

# ROOFING & WATERPROOFING THE ULTIMATE ASSEMBLY®



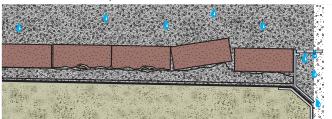


#### THE ULTIMATE ASSEMBLY®

The Ultimate Assembly° 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 Sika - Hydrotech's premier waterproofing membrane, Hydrotech° Monolithic Membrane 6125° (MM6125°), a fluid applied rubberized asphalt membrane with over 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!



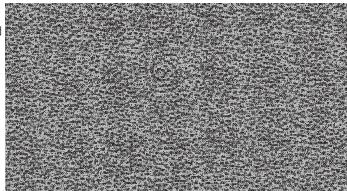
Open Joint Assembly - The open joint paver assembly offers many advantages over a setting bed application. Pavers installed in this configuration can be set level on fixed height and adjustable pedestals, regardless

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

### **Assembly Components**

**Hydrotech** Monolithic Membrane 6125° - 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.

**Hydrotech**° **Hydroflex**° **Protection Sheet** - A 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.

**Hydrotech**° **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)

**DuPont** Styrofoam Brand 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, hardwoods and porcelain) to appeal to any project's aesthetics 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.

The Ultimate Assembly is not intended for vehicular traffic.

#### SINGLE SOURCE WARRANTY

The 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 Sika - Hydrotech, from the membrane up through the pavers. It's a warranty only Sika - Hydrotech can offer and peace of mind only Sika - 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), Styrofoam topped with exceptionally durable architectural pavers and of course, it's warranted by Sika - Hydrotech. 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"

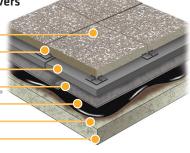
Hydrotech® Hydroflex®

Hydrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate

(typical components depicted)



#### Ultimate Assembly - Wood Tile\*

Wood Tiles

Adjustable Pedestals and stone ballast

Styrofoam<sup>™</sup>

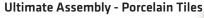
Hydrotech® Hydroflex®

Hvdrotech® Monolithic Membrane 6125®

Surface Conditioner

Approved Substrate

\*Please refer to the Wood Tile Brochure for applicability, specific applications and conditions



Porcelain Tiles

Adjustable Pedestal and Paver Tray

Hydrotech® Hydroflex®

Hydrotech® Monolithic Membrane 6125®

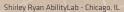
Surface Conditioner

Approved Substrate

(typical components denicted)

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







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## 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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