cell extruded polystyrene that can be placed in a wet environment. Placed on top of Hydrotech<sup>®</sup> Monolithic Membrane 6125<sup>®</sup>, it offers protection from the harsh conditions up on a rooftop.

#### UNCONVENTIONAL COMMON SENSE IN ROOFING

This arrangement of roofing materials (roof deck / roof membrane / moisture-resistant insulation) has been referred to for decades as an Insulated Roof Membrane Assembly (IRMA), although it is now most often referred to as a Protected Membrane Roof (PMR). With such roofs, the membrane's temperature range and rate of temperature change are drastically reduced. Neither Mother Nature nor physical abuse can easily affect it.

BY SIMPLY REVERSING THE INSULATION AND MEMBRANE PLACEMENT – INSULATION ON TOP OF THE MEMBRANE RATHER THAN BENEATH – THE CAUSE OF MANY ROOFING PROBLEMS CAN BE EASILY SOLVED.









Jacob Javits Center Expansion - New York , NY



400 N. Aberdeen - Chicago, IL

#### PROTECTED MEMBRANE ROOFING (PMR) ASSEMBLY BENEFITS:

**Proven Performance –** The PMR Assembly has been a proven, time tested roof assembly for 60 years, with thousands of successful installations around the world.

**Total Roof Life Cost Savings –** While the initial cost might be slightly greater, the life cycle cost of a PMR Assembly can be considerably less than that of a conventional roof, since it can last significantly longer...2-3 times longer!

**Lower Maintenance Costs -** Roof maintenance is minimal throughout the service life of a PMR Assembly.

**Design Flexibility –** A wide choice of topping materials and finishes installed over the membrane and insulation is possible to meet the desired roofs function.

**No Vapor Retarder Needed –** With the membrane located below the insulation (on its warm side) the dew point condition occurs above it, therefore no additional vapor retarder is required in a PMR Assembly.

**Future Alterations –** Since the insulation and other topping materials above the membrane are typically loose laid, the roof surface can be easily altered to suit a new roof function or aesthetic.

**Reuse / Recycle Option -** A truly sustainable roof provides the best performance for the longest time possible. When it's finally time to replace the roof, the Styrofoam™ insulation can be either reused or recycled.

**Other Work Can Proceed Faster –** Since Hydrotech<sup>®</sup> Monolithic Membrane 6125<sup>®</sup> (MM6125<sup>®</sup>) membrane is installed first (followed by the insulation and ballast), the interior build out can begin immediately.

**Single Source Full Assembly Warranties** – Warranties available typically cover the integrity of the membrane, thermal performance and wind resistance of the insulation, as well as removal and reinstallation of the topping materials provided by Hydrotech for up to 30 years.

For further information, see the Protected Membrane Roof Planning Guide.



Pacific Bell Administration Office Complex - San Ramon, CA

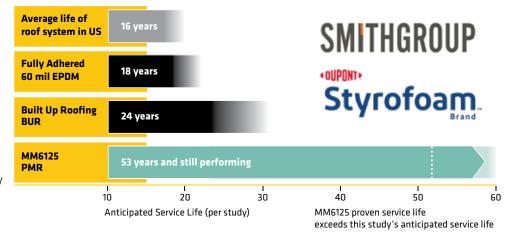
#### LIFE CYCLE BENEFIT

Hydrotech® Monolithic Membrane 6125® utilized in a Protected Membrane Roof Assembly maximizes the lifecycle benefit to an owner, well beyond other options. Compare for yourself and see the clear difference.

#### Costs that must be considered are:

Initial Cost, Maintenance/Repair and Replacement Cost.

Ask to see the SmithGroup life cycle cost study commissioned by the manufacturer of Styrofoam<sup>™</sup>.



#### **TYPICAL APPLICATIONS**

## Protected Membrane Roof (PMR) (typical components depicted)

Stone Ballast

Hydrotech® Stone Filter Fabric

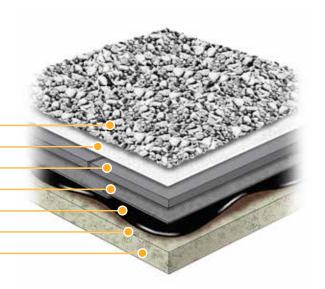
Styrofoam™

Hydrotech® Hydroflex® Protection Sheet

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate



#### **PMR Metal Deck**

(typical components depicted)

Stone Ballast

Hydrotech® Stone Filter Fabric

Styrofoam™

Hydrotech® Hydroflex®

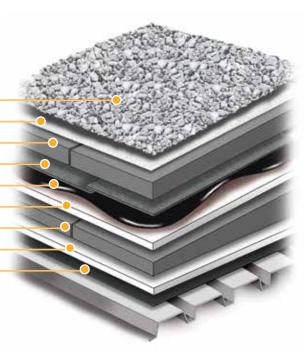
Hydrotech® Monolithic Membrane 6125®

Approved Substrate Board

Tapered Insulation

Approved Substrate Board

Vapor Barrier (where needed)



#### The Ultimate Assembly®

(typical components depicted)

Architectural Paver

Spacer Tab

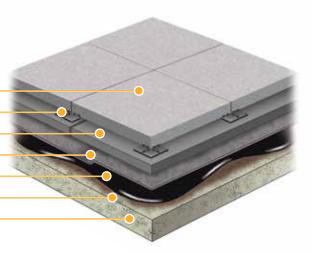
Styrofoam™

Hydrotech® Hydroflex®

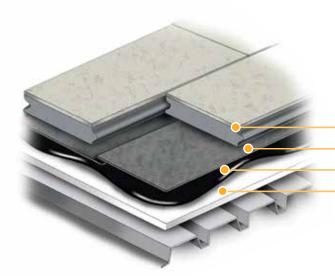
Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate



The Ultimate Assembly is not intended for vehicular traffic



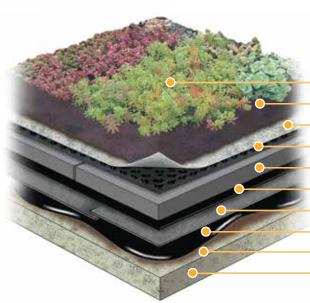
## Hydrotech® Hydroguard® (typical components depicted)

Hydroguard

Hydrotech® Hydroflex®

Hydrotech® Monolithic Membrane 6125®

Approved Substrate



## Garden Roof® Assembly (typical extensive assembly depicted)

Vegetation

Hydrotech® LiteTop® Growing Media

Hydrotech® Systemfilter

Hydrotech® Gardendrain® GR10, GR25, or GR30

Styrofoam™

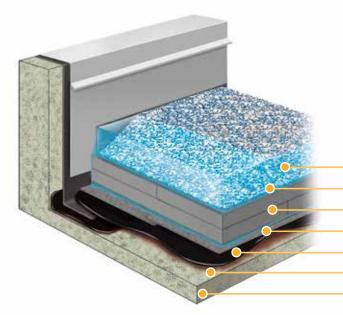
Hydrotech® Root Stop

Hydrotech® Hydroflex 30®

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate



## Blue Roof Assembly

Stone Ballast

Hydrotech® Stone Filter Fabric

Styrofoam™

Hydrotech® Hydroflex 30®

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate

## GLOBAL BUT LOCAL PARTNERSHIP



#### **WE ARE SIKA**

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 transportation, marine, automotive, and renewable energy manufacturing industries.

Sika has subsidiaries in 102 countries around the world and, in over 400 factories, produces innovative technologies for customers worldwide. In doing so, it plays a crucial role in the transformation of the construction and transportation sector toward greater environmental compatibility. With more than 34,000 employees, the company generated sales of CHF 11.76 billion in 2024.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to use.

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