





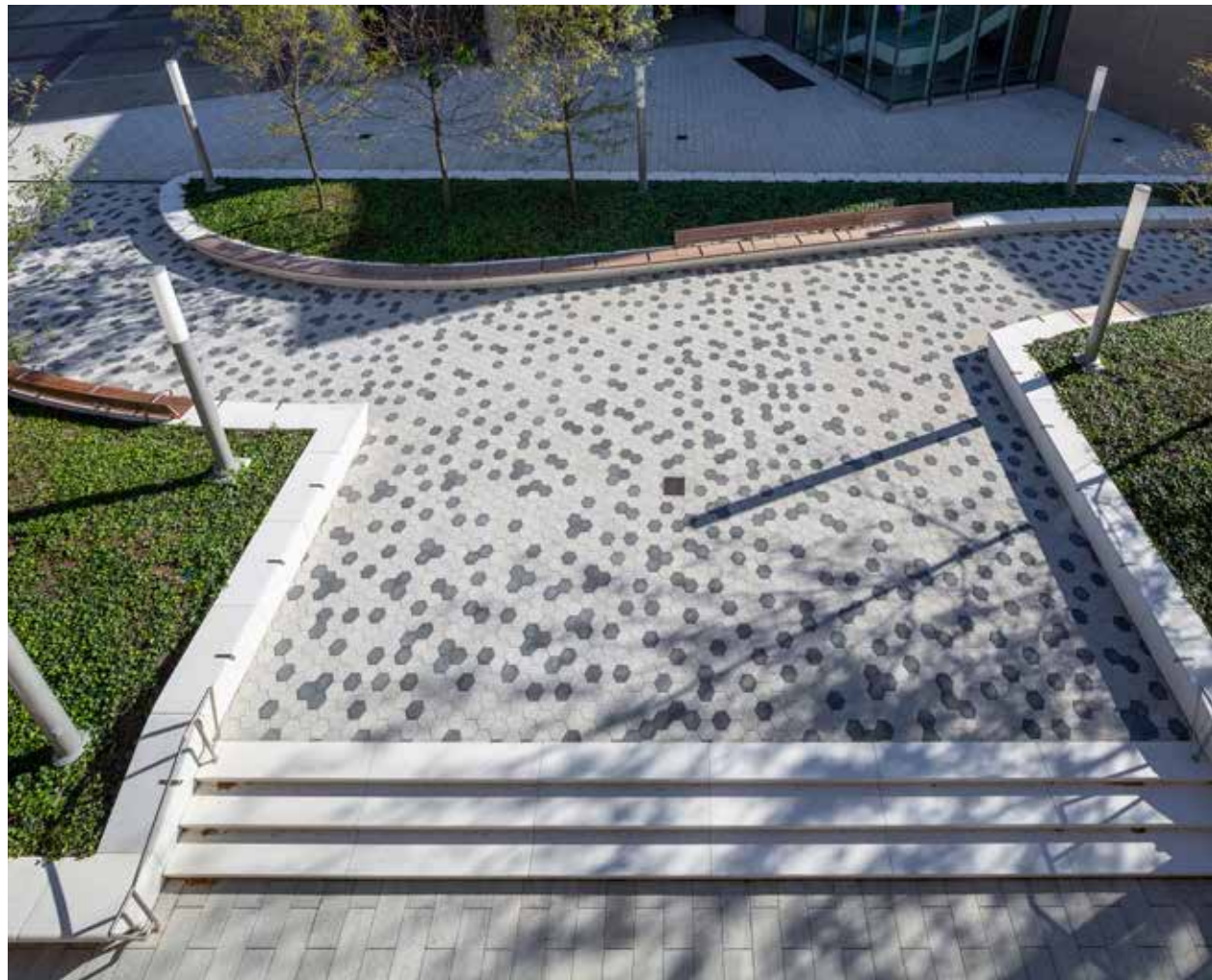
# Bringing YOUR VISION to Life



Designed and installed in some of the most prestigious commercial spaces in North America, Architects, Landscape Architects and Engineers trust Unilock to bring their architectural vision to life and to withstand the toughest rigor of a commercial environment.



DESIGNED BY  
IQ LANDSCAPE  
ARCHITECTS.  
THE PAVERS  
SELECTED FOR  
THIS PLAZA  
INVOKE LIFE  
AND MOVEMENT  
THROUGHOUT  
THE SPACE.







**PROJECT:** White Plains Library, White Plains, NY. **DESIGN:** IQ Landscape Architects. **PRODUCT:** Hex/City Park Paver™ and Rectangles with Series™ finish in Peppered Granite and Crystalline Basalt.

The newly restored White Plains Library Plaza offers a welcoming place for people to gather with friends and family. Here they enjoy new green space with trees and native plants and explore the discovery garden with herb plantings, wind chimes and percussion instruments.

**Designed by IQ Landscape Architects**, this roof deck plaza is divided into several outdoor rooms as an extension of the library. The pavers selected for the plaza invoke life and movement throughout the space with the subtle and durable architectural

finish of Series™. The hexagonal City Park Paver™ in Peppered Granite and Crystalline Basalt create a playful, fluid design. At the center of the plaza, the 12" x 24" rectangle in Peppered Granite is grounded with an illuminated canopy structure creating a programmable space for special events.

What was once a barren and unwelcoming space has been reimagined into a destination, creating a park space in the middle of the city of White Plains, New York, for all to enjoy.





**67**  
Skyline™



**52**  
Series™



**84**  
Cophthorne®



**120**  
U-Cara®



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The possibilities are endless. Let's see what we can create together.



**PROJECT:** Harrison PATH Station, Harrison, NJ. **DESIGN:** Port Authority of New York & New Jersey. **PRODUCT:** Eco-Priora™ with Series Finish in special order colors.



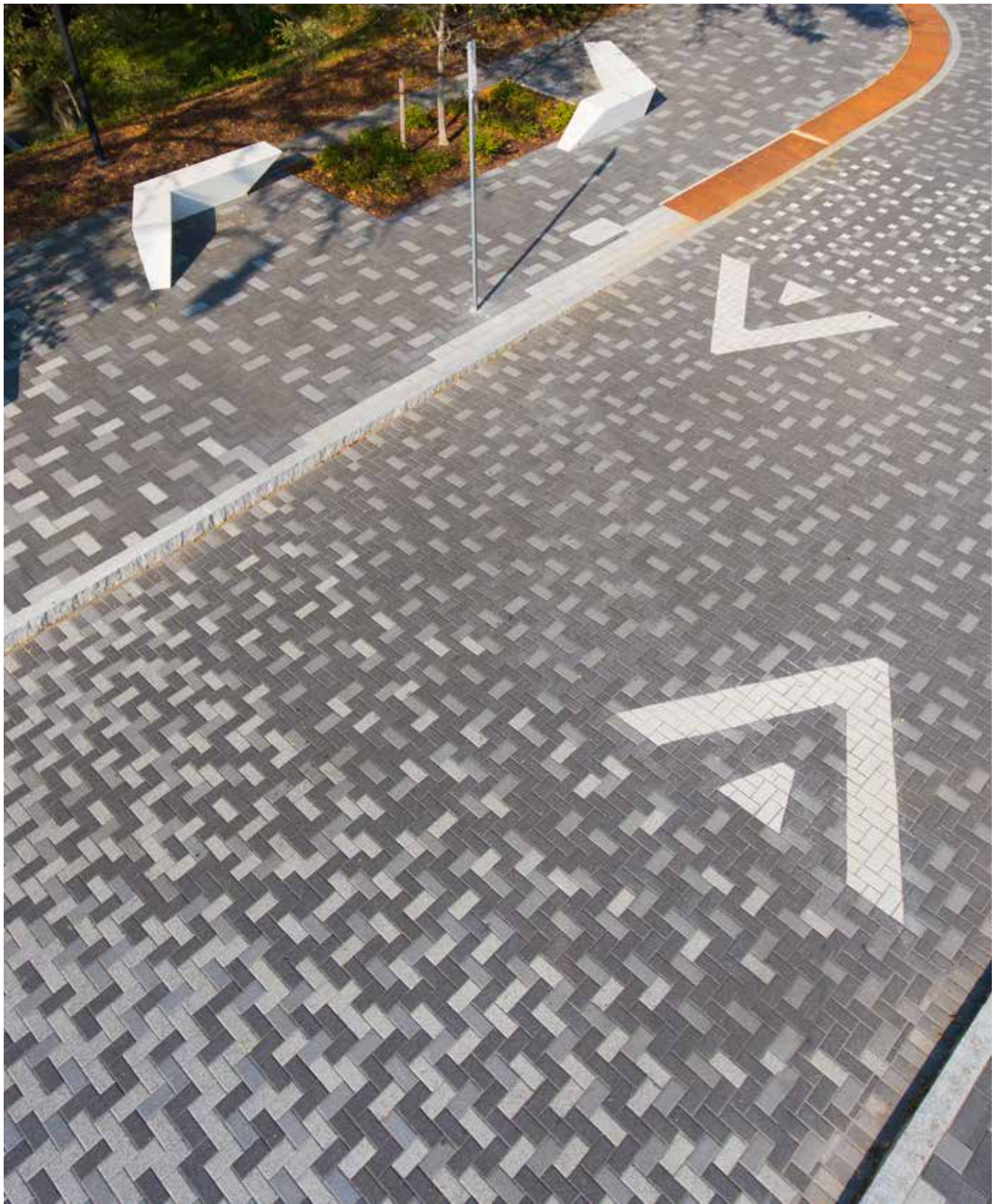


BE INSPIRED





# GEOMETRIC



**PROJECT:** Columbus College of Art and Design, Columbus, OH. **DESIGN:** MKSK Studios. **PRODUCT:** Rectangles and Squares with Series™ finish in special order colors.

**GEOMETRIC DESIGN** has roots in prehistoric and early modern art and is currently on-trend. Patterning used with standard shapes such as squares and rectangles can deliver strong geometric execution, achieving a truly unique design.



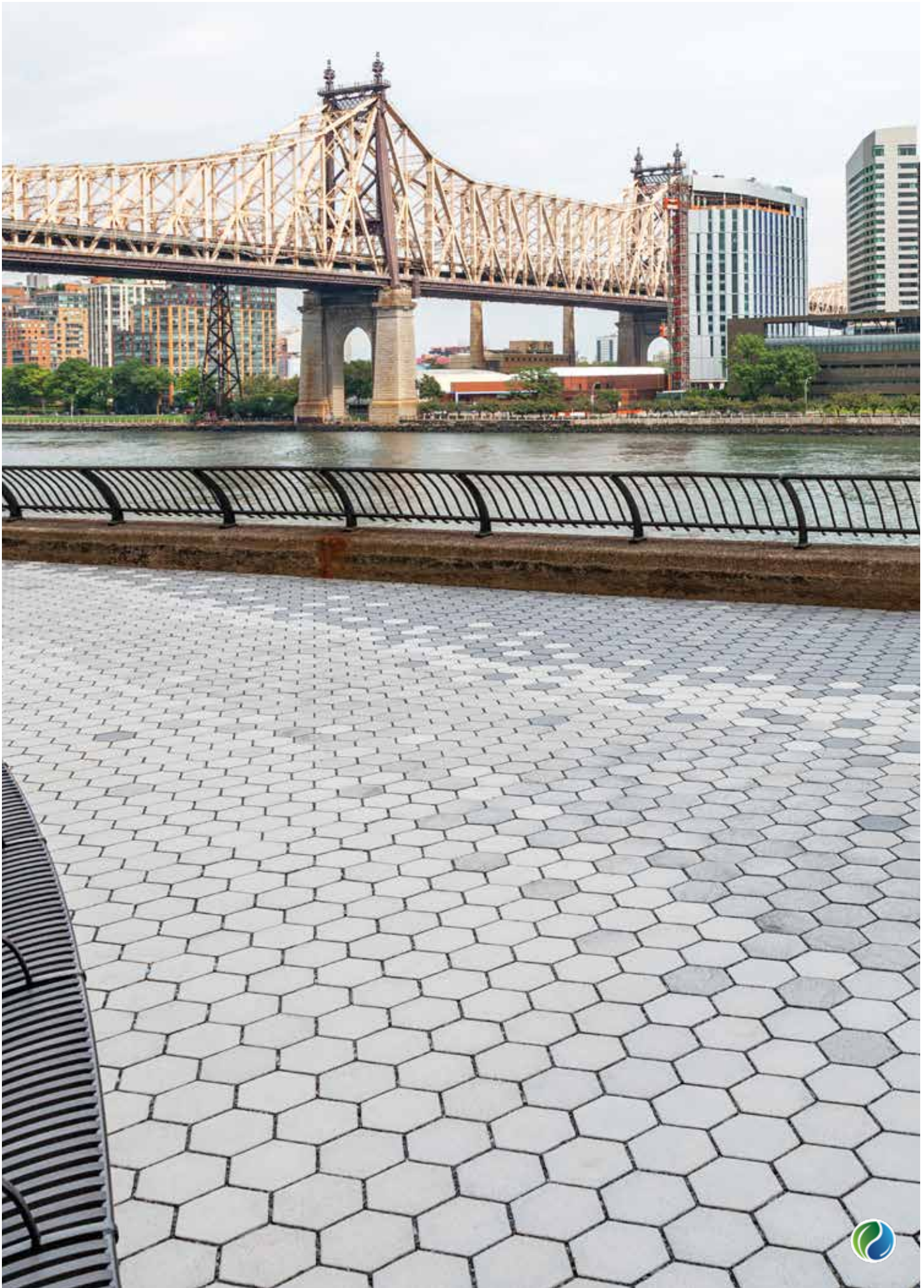


**PROJECT:** Yolanda Garcia Park, Bronx, NY. **DESIGN:** New York City Parks. **PRODUCT:** Permeable Hex/City Park Paver® with Smooth Premier finish in Dark Charcoal, Medium Grey and White.



**PROJECT:** City Point, Waltham, MA. **DESIGN:** CBA Landscape Architects LLC. **PRODUCT:** Squares and Rectangles with Umbriano® finish in French Grey, Grenada White, and Midnight Sky.





**PROJECT:** Sutton Place Park, Manhattan, NY. **DESIGN:** New York City Parks. **PRODUCT:** Permeable Hex/City Park Paver™ with Umbriano® finish in Grenada White, Winter Marvel and French Grey.





**PROJECT:** Jayhawk Boulevard, Kansas City, MO **DESIGN:** Indigo Design. **PRODUCT:** Squares with Series™ finish in Mineral Ice Grey, Onyx Black and SS0083

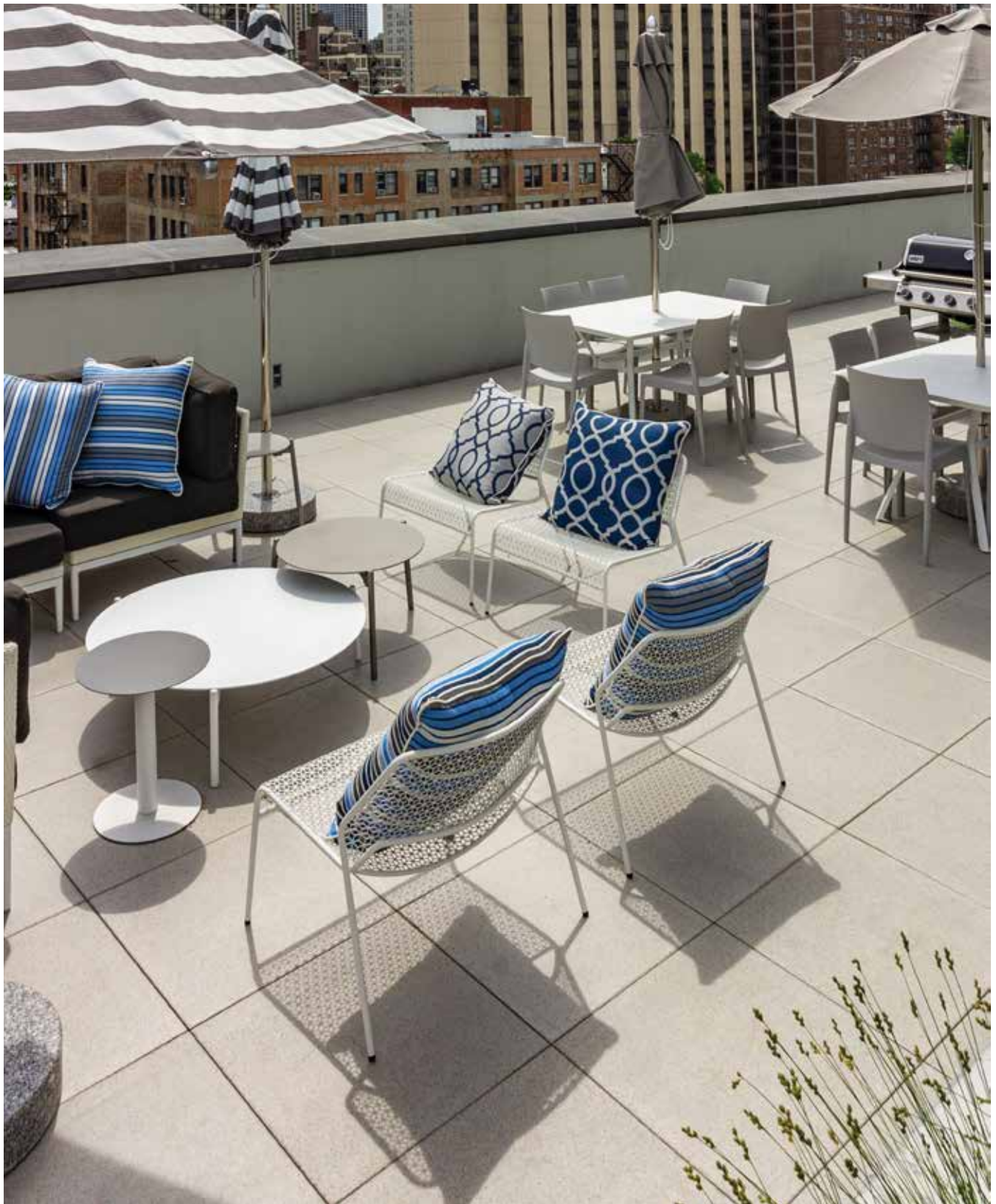


**PROJECT:** Pat Bayly Square, Ajax, ON. **DESIGN:** NAK Design Group. **PRODUCT:** Squares / Rectangles in Smooth Premier / Il Campo®.



**PROJECT:** Queen's Park, Toronto, ON. **DESIGN:** The Planning Partnership. **PRODUCT:** Hex/City Park Paver® with Umbriano® finish in French Grey.

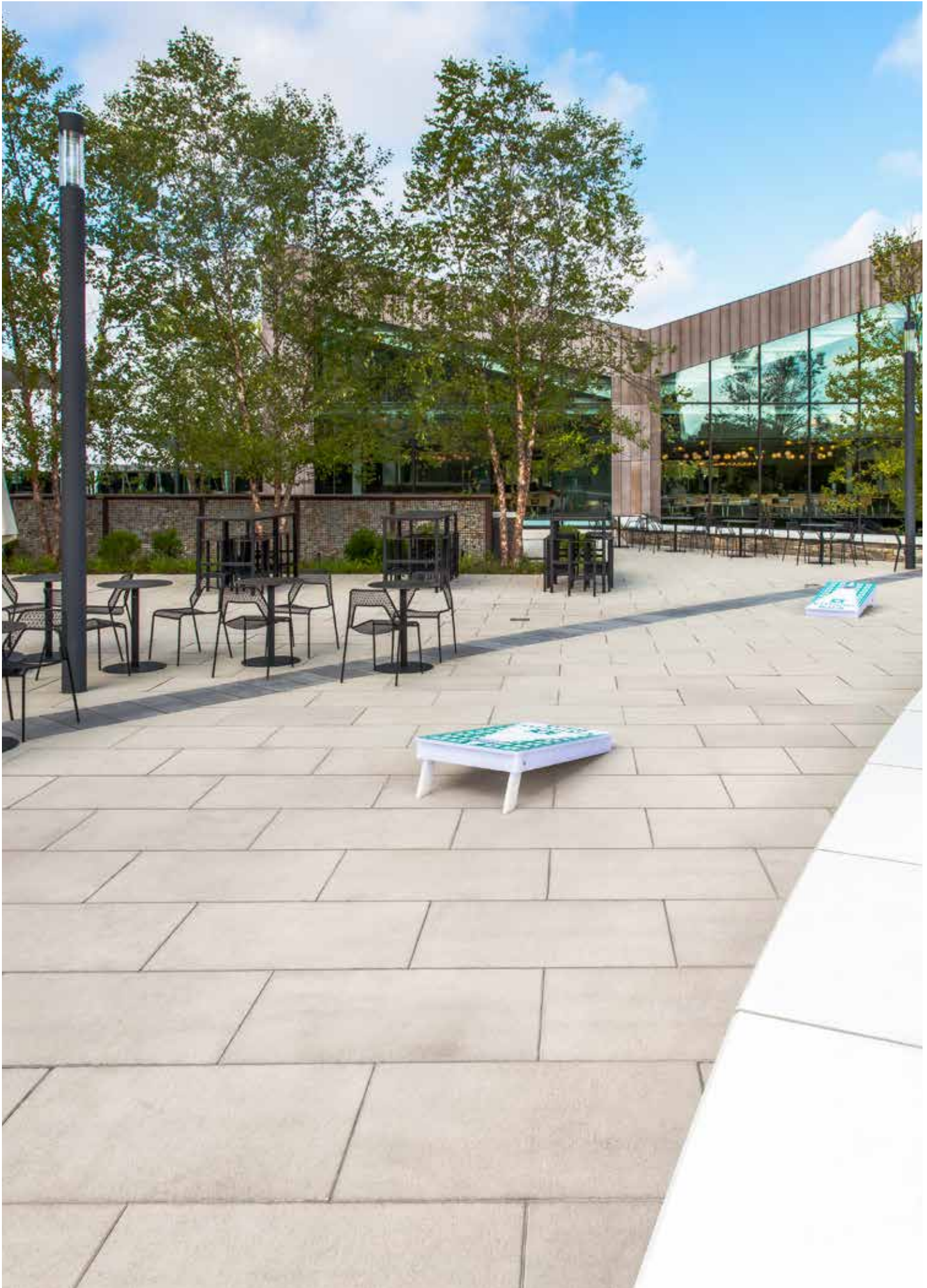




PROJECT: Old Town Park, Chicago, IL. DESIGN: Hitchcock Design Group. PRODUCT: Arcana in Modena.

**CLEAN, UNCLUTTERED LINES** are the foundation for a contemporary project. Often achieved with large format slabs and pavers, the unique and modern finishes of Unilock products allow smaller format pavers to create distinctive, modern landscapes.





**PROJECT:** Private Office Complex, Johnston, RI. **DESIGN:** IBI Placemaking. **PRODUCT:** Rectangle with Umbriano® finish in Summer Wheat and French Grey.



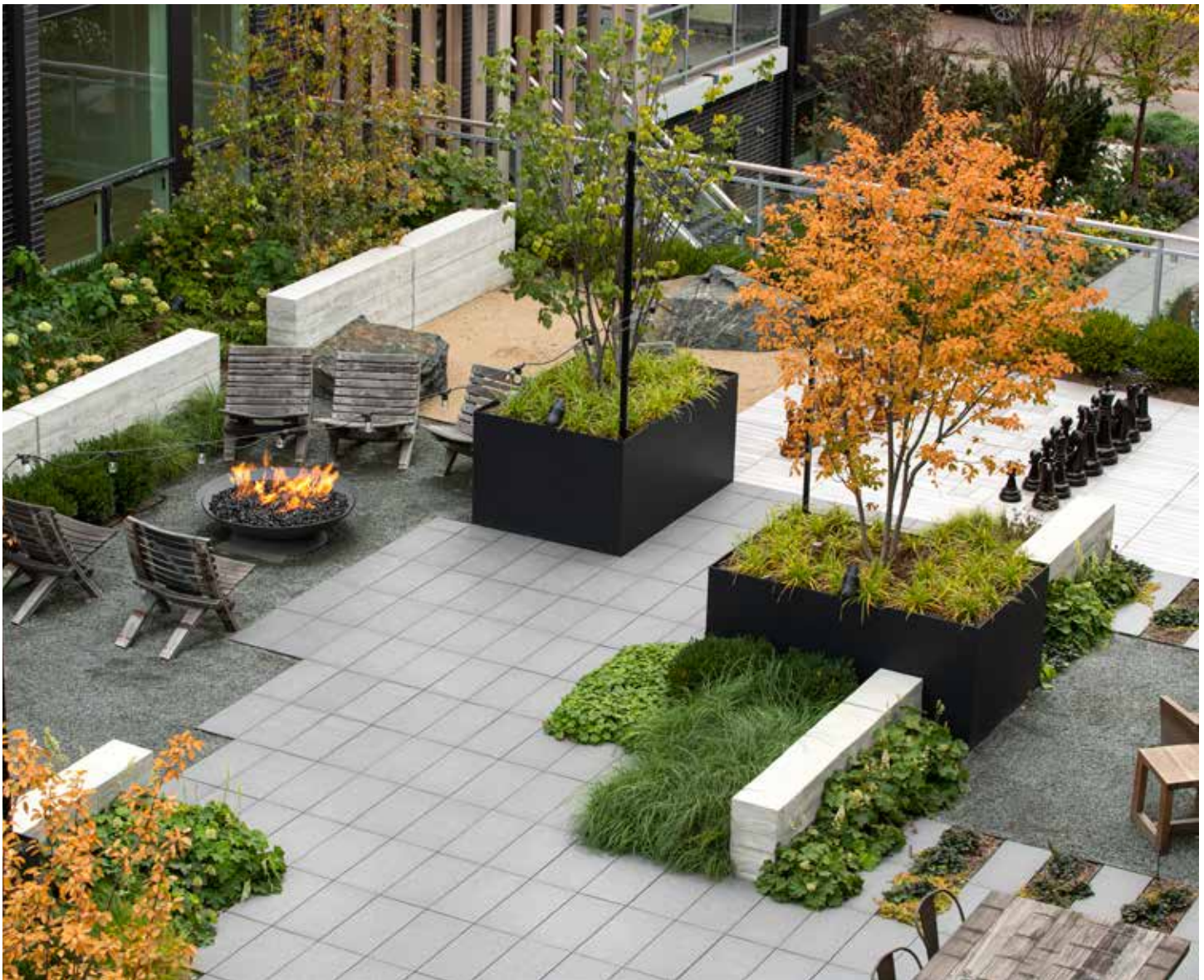


**PROJECT:** Innovation Square, Boston, MA. **DESIGN:** Ground Landscape Architecture. **PRODUCT:** Rectangles with Umbriano® finish in Winter Marvel and French Grey.





**PROJECT:** Private Office Complex, Johnston, RI. **DESIGN:** IBI Placemaking. **PRODUCT:** Rectangle with Umbriano® finish in Summer Wheat.



**PROJECT:** Norweta Row Condominiums, Chicago, IL. **DESIGN:** site | site design group ltd. **PRODUCT:** Arcana slab in Corvara.



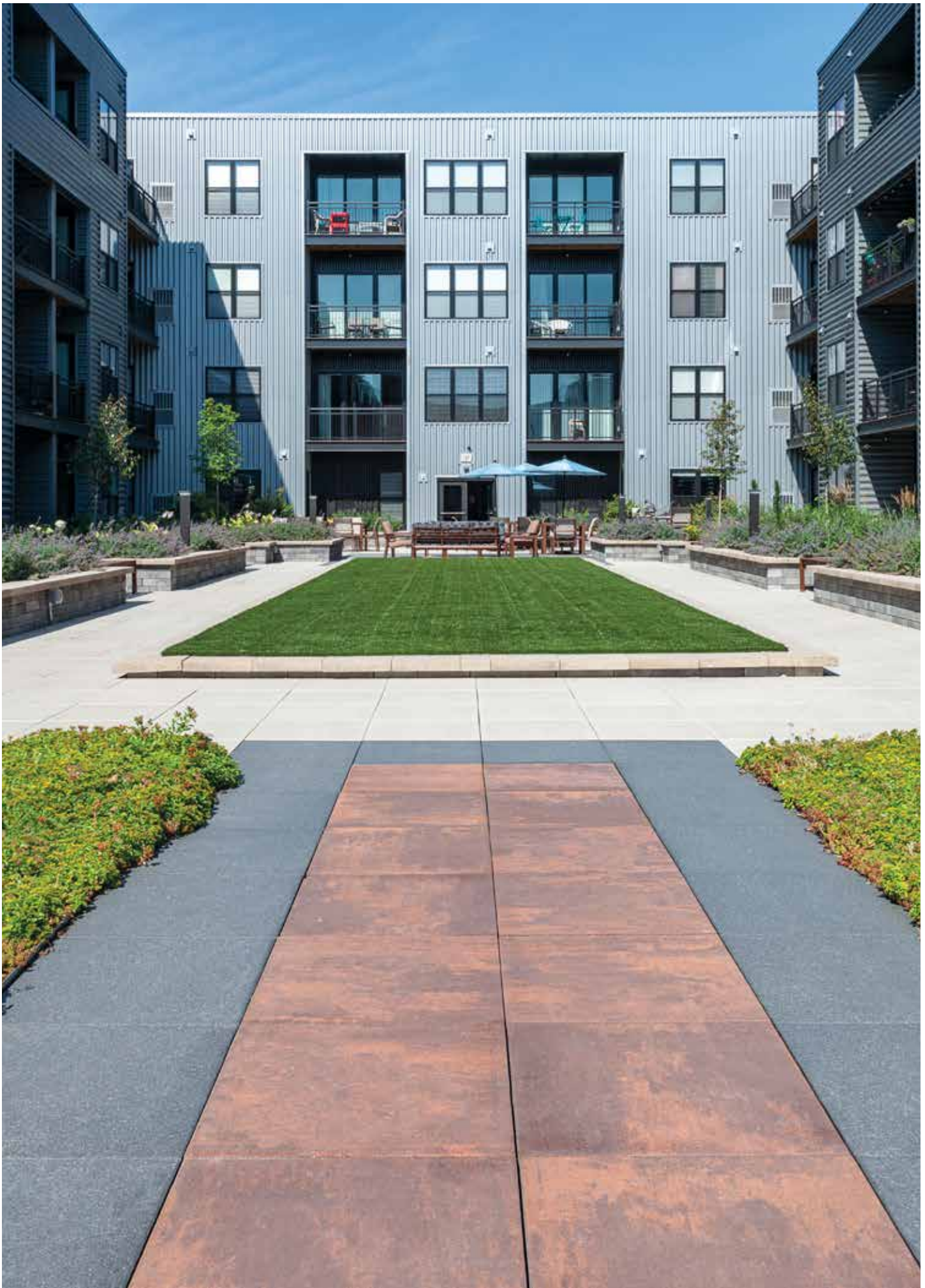


**PROJECT:** Minuteman High School, Lexington, MA **DESIGN:** Kaestle Boos Associates, Inc. **PRODUCT:** Rectangles with Umbriano® finish in Grenada White, Winter Marvel and French Grey.



**PROJECT:** Minuteman High School, Lexington, MA **DESIGN:** Kaestle Boos Associates, Inc. **PRODUCT:** Rectangles with Umbriano® finish in Grenada White, Winter Marvel and French Grey.





**PROJECT:** Synergy Apartments, Wauwatosa, WI. **DESIGN:** New Eden Landscape Architecture. **PRODUCT:** Arcana in Lugano and Vivanto and Skyline™ with Smooth Premier finish in Heritage Brown and Medium Grey.





PROJECT: Tice's Corner Marketplace, Woodcliff Lake, NJ. DESIGN: Sean Jancski Landscape Architects. PRODUCT: Artline™ with Umbriano finish in Winter Marvel and French Grey.

**LINEAR, PLANK PAVING DESIGN** styles have emerged as a paving trend. Whether directing the flow of traffic or creating a dramatic destination, Unilock offers an extensive range of sizes along with unique finishes to ensure your design vision is achieved.





**PROJECT:** New England Business Center, Andover, MA. **DESIGN:** Beals + Thomas, Inc. in partnership with Architectural Resources Cambridge. **PRODUCT:** Planks with Smooth Premier Finish in Dark Grey, Granite, and White.





**PROJECT:** Athena West Parking Garage Parkette, Watertown, MA. **DESIGN:** Stantec, Boston. **PRODUCT:** Planks with Umbriano® finish in Midnight Sky.





**PROJECT:** Education First, Holt Building. Cambridge, MA **DESIGN:** Zen Associates. **PRODUCT:** Artline® with Umbriano® finish in Winter Marvel.



**PROJECT:** PNC Tower, Troy, MI. **DESIGN:** Michael J. Dul & Associates, Inc. **PRODUCT:** Plank with Il Campo®, Series™ and Smooth Premier finishes in Granite, Black Granite and Opal.





PROJECT: Peabody's Interiors, Brown Deer, WI. DESIGN: Breezy Hill. PRODUCT: Courtstone® in Basalt.

**DESIGN HAS EVOLVED** through the ages but sometimes the right style is not the most recent. From old-world cobblestones to historic brick style street pavers, Unilock offers authentic surface textures, colors and the assurance of the latest technology to deliver durable long-lasting products for your designs.





PROJECT: East Burlington Street, Riverside IL. DESIGN: Christopher B Burke Engineering Ltd. PRODUCT: Town Hall®.





**PROJECT:** Diamond Park, Ligonier, PA. **DESIGN:** EADS Group. **PRODUCT:** Town Hall® in Old Oak, Burgundy Red, and a special order color Red Ochre, and Beacon Hill XL with Smooth Premier finish in Opal.





**PROJECT:** Adachi Bar & Restaurant, Birmingham, MI. **DESIGN:** Michael J Dul & Associates, Inc.  
**PRODUCT:** Copthorne® in Basalt.



**PROJECT:** Plymouth Rock, Plymouth, MA. **DESIGN:** BETA Group Inc.  
**PRODUCT:** Town Hall® in Basalt, Steel Blue, and special order Belgian Blue, Pebble Taupe, Dawn Mist.



**PROJECT:** Peabody's Interiors, Brown Deer, WI. **DESIGN:** Breezy Hill. **PRODUCT:** Courtstone® in Basalt.





PROJECT: Beachwood Apartments, Beachwood, OH. DESIGN: Brubeck Design Studio. PRODUCT: Richcliff® in Dawn Mist and Smoke Shale.

**THERE ARE MANY INTERPRETATIONS** of traditional paving design from formal to rustic. Explore possibilities in this expansive style from standard brick pavers to natural stone, smooth surfaces or riven flagstone. Whether your preference is simple rectangle or multi-unit random collections, there are many product styles to consider for your traditional design.





**PROJECT:** Lincoln Commons, Chicago, IL. **DESIGN:** Wolff Landscape Architecture. **PRODUCT:** Rectangle with Series™ finish in Golden Tan.





**PROJECT:** Historic Westside Market, Cleveland, OH. **DESIGN:** Stephen Hovancsek & Associates. **PRODUCT:** Permeable Rectangle, Eco-Priora™ with Standard finish in River.





**PROJECT:** YMCA, Sheboygan, WI. **DESIGN:** Greenscape. **PRODUCT:** Brussels Block® in Coffee Creek.



**PROJECT:** Shaker Heights Country Club, Shaker Heights, OH. **DESIGN:** Kevin C. Robinette Architect, LLC. **PRODUCT:** Beacon Hill® Platform with Smooth Premier finish in Sierra.





**PROJECT:** Green Bay Botanical Garden Amphitheater, Green Bay, WI. **DESIGN:** Vosters Custom Brick Paving. **PRODUCT:** Thornbury® Platform Permeable in Almond Grove with Town Hall® in Basalt.



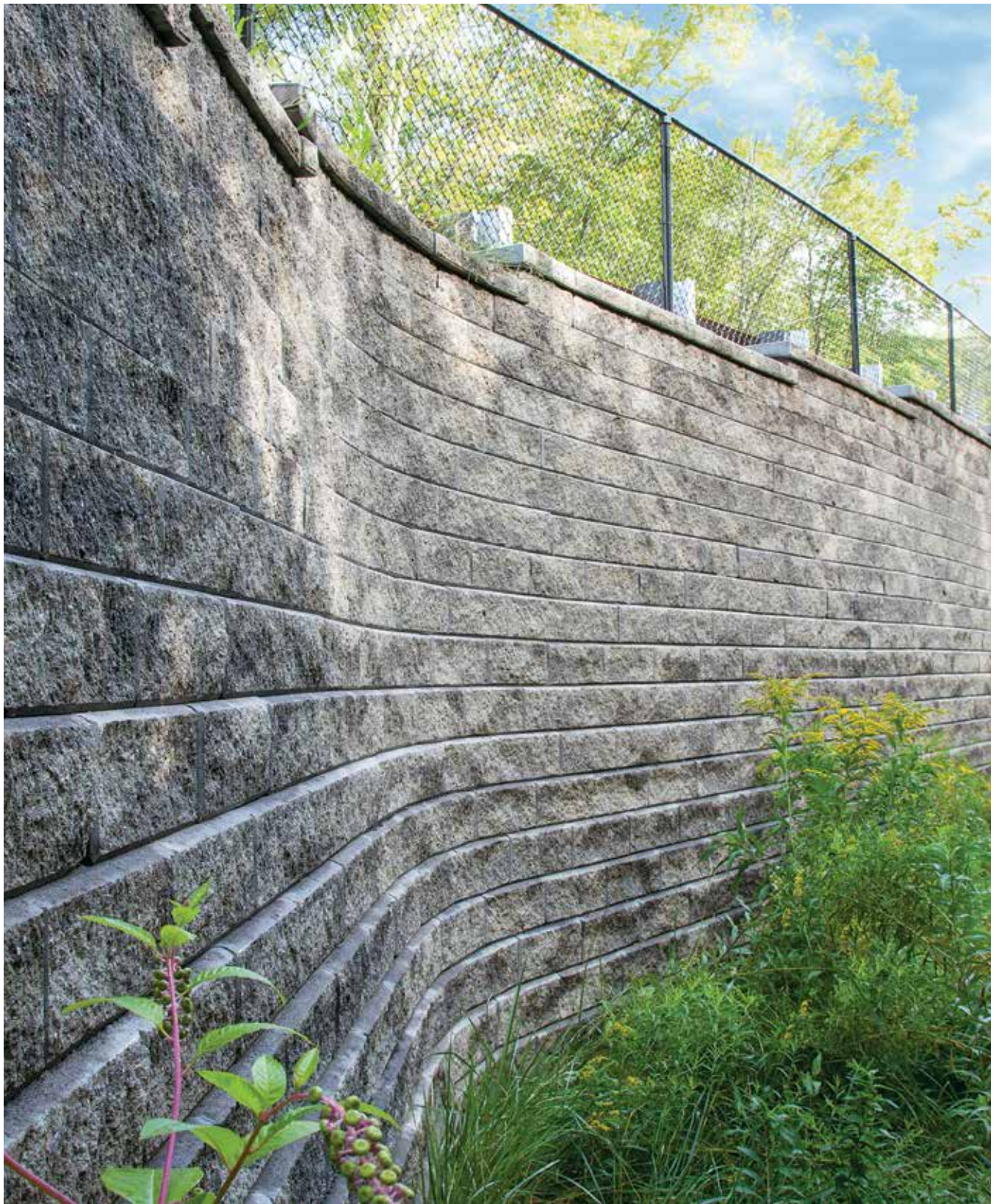
**PROJECT:** West Jefferson Streetscape, Naperville, IL. **DESIGN:** Upland Design. **PRODUCT:** Rectangle with Il Campo® and Smooth Premier finish in Heritage Brown and Sandstone.





**PROJECT:** Jaguar Land Rover South Shore, Schererville, IN. **DESIGN:** Dean's Landscaping. **PRODUCT:** Beacon Hill® Platform with Series™ finish in Mineral Ice Grey.





PROJECT: North Village, Douglas, MA. DESIGN: Coweaset Engineering. PRODUCT: Pisa XL / Concord Wall™ XL in Granite Blend.

**RETAINING WALLS** range from structural to non-structural, contemporary to natural, and large-scale to small. Unilock offers many different styles to meet the needs of the application and aesthetic for your project with additional resources, such as design support available as you need it.





**PROJECT:** Ursuline College, Pepper Pike, OH. **DESIGN:** Hiti, DiFrancesco and Siebold, Inc. **PRODUCT:** Rivercrest® Wall with Ledgestone™ Coping in Buff.



**PROJECT:** Myersville Rd Roundabout, Green, OH. **DESIGN:** AECOM. **PRODUCT:** Rivercrest® Wall with Ledgestone™ Coping in Buff.





**PROJECT:** Auburn Hills Amphitheater, Auburn Hills, MI. **DESIGN:** OHM Advisors. **PRODUCT:** Rivercrest® Wall and Ledgestone® Coping in Buff.

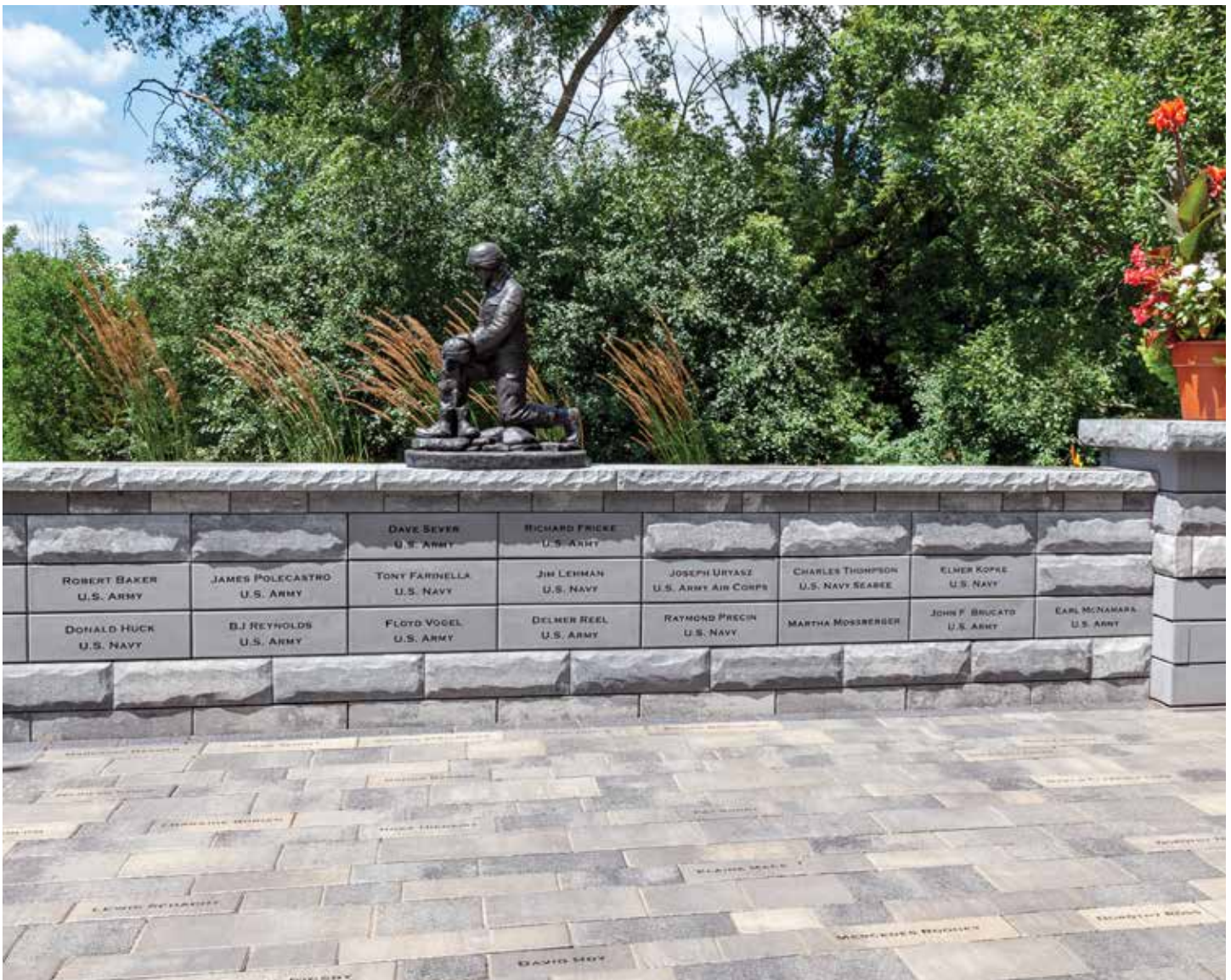


**PROJECT:** Hogan Avenue, Mississauga, ON. **DESIGN:** RisiStone Engineering. **PRODUCT:** SienaStone® in Natural.





**PROJECT:** Taffrail Park, Quincy MA. **DESIGN:** Brown, Richardson, + Rowe, Inc. **PRODUCT:** U-Cara® Multi Face Wall with Umbriano® fascia panels in French Grey.



**PROJECT:** The Vines Senior Home. **DESIGN:** Runde's Contractors. **PRODUCT:** U-Cara® Multi Face Wall with Smooth and Pitched fascia panels in Opal and Granite Fusion.



# THE DETAILS

Every project's success is directly proportionate to the attention paid to the many details. At Unilock, we take pride in supporting designers with those fine details, from **product choice and finish selection, to cross-sections, construction documents and installation guidelines.** We're present from the very beginning of your design process right through to project completion.





# THE BEST Product

## SUPERIOR CHOICE

Surfaces must be engineered to withstand the test of time. Unilock pavers not only satisfy requirements for structural integrity, safety, cost, environmental impact, maintenance and field-proven performance, but they also provide superior skid resistance and weathering. Because of the unique combination of product strength, ease of maintenance, aesthetics and reusability, they have a better life-cycle cost than other products. Pavers are a flexible system, so their surface area can move slightly without jeopardizing structural integrity. Concrete pavers require less maintenance than other products and can withstand heavy loading. They can also be manufactured in different shapes, colors and finishes for your large scale projects.

## STRENGTH AND DURABILITY

All Unilock pavers and walls are manufactured to meet and exceed the ASTM standards without compromising the composition. They are stronger than other materials with their higher compressive strength, which is achieved by a specialized manufacturing process, and have lower absorption rates that are essential in freeze thaw climates. At Unilock, we will not sacrifice quality for cost.

## STANDARDS & TEST METHODS

### ASTM STANDARDS - PAVERS & SLABS

Type	ASTM C140 Compressive Strength	ASTM C140 Water Absorption	ASTM C1645 Freeze/Thaw (49 cycles)	ASTM C1782 Flexural Strength	CSA 231.1 Flexural Strength	Dimensional Accuracy
PAVERS	8,000 PSI MIN.	< 5%	<500 G/M2			± 1/16" (1.6MM)
SLABS	8,000 PSI MIN.	< 5%	<500 G/M2	>725 PSI AVG.	>650 PSI MIN.	± 1/16" (1.6MM)

Unilock® meets and exceeds C936 paver manufacturing standards.

### Pavers

- > C140 for Absorption and Compressive Strength
- > C1645 for Freeze-Thaw Durability

### Slabs

- > C140 for Absorption and Compressive Strength
- > ASTM C1645 for Freeze-Thaw Durability
- > ASTM C1782 or CSA 231.1 for Flexural Strength

### ASTM STANDARDS - WALLS

TYPE	ASTM C1372 plus Zone 3 ASTM C140 Compressive Strength	ASTM C140 Water Absorption	ASTM C1262 Freeze/Thaw (50 cycles)	Dimensional Tolerances
WALLS	5,500 PSI MIN.	< 7LB/FT <sup>2</sup>	≤1.5%	± 1/8" (3.2MM)

Unilock meets and exceeds C936 paver manufacturing standards.

### Dry Cast Retaining Walls

- > C140 for Absorption and Compressive Strength
- > ASTM C1262 for Freeze-Thaw Durability
- > NMMA Zone 3 with de-icing salt exposure guidelines

## ADA COMPLIANCE

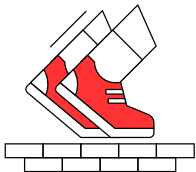
The American with Disabilities Act Accessibility Guidelines (ADAAG) provides measurable criteria to determine compliance, not individual product evaluation. Gaps, joints or openings, greater than ½" horizontal and ¼" vertical should be avoided as they can disrupt wheelchair maneuvering. (United States Access Board – Guidelines and Standards)



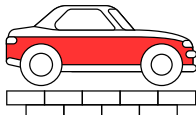
# THE IMPORTANCE OF ASPECT RATIO

Simply defined, aspect ratio is the overall length of a paver divided by its height.  
**LENGTH/HEIGHT = ASPECT RATIO**

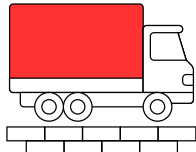
If an insufficient aspect ratio is used, any flexing or rocking caused by movement on the surface such as pedestrian or vehicular traffic, could result in breakage of the paver units. Not only is this breakage unsightly, but it can also compromise the integrity of the segmental system.



**OVER 5 : 1**  
Pedestrian Only



**4 : 1**  
Light-Duty  
Vehicular

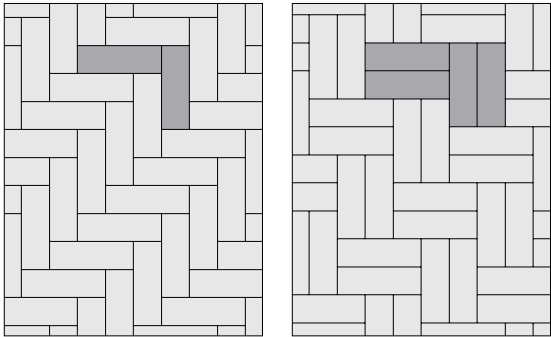


**3 : 1 OR LESS**  
Heavy-Duty  
Vehicular

## LAYING PATTERN CONSIDERATIONS

The laying pattern used in your application can also add a significant amount of strength to your design. A herringbone pattern provides the best ‘lock-up’, adding strength against rotational forces such as tires at a roadway intersection in the same way the ‘L’ shaped paver provides maximum performance.

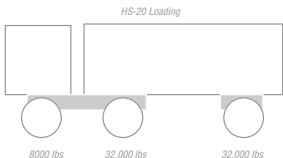
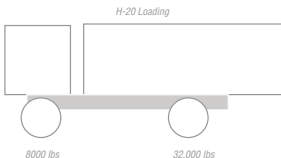
*SPEAK WITH YOUR UNILOCK REPRESENTATIVE  
FOR MORE INFORMATION.*



## HEAVY-DUTY CONSIDERATIONS

Unilock has a variety of shapes and sizes available to fit your heavy-duty application and style preferences. For maximum performance where twisting and tipping will be factors, consider the unique “L” interlocking shape as it provides superior resistance under heavy loads. The patented locking features work in tandem with the “tri-axis” technology. The result? A stronger, more stable pavement surface.

Heavy-duty Unilock paving systems are also designed for rapid mechanized installation, making them competitive and affordable.



### H-20 & HS-20 LOAD RATING

Similar to top of deck stresses per AASHTO H-20 loading conditions (32,000 lbs/14,500 kg), Unilock pavers can support 3-4 axle vehicles. This would include delivery, fire and semi-truck and trailer traffic in light-duty roadway applications.



## APPLICATION BY SIZE, THICKNESS & PRODUCT

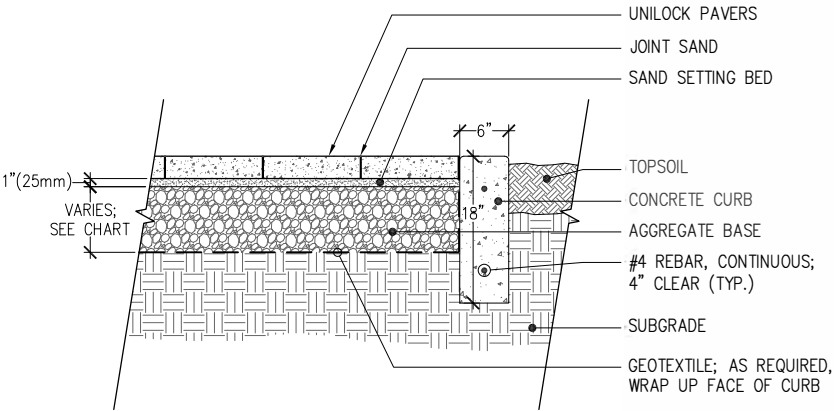
Product	Product Size	Thickness	Pedestrian	Commercial Pedestrian*	Light-Duty Vehicular	Commercial Vehicular	Heavy-Duty	Permeable
Anchorlock®		80 mm	✓	✓	✓	✓	✓	
Artline™		100 mm	✓	✓	✓			
Artline™		70 mm	✓					
Beacon Hill™		80 mm	✓	✓	✓			
Beacon Hill™		60 mm	✓					
Bristol Valley™		60 mm	✓					
Brussels Block®		70 mm	✓	✓	✓			
Brussels Dimensional™ Paver		100 mm	✓	✓	✓	✓		
City Park Paver™		70 mm	✓	✓	✓	✓		✓ (80 mm)
Copthorne®		60 mm	✓	✓	✓	✓		
Courtstone®		60 mm	✓	✓	✓	✓		
Dura-Mat™		100 mm			✓			✓
Eco-Line™		100 mm	✓	✓	✓	✓	✓	✓
Eco-Optiloc™		80 mm	✓	✓	✓	✓	✓	✓
Mattoni		70 mm	✓	✓	✓			
Optiloc®		80 mm	✓	✓	✓	✓	✓	
Richcliff®		60 mm	✓	✓	✓	✓		
Thornbury™		70 mm	✓	✓	✓			✓
Town Hall™		70 mm	✓	✓	✓	✓		✓
	36 x 36	100 mm	✓					
	18 x 36	100 mm	✓					
	24 x 24	150 mm	✓	✓	✓			
	24 x 24	100 mm	✓	✓	✓			
	24 x 24	70 mm	✓					
	24 x 24	50 mm	✓					
	24 x 24	45 mm	✓					
	18 x 24	50 mm	✓					
	18 x 24	45 mm	✓					
	18 x 18	45 mm	✓					
	16 x 24	100 mm	✓	✓	✓ **			
	12 x 24	150 mm	✓	✓	✓	✓		
	12 x 24	100 mm	✓	✓	✓ **			
	12 x 24	70 mm	✓					
	12 x 24	50 mm	✓					
	12 x 24	45 mm	✓					
	12 x 18	100 mm	✓	✓	✓	✓		
	8 x 24	150 mm	✓	✓	✓			
	8 x 24	100 mm	✓	✓	✓ **			
	6 x 24	150 mm	✓	✓	✓	✓		
	6 x 24	70 mm	✓					
	16 x 16	100 mm	✓	✓	✓	✓		
	16 x 16	80 mm	✓	✓	✓			
	16 x 16	70 mm	✓	✓	✓			
	8 x 16	100 mm	✓	✓	✓	✓		
	8 x 16	70 mm	✓	✓	✓			
	4 x 16	100 mm	✓	✓	✓	✓		✓
	12 x 12	100 mm	✓	✓	✓	✓		
	12 x 12	70 mm	✓	✓	✓			✓
	12 x 12	45 mm	✓					
	6 x 12	100 mm	✓		✓	✓	✓	
	6 x 12	80 mm	✓	✓	✓	✓		
	6 x 12	70 mm	✓	✓	✓			
	10 x 10	80 mm	✓	✓	✓	✓		✓
	5 x 10	80 mm	✓	✓	✓	✓	✓	✓
	8 x 8	70 mm	✓	✓	✓	✓		
	6 x 8	70 mm	✓	✓	✓	✓	✓	
	4 x 12	100 mm	✓	✓	✓	✓	✓	
	4 x 12	80 mm	✓	✓	✓			
	4 x 12	70 mm	✓	✓	✓			
	3 x 12	100 mm	✓	✓	✓	✓	✓	✓
	6 x 6	80 mm	✓	✓	✓	✓		
	6 x 6	70 mm	✓	✓	✓	✓		
	5 x 5	80 mm	✓		✓	✓		✓
	4 x 8	80 mm	✓	✓	✓	✓	✓	
	4 x 8	70 mm	✓	✓	✓	✓		
	4 x 8	60 mm	✓	✓	✓			
	4 x 4	70 mm	✓	✓	✓	✓		
	3 x 6	100 mm	✓	✓	✓	✓	✓	

All pavements require a site specific design. A Herringbone laying pattern is essential for most vehicular trafficked pavements and becomes more critical as the demands on the pavements increase. Please contact your local Unilock Representative for specific design details. This chart is only a guideline. \*Subject to occasional light duty service vehicles. \*\*Installed on a concrete base.



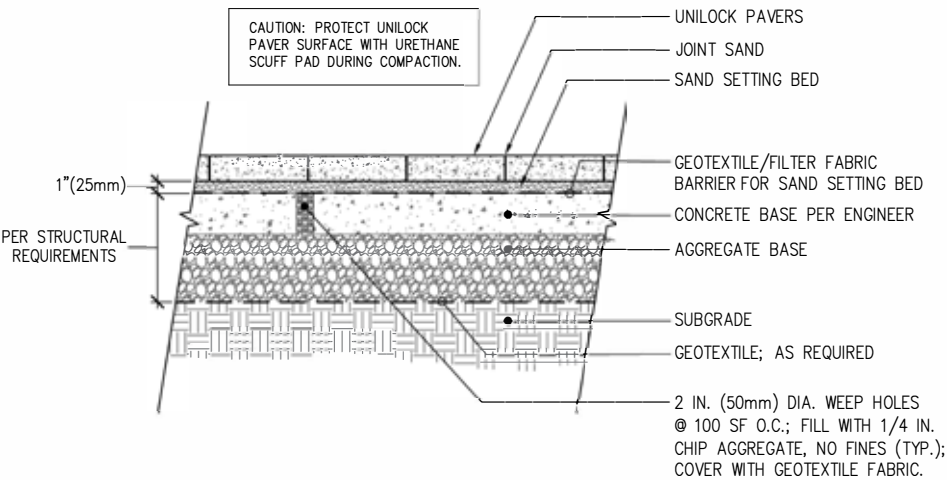
# NON-PERMEABLE INSTALLATIONS

Commercial environments are demanding and having the correct base design is essential. Below are a couple of examples of the base detail; however, every base detail must be specific to site conditions and load capacity. Contact your Unilock Representative to learn more.



## PAVER INSTALLATION ON GRANULAR

From pedestrian to heavy-duty applications this detail is tried and true. Contact your Unilock Representative to learn more. Specific installation details may vary based on site conditions.



## PAVER INSTALLATION ON SAND OVER CONCRETE

Ideal for heavy-duty applications, this detail ensures adequate base support under heavy loads. Approving the proper sand type and gradation is critical for lock up and drainage in vehicular applications. Contact your Unilock Representative to learn more. Specific installation details may vary based on site conditions.

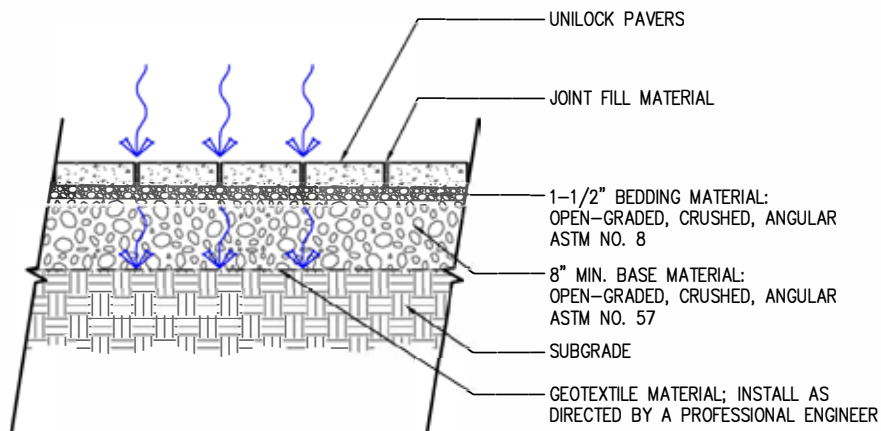


## PERMEABLE INSTALLATIONS

Similar to the non-permeable paver systems structural component, permeable paver installations offer secondary purpose for capturing and detaining rainwater. Common uses can range from sidewalk and plaza areas, to heavy-duty parking lots and roadways and include various base depths as shown in the two details below.

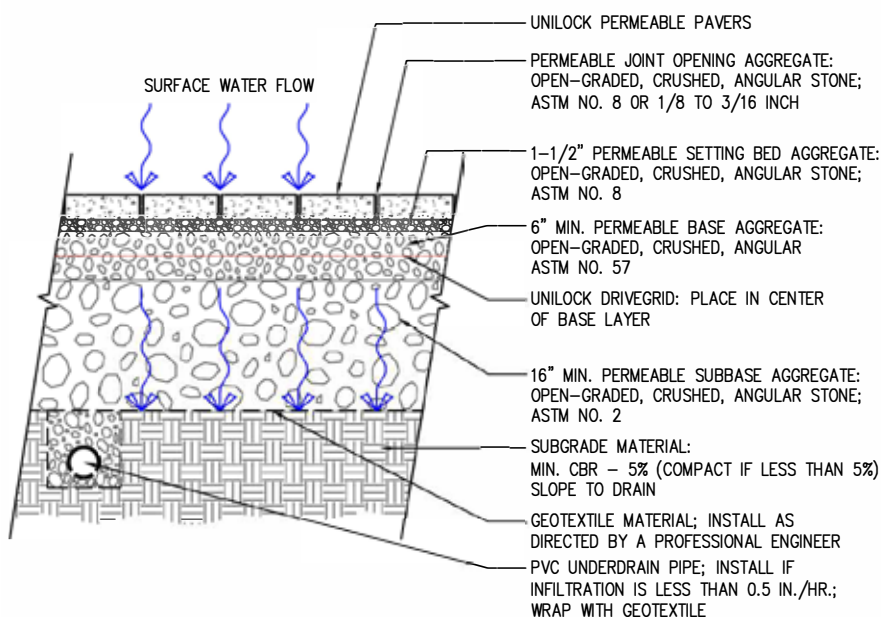
### PERMEABLE ON OPEN GRADED AGGREGATE - LIGHT DUTY

This cross-section is an example of a light-duty pedestrian sidewalk application. Contact your Unilock Representative to learn more. Specific installation details will vary based on site conditions.



### PERMEABLE ON OPEN GRADED AGGREGATE - HEAVY-DUTY

Heavy-duty permeable applications require additional base support as illustrated below. This cross section is only an example. Contact your Unilock Representative to learn more. Specific installation details will vary based on site conditions.





ARCHITECTURAL SLABS

Unilock has many options for paving products on roof decks. Various installation methods will determine the appropriate products for the application. While pedestal installation typically utilizes the square or large slabs, a granular installation will extend your product choice and design flexibility. Ask your Unilock Representative for details.

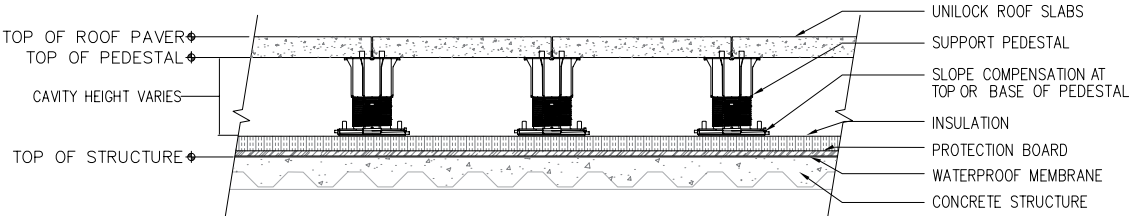


Product Type	Thickness	Shape	Product Weights
Arcana + Skyline™	50mm	606 x 606mm	24 lbs/sq.ft.
Beacon Hill™ XL	60mm	900 x 540mm** 720 x 540mm**	27.5 lbs/sq.ft.

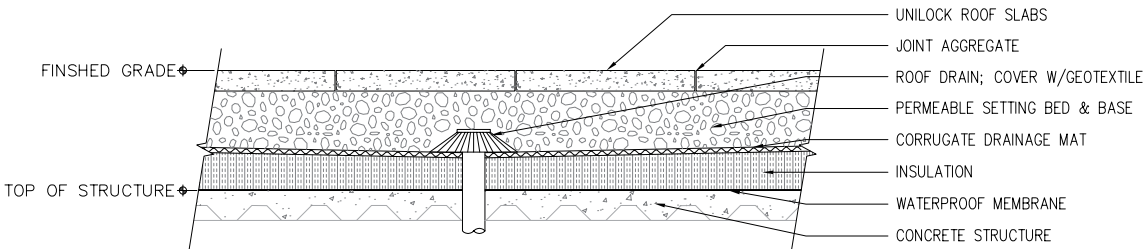


PEDESTAL SYSTEM

Unilock offers adjustable and stackable pedestal systems for your project. Contact your Unilock Representative to learn more. Specific installation details may vary based on pedestal height, load-bearing requirements, safety standards and wind-lift.



GRANULAR BASE SYSTEM



The cross sections shown are examples of the type of installation systems and technical features of Unilock products. Unilock shall not be deemed responsible for improper use of the product or of damage deriving from any use different from those recommended

and/or installation procedures not in line with the following instructions relevant to a raised installation. All roof top slab/pedestal installations must be engineered by a professional engineer.



# LEED® Credit Opportunities

LEED, Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices that have a positive impact on the health of occupants, while promoting renewable, clean energy. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification. Unilock products can help with your certification goals.

## POTENTIAL LEED CREDITS FOR UTILIZING PERMEABLE PAVERS

### Rainwater management: LEED V4

Up to three points can be achieved for retaining rainwater onsite based on the percentile kept. 85% (zero lot line projects only) • 3 points, 95% - 2 points and 98% - 3 points. (all except Healthcare - subtract one point). *See LEED v4 for more specific project/site details.*















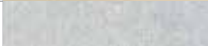
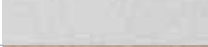






### Heat Island Reduction - Non-Roof: LEED v4

Paving materials with a three-year aged solar reflectance (SR) value of at least 0.28. If three-year aged value information is not available, use materials with an initial SR of at least 0.33 at installation OR use an open grid pavement at least 50% pervious • 2 points (except Healthcare - 1 point). *See LEED v4 for more specific site calculations.*

### Solar Reflectance

Solar Reflectance Index (SRI) is a criterion used by USGBC that measures values of sunlight and radiation bouncing from built surfaces. It is used to measure urban heat island effects in city centers. Dark pavement absorbs heat during the day and then releases it at night. This process creates a situation that causes urban centers to stay warmer all the time which contributes to air pollution and increased energy consumption. Careful selection of materials and colors can help reduce urban heat island effects.

SAMPLE OF QUALIFIED UNILOCK COLORS (≥33)

Surface Finish	Color	Swatch	Solar Reflectance	SRI*
Umbriano® (mottled)	Grenada White		0.45	52
	Summer Wheat		0.42	48
	Winter Marvel		0.35	38
Series™ (exposed Granite)	Golden Tan		0.40	45
	Chardonnay Tan		0.39	44
	Peppered Granite		0.38	42
	Coral Gem		0.37	41
	Ice Grey		0.35	38
	Mineral Ice Grey		0.31	33
	SS0025		0.42	48
	SS0016		0.41	46
	SS0026		0.37	41
Arcana	Lugano		0.46	53
	Modena		0.46	53
Smooth Premier	Cream		0.49	57
	TX Active White		0.46	53
	SS0080		0.44	50
	Tuscany Blend		0.39	44
	Chamois		0.41	46
Standard Finish	Canvas		0.33	36
	River		0.32	34
	Nevada		0.31	33

### Materials and Resources: LEED V4

- > Building Product Disclosure and Optimization - Sourcing of Raw Materials - Sourcing of Raw Materials and Extraction • 1 point
- > Building Product Disclosure and Optimization - Sourcing of Raw Materials - Leadership Extraction Practices • 1 point
- > Building Product Disclosure and Optimization - Material Ingredient Reporting- Material Ingredient Reporting • 1 point
- > Building Product Disclosure and Optimization - Material Ingredient Reporting - Material Ingredient Optimization • 1 point
- > Building Product Disclosure and Optimization - Environmental Product Declaration • 1 point

*Values may change slightly by region due to variations in local aggregate and granite.*

*Please be sure to contact your Unilock Representative for a comprehensive and current list of SRI product values.*



**Unilock is the only company** in North America with memberships in Eurobeton and Stein + Design, two prestigious European concrete product innovation groups, which give us exclusive access to **leading edge product designs** and manufacturing processes.





## ENDURACOLOR™ ARCHITECTURAL FINISHES

Only Unilock offers EnduraColor Architectural Finishes. These products set a new standard for everlasting beauty thanks to proprietary blends of some of nature's highest performing minerals such as granite and quartz, combined with manufacturing technologies that are unique to Unilock.



## ENDURACOLOR™

The refined surface of Unilock EnduraColor products is achieved with a **two-step manufacturing process** that combines a base of coarser aggregates for a **stronger foundation**, with concentrated color and **wear-resistant finer aggregates on top**. This process protects the surface from the appearance of fading over time because the top layer prevents large, lighter color aggregates from ever showing through. Now, with U-Cara®, walls are available with EnduraColor too!



## CLASSIC

Unilock Classic pavers and walls are manufactured to exceed ASTM standards for quality and strength. Available in classic shapes and styles, these products utilize a traditional **product mix of large and small aggregates**, that is consistent from top to bottom, with color mixed throughout.



# Unilock TECHNOLOGIES

All **products are not created equal**. Many products look great when they're first installed, but after time the difference shows. For **over 47 years**, the very best designers and contractors have **relied on Unilock** to supply cutting edge paver and wall products that enable them to build extraordinary projects that stand the test of time.



## Reala™

Utilizing Reala technology, a multitude of natural stone surfaces, brick and historic cobblestones are cast to create a wide variety of authentic textures with consistent dimensions that are more cost efficient to install.

### Products with Reala:

COPTHORNE®, COURTSTONE®, RICHCLIFF®, TOWN HALL®, RIVERCREST® WALL, LEDGESTONE™, AND MACKINAW™

## Ultima™

Only Unilock has the technology in North America to manufacture Ultima Concrete resulting in pavers up to four times stronger than poured concrete. With Ultima, the look you purchase is the look that will last.

### Products with Ultima:

COPTHORNE®, COURTSTONE®, RICHCLIFF® AND TOWN HALL®





## ColorFusion™

The look of natural granite is achieved when color and granite particles are randomly dispersed using proprietary ColorFusion technology to achieve a unique mottled surface.

**Products with ColorFusion:**  
UMBRIANO® AND U-CARA®



## EasyClean™

With EasyClean, the occasional spill doesn't have to leave a lasting mark on your new pavement. Unlike costly after-market sealers which merely coat the top, EasyClean goes beyond the surface and becomes integral to the product during manufacturing, making spills and other debris easier to clean before a stain can develop. Ask your Unilock Representative for more information about adding EasyClean to the products on your commercial projects.

**Products with EasyClean:**  
ARCANA™, GRANITO™, MATTONI™, UMBRIANO®, SENZO™, AND U-CARA®

Nothing protects pavers from stains like EasyClean.

✓	Pavers are pre-sealed at the factory
✓	Enhanced resistance to weathering
✓	Reduced dirt absorption
✓	Stains from leaves, coffee, ketchup, mustard, wine and BBQ oils are easier to remove

## Classic Coat

Factory sealed standard finish pavers are available with Classic Coat to protect the surface texture and color. Ask your Unilock Representative for more information about using products with Classic Coat on your commercial projects to save time and money post installation.

**Products with Classic Coat:**  
CONSULT YOUR PRODUCT DATA



Unilock has an extensive collection of in stock and quick ship products to suit your project. Our **vast array of sizes, edges, finish and color options** make it easy to achieve your design vision. Speak with your Unilock Representative about in stock options available in your market.





## ARCHITECTURAL FINISHES

Proprietary blends of some of nature's highest performing minerals such as granite and quartz are combined with manufacturing technologies that are exclusive to Unilock.



Umbriano® Mottled Finish with ColorFusion™ and EasyClean™



Senzo® Matte Finish with EasyClean™



Series™ Exposed Granite Finish



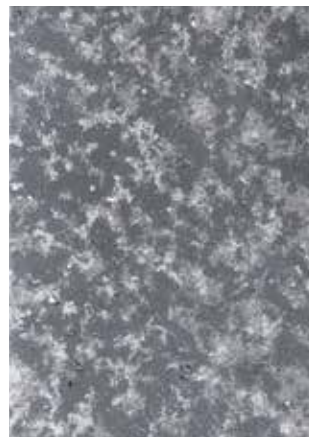
Il Campo® Brushed Finish



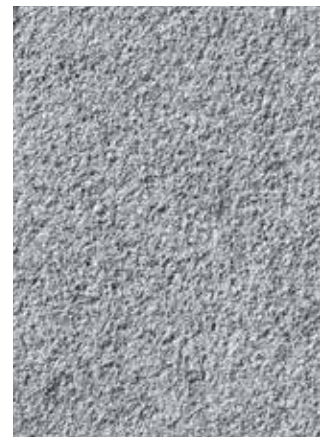
Smooth Premier Finish



Flagstone Premier Finish



Granito™ Boldly Mottled Finish with EasyClean™



Revela™ Shot-Blast Finish



Classic Thru-Mix Finish

## CLASSIC FINISH

Classic finish utilizes a traditional product mix of large and small aggregates, that is consistent from top to bottom, with color mixed throughout. Rest assured they are manufactured to exceed ASTM standards for quality and strength.



# UMBRIANO®

Rich, mottled granite particles with a non-slip texture.



Design award  
winner 2011

## COLORS



French Grey



Midnight Sky



Summer Wheat (SR 0.42)



Winter Marvel (SR 0.35)

## SPECIAL ORDER COLORS



Autumn Sunset (SR 0.30)



Grenada White (SR 0.45)



Harvest Brown



Summer Rose

## SIZES

<p>Squares</p> <p>16 x 16 x 2 3/4" (70mm) 24 x 24 x 2 3/4" (70mm) 36 x 36 x 4" (100mm)</p>	<p>Rectangles</p> <p>4 x 8 x 2 3/8" (60mm) 7 x 14 x 3 1/8" (80mm) 8 x 16 x 2 3/4" (70mm) 12 x 24 x 2 3/4" (70mm) 18 x 36 x 4" (100mm) 21 x 35 x 2 3/8" (60mm)</p>
<p>Planks</p> <p>8 x 24 x 2 3/4" (70mm) 12 x 36 x 4" (100mm)</p>	<p>Hex/City Park Paver™</p> <p>8 x 8 x 2 3/4" (70mm)</p>
<p>Artline™ Platform</p> <p>Random Bundle (70mm)</p>	<p>Permeable Planks</p> <p>3 x 12 x 4" (100mm)</p>
<p>Beacon Hill™ Platform</p> <p>Random Bundle (60mm) Random Bundle (80mm)</p>	

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

Special order colors are available, minimum quantities will apply. Not all colors are stocked in all regions. Please contact your Unilock Representative for more details.







# SERIES™

Timeless micro-pebbled exposed granite.

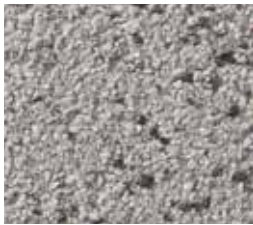
## COLORS



Black Granite



Cobalt Grey



Glacier



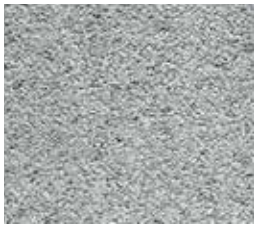
Golden Sand



Golden Tan (SR 0.40)



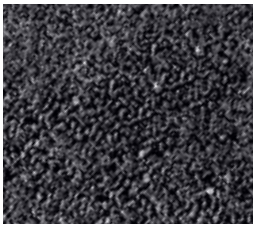
Ice Grey (SR 0.35)



Mineral Ice Grey (SR 0.31)



Mountain Mist (SR 0.28)



Onyx Black

## SPECIAL ORDER COLORS



Baritone Black



Buff



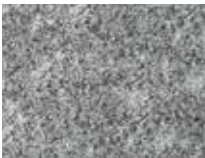
Cabernet Red



Coral Gem  
(SR 0.37)



Crystal Rose



Crystalline Basalt



Grey



Laurentian Green



Mocha Brown



Peppered Granite  
(SR 0.38)



Platinum Grey  
(SR 0.28)

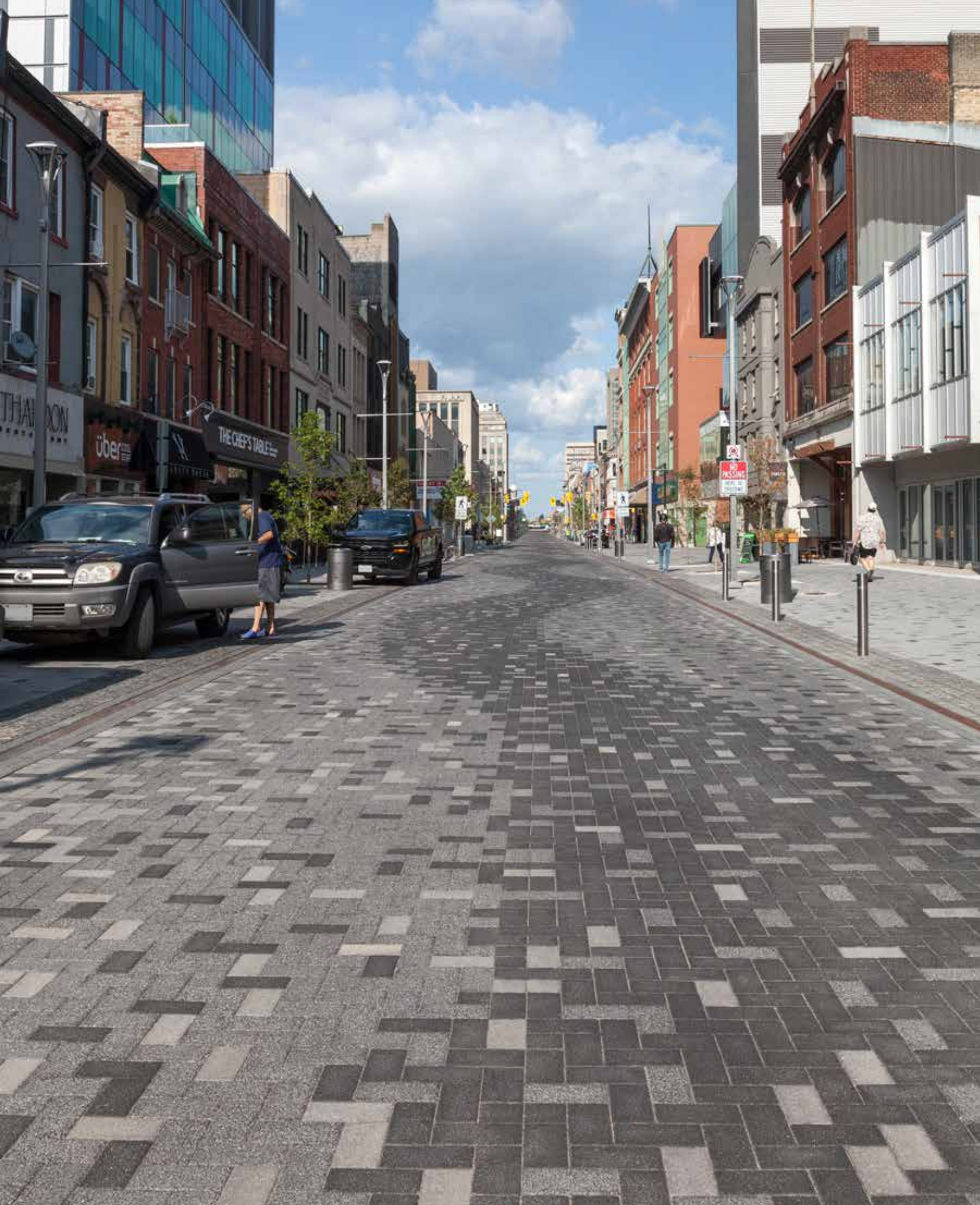


Starlight

## SIZES

Squares	6 x 6 x 2¾" (70mm)	Rectangles	4 x 8 x 2¾" (70mm)
	8 x 8 x 2¾" (70mm)		7 x 14 x 3⅛" (80mm)
Planks	4 x 12 x 4" (100mm)	Beacon Hill™ Platform	Random Bundle (60mm)
	8 x 24 x 4" (100mm)		Random Bundle (80mm)







# SENZO™

Contemporary finish with integral surface protection from stains.



PROJECT: Islington Golf Club, Toronto, ON. DESIGN: Schollen & Company Inc. PRODUCT: Rectangles with Senzo™ finish in a special order color.

## COLORS



Crema (SR 0.43)



Midnight Charcoal



Mocha Brown

## SPECIAL ORDER COLORS



Castano



Bianco



Grigio (Grey Blend)



Mediterraneo (SR 0.35)



Nuvola

## SIZES

Rectangles

8 x 16 x 2 3/4" (70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

Special order colors are available, minimum quantities will apply. Not all colors are stocked in all regions. Please contact your Unilock Representative for more details.



# IL CAMPO®

Brushed finish for rich detail. Striking and slip resistant.



PROJECT: Wheeling Town Center, Wheeling, IL. DESIGN: Upland Design Group. PRODUCT: Rectangles and Squares with Il Campo® finish in Heritage Brown.

## COLORS



Bavarian Blend



Dark Charcoal



Granite Blend



Granite Fusion



Heritage Brown



Mocha



Sandstone

## SIZES

Rectangles	4 x 8 x 2¾" (70mm) 8 x 16 x 2¾" (70mm)	Planks	4 x 12 x 4" (100mm) 8 x 24 x 4" (100mm)
Artline™ Platform	Random Bundle (70mm)		

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.



# FLAGSTONE PREMIER

Long-lasting, colorfast, flagstone texture.

## COLORS



Almond Grove



Almond Grove Fusion



Alpine Grey



Bavarian



Birch



Fossil



Granite Blend



Granite Fusion



New York Blend



Oak Brown Fusion



River



Sierra



Slate Blue



Steel Mountain



Tuscany



Walnut

## SIZES

Rectangles	21 X 35 x 2 <sup>3</sup> / <sub>8</sub> " (60mm)	Thornbury™ Platform	Random Bundle (70mm)
Beacon Hill™ Platform	Random Bundle (60mm) Random Bundle (80mm)		

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.  
Special order colors are available, minimum quantities will apply. Not all colors are stocked in all regions. Please contact your Unilock Representative for more details.














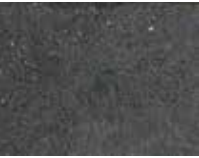






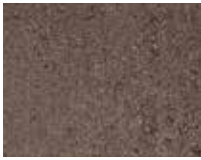





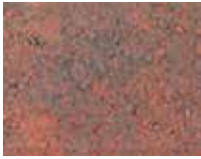











# SMOOTH PREMIER

Long-lasting, colorfast, smooth, contemporary finish.

## COLORS

					
Almond Grove	Almond Grove Fusion	Bavarian Blend	Birch (SR 0.28)	Brown	Chamois (SR 0.41)
					
Charcoal	Charleston	Cocoa Brown	Copper Ridge	Dark Brown	Dark Charcoal
					
Fossil	Granite	Granite Fusion (SR 0.28)	Heritage Brown	Medium Grey	Midnight Charcoal
					
Mocha	New York Blend	Oak Brown Fusion	Opal Blend (SR 0.32)	Red	River
					
Rustic Red	Sable Blend	Sandstone	Sierra	Silver Grey	Steel Grey Blend
					
Steel Mountain	Tuscany (SR 0.39)				

## SIZES

Skyline	23 <sup>7</sup> / <sub>8</sub> x 23 <sup>7</sup> / <sub>8</sub> x 2" (50mm)	Beacon Hill™ Platform	Random Bundle (60mm) Random Bundle (80mm)
Rectangles	4 x 8 x 2 <sup>3</sup> / <sub>8</sub> " (60mm) 7 x 14 x 2 <sup>3</sup> / <sub>8</sub> " (60mm) 7 x 14 x 3 <sup>1</sup> / <sub>8</sub> " (80mm) 21 x 28 x 2 <sup>3</sup> / <sub>8</sub> " (60mm) 21 x 35 x 2 <sup>3</sup> / <sub>8</sub> " (60mm)	Permeable Rectangles	5 x 10 x 3 <sup>1</sup> / <sub>8</sub> " (80mm)
		Permeable Planks	3 x 12 x 4" (100mm)
Planks	4 x 12 x 4" (100mm) 4 x 16 x 4" (100mm) 8 x 24 x 4" (100mm)	Thornbury™ Platform	Random Bundle (70mm)
Artline™ Platform	Random Bundle (70mm)	Hex/City Park Paver™	8 x 8 x 2 <sup>3</sup> / <sub>4</sub> " (70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.







# GRANITO™

Unique and boldly mottled color finish.



PROJECT: Unilock Outdoor Idea Center, Georgetown, ON. PRODUCT: Hex/City Park Paver™ with Granito Finish in Notte.

## COLORS



Notte



Sabia

## SIZES

Beacon Hill™ Platform	Random Bundle (60mm)
Hex/City Park Paver™	8 x 8 x 2¾" (70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.



# REVELA™

Shot-blasted paver surface added to your favorite finish.



PROJECT: Private Residence, Chicago, IL. DESIGN: Countywide Landscaping. PRODUCT: Rectangles with Revela Finish in Mica Grey.

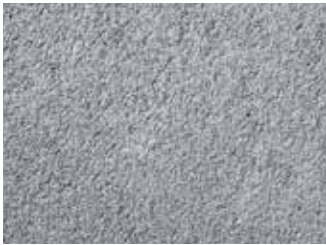
## COLORS



Metallic Grey  
(Shot Blast - Series™ Finish)



Mica Grey  
(Shot Blast - Smooth Premier)



Pewter  
(Shot Blast - Smooth Premier)



Savannah  
(Shot Blast - Series™ Finish)

## SIZES

Slabs	21 x 35 x 23 <sup>3</sup> / <sub>8</sub> " (60mm)
Rectangles	6 x 12 x 4" (100mm)



# STANDARD

A classic thru-mix paving stone surface.

## COLORS



Almond Grove



Autumn Red



Beechwood



Burnt Oak



Canvas (SR 0.33)



Charcoal



Dark Charcoal



Granite Blend



Natural (SR 0.30)



Prairie (SR 0.28)



Red



River Blend (SR 0.32)



Rustic Red



Saddle



Sandstone



Sierra



St Clair



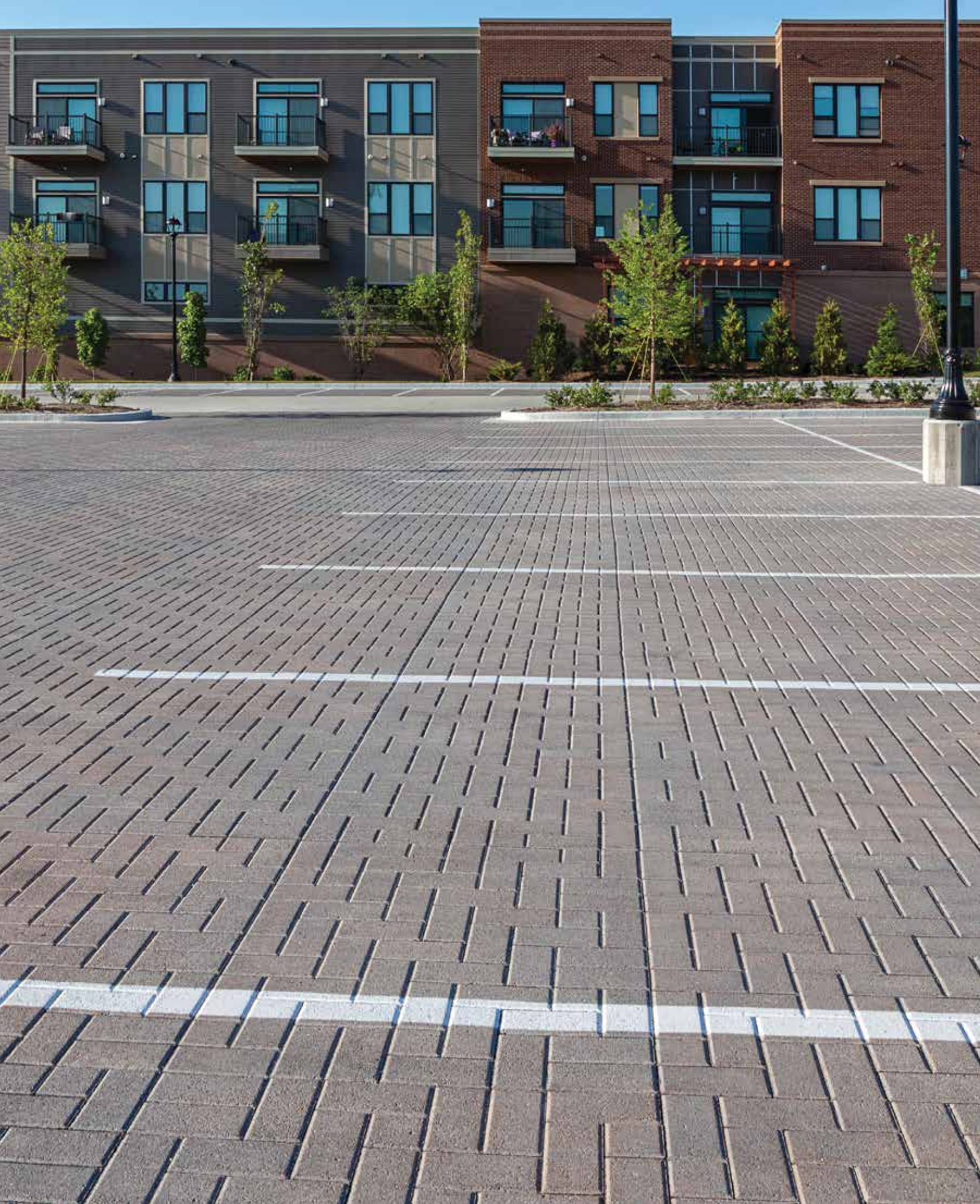
Terra Cotta

## SIZES

Squares	6 x 6 x 2 <sup>3</sup> / <sub>4</sub> " (70mm) 8 x 8 x 2 <sup>3</sup> / <sub>8</sub> " (60mm) 12 x 12 x 2 <sup>3</sup> / <sub>4</sub> " (70mm)	Permeable Rectangles	5 x 10 x 3 <sup>1</sup> / <sub>8</sub> " (80mm)
Rectangles	4 x 8 x 2 <sup>3</sup> / <sub>8</sub> " (60mm) 6 x 12 x 2 <sup>3</sup> / <sub>4</sub> " (70mm)	Eco-Optiloc™	10 <sup>1</sup> / <sub>4</sub> x 10 <sup>1</sup> / <sub>4</sub> x 3 <sup>1</sup> / <sub>8</sub> " (80mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.







# SHAPES & SIZES

## SLABS

23 1/2 x 23 1/2 x 2 (600 x 600mm) T: 50mm	23 3/4 x 23 3/4 (606 x 606mm) T: 50mm	17 1/2 x 23 3/4 (453 x 606mm) T: 50mm	11 1/4 x 23 3/4 (301 x 606mm) T: 50mm	11 1/16 x 23 1/2 (300 x 600mm) T: 50mm

## SQUARES

36 x 36 (900 x 900mm) T: 100mm	24 x 24 (600 x 600mm) T: 50, 70 or 100mm	16 x 16 (400 x 400mm) T: 70, 80 or 100mm	12 x 12 (300 x 300mm) T: 70 or 100mm	8 x 8 (200 x 200mm) T: 70, 80 or 100mm	6 x 6 (150 x 150mm) T: 70 or 80mm	4 x 4 (100 x 100mm) T: 70mm


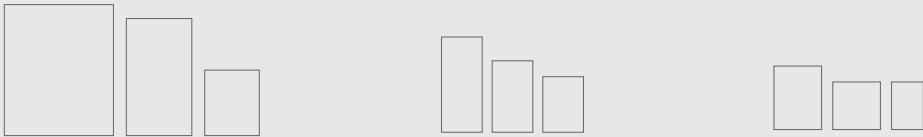
## RECTANGLES


18 x 36 (450 x 900mm) T: 100mm	16 x 24 (400 x 600mm) T: 100mm	12 x 24 (300 x 600mm) T: 50, 70, 100 or 150mm	12 x 18 (300 x 450mm) T: 100mm	8 x 16 (200 x 400mm) T: 70 or 100mm	7 x 14 (180 x 360mm) T: 60 or 80mm	6 x 12 (150 x 300mm) T: 70, 80 or 100mm	5 x 10 (120 x 240mm) T: 80mm	6 x 8 (150 x 200mm) T: 70mm	4 x 8 (100 x 200mm) T: 60, 70 or 80mm	3 x 6 (75 x 150mm) T: 100mm



## PLANKS

12 x 36 (300 x 900mm) T: 100mm	8 x 24 (200 x 600mm) T: 100 or 150mm	6 x 24 (150 x 600mm) T: 70 or 150mm	4 x 16 (100 x 400mm) T: 100mm	4 x 12 (100 x 300mm) T: 70, 80 or 100mm	3 x 12 (75 x 300mm) T: 100mm	2 1/4 x 9 1/2 (60 x 240mm) T: 70mm



RANDOM BUNDLES		
		
<b>Artline Platform</b> 6% - 17% x 4% and 7% (170-450 x 125 and 187.5mm) T: 70mm or 100mm		<b>Beacon Hill Platform</b> 21 x 14, 14 x 14, 7 x 14" (540 x 360, 360 x 360, 180 x 360mm) T: 70 or 100mm
		
<b>Thornbury Platform</b> 13% x 16%, 13% x 8%, 6% x 8" (350 x 420, 350 x 210, 170 x 210mm) T: 70 or 80mm	<b>Tribeca Platform</b> 5% x 12, 5% x 9, 5% x 7" (130 x 305, 130 x 230, 130 x 175mm) T: 60mm	<b>Small Random Platform</b> 6 x 8, 6 x 6, 4 x 6" (150 x 200, 150 x 150, 100 x 150mm) T: 70mm

GEOMETRICS			
			
8 x 8" (200 x 200mm) T: 70mm	10% x 10%" (260 x 260mm) T: 80mm	6x12x16%" (150 x 300 x 424mm) T: 70 or 80mm	8% x 5%" (147 x 224mm) T: 80mm

PERMEABLE OPTIONS 				
				
8 x 8" (200 x 200mm) T: 80mm	10% x 10%" (260 x 260mm) T: 80mm	9% x 9%" (250 x 250mm) T: 80mm	4 x 16" (100 x 400mm) T: 100mm	3 x 12" (75 x 300mm) T: 100mm
				
12 x 12" (300 x 300mm) T: 100mm	10 x 10" (240 x 240mm) T: 80mm	5 x 10" (120 x 240mm) T: 80mm	5 x 5" (120 x 120mm) T: 80mm	<b>Eco-Line' Random Bundle</b> 9% - 14" x 3 3/8 and 4" T:100mm

Not all shapes and sizes are available in all regions, or in all finish or edge options (not shown). Consult your Unilock Representative for more information. All measurements are nominal.

T = height / thickness of the slab or paver





# ARCANA™

Silky, matte, and speckled slabs with exposed granite, quartz and marble.



PROJECT: 61 E Banks Roof Deck, Chicago, IL. DESIGN: Jacobs/Ryan Associates. PRODUCT: Arcana in Lugano.

## COLORS



Corvara (SR 0.30) \*



Lugano (SR 0.46)



Modena (SR 0.46) \*



Vivanto \* (SR 0.18)



11 7/8 x 23 7/8 x 2"  
(301 x 606 x 50mm)



17 7/8 x 23 7/8 x 2"  
(453 x 606 x 50mm)



23 7/8 x 23 7/8 x 2" \*  
(606 x 606 x 50mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.

Arcana is not recommended for vehicular traffic.



# SKYLINE™

Smooth and contemporary slabs, ideal for pedestrian or roof deck applications.

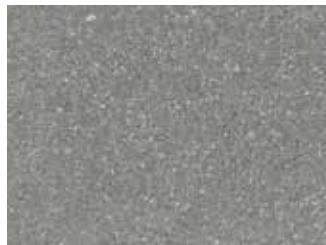


PROJECT: Avalon Yonkers, Yonkers, NY. DESIGN: PS & S Engineering. PRODUCT: Skyline with Smooth Premier finish in Opal.

## COLORS



Chamois



Medium Grey



Silver Grey



23<sup>7</sup>/<sub>8</sub> x 23<sup>7</sup>/<sub>8</sub> x 2"  
(606 x 606 x 50mm)

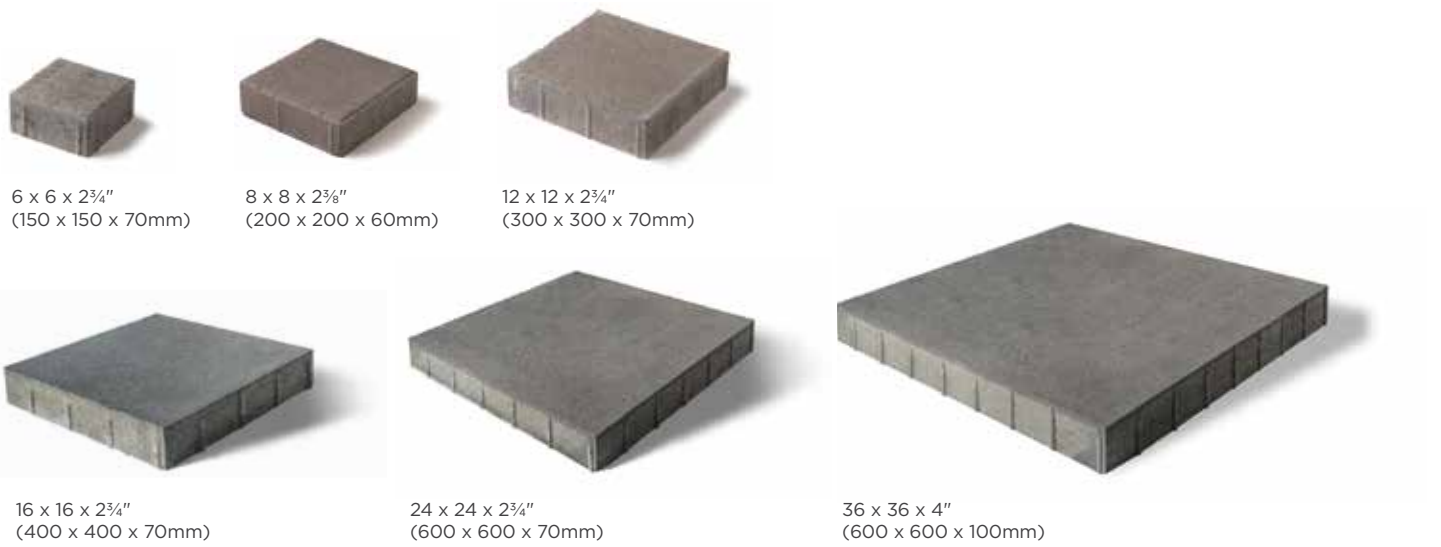
CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.




























*This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.*



# SQUARES

A collection of square pavers available in a variety of finishes and colors.



FINISHES	COLORS	SIZES
 Umbriano® Finish	 French Grey *	16 x 16 x 2 3/4" (70mm) * 24 x 24 x 2 3/4" (70mm) *
	 Midnight Sky *	
 Series™ Finish	 Summer Wheat *	36 x 36 x 4" (100mm)
	 Winter Marvel *	
 Standard Finish	 French Grey	6 x 6 x 2 3/4" (70mm)
	 Summer Wheat	
 Standard Finish	 Black Granite	8 x 8 x 2 3/4" (70mm)
	 Mountain Mist	
 Standard Finish	 Black Granite	8 x 8 x 2 3/4" (60mm) *
	 Glacier	
 Standard Finish	 Dark Charcoal	6 x 6 x 2 3/4" (70mm) 12 x 12 x 2 3/4" (70mm)
	 Granite Blend	
 Standard Finish	 Natural	8 x 8 x 2 3/4" (60mm) *
	 Rustic red	
 Standard Finish	 Terra Cotta *	6 x 6 x 2 3/4" (70mm) 12 x 12 x 2 3/4" (70mm)
	 Burnt Oak	
 Standard Finish	 Granite Blend	6 x 6 x 2 3/4" (70mm) 12 x 12 x 2 3/4" (70mm)
	 Dark Charcoal	

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.  
This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.  
\* Available for quick ship across North America.

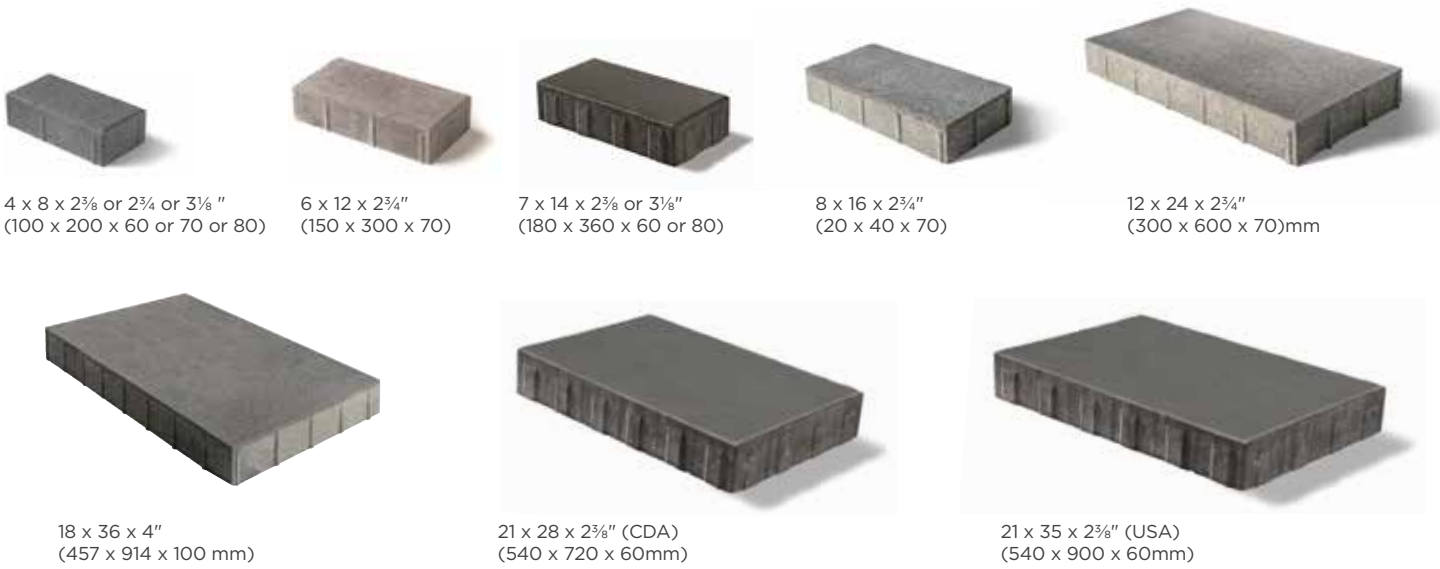






# RECTANGLES

A collection of rectangle pavers available in a variety of finishes and colors.

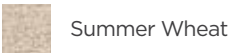
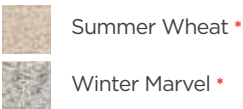
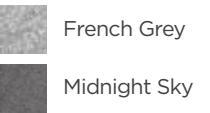
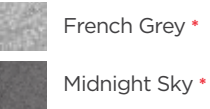


## FINISHES



Umbriano® Finish

## COLORS



## SIZES

8 x 16 x 2 3/4" (70mm) \*  
12 x 24 x 2 3/4" (70mm) \*

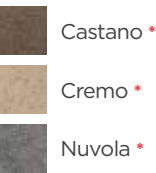
4 x 8 x 2 3/8" (60mm)  
7 x 14 x 2 3/4" (80mm)

21 x 35 x 2 3/8" (60mm)

18 x 36 x 4" (100mm)



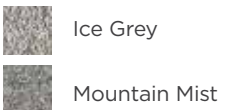
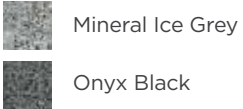
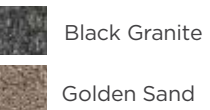
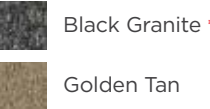
Senzo™ Finish



8 x 16 x 2 3/4" (70mm) \*



Series™ Finish



4 x 8 x 2 3/4" (70mm) \*

7 x 14 x 3 1/8" (80mm)

8 x 16 x 2 3/4" (70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.

\* Available for quick ship across North America.








## FINISHES

## COLORS

## SIZES



Il Campo® Finish

 Bavarian	 Granite Blend	 Mocha
 Dark Charcoal *	 Heritage Brown	















4 x 8" x 2<sup>3</sup>/<sub>4</sub>" (70mm) \*

 Granite Blend	 Sandstone
---	---

8 x 16 x 2<sup>3</sup>/<sub>4</sub>" (70mm)



Smooth Premier Finish

 Almond Grove	 Fossil	 Red
 Brown	 Granite Blend	 River
 Charcoal	 Granite Fusion	 Rustic Red
 Charleston	 Heritage Brown	 Sierra
 Dark Charcoal	 Mocha	






4 x 8 x 2<sup>3</sup>/<sub>8</sub>" (60mm)

 Dark Brown	 Opal Blend
---	---










7 x 14 x 2<sup>3</sup>/<sub>8</sub>" (60mm)

 Dark Brown	 Midnight Charcoal	 Opal Blend
--	---	--

7 x 14 x 3<sup>1</sup>/<sub>8</sub>" (80mm)

 Almond Grove Fusion	 Oak Brown Fusion	 Tuscany
 Granite Fusion	 Opal Blend	

21 x 28 x 3<sup>1</sup>/<sub>8</sub>" (80mm)

 Almond Grove	 Granite Fusion	 Sierra
 Bavarian	 Opal Blend	 Steel Mountain
 Fossil	 New York Blend	 Tuscany

21 x 35 x 2<sup>3</sup>/<sub>8</sub>" (60mm)


















Flagstone Premier Finish

 Almond Grove	 Fossil	 Tuscany
 Alpine Grey	 New York	 Walnut
 Bavarian	 Sierra	
 Birch	 Steel Mountain	




21 x 35 x 2<sup>3</sup>/<sub>8</sub>" (60mm)



Standard Finish

 Almond Grove	 Granite Blend *	 Rustic Red *
 Autumn Red	 Natural	 Sandstone
 Beechwood	 Prairie	 Sierra *
 Charcoal	 Red	 St Clair
 Dark Charcoal *	 River Blend	 Terra Cotta *

4 x 8 x 2<sup>3</sup>/<sub>8</sub>" (60mm) \*

 Burnt Oak	 Dark Charcoal	 Granite Blend
---	---	---

6 x 12 x 2<sup>3</sup>/<sub>4</sub>" (70mm)



# PLANKS

A collection of plank pavers available in a variety of finishes and colors.



8 x 24 x 2 3/4 or 4 or 6"  
(200 x 600 x 70 or 100 or 150)



6 x 24 x 2 3/4 or 6"  
(150 x 600 x 70 or 150)



4 x 16 x 4"  
(100 x 400 x 100)



4 x 12 x 4"  
(100 x 300 x 100)



3 x 12 x 4"  
(70 x 300 x 100)



2 1/4 x 9 1/2 x 2 3/4"  
(60 x 240 x 70)mm

## FINISHES



Umbriano® Finish

## COLORS



French Grey



Midnight Sky



Summer Wheat



Winter Marvel

## SIZES

8 x 24 x 2 3/4" (70mm)



French Grey



Winter Marvel

12 x 36 x 4" (100mm)



Summer Wheat

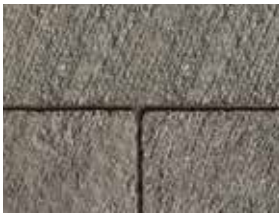


Series™ Finish



Black Granite

4 x 12 x 4" (100mm)  
8 x 24 x 4" (100mm)



Il Campo® Finish



Granite Blend

4 x 12 x 4" (100mm)  
8 x 24 x 4" (100mm)



Smooth Premier Finish



Sandstone

4 x 12 x 4" (100mm)



Opal Blend \*



Steel Grey Blend \*

4 x 16 x 4" (100mm) \*



Opal Blend



Steel Grey Blend

8 x 24 x 4" (100mm)



Charleston



Dark Charcoal \*

9 1/2 x 2 1/4 x 2 3/4" (70mm) \*



Cocoa Brown \*



Sable Blend \*

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.

\* Available for quick ship across North America.





**PROJECT:** Columbia Center, Troy, MI. **DESIGN:** Grissim Metz Andriese Associates. **PRODUCT:** Planks with Il Campo® and Series™ finishes in Granite and Black Granite.



# ARTLINE™ PLATFORM

An assortment of rectangular pavers with long, clean lines.




RANDOM BUNDLE (all units sold together)						
						
4⅞ x 6¾ x 2¾" (125 x 169 x 70)	4⅞ x 10⅝" x 2¾" (125 x 262.5 x 70)	4⅞ x 13⅝ x 2¾" (125 x 337.5 x 70)	4⅞ x 17¾ x 2¾" (125 x 450 x 70)	7½ x 8⅞ x 2¾" (187.5 x 225 x 70)	7½ x 13⅝ x 2¾" (187.5 x 337.5 x 70)	7½ x 17¾ x 2¾" (450 x 187.5 x 70)mm

FINISHES



Umbriano® Finish

COLORS




-  French Grey
-  Midnight Sky
-  Winter Marvel

SIZES

Artline Platform



Il Campo® Finish

-  Bavarian Blend
-  Granite Blend
-  Granite Fusion

Artline Platform



Smooth Premier Finish

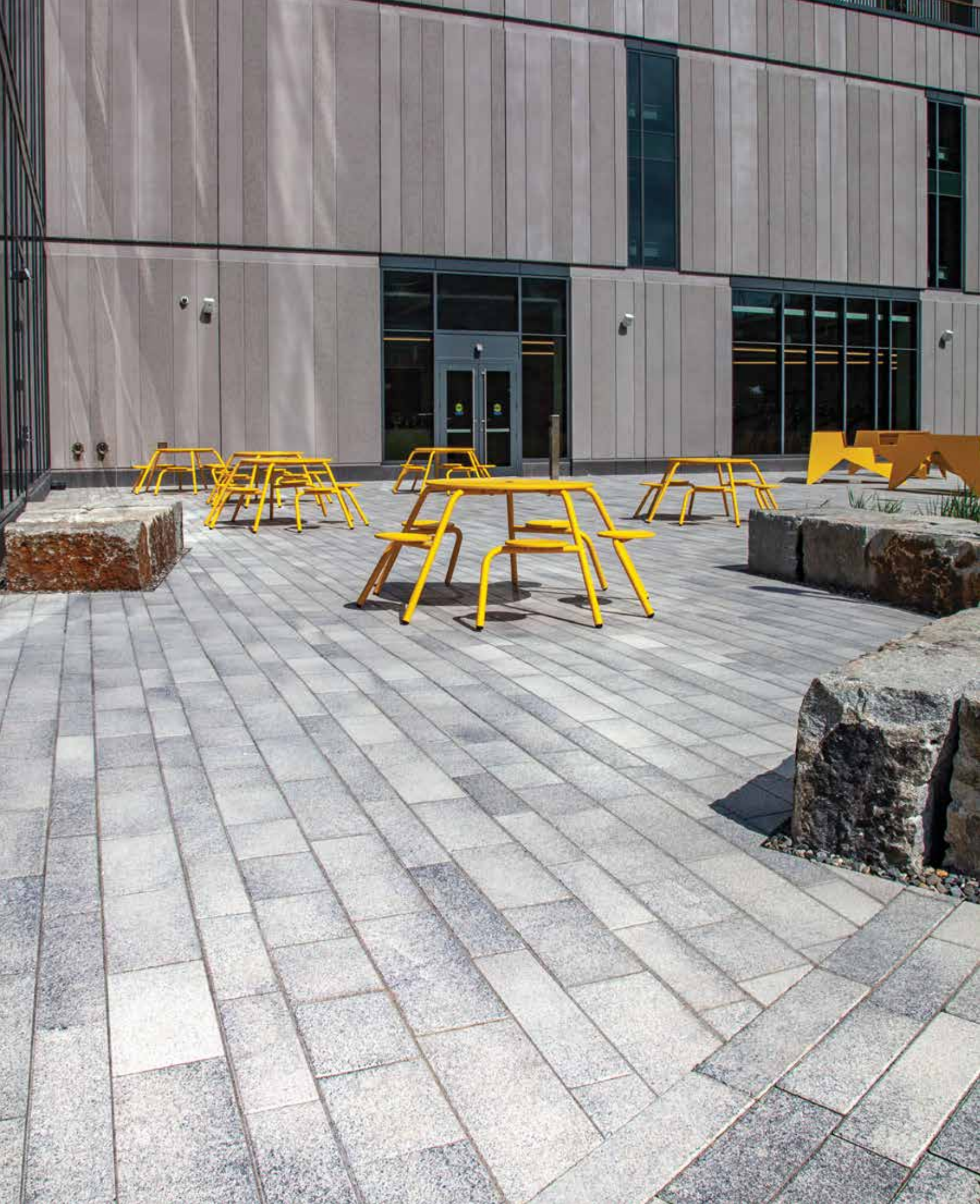
-  Bavarian Blend
-  Birch
-  Copper Ridge
-  Fossil
-  Granite Blend
-  Granite Fusion \*
-  Sierra
-  Steel Mountain
-  Tuscany

Artline Platform \*

10mm (4") Artline is available by special order only. Minimum quantities apply.

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.  
This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.  
\* Available for quick ship across North America.





**PROJECT:** Education First, Hult Building, Cambridge, MA. **DESIGN:** Zen Associates. **PRODUCT:** Artline® Platform with Umbriano® finish in Winter Marvel.



# BEACON HILL™ PLATFORM

A collection of three shapes that create a classic random appearance.

RANDOM BUNDLE (all units sold together)



**LARGE RECTANGLE**  
14 x 21 x 2<sup>3</sup>/<sub>8</sub> or 3<sup>1</sup>/<sub>8</sub>"  
(360 x 540 x 60mm or 80mm)

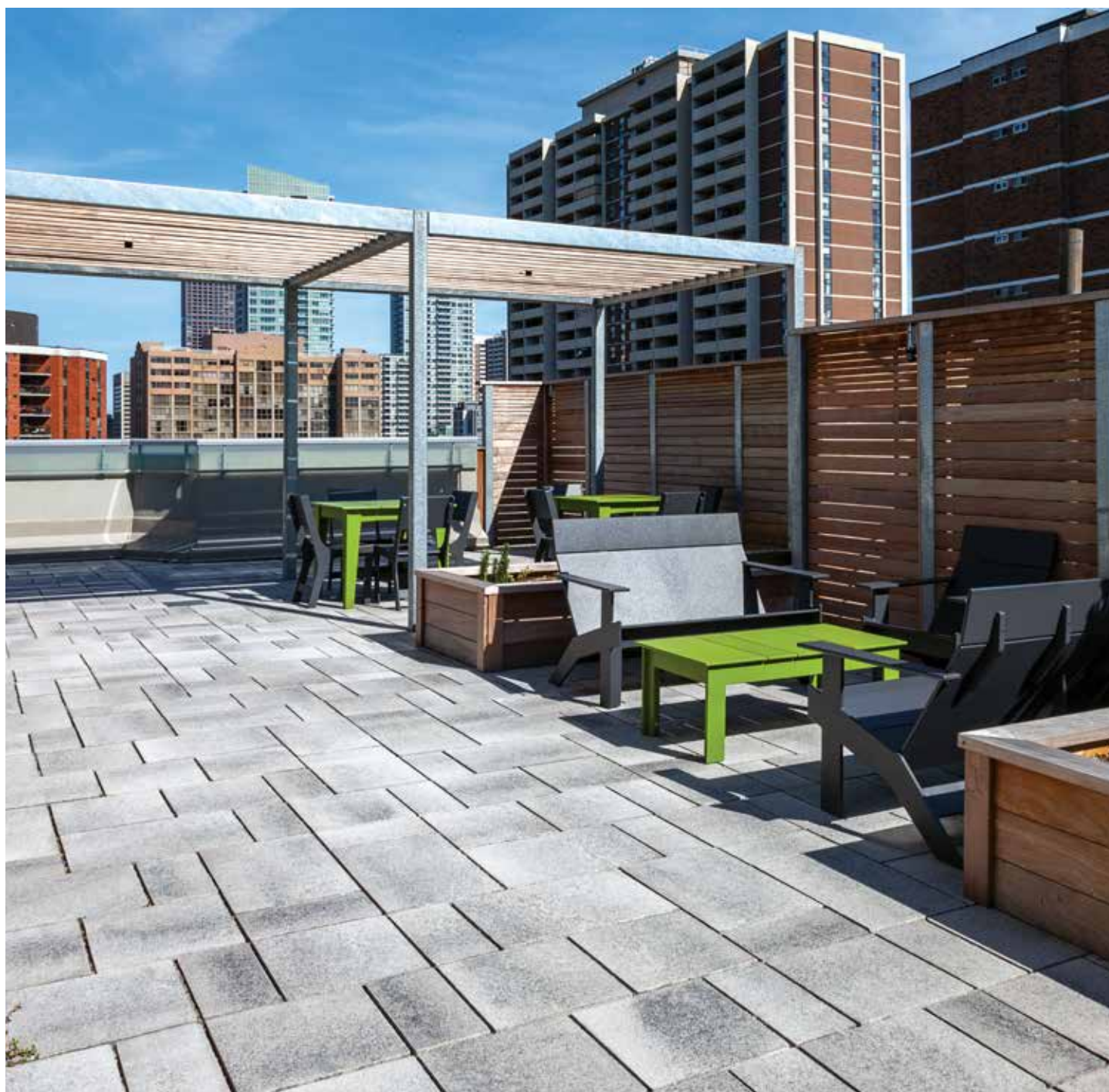


**SQUARE**  
14 x 14 x 2<sup>3</sup>/<sub>8</sub> or 3<sup>1</sup>/<sub>8</sub>"  
(360 x 360 x 60mm or 80mm)
































































**SMALL RECTANGLE**  
7 x 14 x 2<sup>3</sup>/<sub>8</sub> or 3<sup>1</sup>/<sub>8</sub>"  
(180 x 360 x 60mm or 80mm)

**ADDITIONAL INDIVIDUAL SIZES**  
7 x 14 x 2<sup>3</sup>/<sub>8</sub> or 3<sup>1</sup>/<sub>8</sub>"  
21 x 35 x 2<sup>3</sup>/<sub>8</sub>" (60mm) (US)  
21 x 28 x 2<sup>3</sup>/<sub>8</sub>" (60mm) (CDA)



**PROJECT:** 130 Carlton Roof Deck, Toronto, ON. **DESIGN:** MWLA Landscape Architects. **PRODUCT:** Beacon Hill™ Platform with Umbriano® finish in Winter Marvel.



FINISHES	COLORS			SIZES
 Umbriano® Finish	 French Grey *	 Winter Marvel *	 Summer Wheat *	Beacon Hill Platform 2⅝" (60mm) *
	 Midnight Sky *			
	 French Grey	 Winter Marvel	 Summer Wheat	Beacon Hill Platform 3⅞" (80mm)
	 Midnight Sky			
 Series™ Finish	 Cobalt Grey	 Mineral Ice Grey		Beacon Hill Platform 2⅝" (60mm)
	 Black Granite	 Ice Grey		Beacon Hill Platform 3⅞" (80mm)
	 Golden Sand	 Mountain Mist		
 Smooth Premier Finish	 Almond Grove Fusion	 Granite Fusion *	 Sierra	Beacon Hill Platform 2⅝" (60mm) *
	 Bavarian Blend	 New York Blend	 Steel Mountain	
	 Birch	 Oak Brown Fusion	 Tuscany *	
	 Fossil	 Opal Blend *		
	 Almond Grove Fusion *	 Oak Brown Fusion	 Tuscany	Beacon Hill Platform 3⅞" (80mm) *
	 Granite Fusion	 Opal Blend		
 Flagstone Premier Finish	 Almond Grove	 Fossil	 Sierra	Beacon Hill Platform 2⅝" (60mm) *
	 Almond Grove Fusion	 Granite Fusion *	 Slate Blue	
	 Alpine Grey	 New York Blend	 Steel Mountain	
	 Bavarian Blend	 Oak Brown Fusion	 Tuscany *	
	 Birch	 River	 Walnut	
	 Almond Grove Fusion	 Birch	 Oak Brown Fusion	Beacon Hill Platform 3⅞" (80mm)
	 Alpine Grey	 Fossil	 Steel Mountain	
	 Bavarian Blend	 Granite Fusion	 Tuscany	
 Granito™ Finish	 Notte *	 Sabia *		Beacon Hill Platform 2⅝" (60mm) *

Beacon Hill 6mm not recommended for vehicular traffic.

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.  
 This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.  
 \* Available for quick ship across North America.



# HEX/CITY PARK PAVER™

A modern twist on a traditional urban paver hex shape.



PROJECT: Playground 52, Bronx, NY. DESIGN: New York City Parks Department. PRODUCT: Hex/City Park Paver™ with Umbriano® finish in Summer Wheat.

## FINISHES



Smooth Premier Finish

## COLORS



Dark Charcoal



Granite Fusion

## SIZES

Hex/City Park Paver™



8 x 8 x 2 3/4"  
(200 x 200 x 70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.






# OPTILOC®

A heavy-duty, L-shaped industrial paver with tri-axis locking, offering a sleek, rectilinear look.



PROJECT: E.L. Harvey & Sons, Westborough, MA . DESIGN: Hayden Site & Utility, Inc. PRODUCT: Optiloc® with Standard finish in Granite Blend.

FINISHES	COLORS	SIZES
 Standard Finish	 Natural	10¼ x 10¼ x 3⅞" (80mm)
 10¼ x 10¼ x 3⅞" (260 x 260 x 80mm)		

This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.



## ELEGANCE®

**Deep, rich colors** and a multitude of unique Reala™ textures combine to deliver the timeless beauty of Unilock Elegance. From the timeworn look of European cobblestones, to the classic luxury of riven natural stone slabs, **our Elegance collection offers styles you can't get anywhere else.** And thanks to Ultima Concrete, the look you purchase is the look that will last, with up to 4x the strength of poured-in-place concrete.







Copthorne



Richcliff



Town Hall



Courtstone



# TOWN HALL®

Modeled after historic North American clay street pavers, Town Hall textures were cast from a multitude of different surfaces using Reala™ Technology, and Ultima™ Concrete Technology was used to create superior durability. Installed in traditional or permeable applications.



PROJECT: Little Caesar's Arena, Detroit, MI. DESIGN: Smithgroup. PRODUCT: Town Hall® in Burgundy Red and Heritage Red.



Basalt \*



Burgundy Red \*



Burnt Clay \*



Heritage Clay \*



Heritage Red \*



Old Oak \*



4 x 9¾ x 2¾" \*  
(100 x 250 x 70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.

 Town Hall is also available for permeable installations.



# RICHCLIFF®

Inspired by the texture of natural cut flagstone. Richcliff is cast using Reala™ Technology, which ensures a completely random and natural appearance. Ultima™ Concrete Technology makes Richcliff up to four times stronger than conventional poured concrete.



PROJECT: Woodward Avenue, Detroit, MI. DESIGN: The Mannik Smith Group, Inc. PRODUCT: Richcliff® Large Rectangle in Smoke Shale.



Dawn Mist \*



Pebble Taupe \*



Smoke Shale \*

RANDOM BUNDLE (all units sold together) \*



LARGE RECTANGLE  
9 x 12 x 2 3/8"  
(226 x 300 x 60mm)



SQUARE  
9 x 9 x 2 3/8"  
(226 x 226 x 60mm)



SMALL RECTANGLE  
6 x 9 x 2 3/8"  
(150 x 226 x 60mm)



LARGE RECTANGLE \*  
12 x 21 x 2 3/8"  
(302 x 528 x 60mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# COPTHORNE®

Inspired by the rich color and timeworn beauty of European street pavers and cast using Reala™ Technology for an authentic surface appearance, Copthorne uses Ultima™ Concrete Technology to deliver up to four times the strength of conventional poured concrete.



**PROJECT:** The Western Reserve Historical Society of Cleveland. **DESIGN:** AECOM. **PRODUCT:** Copthorne® in Basalt and Steel Blue.



Basalt \*



Burgundy Red \*



Burnt Clay \*



Old Oak \*



Steel Blue \*



2½ x 7⅞ x 2⅞" \*  
(65 x 200 x 60mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# COURTSTONE®

Courtstone brings a luxurious, old-world elegance to every project with Ultima™ that provides up to four times the strength of conventional poured concrete. Using Reala™ Technology, the unique shapes were cast from real European cobblestones but manufactured with a consistent base for efficient installation.



PROJECT: Peabody's Interiors, Brown Deer, WI. DESIGN: Breezy Hill. PRODUCT: Courtstone® in Basalt.



Basalt \*



Belgian Blue \*



Dawn Mist \*



Pebble Taupe \*

RANDOM BUNDLE (all units sold together) \*



**XL RECTANGLE**  
5⅞ x 8⅞ x 2⅞"  
(130 x 215 x 60mm)



**LARGE RECTANGLE**  
5⅞ x 7¼ x 2⅞"  
(130 x 185 x 60mm)



**RECTANGLE**  
5⅞ x 6½ x 2⅞"  
(130 x 165 x 60mm)



**SMALL RECTANGLE**  
5⅞ x 5¾ x 2⅞"  
(130 x 145 x 60mm)



**SQUARE**  
5⅞ x 5⅞ x 2⅞"  
(130 x 130 x 60mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



Unilock paver collections include products that are available only in a stock range of colors. Special-order colors may be an option for this range of products but please speak with your Unilock Representative for more information. These are **tried and true products lines** that will suit a wide range of commercial applications.





# BRUSSELS BLOCK®

Brussels Block is the original tumbled paver. Its timeless warmth, relaxed appearance and tumbled finish reflect natural quarried stone.



PROJECT: YMCA, Sheboygan, WI. DESIGN: Greenscape. PRODUCT: Brussels Block® in Coffee Creek.



Almond Grove



Coffee Creek



Desert Sand



Limestone \* (SR 0.28)



Mahogany



New York Blend



Sandstone \* (SR 0.41)



Sierra \*



DIMENSIONAL PAVER  
8 x 12 x 4"  
(200 x 300 x 100mm)



XL STONE \*  
8 1/4 x 13 3/4 x 2 3/4"  
(208 x 348 x 70mm)



STANDARD STONE \*  
6 7/8 x 8 1/4 x 2 3/4"  
(174 x 208 x 70mm)



HALF STONE \*  
4 1/8 x 6 7/8 x 2 3/4"  
(104 x 174 x 70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# BRONTE® STREET PAVER

Ideal for heavy-duty applications with superior load-bearing properties. The interlocking tongue and groove provides maximum performance where vehicle turning creates a twist load on the paver.



PROJECT: Ron Joyce Children's Health Centre. DESIGN: Vertechs Design Landscape Architects. PRODUCT: Bronte® Street Paver in Limestone and Natural.



Natural - Distressed Finish  
SPECIAL ORDER



THIS PRODUCT IS AVAILABLE IN A VARIETY OF SPECIAL ORDER FINISHES AND COLORS. ASK YOUR UNILOCK REPRESENTATIVE ABOUT SPECIAL ORDER OPTIONS IN YOUR REGION.



5½ x 8½ x 4"  
(140 x 220 x 100mm)

*Special Order colors are available, minimum quantities will apply. \* Please contact your Unilock Representative for more details.*



# BRISTOL VALLEY<sup>®</sup>

The subtle surface texture and understated edge detail of Bristol Valley brings a new, refined elegance to projects.



PROJECT: Ohio State University - Alumni Awards Garden, Columbus, OH. DESIGN: James Burkart Associates, Inc. PRODUCT: Bristol Valley<sup>®</sup> Bavarian Blend.



Bavarian



Bavarian Blend



Copper Ridge



Granite Fusion



New York Blend



Steel Mountain



RANDOM BUNDLE (all units sold together)



LARGE RECTANGLE  
14 x 21 x 2 3/8"  
(360 x 540 x 60mm)



SQUARE  
14 x 14 x 2 3/8"  
(360 x 360 x 60mm)



SMALL RECTANGLE  
7 x 14 x 2 3/8"  
(180 x 360 x 60mm)



XL RECTANGLE  
21 x 35 x 2 3/8"  
(540 x 890 x 60mm)



# MATTONI™

Mattoni reinterprets classic slender Roman brick with a surface that is antiqued for a distressed, timeworn appearance.



PROJECT: Johnsonville Corporate Center, Sheboygan Falls, WI. DESIGN: Otter Creek Landscape & Garden Center. PRODUCT: Mattoni™ in Charleston.



Charleston



Cocoa Brown \*



Dark Charcoal \*



Sable Blend \*



2¼ x 9½ x 2¾" \*  
(60 x 240 x 70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# GRANITO™

The unique and boldly mottled color of Granito is achieved with proprietary Artista™ Color Technology, combined with EnduraColor™ for a refined surface texture and long-lasting color.



PROJECT: Unilock Outdoor Idea Center, Georgetown, ON PRODUCT: Hex/City Park Paver™ with Granito™ Finish in Notte.



Notte \*



Sabia \*



7<sup>7</sup>/<sub>8</sub> x 7<sup>7</sup>/<sub>8</sub> x 2<sup>3</sup>/<sub>4</sub>"  
(200 x 200 x 70mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



Since **Unilock introduced permeable pavers to North America** more than twenty-five years ago, we have steadily increased our selection of sizes, shapes, colors and finishes. Our permeable pavers are **suitable for a variety of applications** and have joint spacing that complies with the Americans with Disabilities Act.





# Permeable Paver Innovation

Unilock introduced permeable paving to North America in 1991, and has continued to lead the charge with new innovative products. Our extensive involvement in permeable paving and long-standing international alliances have allowed us to gain valuable knowledge, experience, and best practices that we can share with clients to help ensure their projects are a success.

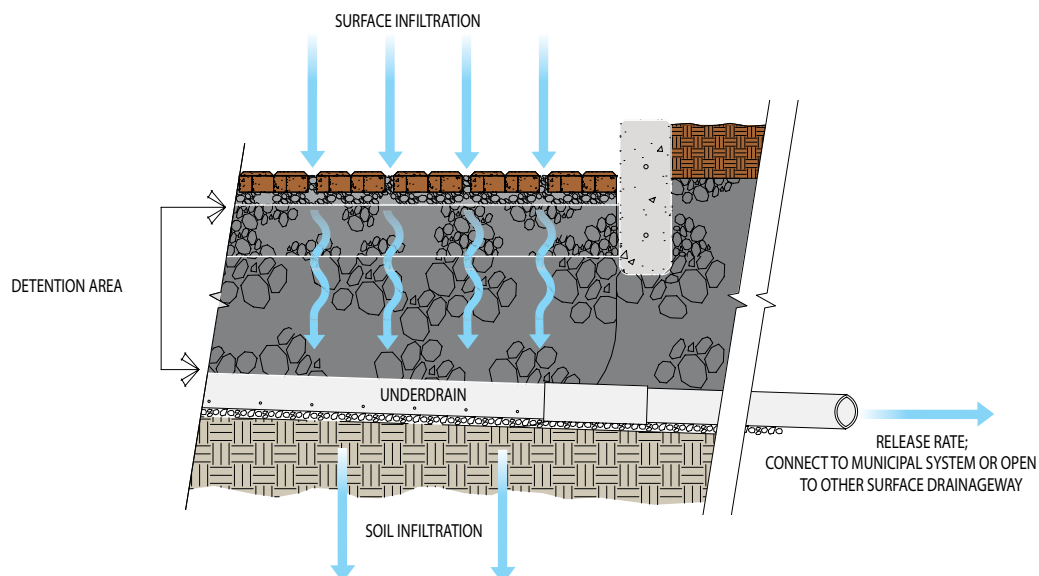


The problem with stormwater is that it has to have **somewhere to go**, ideally back into the ground. Today's urban environments are covered with impervious hard surfaces such as rooftops, parking lots and highways in excessive amounts, instead of pervious fields and forests. This runoff flows into storm drains and ultimately into local rivers, lakes and streams, carrying heavy metals, bacteria and other pollutants that foul our water and put our health at risk.

Some communities use separate systems for sewage and stormwater, however, older urban communities use

combined sewer systems that allow for overflow from the two inputs that release directly into local rivers and coastal waters when the system is overloaded. This allows for millions of gallons of raw waste and other pollutants into the waters we may fish, swim, boat or may be sources of drinking water.

Storm frequencies, intensities and duration are shifting and in many regions more severe storms occur more frequently than expected. Increased rainfall and snowfall will place increased demands on stormwater sewer and flood control systems.







**PROJECT:** 35 Cambridge Park Drive, Cambridge, MA. **DESIGN:** Copley Wolff Design Group Boston. **PRODUCT:** Permeable Rectangle, Eco-Priora™ with Smooth Premier finish in Sandstone

# Permeable Paver DESIGN CONSIDERATIONS

Rainfall intensity and duration are typically analyzed together for traditional non-permeable surfaces. However, with a permeable paver surface, intensity is less of a factor as the surface infiltration rate will exceed the capabilities of most storms. A permeable paver surface is **capable of handling more than 100" (2,540 mm) per hour**. The paver joints must be adequately maintained to allow for maximum infiltration.

Although many rainfall events only last for a few minutes, for larger rainfall events, the impact of duration is important to recognize. A heavy rain could fall at the intensity rate of 6" (152 mm) per hour, but the duration may only last for 10 minutes with a resulting actual rain amount of only 1" (25 mm). Longer duration events can often be more demanding, even with less intensity. Actual monthly rainfalls in the Midwest U.S., for example, average 4" (100 mm). Therefore, permeable paving systems can easily contain most rainfall events.

Runoff coefficient (C value) is used to measure the percentage of water that runs off different surface types. For example, bituminous asphalt has a C value of 0.85. This means that during a rainfall, 85 percent of the water will run off the surface. (Source: Design and Construction of Sanitary and Storm Sewers, American Society of Civil Engineers, New York, p. 332, 1969). In comparison, turf has a C value of 0.15 or 15 percent. **The C value**

**of permeable paving, with up to a 5 percent slope, is actually zero**, unless the rainfall intensity exceeds the surface infiltration rate or the entire open-graded base reaches capacity. With a properly designed permeable paver system, capacity will rarely be reached. To achieve maximum surface infiltration, maintenance of the joints may be necessary.

Soil infiltration is another way to absorb runoff. During the site investigation project phase, conducting a geotechnical or porosity test will determine the soil infiltration rate, which will establish stormwater design requirements. Typical industry recommendations suggest installing an underdrain for soil with less than 0.5" (13 mm) per hour of infiltration. It is possible for underdrain systems to be eliminated for soils with infiltration rates greater than 0.5" (13 mm) per hour.

Release rate refers to the volume of water that is allowed to be discharged into a municipal system or waterway, usually measured in cubic feet per second. Many stormwater regulatory agencies require that the post-development release rate not exceed pre-development conditions. **Permeable paving slows and detains stormwater in the open-graded base so that it can be gradually released.** Local jurisdictions should be contacted for required release rates.



# Benefits of INFILTRATION

Rainwater infiltration is extremely important to the groundwater supply. According to the U.S. Geological Survey, one of America's most important natural resources is groundwater. Half of the drinking water in the U.S. comes from groundwater, with the balance coming from lakes and rivers. It is vital to agriculture and other industries, as well as essential for ensuring the health of rivers, streams, wetlands and other water bodies. Urban sprawl contributes to the decrease in pervious area for rainwater infiltration and reduced groundwater levels. Soil infiltration is a simple method for ensuring future water availability.

Installing a permeable paver system above porous soils allows for rainwater infiltration, reducing runoff and flooding. Most soils, even clay, allow for some infiltration. Soils with high porosity, such as sand, can have a higher infiltration rate than the actual rate of rainfall. For example, if it is raining at a rate of 2" (51 mm) per hour, and the soil has an infiltration rate of 4.5" (114 mm) per hour, the soil will absorb water before it can run off. Even poor soil with a low infiltration rate will work. For example, a soil with 0.25" (6 mm) per hour of infiltration will have complete infiltration after about four hours per inch of rainfall.

## TYPICAL INFILTRATION RATES OF VARIOUS SOIL GROUPS

Soil Conservation Service Group	Typical Soil Type	Saturated Infiltration Rate	
		in/hr	mm/hr
A	Sand	8.27"	210 mm
A	Loamy Sand	2.41"	60 mm
B	Sandy Loam	1.02"	26 mm
B	Loam	0.52"	12.7 mm
C	Silt Loam	0.27"	6.8 mm
C	Sandy Clay Loam	0.17"	4.3 mm
D	Clay Loam and Silty Clay Loam	0.09"	2.3 mm
D	Clay	0.06"	1.5 mm

## INFILTRATION RATES FOR UNILOCK PERMEABLE PAVERS *Newly Installed*

		PAVER	JOINT MATERIAL	Joint Width*	Void Space*	Infiltration Rate**	Minimum Infiltration Rate** for Rainfall intensity of:			
							2"/hr	4.5"/hr	6.5"/hr	11"/hr
ADA ACCESSIBLE	Small: 1/4" Joint	Eco-Line®	ASTM # 9 Aqua Rock	6.25mm	5.8%	560	34	78	112	190
		Eco-Promenade®	ASTM #9 - SEK Chip	7 mm	10.12%	934	20	44	64	109
		Eco-Priora™ Herringbone	ASTM #9 - SEK Chip	7 mm	7.08%	676	28	64	92	155
		Eco-Priora™ 5 x10	Kafka - 1/8 to 3/16"	7 mm	6.8%	633	29	66	96	162
		Eco-Priora™ Pattern H	ASTM #9 - Roscoe Chip	7 mm	5.7%	509	35	79	114	193
		Eco-Priora™ Pattern H	IDOT FA 22	7 mm	5.7%	347	35	79	114	193
		Eco-Priora™ 10 x 10	Kafka - 1/16 to 3/16"	7 mm	4.6%	327	43	98	141	239
	Medium: 1/8" to 3/8" Joint	Town Hall®	Kafka - 1/8 to 3/16"	9mm	6.5%	784	31	69	100	169
		City Park Paver™	ASTM #9 - SEK Chip	10mm	4.2%	934	48	107	155	262
		DuraFlow®	ASTM #8 IDOT CA-16	12mm	8%	912	25	56	81	138
	Large: 3/8" to 1/2" Joint	Eco-Optiloc™	HPB	12 mm	7.3%	404	27	62	89	151
		Eco-Optiloc™	ASTM #8 IDOT CA-16	12 mm	7.3%	912	27	62	89	151
	Extra Large: >1/2"	Tribeca Cobble™	ASTM #9 Aqua Rock	10mm	5.6%	400	36	80	116	196
		Thornbury™	ASTM # 9 Aqua Rock	18mm	4.4%	385	45	102	148	250
		Eco-Stone™	ASTM #8 IDOT CA-16	6 mm	10.18%	784	19	42	60	102
		Ecoloc®	Kafka - 1/8 to 3/16"	7 mm	12.18%	1060	18	41	59	99

**NOTE:** The 2", 4.5", 6.5" and 11" per hour Rainfall Intensity examples are based on common 5 minute rainfall intensity charts and are not the same as total rainfall quantity. \*Joint Width is measured at the top of the paver. Void Space is calculated at the base of the paver. \*\*Infiltration rate is inches per hour based on testing done when first installed and is an approximation.



# Detention and VOLUME CONTROL

## BASE STORAGE CAPACITY

Traditional surface detention ponds which act as holding facilities for rainfall are an inefficient use of space. For most land uses and all impervious areas, such as roofs, roads and parking lots, stormwater runoff flows through a system of pipes that release it into detention or retention ponds. This valuable surface area could be much more effectively utilized.

**A permeable paving base for stormwater detention is a very efficient use of land.** With this system, the surface is pervious, allowing detention area to be contained underneath. The detention is created under every square foot of permeable paving, as deep as necessary.

Permeable paver systems use crushed, angular, open-graded aggregate base materials. These materials are entirely different from those used for traditional impervious roads and parking lots. Those traditional systems use dense-graded aggregates containing fines, making them extremely slow-draining. Conversely, the **use of open-graded aggregates provides a void space or porosity of approximately 40 percent.** This is utilized for detention and allows for a rapid surface infiltration rate of over 500" (12,700 mm) per hour (see page 30 for aggregate infiltration rates).

CRITERIA				RAINWATER HARVEST VOLUME			BASE STORAGE CAPACITY			SURPLUS / (DEFICIT) STORAGE			% USED
Rainfall In/Hr (mm/hr)	Surface Area Ft2 (m2)	Base Depth In (mm)	Void Space	Cubic Ft (m3)	Acre Feet	Gallons (m3)	Cubic Ft (m3)	Acre Feet	Gallons (m3)	Cubic Ft (m3)	Acre Feet	Gallons (m3)	
1 (25 mm)	43,560 (4,047 m <sup>2</sup> )	14 (35 mm)	40%	3,630 (103 m <sup>3</sup> )	0.08	27,154 (103 m <sup>3</sup> )	20,328 (576 m <sup>3</sup> )	0.47	152,064 (576 m <sup>3</sup> )	16,698 (473 m <sup>3</sup> )	0.38	124,910 (473 m <sup>3</sup> )	17.9%
1 (25 mm)	43,560 (4,047 m <sup>2</sup> )	18 (46 mm)	40%	3,630 (103 m <sup>3</sup> )	0.08	27,154 (103 m <sup>3</sup> )	26,136 (740 m <sup>3</sup> )	0.60	195,511 (740 m <sup>3</sup> )	22,506 (637 m <sup>3</sup> )	0.52	168,357 (637 m <sup>3</sup> )	13.9%
1 (25 mm)	43,560 (4,047 m <sup>2</sup> )	22 (56 mm)	40%	3,630 (103 m <sup>3</sup> )	0.08	27,154 (103 m <sup>3</sup> )	31,944 (905 m <sup>3</sup> )	0.73	238,958 (905 m <sup>3</sup> )	28,314 (802 m <sup>3</sup> )	0.65	211,804 (802 m <sup>3</sup> )	13.9%
3.04 (77 mm)	43,560 (4,047 m <sup>2</sup> )	14 (35 mm)	40%	11,035 (312 m <sup>3</sup> )	0.25	82,548 (312 m <sup>3</sup> )	20,328 (575 m <sup>3</sup> )	0.47	152,064 (575 m <sup>3</sup> )	9292.92 (263 m <sup>3</sup> )	0.21	69,516 (263 m <sup>3</sup> )	54.3%
3.04 (77 mm)	43,560 (4,047 m <sup>2</sup> )	18 (46 mm)	40%	11,035 (312 m <sup>3</sup> )	0.25	85,548 (312 m <sup>3</sup> )	26,136 (740 m <sup>3</sup> )	0.60	195,511 (740 m <sup>3</sup> )	15,101 (428 m <sup>3</sup> )	0.35	112,963 (428 m <sup>3</sup> )	42.2%
7.58 (19 mm)	43,560 (4,047 m <sup>2</sup> )	14 (35 mm)	40%	27,515 (779 m <sup>3</sup> )	0.63	205,827 (779 m <sup>3</sup> )	20,328 (575 m <sup>3</sup> )	0.47	152,064 (575 m <sup>3</sup> )	(7,187) 203 m <sup>3</sup>	(0.16)	53,763 (204 m <sup>3</sup> )	135.4%
7.58 (19 mm)	43,560 (4,047 m <sup>2</sup> )	22 (56 mm)	40%	27,515 (779 m <sup>3</sup> )	0.63	205,827 (779 m <sup>3</sup> )	31,944 (905 m <sup>3</sup> )	0.73	238,957 (905 m <sup>3</sup> )	4,429 (125 m <sup>3</sup> )	0.10	33,131 (125 m <sup>3</sup> )	86.1%

Detention volumes or storage capacities for permeable paving are based on different rainfall events.





## CASE STUDY

### Southwest Park *by* Starr Whitehouse

*Hoboken, New Jersey*

As part of an extensive resiliency plan to mitigate flooding in a Hoboken neighborhood, a one-acre parking lot was turned into a unique park. The new space offers a refined spot for a variety of recreational activities with moveable seating areas, a lawn, child-friendly play zones, and much more.

Permeable pavers helped the park meet the city's demand for sustainability with integrated green infrastructure capable of managing 200,000 gallons of stormwater in its underground water detention system. Permeable Planks were designed to direct rainwater back into the subbase and detention system through the joint material and keep it away from sewer systems.

The paving pattern was achieved using three colors of special order Unilock Series™ finish in the Permeable Plank shape. The colors play on the hues of neighborhood buildings creating an interesting and vibrant space for all to enjoy.

PROJECT: Southwest Park. Hoboken, NJ DESIGN: Starr Whitehouse. PRODUCT: Permeable Plank with Series™ Finish



# Improved WATER QUALITY



## MEDIAN POLLUTANT REMOVAL

**Without water, life cannot survive.** For fish, wildlife and humans, clean water is a necessity. Even plants need a certain quality of water. The infiltration process of a permeable paving system will remove harmful pollutants such as oil. **The EPA recognizes permeable paving as a best management practice (BMP)** for non-point source pollutants. Utilizing permeable pavers is a simple step to ensure cleaner water and to minimize increases in water temperature. Often forgotten, water temperature is an important quality issue. Increased water temperatures can increase the amount of bacteria and algae, and can decrease aquatic life. Allowing the water to immediately drain from the surface ensures it

will not be heated from an impervious surface before it reaches a runoff area.

The Interlocking Concrete Pavement Institute (ICPI) has conducted tests that determine water quality. Their findings indicate that **cleaner water results from being filtered through a permeable paving system.** Traditional systems have no means for cleaning water. Many municipalities in North America have begun to implement strategies to improve water quality by using BMPs like permeable paver systems. Even smaller communities have joined in the effort to create more sustainable water management systems.

POLLUTANT	INFILTRATION TRENCH DESIGN TYPE*			INFILTRATION TRENCHES & POROUS PAVEMENT
	0.5 in (13mm) Runoff per Impervious Acre	1.0 in (25mm) Runoff per Impervious Acre	2-Year Design Storm Treatment	Median Pollutant Removal**
Total Suspended Solids	60-80%	80-100%	80-100%	95%
Total Phosphorous	40-60%	40-60%	60-80%	70%
Total Nitrogen	40-60%	40-60%	60-80%	51%
Biological Oxygen Demand	60-80%	60-80%	80-100%	-
Bacteria	60-80%	60-80%	80-100%	-
Metals	60-80%	60-80%	80-100%	99% (Zn)

\*Note: These rates are not based on actual data since monitoring what enters and leaves any infiltration facility is difficult to measure. This data is based on land application of pollutants and their treatment through soils. \*\*Actual monitored removal rates.





Geometric Eco-Optiloc™

## CASE STUDY

### Cleveland Clinic Hospital *by* Cawrse & Associates, Inc.

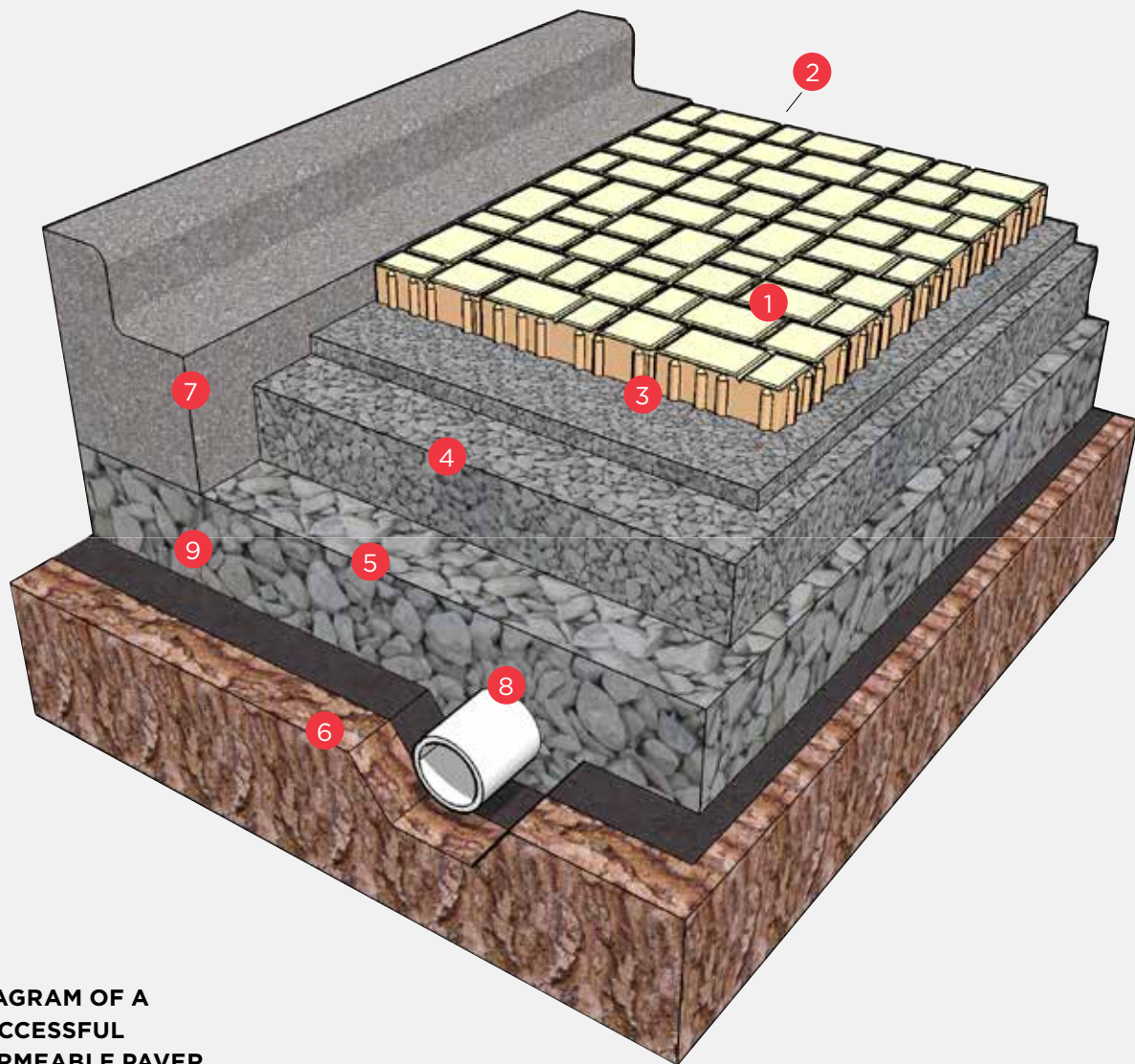
*Avon, Ohio*

**WETLAND REQUIREMENTS.** Cleveland Clinic Hospital located in Avon, Ohio needed to expand in order to continue meeting the health care needs of its community. The clinic identified the need to build a new, multi-story tower and significantly increase parking on a tight budget. The challenge the design team faced was that much of the available property and the adjacent property was wetland. Stormwater runoff from the parking lot was not allowed in order to protect the wetland.

The design team, in conjunction with the Army Corps of Engineers, decided that permeable pavers were the best approach to deal with the stormwater sensitivities. The high infiltration rate of Eco-Optiloc meant that stormwater would be reabsorbed below ground and the 'L' interlocking shape of Eco-Optiloc provided superior resistance to heavy vehicular and truck traffic. The mechanical installation of the pavers, coupled with the low cost of maintenance, kept the project on budget in the short and long term.



# Nine components of a highly **Successful** **Permeable Pavement**



**DIAGRAM OF A  
SUCCESSFUL  
PERMEABLE PAVER  
INSTALLATION**



### **1 | Unilock Permeable Interlocking Concrete Paver**

With various aesthetically pleasing colors and textures, creative choices are not compromised by function. Permeable Interlocking Concrete Pavers (PICPs) are the most durable of any porous pavement material. Unilock's minimum 8,500 psi (57 MPa), high-strength, no-slump concrete allows water to infiltrate between paver units instead of through the material. The joint sizes vary between paver options, ranging from 0.25" (6 mm) to 0.5" (13 mm), which meet the Americans with Disabilities Act specifications for permeable pavement, and allows a minimum of 100" (2,540 mm) per hour of surface infiltration.

### **2 | Joint Aggregate – ASTM No. 8 OR 9**

As the initial filtering layer, the 0.25" (6 mm) crushed, angular, chip stone captures approximately 80 percent of debris in the first 1" (25 mm) to 2" (51 mm). The secondary function of the joint aggregate is to increase the positive interlock between the paver units, which is essential to the structural stability of the PICPs. The joint aggregate must always remain filled to the lip of the PICP units to reduce unnecessary clogging.

### **3 | Setting Bed Aggregate – ASTM No. 8**

Using the 0.25" (6 mm) crushed, angular, chip stone, instead of sand, provides a smooth leveling course for placing pavers and additional structural interlocking of the PICPs. Unlike sand, the setting bed aggregate allows for rapid water infiltration with over 500" (12,700 mm) per hour through the 40 percent void-space. Sand must be avoided as a setting bed in a PICP application.

### **4 | Base Aggregate – ASTM No. 57**

When subsoil conditions are conducive to supporting the ASTM No. 57 (12.5-25mm) crushed, angular, open-graded base material without migration, it can be used without ASTM No. 2 (50-63mm) subbase aggregate. Minimum thickness must be designed to sufficiently support anticipated loads, as well as accommodate stormwater detention in the 40 percent void space of the material. The ASTM No. 57 base aggregate, with a minimum thickness of 4" (102 mm), serves as a transition material between the ASTM No. 8 (2-10mm) setting bed and the ASTM No. 2 subbase aggregate. The infiltration rate of the ASTM No. 57 is over 500" (12,700 mm) per hour.

### **5 | Subbase Aggregate – ASTM No. 2**

Subsoil conditions will dictate the necessity of this larger ASTM No. 2 (50-63mm), crushed, angular, open-graded subbase aggregate thickness. Installation of such material will provide increased structural stability on sites with poor soil conditions. A minimum thickness of 8" (203 mm) is required for effective performance. Subbase aggregate thickness must be designed to sufficiently support anticipated loads. As an added feature, the ASTM No. 2 subbase aggregate temporarily detains stormwater runoff in the 40 percent void-space of the material. The ASTM No. 2 also has an infiltration rate of over 500" (12,700 mm) per hour.

### **6 | Subgrade**

Existing soil materials will determine the performance capabilities of the PICP system. Pre-construction soil analysis, including percolation, California Bearing Ratio and penetrometer measurements (blow counts), are mandatory for proper design. Subsoils with less than 0.5" (13 mm) per hour of infiltration may require underdrainage, scarification and potentially amendments. Subsoils with greater than 0.5" (13 mm) per hour are considered highly permeable. Subsoil compaction can cause a detrimental reduction in permeability and can be eliminated.

### **7 | Edge Restraint**

PICP containment is vitally important to the success of interlocking properties. Lack or failure of an edge restraint will negatively impact the integrity of the pavement surface. For all vehicular PICP applications, an edge restraint, such as a concrete curb, is required. For non-vehicular and pedestrian areas, a plastic edging is sufficient when properly anchored into the subbase.

### **8 | Underdrain**

In PICP systems, the underdrain pipe is based on several factors, such as the permeability of the subsoil, detention requirements, and stormwater release rate of the site. With highly permeable subsoils over 0.5" (13 mm) per hour, the underdrain pipe could be eliminated. Underdrain pipe size is inconsequential, provided the flow rate is greater than the release rate.

### **9 | Mechanical Base Stabilization**

Subsoil characteristics will determine the need for base stabilization. Specifically designed geogrid style systems, such as DriveGrid™ system, can be placed between the subsoil and ASTM No. 57 (12.5-25mm) base aggregate or ASTM No. 2 (50-63mm) and subbase. DriveGrid is not required between aggregate material layers. The base stabilization must be determined by soil conditions specific to each project. Drivegrid should be considered for any weaker subsoils.



# Design and TECHNICAL INFORMATION

## Typical Runoff Coefficients for the Rational Method

Land Use Type	Recommended Value
Industrial	0.75
Downtown Business District	0.85
Single-Family Residential	0.40
Multi-Family Residential	0.60
Parks	0.20

Source: *Design and Construction of Sanitary and Storm Sewers.*  
American Society of Civil Engineers, New York, p. 332, 1969.  
Coefficients are based on 5 – 10 year storm frequencies.

Surface Type	Recommended Value
Bituminous Asphalt	0.85
Pour-In-Place Concrete	0.85
Lawns – Sandy Soils	0.13
Lawns – Heavy Soils	0.20
Permeable Pavers	0.0*

\* Actual value until detention in permeable base reaches capacity.



		SOIL SUBGRADE TEXTURE / INFILTRATION RATE INCHES / HOUR (MM/SEC)										
		Sand	Loamy Sand	Sandy Loam	Loam	Silt Loam	Sandy Clay Loam	Clay Loam	Silty Clay Loam	Sandy Clay	Silty Clay	Clay
Criterion	T <sub>s</sub> (hrs)	8.27 (6x10 <sup>-5</sup> )	2.41 (2x10 <sup>-5</sup> )	1.02 (7x10 <sup>-6</sup> )	0.52 (4x10 <sup>-6</sup> )	0.27 (2x10 <sup>-6</sup> )	0.17 (1x10 <sup>-6</sup> )	0.09 (6x10 <sup>-7</sup> )	0.06 (4x10 <sup>-7</sup> )	0.05 (3x10 <sup>-7</sup> )	0.04 (2x10 <sup>-7</sup> )	0.02 (10 <sup>-7</sup> )
f x T <sub>s</sub> / V <sub>r</sub>	24	496 (12.6)	145 (3.7)	61 (1.5)	31 (0.8)	16 (0.4)	10 (0.25)	5 (0.12)	4 (0.1)	3 (0.07)	2 (0.05)	1 (0.02)
for	48	992 (25.2)	290 (7.4)	122 (3.1)	62 (1.6)	32 (0.8)	20 (0.5)	11 (0.3)	7 (0.17)	6 (0.15)	2 (0.15)	2 (0.05)
(V <sub>r</sub> = 0.4)	72	1489 (37.8)	434 (11)	183 (4.6)	93 (2.4)	149 (1.2)	31 (0.8)	16 (0.9)	11 (0.13)	9 (0.2)	7 (0.17)	4 (0.1)

T<sub>s</sub> = Maximum allowable storage time

V<sub>r</sub> = Voids ratio

Lowest values unless base exfiltration is supplemented with drain pipes.

Maximum allowable depths, inches (m) of storage for selected maximum storage times (T<sub>s</sub> in hours), minimum infiltration rates and inches/hour (mm/sec)(31).

The Natural Resources Conservation Service (NRCS) method typically uses 24-hour storm events as the basis for design. Therefore, this design method is based on controlling the increased runoff for a specific 24-hour storm. The specific duration and return period (e.g., 6 months, 1 year, 2 years, etc.) are provided by the locality. If the increase in peak discharge associated with the storm event cannot be managed, a first-flush event should be the minimum selected for design.



## BASE & AGGREGATE CHARTS

Careful selection of base material, as described below, ensures that an installation can handle almost any amount of rainfall. Testing results of all the aggregates listed below show a void ratio of approximately 40 percent. Choosing the correct void filter is critical as well. The aggregate infiltration rates below illustrate the performance of the system.

### Aggregate Infiltration Rates

Approximate Particle Size	Permeability (k) in./hr (m/s)
ASTM No. 8 (2 – 10 mm)*	1,400 - 4,000 ( $3 \times 10^{-1}$ to $1 \times 10^{-2}$ )
ASTM No. 9 (2 – 5 mm)	140 - 1,400 ( $1 \times 10^{-2}$ to $1 \times 10^{-3}$ )
ASTM No. 10 (1 – 3 mm)	14 - 140 ( $1 \times 10^{-3}$ to $1 \times 10^{-4}$ )
ASTM No. 57 (12.5 – 25 mm)*	500 - 2,000
ASTM No. 2 (50 – 63 mm)*	>1,000

Permeability ranges of joint fill aggregates for permeable pavers.

\* Unilock recommendations

### Setting Bed Aggregate

Sieve Size	Percent Passing
0.5" (12 mm)	100
0.375" (9.5 mm)	85 – 100
(4.75 mm) (No. 4)	10 – 30
(2.36 mm) (No. 8)	0 – 10
(1.16 mm) (No. 16)	0 – 5

Grading requirements for ASTM No. 8 bedding and joint / opening filler.

Setting bed aggregate can be used as joint aggregate for Eco-Optilac®.

### Base Aggregate

SIEVE Size	Percent Passing
1.5" (37.5 mm)	100
1" (25 mm)	95 – 100
0.5" (12 mm)	25 – 60
(4.75 mm) (No. 4)	0 – 10
(2.36 mm) (No. 8)	0 – 5

Grading requirements for ASTM No. 57 base.

### Subbase Aggregate

Sieve Size	Percent Passing
3" (75 mm)	100
2.5" (63 mm)	90 – 100
2" (50 mm)	35 – 70
1.5" (37.5 mm)	0 – 15
0.75" (19 mm)	0 – 5

Sieve sizes for ASTM No. 2 aggregates.

## BASE THICKNESS

Permeable paving is not a typical segmental pavement. Unilock recommends that a professional engineer design a site-specific plan based on available site information. Along with information provided in this brochure, Unilock offers comprehensive software solutions, and industry-experienced consultants to assist you in the design of your pavement.

Pavement Use	Subbase ASTM No. 2	Base ASTM No. 57	Minimum Total
Heavy-duty industrial	14" (355 mm)	6" (152 mm)	20" (508 mm)
Municipal street	12" (305 mm)	6" (152 mm)	18" (457 mm)
Light-duty parking lot	8" (203 mm)	6" (152 mm)	14" (356 mm)
Residential driveway	n/a	12" (305 mm)	12" (305 mm)
Non-vehicular sidewalk	n/a	10" (254 mm)	10" (254 mm)

Notes: 1) All permeable pavers require a 1.5" (38 mm) setting bed of ASTM No. 8 for placement. 2) All thicknesses are after compaction. 3) Geotextiles between subgrade and ASTM No. 2 are optional and based on soil conditions. 4) Geotextiles are not required between the subbase, base or setting bed layers.



# TOWN HALL®

The Town Hall street paver has been designed to satisfy both traditional and permeable installation methods while maintaining a time-worn, historical and distressed appearance.



PROJECT: Northwood Shopping Center, Royal Oak, MI. DESIGN: Michael J Dul Associates, Inc. PRODUCT: Town Hall® in Basalt.



Basalt \*



Burgundy Red \*



Burnt Clay \*



Heritage Clay \*



Heritage Red \*



Old Oak \*



4 x 9¾ x 2¾" \*  
(100 x 250 x 70mm)

Joint Width 9mm  
Void Space 6.5%  
Accessible Joint

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# PERMEABLE SQUARES

Square pavers designed with special spacer bars, the resulting 7mm gap is filled with a clear, fine stone chip that allows rapid penetration of rainwater into the subbase and subsoil.



**PROJECT:** Harrison PATH Station, Harrison, NJ. **DESIGN:** Port Authority of New York & New Jersey. **PRODUCT:** Eco-Priora™ with Series Finish in special order colors.



THIS PRODUCT IS AVAILABLE IN A VARIETY OF SPECIAL ORDER FINISHES AND COLORS. ASK YOUR UNILOCK REPRESENTATIVE ABOUT SPECIAL ORDER OPTIONS IN YOUR REGION.



12 x 12 x 3/8"  
(300 x 300 x 80mm)  
SPECIAL ORDER

Joint Width 7mm  
Void Space 3.6%  
Accessible Joint



Eco-Priora™  
10 x 10 x 3/8"  
(240 x 240 x 80mm)  
SPECIAL ORDER

Joint Width 7mm  
Void Space 4.6%  
Accessible Joint



Eco-Priora™  
5 x 5 x 3/8" \*\*  
(120 x 120 x 80mm)  
SPECIAL ORDER

Joint Width 7mm  
Void Space 9%  
Accessible Joint

*This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply.\*\*Available in select markets. Please contact your Unilock Representative for more details.*











# PERMEABLE RECTANGLES

Rectangular pavers designed with special spacer bars, the resulting 7mm gap is filled with a clear, fine stone chip that allows rapid penetration of rainwater into the subbase and subsoil.



PROJECT: 35 Cambridge Park Drive, Cambridge, MA. DESIGN: Copley Wolfe Design Group Boston. PRODUCT: Eco-Priora™ with Umbriano® Finish in Winter Marvel.

FINISHES	COLORS			SIZES
	 Heritage Brown			5 x 10 x 3 1/8" (80mm)
	 Sable			
Smooth Premier Finish				
	 Beechwood	 Natural	 Sierra	5 x 10 x 3 1/8" (80mm)
	 Granite Blend	 River		
Standard Finish				
	Joint Width 7mm Void Space 6.8% Accessible Joint			Herringbone bundles are available for mechanical installation in select markets. Ask your Unilock Representative for more details.
Eco-Priora™ 5 x 10 x 3 1/8" (120 x 240 x 80mm)				

This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.










# PERMEABLE PLANKS

Linear, plank pavers designed with special spacer bars, the resulting 7mm gap is filled with a clear, fine stone chip that allows rapid penetration of rainwater into the subbase and subsoil.



**PROJECT:** Schulich School of Business - York University, Toronto, ON. **DESIGN:** Quinn Design Associates.  
**PRODUCT:** Permeable Plank (Eco-Promenade™) with Series™ and Smooth Premier finish in Ice Grey and Steel Grey.

FINISHES	COLORS		SIZES
		French Grey	3 x 12 x 4" (100mm)
		Winter Marvel	
Umbriano® Finish			
		Opal Blend	3 x 12 x 4" (100mm)
			
4 x 16 x 4" (100 x 400 x 100mm)	Joint Width 7mm Void Space 9.8% Accessible Joint	3 x 12 x 4" (70 x 300 x 100mm)	Joint Width 7mm Void Space 10.12% Accessible Joint

*This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.*



# TRIBECA COBBLE™ PLATFORM

Granite, marble and quartz particles give Tribeca Cobble its unique surface appearance. Ideal for driveways or traffic calming vehicular applications, Tribeca Cobble can be installed traditionally or on a permeable base to allow water to flow through.



**PROJECT:** Westgate Towers, White Plains, NY **DESIGN:** Community Paving. **PRODUCT:** Tribeca Cobble™ in Crystalline Basalt.



Cobalt Grey



Crystalline Basalt \*



Peppered Granite \*



**LARGE RECTANGLE**  
5 1/8" x 12" x 2 3/8"  
(130 x 30 x 60mm)



**SMALL RECTANGLE**  
5 1/8" x 9" x 2 3/8"  
(130 x 230 x 60mm)



**SQUARE**  
5 1/8" x 7" x 2 3/8"  
(130 x 175 x 60mm)

**Joint Width 10mm**  
**Void Space 5.6%**

**RANDOM BUNDLE** (all units sold together) \*

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# THORNBURY™ PLATFORM

The larger joint space adds a more rugged look to Thornbury and enables water to flow through when the product is installed on a permeable base.



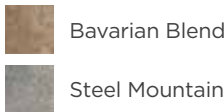
PROJECT: Orland Park Nature Center, Orland Park, IL. DESIGN: Upland Design Group. PRODUCT: Thornbury in Bavarian Blend.

## FINISHES



Smooth Premier Finish

## COLORS



Bavarian Blend

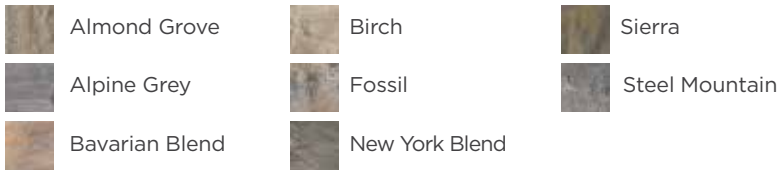
Steel Mountain

## SIZES

Thornbury  
Platform 2¾" (70mm)



Flagstone Premier Finish



Almond Grove

Birch

Sierra

Alpine Grey

Fossil

Steel Mountain

Bavarian Blend

New York Blend

Thornbury  
Platform 2¾" (70mm)

RANDOM BUNDLE (all units sold together)



LARGE RECTANGLE  
13¼ x 16½ x 2¾"  
(350 x 420 x 70mm)



MEDIUM RECTANGLE  
8¼ x 13¾ x 2¾"  
(210 x 350 x 70mm)



SMALL RECTANGLE  
6⅞ x 8¼ x 2¾"  
(173 x 210 x 70mm)

Joint Width 11-18 mm  
Void Space 4.4%

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.



# ECO-LINE® PLATFORM

Permeable, heavy duty unit pavers. With custom finish and color options and the ability to be mechanically installed, this product is not only beautiful, but cost effective.



**PROJECT:** Bentley University Arena, Waltham, MA. **DESIGN:** Pate Landscape Architecture Inc. **PRODUCT:** Eco-Line with Smooth Premier finish in Granite Blend.



THIS PRODUCT IS AVAILABLE IN A VARIETY OF SPECIAL ORDER FINISHES AND COLORS. ASK YOUR UNILOCK REPRESENTATIVE ABOUT SPECIAL ORDER OPTIONS IN YOUR REGION.

Joint Width 6.25mm  
Void Space 5.8%  
Accessible Joint

RANDOM BUNDLE (all units sold together)



3 5/16 x 14 x 4"  
(84 x 357 x 100)



3 5/16 x 12 1/2 x 4"  
(84 x 317 x 100)



3 5/16 x 11 x 4"  
(84 x 277 x 100)



3 5/16 x 9 3/8 x 4"  
(84 x 237 x 100)



4 1/2 x 14 x 4"  
(114 x 357 x 100)



4 1/2 x 12 1/2 x 4"  
(114 x 317 x 100)



4 1/2 x 11 x 4"  
(114 x 277 x 100)



4 1/2 x 9 3/8 x 4"  
(114 x 237 x 100)mm

*This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details. Designed for mechanical installation.*



# PERMEABLE HEX/CITY PARK PAVER™

A modern twist on a traditional urban paver hex shape, The joint space is filled with a clear stone chip that allows rapid penetration of rainwater into the sub-base and subsoil.



**PROJECT:** Yolanda Garcia Park, Bronx, NY. **DESIGN:** New York City Parks. **PRODUCT:** Permeable Hex/City Park Paver™ with Smooth Premier finish in Dark Charcoal, Medium Grey and White.



THIS PRODUCT IS AVAILABLE IN A VARIETY OF SPECIAL ORDER FINISHES AND COLORS.  
ASK YOUR UNILOCK REPRESENTATIVE ABOUT SPECIAL ORDER OPTIONS IN YOUR REGION.



8 x 8 x 3 1/8"  
(200 x 200 x 80mm)

Joint Width 10mm  
Void Space 4.2%  
Accessible Joint

*This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.*



# DURAFLOW®

This latest evolution of permeable pavement is purposely designed with a joint size, radius and angle to promote flow dynamics and facilitate easier cleaning and joint maintenance.



**PROJECT:** 180 York Street, Eden Mills, ON. **DESIGN:** Vertechs Design Landscape Architects. **PRODUCT:** DuraFlow® with Standard finish in Charcoal.



THIS PRODUCT IS AVAILABLE IN A VARIETY OF SPECIAL ORDER FINISHES AND COLORS. ASK YOUR UNILOCK REPRESENTATIVE ABOUT SPECIAL ORDER OPTIONS IN YOUR REGION..



9 7/8 x 9 7/8 x 3 1/8"  
(250 x 250 x 80mm)

Joint Width 12mm  
Void Space 8%  
Accessible Joint

*This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.*







# ECO-OPTILOC™

Eco-Optiloc™ is one of the best solutions for vehicular pavements. It seamlessly combines both superior load-bearing and drainage capabilities.



PROJECT: Link 59, Cleveland, OH. DESIGN: Weber Engineering Services. PRODUCT: Eco-Optiloc™ with Standard Finish in River.

FINISHES	COLORS	SIZES
	<div> Natural *</div> <div> River</div>	10¼ x 10¼ x 3⅞" (80mm) *
		
10¼ x 10¼ x 3⅞" * (260 x 260 x 80mm)	Joint Width 12mm Void Space 7.3% Accessible Joint	

*This product can be manufactured in a variety of special order colors and textures. Minimum quantities will apply. Please contact your Unilock Representative for more details.*

\* Available for quick ship across North America.





# TURFSTONE™

Turfstone is the best solution for areas requiring a supported turf. Its 40% void ratio - filigree design makes it an attractive and permanent solution for emergency access areas, spillways, and environmentally sensitive parking areas.



PROJECT: Radio Flyer, Chicago, IL. DESIGN: Gensler / CYLA Design Associates, Inc. PRODUCT: Turfstone in Natural.

FINISHES	COLORS	SIZES
 Standard Finish	 Natural	15¾ X 23⅝ X 3⅞" (80mm)
 15¾" X 23⅝" X 3⅞" (400 x 600 x 80mm)		

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.






# DURA-MAT™

Dura-Mat interlocking concrete units fasten together on all sides forming a permanent protective carpet. The solid-to-void ratio also allows for vegetation growth where desired.



PROJECT: Retention Pond, Toronto, ON. PRODUCT: Dura-Mat in Natural.

FINISHES	COLORS	SIZES
	 Natural	19 <sup>5⁄8</sup> X 19 <sup>5⁄8</sup> " X 3 <sup>7⁄8</sup> " (80mm)
		19 <sup>5⁄8</sup> " X 19 <sup>5⁄8</sup> " X 3 <sup>7⁄8</sup> " (260 x 260 x 80mm)



# STYLISH RETAINING WALLS

A great retaining wall should provide an aesthetic that **blends subtly with the environment and surrounding architecture.** For decades, Unilock segmental retaining walls have been the choice of Landscape Architects, Designers and Engineers who are looking for **classic, clean lines and timeless appeal.**





# RETAINING WALL design

## SEGMENTAL RETAINING WALLS

Why do so many engineers select Unilock® for retaining walls? In a word: confidence. Confidence that Unilock manufactured products have the structural, safety and weathering capabilities needed for the project. Confidence in the field performance of a vast portfolio of structures. Confidence that Risi Stone will provide the engineering support required to get the job done accurately and expeditiously.



PROJECT: Office Complex Mississauga Rd. Mississauga, ON. DESIGN: RisiStone Engineering. PRODUCT: SonomaStone® in Natural.

	ASTM C1372	UNILOCK STD.
Compressive Strength - Minimum (No individual unit less than)	2500 PSI	5500 PSI
Absorption - Maximum (No individual unit greater than)	15 lb/ft <sup>3</sup>	7 lb/ft <sup>3</sup>
Dimensional Tolerance (length, width, or height)	± 1/8" ( ± 3.2mm)	± 1/8" ( ± 3.2mm)

## SOLID CORE CONSTRUCTION

The solid body tongue and groove design provides engineers with the assurance that the structural properties are guaranteed. Not having to fill a hollow block core and the ability to easily modify blocks on-site is a considerable labor savings. Owners can be confident in the proven long-term performance of the wall's integrity.

## QUALITY MANUFACTURING

Each unit's structural integrity and performance is ensured by manufacturing to specifications that meet or exceed American Society of Testing and Materials (ASTM) standards. The Unilock manufacturing system provides peace of mind by exceeding technical standards set by the National Concrete Masonry Association (NMMA) recommendation for Roadway and Non-Roadway Applications - Zone 3 - with exposure to de-icing salts, as well as local building codes.

## BUILT TO LAST

Unilock manufactured retaining wall systems are engineered to last. Individual units range from 19lbs (8.6kg) to 1,700lbs (772.7kg), and some can be used to construct walls up to 40ft (12.2m) high. The mechanical installation characteristics of Unilock retaining walls surpass conventional modular wall systems in speed and performance. Vespa.RS advanced engineering software from Risi Stone lets you analyze all important factors including height, differing soil types, unique site conditions and loading requirements directly from CAD, saving valuable time.



## SOLID ADVANTAGES

FEATURE	ADVANTAGE	BENEFIT
Solid Blocks	Provides greater durability	<ul style="list-style-type: none"> <li>• More resistant to breakage and minor damage</li> </ul>
	Easy to split or modify	<ul style="list-style-type: none"> <li>• Blocks can be simply cut/alterd with no risk to final wall integrity</li> </ul>
	No hollow cores to fill with gravel & compact	<ul style="list-style-type: none"> <li>• Ensures maximum weight of each block is present</li> <li>• Maximum resistance to overturning</li> <li>• Reduced installation time and labour costs</li> </ul>
Modular System	Wall is flexible, while still retains its structural integrity	<ul style="list-style-type: none"> <li>• Absorbs movement and settlement</li> <li>• Requires minimal embedment</li> </ul>
	Array of complementing special blocks	<ul style="list-style-type: none"> <li>• Easily create site-specific features</li> <li>• Coping can be selected for various wall arrangements</li> <li>• Pre-fabricated corner blocks intensify corner strength and appearance, while speeding construction</li> </ul>
	Requires only a compact granular base	<ul style="list-style-type: none"> <li>• Reduces installation cost</li> </ul>
Interlocking Tongue & Groove	Interlocking mechanism is molded directly in to the block	<ul style="list-style-type: none"> <li>• Easy, quick installation</li> <li>• No separate pins or clips to install</li> </ul>
	Maximum shear strength	<ul style="list-style-type: none"> <li>• Shear strength is maintained along the entire length of block</li> <li>• Allows for superior geogrid connection</li> </ul>
	Automatic alignment & self-battering	<ul style="list-style-type: none"> <li>• Once the first course is installed flat and level, successive blocks stack quickly and easily</li> </ul>
	Blocks are dry-stacked	<ul style="list-style-type: none"> <li>• Lower cost — No mortar requirements</li> <li>• Minimal training is required to achieve excellent results</li> </ul>
	Continuous interlock achieved throughout the wall	<ul style="list-style-type: none"> <li>• Creates a stronger, more damage resistant structure</li> </ul>
Combined with Geogrid Reinforcement	Higher walls can be achieved	<ul style="list-style-type: none"> <li>• Able to use the same facia throughout the project on lower and higher walls (i.e. Gravity and geogrid reinforced walls can be mixed as site conditions dictate)</li> </ul>

## SUPPORT AND ASSISTANCE

### Unilock & Risi Stone®

Unilock manufactures a number of Risi Stone Systems licensed retaining walls: Pisa2®, Concord Wall™, RomanPisa®, RomanWall®, Rivercrest® Wall, SienaStone®, SonomaStone™, DuraHold® and DuraHold®2. With installations more than 25 years old, we offer the most proven SRW systems on the market.

### Design assistance

Risi Stone offers many different levels of assistance. From general product information, typical cross-sections and software programs, to site specific final design packages, they will work with you to achieve the best possible design solution.

### Preliminary Sections

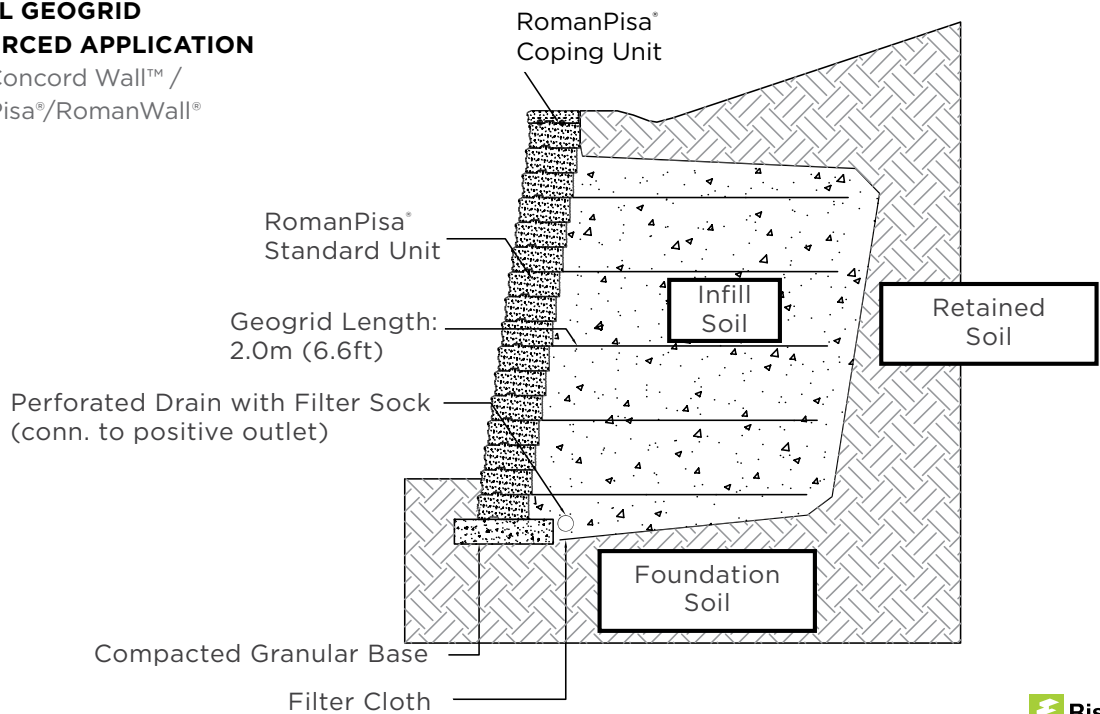
For preliminary design, bidding or feasibility purposes, Risi Stone Systems have created one of the industry's most comprehensive collections of pre-engineered typical cross-section drawings for a variety of applications. These sections have been designed to meet very specific criteria in an attempt to be as close to your particular project as possible. They are sorted according to the main criteria used in the design of a segmental retaining wall. The search tool at [www.unilock.com](http://www.unilock.com) allows you to select the Risi Stone licensed product, the loading and the height of the wall, according to your project requirements to find cross sections that most closely match your project needs.



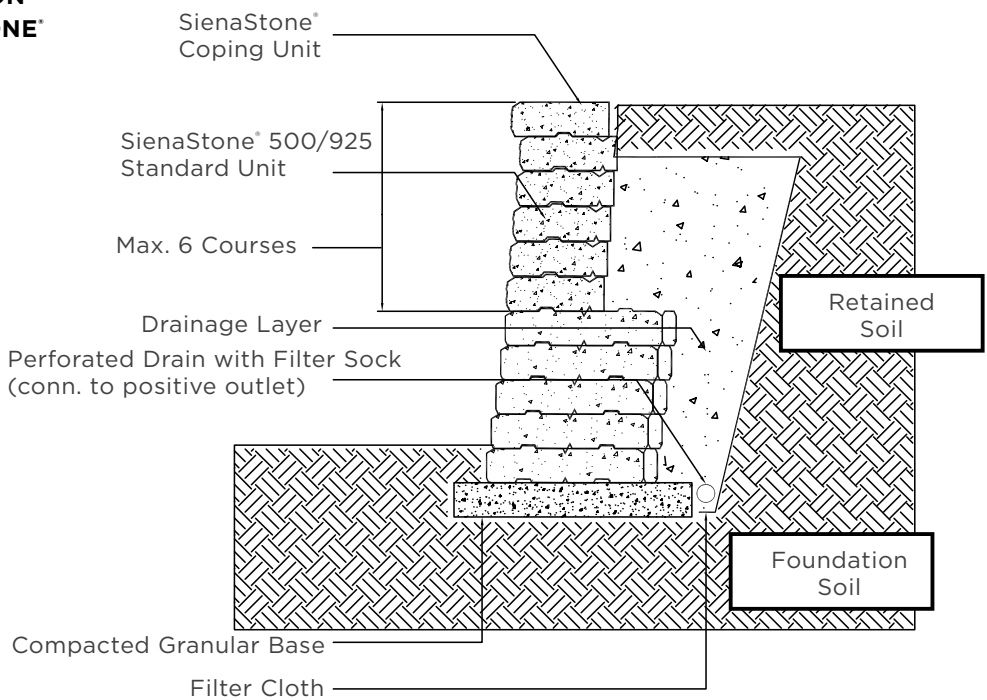
# TYPICAL APPLICATIONS

## TYPICAL GEOGRID REINFORCED APPLICATION

Pisa2®/Concord Wall™ /  
RomanPisa®/RomanWall®



## TYPICAL GRAVITY APPLICATION - SIENASTONE®



# U-CARA®

**U-Cara** fascia panels are available in a **variety of colors and textures**, including, exclusive Unilock **EnduraColor™** finishes.



***Did You Know?***

In 2019, U-Cara received the “red dot” award for high design quality and innovation.

**UMBRIANO® FINISH**



French Grey \*



Midnight Sky \*



Summer Wheat \*



Winter Marvel \*

**SERIES™ FINISH**



Black Granite



Peppered Granite

**PITCHED FINISH**



Almond Grove Fusion



Bavarian



Fossil



Granite



Granite Fusion \*



Natural



Opal Blend



River



Sierra



Steel Grey



Steel Mountain



Tuscany

**SMOOTH PREMIER FINISH**



Almond Grove Fusion



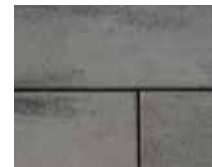
Bavarian



Cream



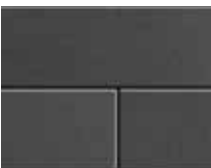
Fossil



Granite



Granite Fusion \*



Graphite



Natural



Opal Blend \*



Sierra



Tuscany \*

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.





# U-CARA®

This patented system, exclusive to Unilock, is comprised of **SureTrack™ backer blocks** that provide dimensionally accurate structure, and **U-Cara fascia panels** that provide unlimited design opportunity.

The **U-Cara Multi-Face Wall System** represents a revolution in wall design.



**LOOK INSIDE!**

U-Cara fascia panels hang easily on the patented **Sure Track** backer block.

1

Choose your Block



FOR LOW WALLS  
**SURETRACK \*  
STANDARD BACKER**  
5<sup>7</sup>/<sub>8</sub> x 7<sup>1</sup>/<sub>8</sub> x 5<sup>7</sup>/<sub>8</sub>"  
(150 x 200 x 150mm)



FOR HIGH WALLS  
**SURETRACK \*  
LARGE BACKER**  
5<sup>7</sup>/<sub>8</sub> x 6<sup>7</sup>/<sub>8</sub> x 11<sup>3</sup>/<sub>4</sub>"  
(150 x 175 x 300mm)

2

Select your Fascia style



**FASCIA PANEL \***  
5<sup>7</sup>/<sub>8</sub> x 18<sup>3</sup>/<sub>8</sub> x 2<sup>3</sup>/<sub>8</sub>"  
(150 x 466 x 60mm)

Closed End Panels for Corners

CORNER BUNDLE (units sold together)



**STANDARD FASCIA HALF PANEL \***  
5<sup>7</sup>/<sub>8</sub> x 9<sup>1</sup>/<sub>8</sub> x 2<sup>3</sup>/<sub>8</sub>"  
(150 x 233 x 60mm)



**CLOSED-END FASCIA PANEL \***  
5<sup>7</sup>/<sub>8</sub> x 20<sup>7</sup>/<sub>8</sub> x 2<sup>3</sup>/<sub>8</sub>"  
(150 x 530 x 60mm)

Coping and Base Units



**UNIVERSAL COPING \***  
14 x 19 x 2<sup>3</sup>/<sub>4</sub>"  
(355 x 482 x 70mm)



**UNIVERSAL BASE UNIT \***  
14 x 19 x 2"  
(355 x 482 x 55mm)

**U-CARA®** Exclusively from Unilock  
US Patent: 9,453,341 International Patents Pending

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

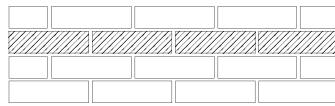
\* Available for quick ship across North America.



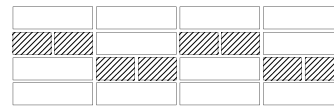
## CREATIVE PATTERNING



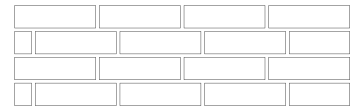
1/2 Running Bond



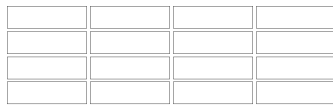
1/2 Running Bond with Linear Accents



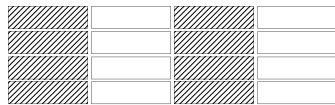
Mixed Bond



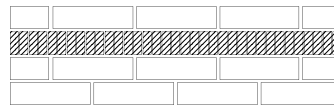
1/3 Running Bond



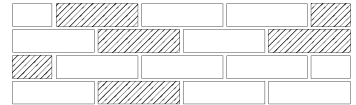
Stacked Bond



Stacked Bond with Accents



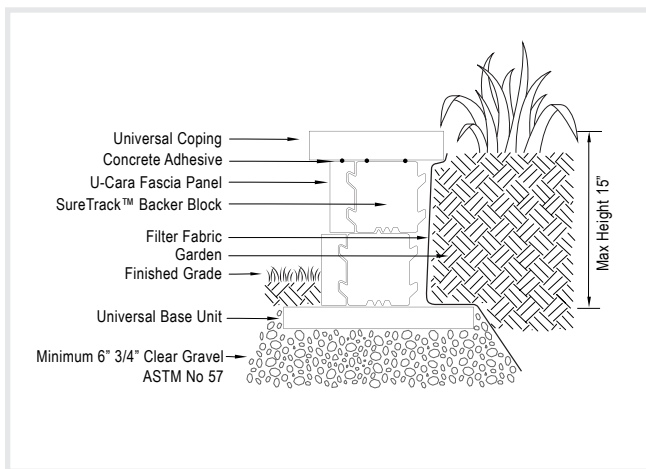
1/2 Running Bond with Paver Accents



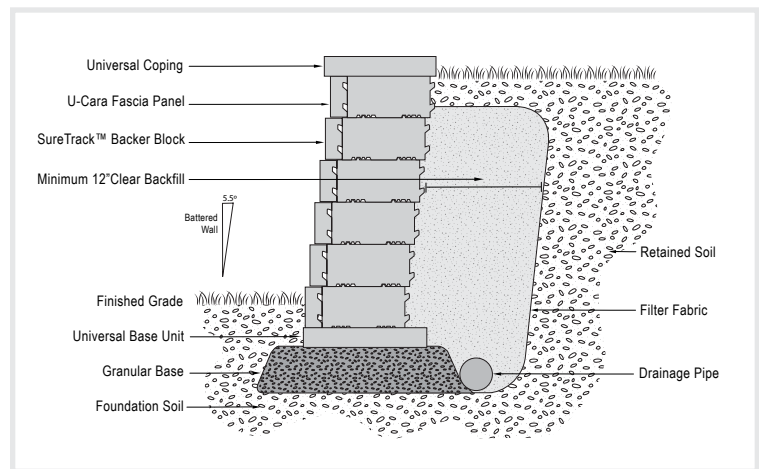
1/2 Running Bond with Random Accents

## A FEW DETAILS

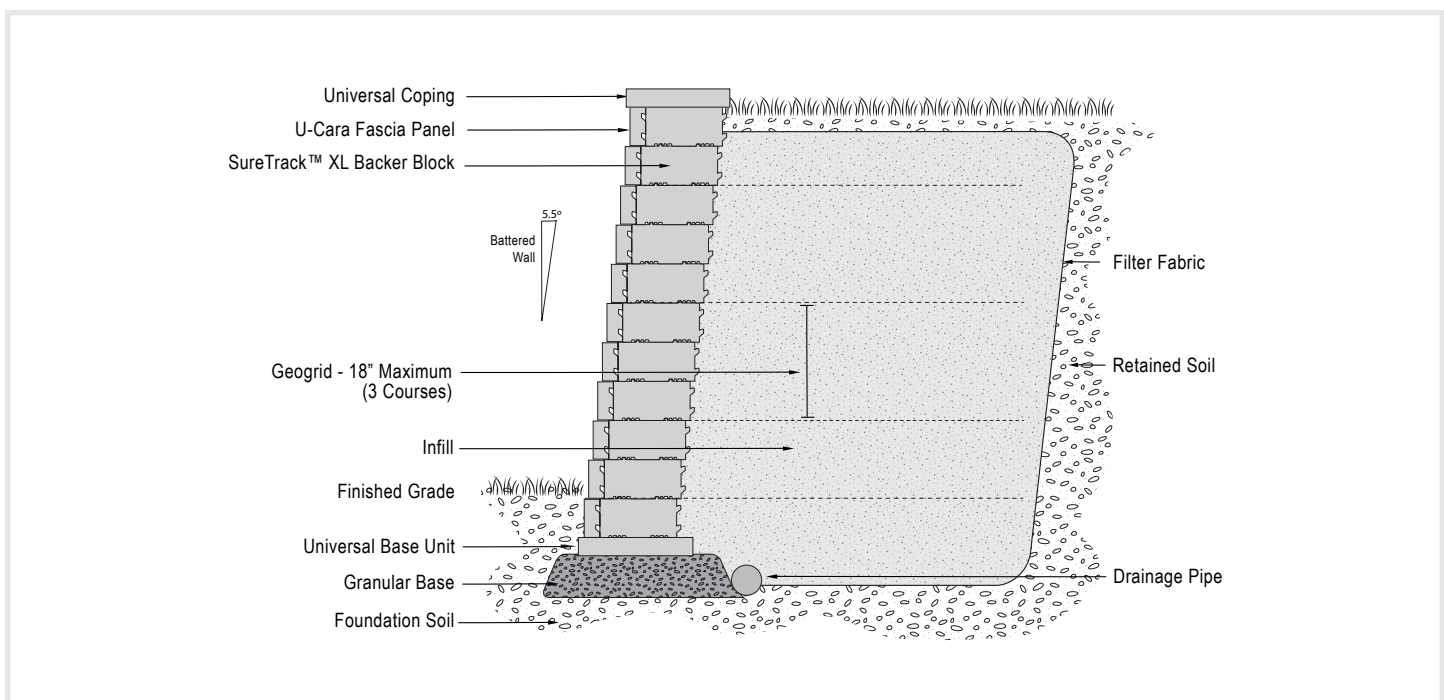
### GARDEN WALL



### RETAINING WALL UNDER 4'

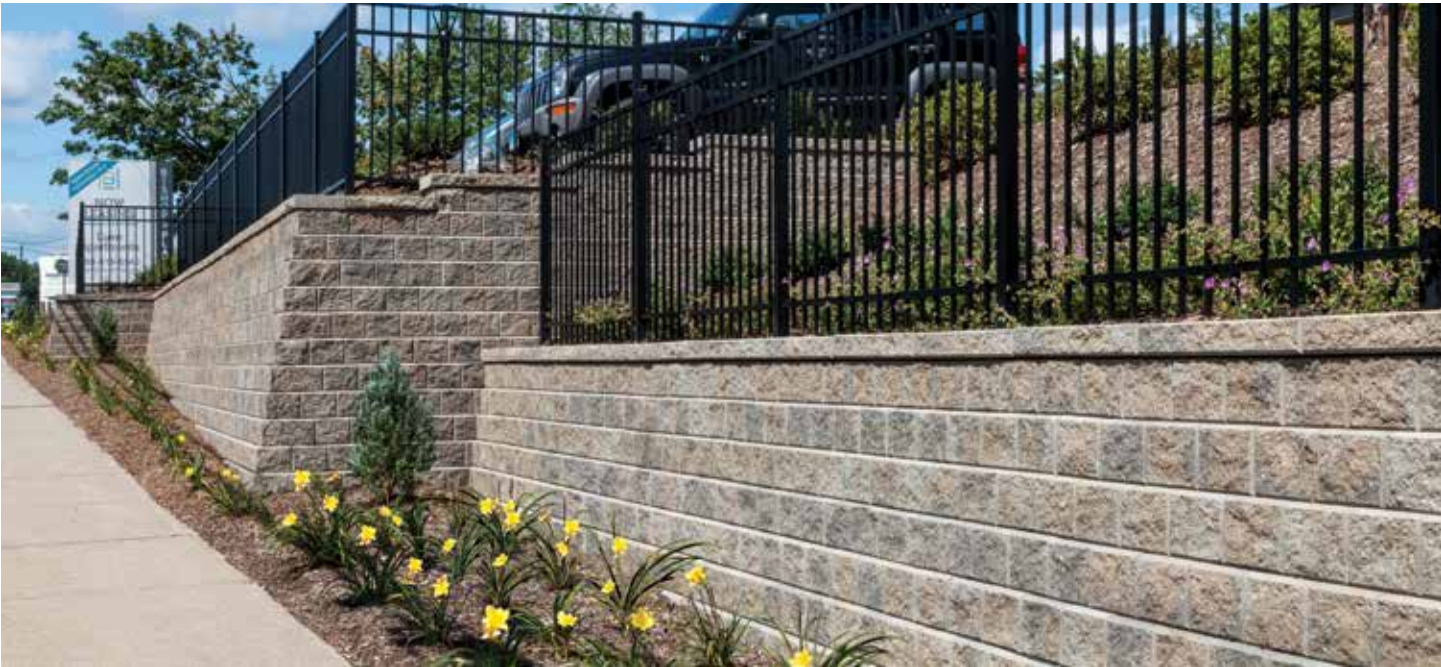


### GEOGRID REINFORCED SETBACK RETAINING WALL



# PISA2™ / CONCORD WALL™

The built in setback design of Pisa2 / Concord Wall automatically forms the correct slope for retaining walls. Use for gravity walls up to 3.5 ft (1m) and grid reinforced walls up to 25 ft (7.5m) high under typical conditions.



PROJECT: Bishops Place, West Hartford, CT. DESIGN: CR3 LLP. PRODUCT: Pisa2 / Concord Wall in Almond Grove.



Almond Grove



Beechwood



Charcoal



Granite \*



Mahogany Ash



Natural



Nevada \*



River



Rustic Red



Sandstone



Sierra \*



St Clair



STANDARD  
12 x 8 x 6"  
(300 x 200 x 150mm)



TAPERED \*  
12 x 8 x 6"  
(300 x 200 x 150mm)



CORNER \*  
8 x 12 x 6"  
(200 x 300 x 150mm)



PISA COPING  
12 x 12 x 3"  
(300 x 300 x 75mm)



XL UNIT  
12 x 16 x 6"  
(300 x 400 x 150mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# ROMANPISA™ / ROMANWALL®

The antiqued, split face of RomanWall makes it a more rugged-looking alternative to Concord Wall/ Pisa2. Use for gravity walls up to 3.5 ft (1m) and grid reinforced walls up to 25 ft (7.5m) high under typical conditions.



PROJECT: Private Residence, Foxboro, MA. DESIGN: Curbs, Inc. PRODUCT: RomanWall / RomanPisa in Nevada.



Almond Grove



Beechwood



Granite



Sierra



STANDARD  
12 x 8 x 6"  
(300 x 200 x 150mm)



TAPERED  
12 x 8 x 6"  
(300 x 200 x 150mm)



CORNER  
8 x 12 x 6"  
(200 x 300 x 150mm)



ROMAN COPING  
12 x 12 x 3"  
(300 x 300 x 75mm)

# SIENASTONE®

Bold and dramatic, this large scale wall block strikes an impressive profile when used for a heavy-duty retaining wall or as treads in large outdoor staircases. Use for gravity walls up to 10 ft (3m) or grid reinforced up to 40 ft (12m) under typical conditions.



PROJECT: Hogan Avenue, Mississauga, ON. DESIGN: Risi Stone Engineering. PRODUCT: SienaStone® in Natural.



Brown \*



Granite \*



Mahogany Ash



Natural \*



Nevada \*



Sierra



STANDARD 333  
13½" x 39" x 7¼"  
343mm x 990.5 x 184mm



STANDARD 500  
20" x 39" x 7¼"  
500 x 990.5 x 184mm



STANDARD 925  
36½" x 39" x 7¼"  
927 x 990.5 x 184mm



COPING \*  
20" x 39" x 7¼"  
500 x 990.5 x 184mm

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# SIENASTONE® SMOOTH

The smooth face creates a modern profile for this big, bold wall. Use for gravity walls up to 10 ft (3m) or grid reinforced up to 40 ft (12m) under typical conditions.



PROJECT: Private Residence, London, ON. DESIGN: Risi Stone Engineering. PRODUCT: SienaStone® Smooth in Granite.

## WALL



Granite

## STEPS



Light Grey



Midnight Charcoal



Tan



STANDARD 375  
14¾ x 47¼ x 7"  
375 x 1200 x 180 mm



CORNER UNIT 375  
14¾ x 47¼ x 7"  
375 x 1200 x 180 mm



COPING 383  
15 x 47¼ x 7"  
383 x 1200 x 180 mm



48" & 72" STEP  
20 x 47¼ or 70¾ x 7"  
500 x 1200 or 1800 x 180 mm

# DURAHOLD®

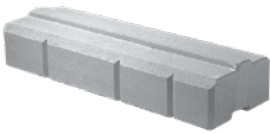
A great alternative to “poured-in-place” concrete. The large size of DuraHold makes it an appropriate choice for demanding structures up to 40ft. (12.2m). Use for gravity walls up to 6ft (1.8 m) in typical conditions.



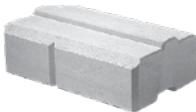
**PROJECT:** Cobble Hotel & Suites, Erie, PA. **DESIGN:** RisiStone Engineering. **PRODUCT:** DuraHold® in Natural.



Natural



STANDARD UNIT  
24 x 72 x 12"  
600 x 1830 x 300mm



HALF UNIT  
24 x 36 x 12"  
600 x 915 x 300mm



COPING UNIT  
24 x 72 x 12"  
600 x 1830 x 300mm



CORNER 90 UNIT  
24 x 60 x 12"  
600 x 1520 x 300mm



TIE-BACK UNIT  
24 x 72 x 12"  
600 x 1830 x 300mm

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.



# DURAHOLD®2

DuraHold2 is similar to DuraHold in appearance, but is almost half the size, making it economical in terms of material cost, speed and efficiency for lower retaining walls. Use for gravity walls up to 4ft (1.2 m) in typical conditions.



PROJECT: Charles H Wright Museum of African American History, Detroit, MI. DESIGN: Owner. PRODUCT: DuraHold®2 in Natural.



Natural



STANDARD UNIT  
12 X 14" X 72"  
300 X 360 X 1830mm



COPING UNIT  
12 X 14 X 72"  
300 X 360 X 1830mm



CORNER 90 UNIT  
12 X 14 X 36"  
300 X 360 X 900mm



TIE-BACK UNIT  
72 X 12 X 14"  
1830 X 300 X 360mm

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

# LINEO™ DIMENSIONAL STONE

Contemporary and sleek lines define Lineo Dimensional Stone with a linear multi-length plank look.



**PROJECT:** Synergy Apartments, Wauwatosa, WI. **DESIGN:** New Eden Landscape Architecture. **PRODUCT:** Lineo Dimensional Stone in Granite with Universal Coping in Buff.



Almond Grove



Granite \*



Limestone



Mahogany Ash



Midnight Charcoal \*



Sandalwood



Sandstone \*



Sierra

RANDOM BUNDLE (all units sold together) \*



UNIT 1  
8 x 12 x 4"  
(200 x 300 x 100mm)



UNIT 2  
8 x 16 x 4"  
(200 x 400 x 100mm)



UNIT 3  
8 x 20 x 4"  
(200 x 500 x 100mm)



UNIT 4  
8 x 24 x 4"  
(200 x 610 x 100mm)

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED COLORS.

\* Available for quick ship across North America.



# MACKINAW WALL™

Mackinaw Wall offers the character of large scale natural stone with Reala™ Technology along with the ease of installation of a precast segmental retaining wall. No coping required.



**PROJECT:** The St. Clair Inn, St Clair, MI. **DESIGN:** Grissim Metz Andriese Associates. **PRODUCT:** Mackinaw Wall in Grindstone.



Coastal Slate



Grindstone \*

RANDOM BUNDLE (all units sold together) \*



**LARGE WEDGE**  
5½ x 28½ (25½) x 9"  
140 x 720 (650) x 230mm



**MEDIUM WEDGE**  
5½ x 20 (17) x 9"  
140 x 510 (430) x 230mm



**SMALL WEDGE**  
5½ x 11½ (8½) x 9"  
140 x 290 (220) x 230mm



**CORNER/PILLAR UNIT**  
5½ x 17½ x 9"  
140 x 440 x 230mm

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.

# RIVERCREST WALL®



With the award-winning Rivercrest Wall system, you get the character and flexibility of natural stone with the durability, affordability and ease of installation of manufactured concrete.



**PROJECT:** Peoples Bank Yankee Peddler, Holyoke, MA. **DESIGN:** Tighe & Bond in partnership with Coweset Engineering. **PRODUCT:** Rivercrest Wall in Coastal Slate.



Buff \*



Coastal Slate \*

RANDOM (all units sold together) \*



STANDARD UNIT 1  
8 x 9-10 x 2¼"  
(200 x 230-250 x 57mm)



STANDARD UNIT 2  
9-10 x 12 x 2¼"  
(230-250 x 310 x 57mm)



STANDARD UNIT 3  
9-10 x 12 x 2¼"  
(230-250 x 310 x 57mm)



STANDARD UNIT 4  
9-10 x 17 x 2¼"  
(230-250 x 425 x 57mm)

CORNER BUNDLE \*  
(units sold together)



LONG CORNER UNIT  
9-10 x 12 x 2¼"  
(230-250 x 310 x 57mm)



SHORT CORNER UNIT  
9-10 x 10 x 2¼"  
(230-250 x 250 x 57mm)

JUMPER BUNDLE (all units sold together) \*



JUMPER UNIT 1  
8 x 9-10 x 4½"  
(200 x 230-250 x 114mm)



JUMPER UNIT 2  
9-10 x 12 x 4½"  
(230-250 x 310 x 114mm)



JUMPER UNIT 3  
9-10 x 12 x 4½"  
(230-250 x 310 x 114mm)



STANDARD UNIT 4  
9-10 x 17 x 4½"  
(230-250 x 425 x 114mm)



JUMPER CORNER UNIT \*  
9-10 x 12 x 4½"  
(230-250 x 310 x 114mm)

PILLAR UNIT \*  
AVAILABLE

CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



# COPING OPTIONS

## LEDGESTONE™ COPING



BUFF \*



GREY \*



COPING UNIT \* or  
CLOSED END COPING  
12 x 24 x 2 3/4"  
305 x 610 x 70mm



LARGE COPING UNIT \* or  
LARGE CLOSED END COPING  
13 1/2 x 30 x 2 3/4"  
610 x 1220 x 70mm



FULLNOSE COPING \*  
12 x 24 x 2 3/8"  
305 x 610 x 60mm



24" PILLAR CAP \*  
24 x 24 x 3 1/2"  
600 x 600 x 90mm  
29" PILLAR CAP  
29 x 29 x 4"  
740 x 740 x 100mm



## ENDURACOLOR™ UNIVERSAL COPING



Cream



Light Grey



Midnight Charcoal \*



Tan



14 x 19 x 2 3/4" \*  
360 x 480 x 70mm



CONSULT YOUR REGIONAL PRODUCT DATA RESOURCE GUIDE TO FIND LOCALLY STOCKED SIZES AND COLORS.

\* Available for quick ship across North America.



Our years of industry-leading expertise and unparalleled personal attention and collaboration ensure that every intricate detail of your project runs smoothly. Our level of support is tailored to meet your needs:

## Details and specs

Cross sections, details, specifications and technical support are assets available to you to build out your documents and drawings. Contact your Unilock Representative for more information.

## Uvision® and Samples

Choosing the perfect product has never been easier. Our Uvision design software conveys your design in a rendering to aid your client with visualization. And when the time comes to finalize your product selection, your Unilock Representative will bring you all the real life samples you need.

## Outdoor Idea Centers

Unilock Outdoor Idea Centers provide you with the perfect place for inspiration and a great destination for client feedback. When you visit be sure to see, touch and experience all that Unilock has to offer.

## Lunch and learn

At Unilock, there is always something new. Ask your Unilock Representative about a Lunch and Learn session that also earns you valuable continuing education credits.

We're here to help through every step of your project. Talk to your Unilock Representative today to get all the details.



# QUICK SHIP Summary List

**IN STOCK AND READY TO SHIP** These products are in stock at a number of Unilock locations and are ready to ship across North America. These products are marked throughout the catalog with a red asterisk (\*).

PRODUCT	PRODUCT SIZE	COLOR(S)			FINISH
Arcana™	24 x 24" (50mm)	Corvara	Modena	Vivanto	Shot Blast
Squares	8 x 8" (60mm)	Terra Cotta			Standard
	16 x 16" (70mm)	French Grey	Midnight Sky	Summer Wheat	Umbriano*
	24 x 24" (70mm)				
Rectangles	4 x 8" (60mm)	Dark Charcoal Granite	Rustic Red Sierra	Terra Cotta	Standard
	4 x 8" (70mm)	Dark Charcoal			Il Campo*
	4 x 8" (70mm)	Black Granite			Series™
	8 x 16" (70mm)	Crema	Midnight Charcoal	Mocha Brown	Senzo™
	8 x 16" (70mm) 12 x 24" (70mm)	French Grey Midnight Sky	Summer Wheat	Winter Marvel	Umbriano*
Planks	4 x 16" (100mm)	Opal	Steel Grey		Smooth Premier
Artline™ Platform	Random Bundle (70mm)	Granite Fusion			Smooth Premier
Beacon Hill™ Platform	Random Bundle (60mm)	Granite Fusion	Opal Blend	Tuscany	Smooth Premier
	Random Bundle (80mm)	Almond Grove Fusion			Smooth Premier
	Random Bundle (60mm)	Granite Fusion	Tuscany		Flagstone Premier
	Random Bundle (60mm)	French Grey	Midnight Sky		Umbriano*
	Random Bundle (60mm)	Notte	Sabia		Granito™
Brussels Block*	XL (70mm) Standard (70mm) Half (70mm)	Limestone	Sandstone	Sierra	Classic
Mattoni™	9¼ x 2¼" (70mm)	Cocoa Brown	Dark Charcoal	Sable Blend	Smooth Premier
Granito™- Hex/City Park Paver™	8 x 8" (70mm)	Notte	Sabia		Granito™
Eco-Optiloc™	10¼ x 10¼" (80mm)	Natural			Standard
Tribeca Cobble™	Random Bundle (60mm)	Crystalline Basalt	Peppered Granite		Series™
Cophorne*	2½ x 7⅞" (60mm)	Basalt Burgundy Red	Burnt Clay Old Oak	Steel Blue	Reala™
Courtstone*	Random Bundle (60mm)	Basalt Belgian Blue	Dawn Mist	Pebble Taupe	Reala™
Richcliff	Random Bundle (60mm) Large Rectangle (60mm)	Dawn Mist	Pebble Taupe	Smoke Shale	Reala™
Town Hall†	4 x 9¾" (70mm)	Burgundy Red Burnt Clay	Old Oak Basalt	Heritage Red Heritage Clay	Reala™
U-Cara*	SureTrack Standard Backer SureTrack Large Backer Fascia Panel Standard Fascia Half Panel Closed-End Fascia Panel Universal Coping Universal Base Unit	French Grey Midnight Sky	Summer Wheat	Winter Marvel	Umbriano*
		Granite Fusion			Pitched
		Granite Fusion	Opal Blend	Tuscany	Smooth
Pisa2™ / Concord Wall™	Tapered Unit Corner Unit	Granite	Sierra	Nevada	
SienaStone*	Coping	Brown	Granite	Natural Nevada	
Lineo™ Dimensional Stone	Random Bundle	Granite	Midnight Charcoal	Sandstone	
Mackinaw™ Wall	Random Bundle	Grindstone			
Rivercrest® Wall	Random Bundle Jumper Bundle Corner Bundle Jumper Corner Pillar Unit	Buff	Coastal Slate		
Ledgestone™ Coping	Coping Unit Large Coping Unit Fullnose Coping 24" Pillar Cap	Buff	Grey		
Universal Coping	14 x 19 x 2¾"	Midnight Charcoal			





**PROJECT:** White Plains Library, White Plains, NY. **DESIGN:** IQ Landscape Architects. **PRODUCT:** Hex/City Park Paver™ with Series™ finish in Crystalline Basalt and Peppered Granite.



# CUSTOMIZATION

Unilock allows you to customize products to suit your project. Our vast array of sizes, edges, finish and color options make it easy to achieve your design vision. Choose a shape or a finish first and then narrow down the desired color range. Then call your Unilock Representative for all of the special order options available in your market.



## **STEP 1** CHOOSE SHAPES



## **STEP 2** CHOOSE FINISHES



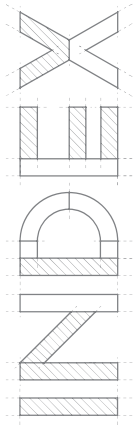
## **STEP 3** CHOOSE COLORS



## **STEP 4** CALL YOUR UNILOCK REPRESENTATIVE

Creating products to suit your unique design ideas is what we do best. Call us early in the design process to ensure every aspect is accurate, from shape and finish, to color and edge detail. Let's see what we can create together!

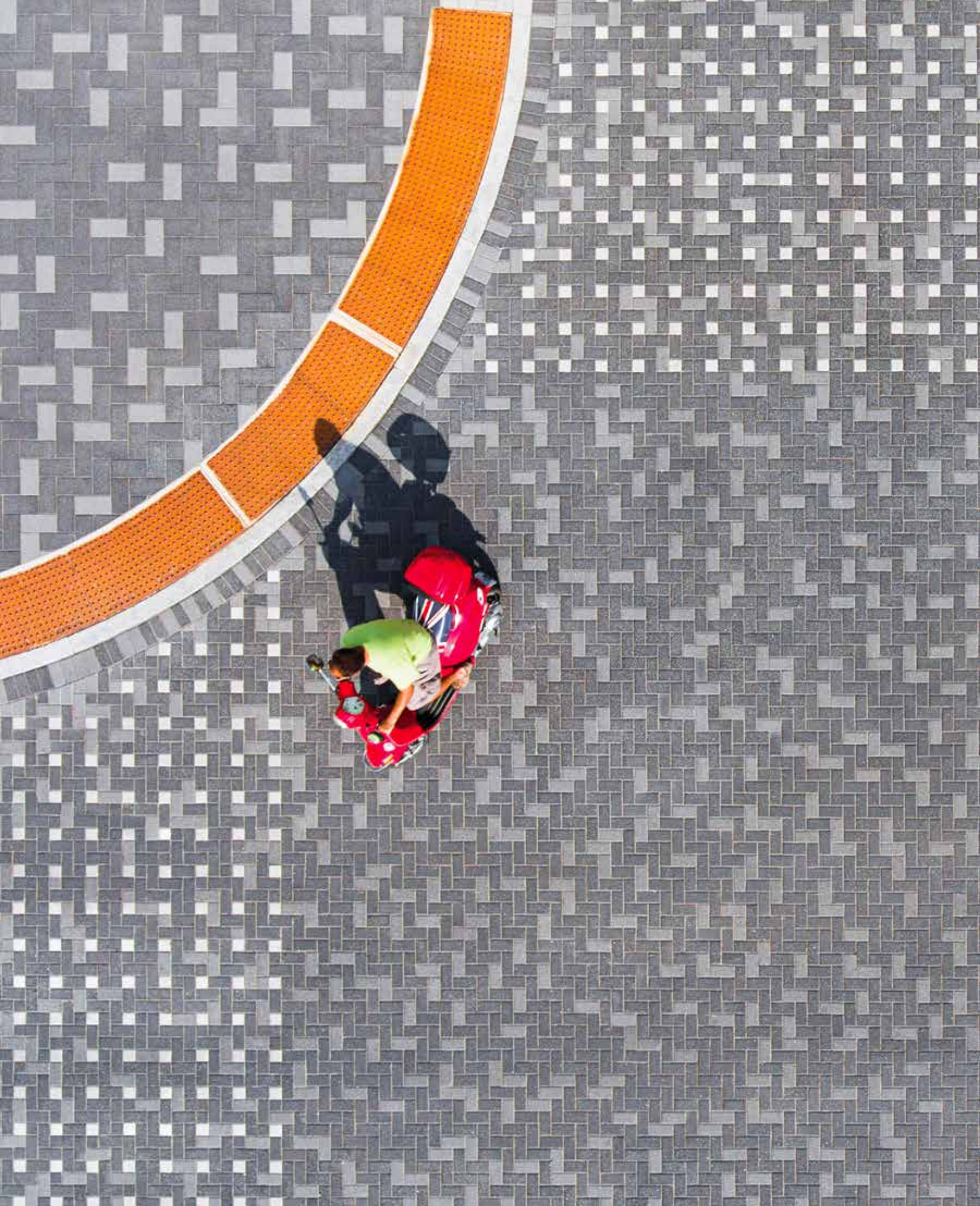
Products listed as "Special Order" are not currently inventoried and may require additional lead times for manufacturing. Special pricing and minimum quantities may apply. Contact your Unilock Representative to confirm all details before creating your specification.



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**PROJECT:** Gay Street. Columbus, OH. **DESIGN:** MKSK Studios. **PRODUCT:** Rectangles and Squares with Series™ finish in special order colors



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