

## The Ultimate Assembly®



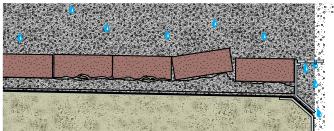
WATERPROOFING & OPEN JOINT PAVER ASSEMBLY FOR PLAZAS & ROOF DECKS

## THE ULTIMATE ASSEMBLY®

Hydrotech's Ultimate Assembly<sup>®</sup> is the perfect solution for roof decks and plazas when optimal performance must be matched with superior aesthetics. Utilizing pavers from a variety of manufacturers installed in an open joint assembly, the Ultimate Assembly offers many advantages over other installation methods.

The Ultimate Assembly begins at the substrate with Hydrotech's premier waterproofing membrane, Monolithic Membrane 6125®, a fluid applied rubberized asphalt membrane with 60 years of proven performance. The assembly can include insulation, drainage, and other components so it can be tailored to meet a wide variety of jobsite conditions. Architectural finish pavers complete the assembly offer high compressive strength, low moisture absorption, and are available in a wide variety of colors and textures.

It is not uncommon to find pavers on plazas installed in a setting bed (asphaltic, concrete or sand). However, pavers installed in this method are susceptible to premature deterioration due to constant wetting and drying, as well as freeze thaw damage. Over time this can lead to heaving and displacement of the pavers and setting bed (see illustration below left). Pavers in a setting bed application must be sloped to move water to a drain, otherwise ponding water on the paver surface can occur. This ponded water can be a slip hazard especially in the winter when it turns to ice. There is a better way!

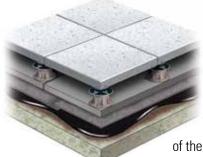


Assembly Components

**Monolithic Membrane 6125®** - This membrane is the ideal base for The Ultimate Assembly. A fluid-applied, seamless, rubberized asphalt made of 100% solids, MM6125® bonds to the substrate with strength and durability that last. It has been protecting high profile structures across the globe for 60 years.

**Hydroflex® Protection Sheet** - This heavy-duty fiberglass reinforced rubberized asphalt sheet helps to protect the membrane from construction traffic and topping materials, while also acting as a separation layer between the membrane and insulation.

**Hydrodrain® Drainage Medium** - A durable prefabricated drainage panel composed of a high-density polyethylene core and filter fabric, Hydrodrain acts as an avenue for water to flow to substrate-level drains, thereby lessening unwanted moisture. (optional component)



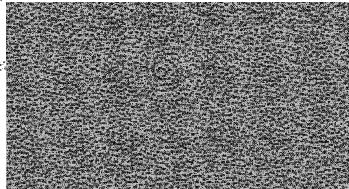
**Open Joint Assembly** - The open joint paver assembly offers many advantages over a setting bed application. Pavers installed in this configuration can be set level on fixed height and adjustable pedestals, regardless

of the slope at the membrane level below. This open joint configuration allows

water to drain off the paver surface and quickly flow to concealed drains (see illustration below right), eliminating the issues typically seen with setting bed applications.

**Installation Ease** - The installation of pavers on fixed height or adjustable pedestals to an established grade and leveled where a sloped deck exists is a simple, durable solution.

**Access to Substructure** - Since the pavers are loose laid on fixed height or adjustable pedestals, access to drains or other components below is easy. Pavers can be simply lifted and reset in place when work is done, so maintenance and future alterations are easily accomplished.



Setting Bed vs. Open Joint

**DuPont STYROFOAM™ Insulation** - A CFC-free, closed cell, extruded polystyrene board with high compressive strength, STYROFOAM™ is moisture resistant and able to retain its thermal value over the years. (optional component)

**Architectural Pavers** - Pavers are available in a wide variety of sizes and materials (concrete, hardwoords and porcelain) to appeal to any projects aesthitics or budget.

**The Ultimate Assembly Accessories** - Accessories help to create a finished assembly that is simple and reliable. Spacer tabs ensure joint uniformity, while facilitating expansion, drainage, and air circulation. Pedestals can telescope and can be used with other accessories to compensate for slope in the deck — so the paver surface is level.

### SINGLE SOURCE WARRANTY

Hydrotech's Ultimate Assembly® warranty provides an owner with "peace of mind" knowing the membrane protecting their structure has a proven performance record of 60 years. In fact, this single source warranty covers every component of the assembly provided by Hydrotech, from the membrane up through the pavers. It's a warranty only Hydrotech can offer and peace of mind only Hydrotech can give.

The warranty includes:

- · Watertightness of membrane
- Thermal retention of the insulation
- Wind uplift resistance
- Performance of the pavers
- Removal and replacement of overburden if a warranted repair to the membrane is needed

Please contact Hydrotech for specific warranty terms and conditions.

### TYPICAL INSTALLATIONS

**Plazas and Promenades** - A plaza finished with architectural pavers can greatly improve the look of a building exterior. As these areas often enclose occupied space or parking, watertightness is critical — which is why the Ultimate Assembly has been installed on thousands of plazas nationwide.

**Roofs and Terraces** - Few roofing systems can match the integrity and beauty of The Ultimate Assembly. Since the layers above the MM6125® waterproofing act as a shield against UV rays and harsh weather, the building structure is well protected. With architectural pavers as the finished surface, the design process gains creative flexibility, while the structure benefits from a high performance overburden.

**Renovation** - Replacing old plaza surfaces is a task no owner or developer looks forward to. So when the time does arrive, few care to risk a system with a short or inconsistent performance record. The Ultimate Assembly removes that element of mystery with our time tested MM6125 waterproofing, insulation and drainage (if needed), topped with exceptionally durable architectural pavers — and of course, it's warranted by American Hydrotech, Inc. Thanks to the open joint configuration, maintenance of the entire assembly is remarkably simple.

# Ultimate Assembly - Concrete Pavers Architectural Pavers Fixed height Pedestal or Tabs STYROFOAM™ Hydroflex® Monolithic Membrane 6125® Surface Conditioner Approved Substrate

(typical components depicted)

### **Ultimate Assembly - Wood Tile\***

Wood Tiles

Adjustable Pedestals and stone ballast

STYROFOAM<sup>™</sup>

Hydroflex®

Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate

typical components depicted)

\*Please refer to Hydrotech's Wood Tile Brochure for applicability, specific applications and conditions

### **Ultimate Assembly - Porcelain Tiles**

Porcelain Tiles

Adjustable Pedestal and Paver Tray

STYROFOAM"

Hydroflex®

Monolithic Membrane 6125®

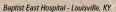
Surface Conditioner

Approved Substrate

(typical components depicted)

\*Please contact Hydrotech for applicability, specific applications and conditions







Rich Tree Open Kitchens - Skokie, IL



Trump International Hotel - Chicago, IL

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.

We have best-in-class brands that provide exceptional performance and owner value: Monolithic Membrane 6125®, our premium (flagship) waterproofing product has been successfully installed on the world's most prestigious structures in over 62 countries for 60 years.

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. Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and motor vehicle industry. Sika has subsidiaries in 100 countries around the world and manufactures in over 300 factories and over 25,000 employees.









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The management system governing the manufacture of MM6125 is ISO 9001:2015 certified