



A SIKA COMPANY

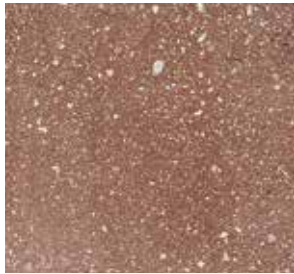
The
Ultimate Assembly[®]
with **Hanover Architectural Pavers**



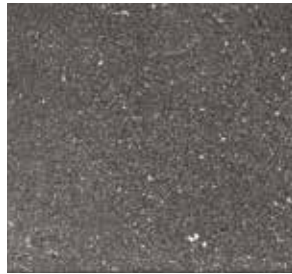
WATERPROOFING & OPEN JOINT PAVER ASSEMBLY FOR PLAZAS & ROOF DECKS

STANDARD FINISHES AND COLORS

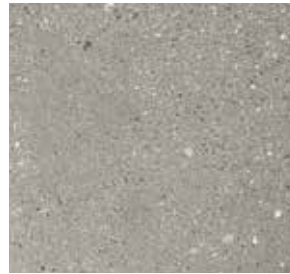
Hanover® pavers, as marketed by Hydrotech, are the perfect finish to the Ultimate Assembly®. With a high compressive and flexural strength, along with an unmatched combination of colors and finishes, designers and owners can be confident in their choice of the Ultimate Assembly. The eight colors below represent the stable of standard colors available in all finishes. Standard nominal sizes are 12", 18", 24", 30" and 36" square. Rectangular and custom sizes, colors and finishes are also available.



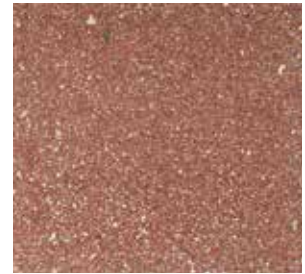
Quarry Red



Charcoal



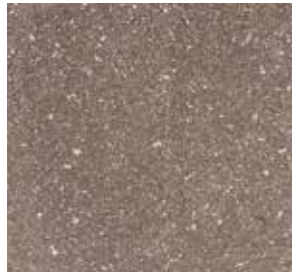
Natural*



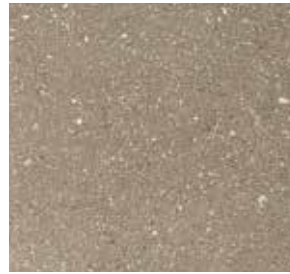
Red 15



Tan



Brown



Cream



Limestone Gray

*Natural color Prest® Pavers have a tendency to vary in color within any given shipment. It may vary in shade from gray/buff to light gray, and even to a darker gray. This variance should be expected and considered normal for the Natural color Prest® Pavers.

CUSTOM COLORS - TUDOR FINISH

The blends shown below were all developed by Hanover to address a specific project requirement. Additional custom blending is available by special order when quantities permit. Hanover's Tudor® finish is a specialized texture designed to reveal the aggregates naturally. It gives the surface a "granite-like" appearance which adds slip resistant qualities to the paver.



Matrix #1930



Matrix #1025



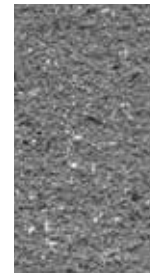
Matrix #115



Matrix #1171*



Antietam*



Matrix #1428



Matrix #1151*



Glacier White

*Colors are available with a Heavy Tudor® finish only.

The Ultimate Assembly is not intended for vehicular traffic.

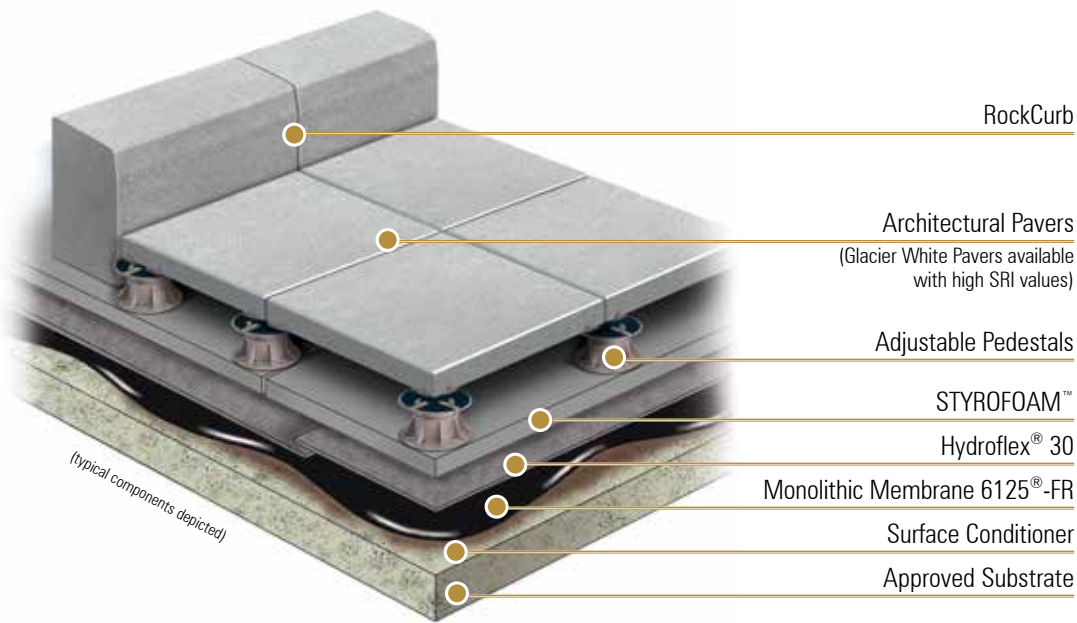


Western Missouri Medical Center - Warrensburg, MO



SEPTA Suburban Station - Philadelphia, PA

ULTIMATE ASSEMBLY



Standard Paver Colors



Custom Colors Also Available

Hanover® pavers installed on fixed-height or adjustable pedestals can convert sloped decks to dead level usable roof and plaza areas. This open joint assembly accommodates drainage by allowing water to flow beneath the pavers unobstructed to the drains.

Architectural pavers are available in a number of standard sizes, colors and finishes. The Glacier White paver is the perfect choice in rooftop applications where a LEED™ compliant high SRI value may be desired (see next page). Custom colors and finishes to meet your specific needs are also available.

Assembly Benefits:

- Free draining - no ponding water on paver surface
- Level paver installation - doesn't have to follow the slope of the structure
- Easy access to roof/plaza components below (if needed)
- Future flexibility - if roof or plaza design changes

Assembly Features:

- Multiple paver sizes are available, including oversized pavers
- Many standard paver colors and finishes available
- Custom colors available upon request
- A high reflectance (SRI) paver, Hanover Glacier White is available
- For high-wind situations the Guardian paver system is available
- The typical weight of a 2' x 2' x 2" paver is 25 lbs./S.F.

The Ultimate Assembly is not intended for vehicular traffic.



First Citizens - Raleigh, NC



UNC Charlotte Football Stadium - Charlotte, NC

GLACIER WHITE & LEED

Hanover® can provide pavers with high reflectance and emittance values that combine to provide a Solar Reflectance Index (SRI) meeting LEED requirements.

- Solar reflectance is the ratio of the amount of solar radiation reflected from a surface to the total amount reaching that surface.
- Emittance refers to a material's ability to release absorbed heat.

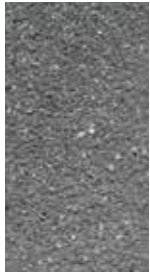
The Solar Reflectance Index (SRI) is a value that incorporates solar reflectance and emittance as a single value. Hanover's Glacier White pavers provide SRI values as follows; Tudor - 76, Finish 13 - 81, Diamond Finish - 84.



Hanover's Glacier White with Tudor® finish has a reflectance value of 0.627, emittance value of 0.91 and an SRI of 76.

TUDOR #13 FINISH

Hanover® Pavers are also produced in a Tudor #13 finish which gives a delicate "sandstone" texture. Tudor #13 is available in all the standard colors. A few of the available custom colors are shown below. Other custom colors can be ordered when quantities permit.



Matrix #1428



Matrix #1775



Matrix #2127



Matrix #1914

SLATEFACE FINISH

The SlateFace® Paver has been designed to reproduce the texture, color and appearance of natural slate. Stocked in BlueStone and Tennessee Flagstone colors, the irregular top surface was taken from actual slate faced stone. SlateFace® Pavers feature a square edge.



BlueStone (#M2374)



Tennessee Flagstone (#M2343)

Please Note: The photos shown are a representation of possible color blend and texture. The actual product may vary. A natural effect can be achieved by rotating the direction of the pavers during installation.



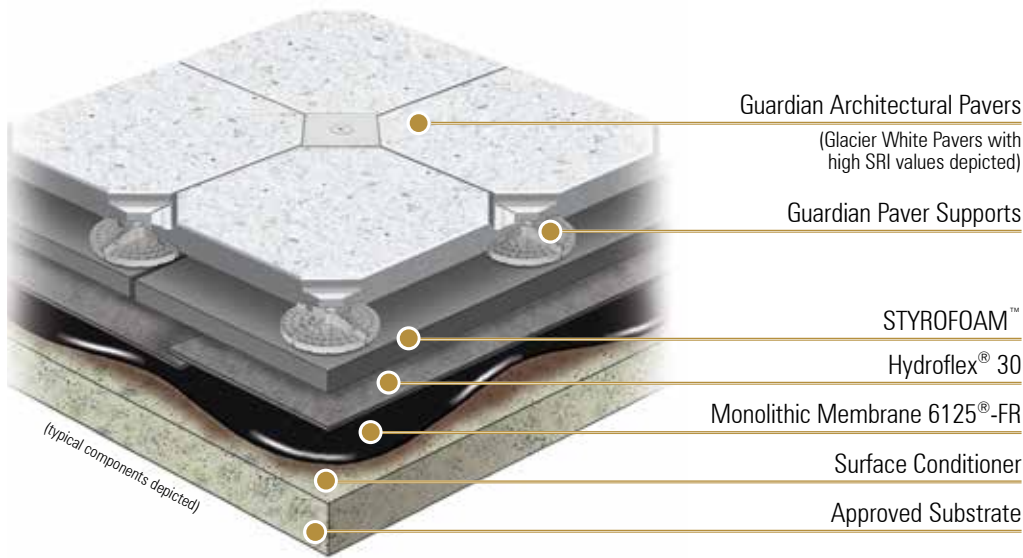
7 World Trade Center - New York, NY



City Creek Center - Salt Lake City, UT

GUARDIAN PAVER SYSTEM

Standard Accessory Colors



High wind and special site conditions require a paver assembly up to the task. Hanover® Guardian® Paver Assembly is ideal for the most severe conditions, which require an elevated roof paver pedestal system. This system will provide a monolithic interlocked paver surface which provides high wind uplift resistance. Guardian® is made up of a unique 3 piece pedestal and a shaped paver that, together, will "lock down" and unitize the entire roof paver surface.

Product Features:

- Specially designed for wind uplift resistance.
- Pavers are interlocked creating a monolithic roof surface.
- Compatible with Elevator Pedestals.
- 18" x 36", 24" x 24" and 30" x 30" nominal sizes available.
- An oversized Guardian® Paver at 24" x 36" is also available and scored with a false joint and corner impressions at the 23 1/2" dimension. This paver should be used where a smaller piece would typically be required. (depicted at right)
- 18" x 36", 24" x 24" and 24" x 36" available in 2" and 3" thickness, 30" x 30" is only available in 2" thickness.



The Ultimate Assembly is not intended for vehicular traffic.

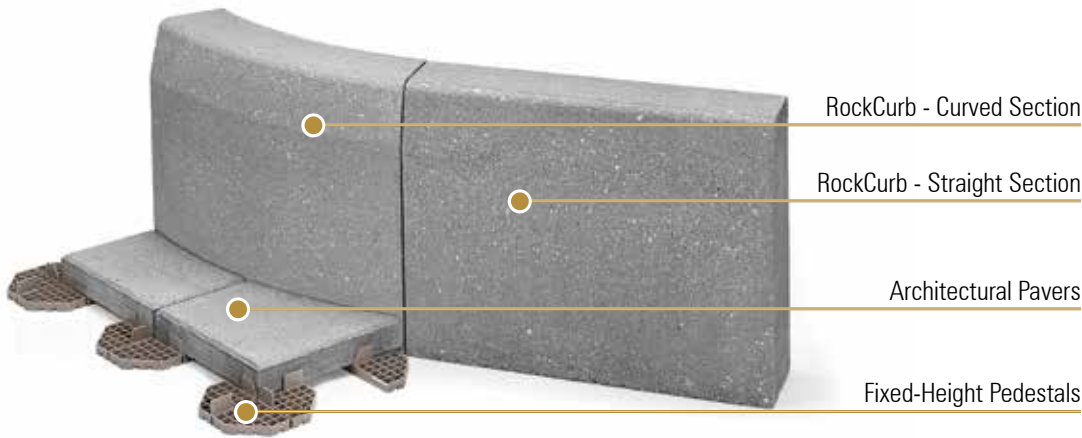


Trump International Hotel & Tower - Chicago, IL

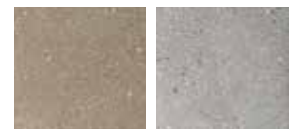
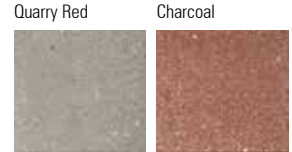
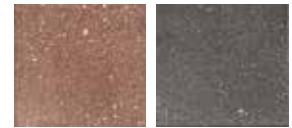


Oregon Health & Science University - Collaborative Life Sciences Building - Portland, OR

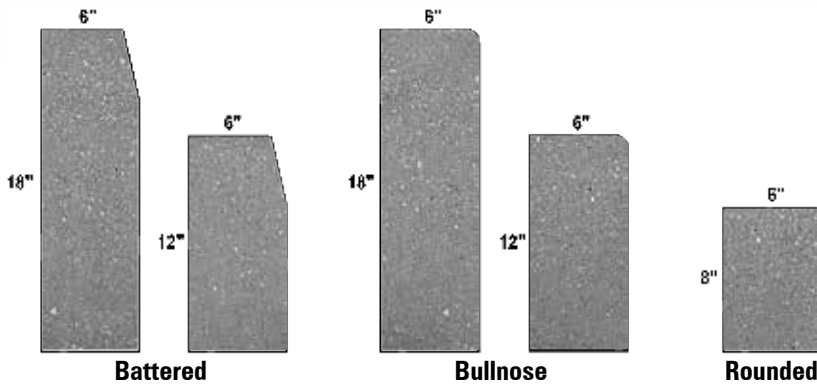
ULTIMATE ASSEMBLY - ROCKCURB



Standard RockCurb Colors



Custom Colors Also Available



RockCurbs can be used to divide landscaped areas from hardscaped areas on a roof or plaza. RockCurb is hydraulically pressed concrete with a minimum strength of 8,500 psf. It comes in the standard Tudor finish and eight standard colors, complementing the standard paver finish and color. The Tudor finish appears on the top and front sides only. The end face and back side is left unfinished.

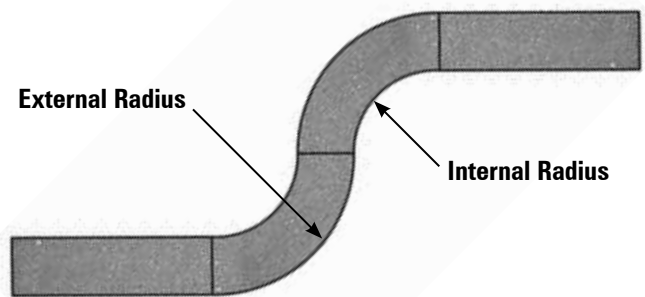
RockCurbs are available in a variety of configurations. Each piece is 6" thick, 36" long and comes in 8", 12" and 18" heights. The 18" RockCurb is available in battered edge only. The 8" is available with a slightly rounded edge only.

Product Features:

- 6" thick
- 8", 12" and 18" height
- 36" length
- 15° battered, bull nose and rounded profiles available
- Standard and custom colors available
- Glacier White RockCurbs available with high SRI values.

RockCurb is also available in a limited number of height and radius sections as follows:

- 12" high - 5, 10, 15, 20 and 30 foot external radius length
- 18" high - 3, 6, 8, 10, 15, 20 and 30 foot external radius length
- 18" high - 6, 15, 20 and 30 foot internal radius length



Resurrection Medical Center - Chicago, IL



Penn State University - Millennium Science Center - State College, PA

THE ULTIMATE ASSEMBLY - SPECIAL PRODUCTS

The Ultimate Assembly can accommodate almost any condition with an array of specialty products manufactured by Hanover®.

- Ballast Pavers - Lightweight and Standard Walkway pavers are available in a natural color with a diamond finish. The Diamond paver finish is not recommended if aesthetics are important. Contact Hydrotech for sizes, thicknesses and weights.
- Rectilinear Pavers - Available in four nominal sizes: 12" x 24", 12" x 36", 12" x 48" and 24" x 48" with thicknesses ranging from 2" - 3" and a beveled edge. Produced with integral spacer lugs, they can be laid individually or combined with other Hanover Pavers.
- Detectable Warning Pavers - Manufactured in accordance with the requirements set forth in the American's Disabilities Act (ADA), Hanover's Detectable Warning Paver is fabricated with a detectable texture applied to the surface of the paver. The Tudor finish is available for special order when quantities permit.
- Pedestal Pavers are a unique alternative to the typical pedestal support system incorporating integral concrete feet on all four corners. A perfect solution when a ballast paver on a PMR Assembly is needed.
- Drainage Pavers are available upon request. They can be manufactured with holes or slots depending on the project requirements.
- Pool Edge Profile pavers are available in 4 edge styles. Each pool edge profile paver is 2" thick. By integrating standard pavers on pedestals with pool edge profiles, designers have the opportunity to create a space where individual units can easily be lifted for underground repairs while maintaining a consistent design for the pool area.

Ballast Pavers



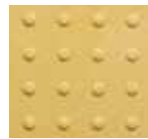
Color: Natural

Finish: Diamond

Rectilinear Pavers



Detectable Warning



Yellow



Red



Charcoal

Pedestal Pavers



Drainage Pavers (slots and holes)



Pool Edge Profiles

Profile A



Profile C



Profile B



Profile D



Pool Edge Profile C



Duke University French Science Center - Durham, NC

THE ULTIMATE ASSEMBLY - ACCESSORIES

The Ultimate Assembly can be installed using a variety of accessories.

Joint spacers are available when fixed-height pedestals will not or cannot be used (i.e. due to height limitations). Plastic cruciform or "T" spacers are available to maintain a 1/8" joint between pavers. Spacers would typically be used in conjunction with 1/16" and/or 1/8" leveling shims to elevate pavers off the substrate from 1/16"-1/4".

Hanover® flexible fixed-height pedestals are square, 1/4" thick EPDM rubber support pedestals with integral 1/8" joint spacer tabs. Flexible fixed-height pedestals can be used singly or combined with 1/16" and/or 1/8" leveling shims, made of the same flexible EPDM rubber, to elevate pavers off the substrate from 1/4"-5/8".

Hanover® fixed-height and High-Tab® fixed-height pedestals are octagonal, 5/8" high support pedestals composed of high density polyethylene. Both types of pedestals have 1/8" integral joint spacer tabs with taller tabs on High-Tab® units. Fixed-height pedestals can be used singly, stacked together or combined with 1/16" and/or 1/8" leveling shims, made of flexible rubber, to elevate pavers off the substrate from 5/8"-2".

The Hanover Elevator™ adjustable pedestal system consists of a series of threaded base and top pedestal units composed of high density polypropylene, which can be combined with a threaded Coupler also of high density polypropylene. The top pedestal units have integral 1/8" spacing tabs and inset rubber pads. The top pedestal units come with either 4 spacing tabs for typically "stacked bond" installations or 3 spacing tabs for "running bond" or otherwise offset joint installations. EdgeFinder™ is a new accessory that, when installed on the "no tab" Elevator top plate, provides an edge restraint for the pavers that helps prevent the pavers from "walking" and resulting in a more solid feel when transitioning from a paved area to a grass area or planting bed.

The Elevator adjustable pedestal system is designed for use with Hydrotech supplied Hanover Architectural Pavers to provide a loose-laid, open joint paver installation. Combinations of Elevator pedestals and Couplers can provide elevation of the pavers off the substrate from 2 to 16 inches, to provide adequate space for utilities to run beneath the paver surface or to make up for differences in height between the structural deck and the finished elevation.



Hanover® Joint Spacers and Leveling Shims

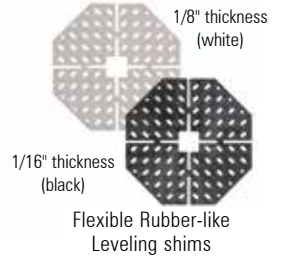


Hanover® EPDM Pedestal and Leveling Shims

Stand alone use only



Hanover® High-Tab® Pedestal with Flexible Leveling Shims



1/8" thickness (white)

1/16" thickness (black)

Flexible Rubber-like Leveling Shims

Elevator® System Units



2" Top



3" Top



4" Top



2" Base



3" Base



4" Base



Coupler

Please Note: All units are packaged separately. 50 pieces per box



High-Tab® Pedestal 5/8"



2 High-Tab® Pedestal 1 1/4"



3 High-Tab® Pedestal 1 7/8"



2" Base & Top 2"-3"



3" Base & Top 3"-4 3/4"



4" Base & Top 4 3/4"-7 3/4"



3" Base, 4" Top & Coupler 7 3/4"-10"



4" Base, 4" Top & Coupler 9"-12"



4" Base, 4" Top & 2 Coupler 12"-16"



Jacksonville Library - Jacksonville, FL Photo Credit: Hanover Architectural Pavers



University of Texas - MD Anderson Cancer Center - Houston, TX

ULTIMATE ASSEMBLY - PAVER PRODUCT DATA

Prest® Paver Sizes	1 3/4"	1 13/16"	2"	2 1/4"	2 1/2"	2 3/4"	3"	4"
11 3/4" x 11 3/4"	X	X	X	X	X	X	X	
11 3/4" x 17 5/8"	X		X	X	X	X	X	
11 7/8" x 11 7/8"			X	X	X	X	X	
11 15/16" x 11 15/16"			X	X	X	X	X	
14 7/8" x 14 7/8"			X	X	X	X	X	
15 7/8" x 15 7/8"			X	X	X	X	X	
17 5/8" x 17 5/8"	X	X	X	X	X	X	X	X
17 7/8" x 17 7/8"			X	X	X	X	X	
17 5/8" x 23 1/2"	X	X	X	X	X	X	X	
17 5/8" x 35 3/8"			X	X	X	X	X	
23 1/2" x 23 1/2"	X	X	X	X	X	X	X	X
23 7/8" x 23 7/8"			X	X	X	X	X	
23 1/2" x 29 1/2"		X	X	X	X	X	X	
23 1/2" x 35 3/8"	X	X	X	X	X	X	X	
23 7/8" x 35 7/8"			X	X	X	X	X	
29 7/8" x 29 7/8"			X	X	X	X	X	
35 3/4" x 35 3/4"				X	X	X	X	
35 3/8" x 35 3/8"					X	X	X	
35 7/8" x 35 7/8"					X			

Miscellaneous Roof Paver Sizes	2"	2 1/4"	2 1/2"	2 3/4"	3"
Rectilinear Pavers					
11 3/4" x 23 1/2"	X	X	X	X	X
11 3/4" x 35 3/8"	X	X	X	X	X
11 3/4" x 47 1/8"			X		
23 1/2" x 47 1/8"			X		X
Guardian® Pavers					
17 5/8" x 35 3/8" (with or without score line)	X				X
23 1/2" x 23 1/2"	X				X
23 1/2" x 35 3/8" (with or without score line)	X				X
29 3/4" x 29 3/4"	X				
Ventloc® Pavers: Standard weight = 16 lbs/sf, Heavyweight = 20 lbs/sf					
11 3/4" x 17 5/8"	X				
Pedestal® Paver: 22 lbs/sf					
23 1/2" x 23 1/2"		X			

- = Standard Thickness (25 lbs/sf)
- = SlateFace Paver Thickness (22 lbs/sf)
- = Natural Diamond Roof Paver Thickness (23 lbs /sf)
- = Natural Diamond Roof Paver Thickness (32 lbs /sf)

Relative Strengths at 2" Thickness
Compressive: 8,500 psi
Absorption: less than 5%
Density: 155 lbs./cu ft.
Flexural: 1,100 psi



Western Carolina University - School of Gerontology - Cullowhee, NC



Southwest Area High School - Chicago, 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.



Reverie on the Ashley – Charleston, SC

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.



St. Regis Hotel - Park City, UT



10 Rittenhouse Square - Philadelphia, PA



A SIKA COMPANY

American Hydrotech Inc.

401 N. Michigan Ave., Chicago, Illinois 60611

800.877.6125 312.337.4998

www.hydrotechusa.com

This information is intended only for general conceptual purposes. It is based on data and knowledge considered to be true and correct. It is offered for the user's consideration, investigation and verification and is not intended to substitute for the advice provided by appropriate professionals. Hydrotech assumes no liability for the use of this information. The determination of the suitability and applicability of this information is the sole responsibility of the user.