

Commercial and Public Agency Showcase



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the VERSA-LOK family

For landscape architects and designers, engineers and specifiers, VERSA-LOK means retaining walls—and a whole lot more.

Since 1987, VERSA-LOK has set the standard for excellence in segmental retaining walls. Its uniquely engineered design also enables the creation of a wide range of other features: multiangle curves and corners, stairs, columns, freestanding and parapet walls—even bridges. In the pages that follow, you'll find some examples of VERSA-LOK's incredible versatility.

No matter how challenging your landscaping problem may be, there's a VERSA-LOK retaining wall system that can resolve it with engineered elegance. With five systems from which to choose—Standard, Cobble, Accent, Mosaic and Square Foot—if you can design it, you can build it with VERSA-LOK.



serpentine weathered Mosaic wall brings form and function to zoo

A serpentine Weathered Mosaic wall 112 feet in length helped define an outdoor classroom space at the Sedgwick County Zoo in Wichita, KS. The wall was a perfect match for the existing Kansas limestone exterior of the building to which it's attached.

The soft, curved lines of the VERSA-LOK wall are a natural extension of the spiral-shaped Cargill Learning Center. The 7- to 8-foot-tall wall forms the perimeter of a large outdoor courtyard and also creates a smaller, more intimate niche used for classes. Beyond the wall is the zoo's entry plaza, and the wall retains large grade differentials, entry pools and waterfalls along its length.

"The VERSA-LOK retaining wall system was paramount in keeping the project within the tight budget required without the added cost of a natural limestone retaining wall," said Jason C. Wenzel, project manager/designer for WDM Architects in Wichita. "VERSA-LOK's Weathered Mosaic was a natural choice to replicate the native Kansas limestone veneer and color palette of the building that anchors each end of the wall."

The wall is also functional, noted Wenzel. An inset bench built into the entire length of the wall provides continuous seating, resting and queuing space within the courtyard for visitors to the learning center.

location: Wichita, KS

owner: Sedgwick County

designer: WDM Architects, Wichita, KS

contractor: Heartstone, Inc., Wichita, KS

manufacturer: Capitol Concrete Products, Topeka, KS

solution: VERSA-LOK Mosaic®—Weathered™

square feet: 1,200

VERSA-LOK versatility showcased in medical center courtyard

When Tri-Star Health System gave its 35-year-old Skyline Medical Center in Nashville, TN, a facelift, the renovation included adding a sunken, open-air courtyard to serve as a combination dining-waiting area for visitors and patients.

Nashville A&E firm Gresham Smith and Partners designed a space populated with trees, tiered plantings and fountains and defined by irregular-shaped segmental retaining walls. A terraced stairway connects the courtyard with a parking lot above. Freestanding columns tower over the stairs like sentries, adding an extra dimension.

GS&P wanted an attractive SRW system that matched the existing structure and could be modified to create curves, corners, stairs and columns—all without costly specialty units. They found it in VERSA-LOK Standard.

For example, the columns were constructed by splitting the solid VERSA-LOK Standard units in half and securing them with VERSA-LOK Concrete Adhesive. Concrete was poured in the center, along with rebar, for additional reinforcement.

In addition to its solid construction and design versatility, said Tom Martin, landscape architect at Gresham Smith and Partners, "We chose the VERSA-LOK system because of its relative low cost, good local engineering support and seasoned installation personnel."



location: Nashville, TN

owner: Tri-Star Health System, Nashville, TN

designer: Gresham Smith & Partners, Nashville, TN

contractor: Wasco, Inc., Nashville, TN

manufacturer: VERSA-LOK South, Mufreesboro, TN

solution: VERSA-LOK Standard—straight face

square feet: 12,518



location: Plymouth, MN

owner: Providence Academy

designer: Anderson Engineering of Minnesota, LLC

contractor: Timme Incorporated, Endeavor, WI

manufacturer: VERSA-LOK Midwest, Oakdale, MN

solution: VERSA-LOK Square Foot

square feet: Approx. 3,000

economical Square Foot wall maximizes space for school

Providence Academy, a private school in Plymouth, MN, needed to accommodate a loading dock on the lowest level of the school in the rear of the building. At the same time, they hoped to preserve a level green space near the school's easterly entrance to avoid leaving a steep slope leading down to the dock area. Looking for a more economical and aesthetically pleasing solution than a poured-in-place concrete wall to complement the red brick exterior of the school, they found it in VERSA-LOK Square Foot.

A mammoth 275-foot-long curved Square Foot wall ranging from 16' high on one end to 4' high on the other not only facilitated the loading dock, but also created a large space for an elementary school playground. A smaller 2'- 4' tall Square Foot wall was installed on the opposite side of the loading dock driveway to preserve a wooded area downhill from the wall. To prevent access to the top of the wall, chain-link and iron fencing was installed behind the wall around the perimeter of the playground. Evergreens planted around the tallest part of the wall soften the appearance of the large structure.

The result: an attractive and safe retaining wall, a functional loading dock and a new playground at a cost significantly lower than the alternatives.

natural stone look of Mosaic preserves historic look

When the Town of Wilton, ME, wanted to reclaim some land along a scenic stream to build a parking lot, it wanted the facility to blend in with its surroundings. Adding to that challenge was a massive retaining wall behind the parking lot that would tower more than 20 feet tall and span nearly 175 feet from end to end.

The wall and 45-space parking lot face the stream. A nearby retaining wall and dam upstream from the mill are constructed of natural stone, necessitating a wall of similar materials.

VERSA-LOK Mosaic was the only random-pattern segmental retaining wall system capable of being built to such heights, and the Weathered texture was specified for a more historic look.

The 175-foot-long Wilton wall is shaped in a graceful crescent with a deep, curved recess in the center. The top of the wall gradually steps up from each end to its maximum height of just over 20 feet. The trapezoidal shape of the solid units allowed installers to easily arrange them to build curves without the use of specialty pieces. A swale was dug behind the top of the wall, sloped from the top down each side and filled with large rip-rap stone to guide drainage away from the wall.

Total cost of the wall was significantly less than a poured-in-place concrete wall and far more attractive.



location: Wilton, ME

owner: Town of Wilton, Wilton, ME

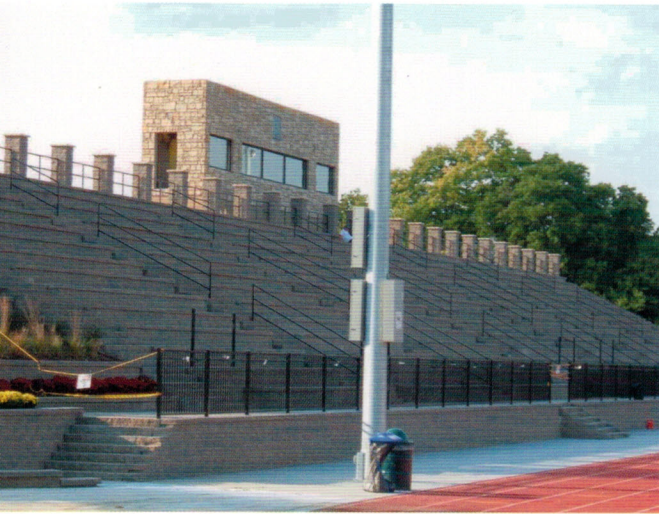
designer: Hoover Biegel Landscape & Associates, Inc.,
Portsmouth, N.H.

contractor: E.L. Vining, Farmington, ME

manufacturer: VERSA-LOK New England, Nashua, N.H.

solution: VERSA-LOK Weathered Mosaic

square feet: 3,347



location: Lawrence, KS

owner: Lawrence School District

designer: Landplan Engineering, Lawrence, KS

contractor: BC Hardscapes LLC, Claycomo, MO;

VR Anderson Builders LLC, St. Louis, MO

manufacturer: Capitol Concrete Products, Lawrence, KS

solution: VERSA-LOK Standard

square feet: 65,051

Kansas school district achieves savings using VERSA-LOK to build stadium bleachers

The Lawrence, KS, school district saved tens of thousands of dollars and months of construction time by using VERSA-LOK retaining wall systems rather than aluminum to build stadium bleachers at two high schools.

When planners began exploring options for the stadiums they discovered that aluminum bleachers would take more than a year to construct, and by that time, football season would be over. So they began looking at using VERSA-LOK wall units for the bleachers as well as the retaining walls.

The school district preferred enclosed bleachers. But estimates showed that enclosed aluminum bleachers would run about \$400 per seat, while bleachers built with solid VERSA-LOK wall units would average about \$300 per seat. VERSA-LOK bleachers would be quieter than aluminum bleachers, alleviating noise concerns, and warmer than aluminum bleachers because they absorb heat during the day and radiate it at night.

Three bleachers are supported by partially terraced berms and the fourth by a near-vertical wall. The terraced bleachers were built on dirt hills covered with two feet of clean drainage rock. As seat rows were added, more dirt was placed and compacted on the hill. Geogrid runs under each seat row.

VERSA-LOK rehabilitates amphitheatre on Wisconsin campus

An outdoor amphitheatre on a university campus got a new lease on life when crumbling limestone seating tiers were replaced with VERSA-LOK seat walls and integrated stairs.

When Dr. Melvin Wall, a chairman of the University of Wisconsin-River Falls Plant and Earth Science Department, and his wife toured northern Italy in the 1960s, they fell in love with a Greco-Roman style amphitheatre. Returning to campus, Wall garnered the support of students, staff, alumni and friends of the university to level the area and haul in limestone blocks to create the seating tiers.

Over the years, the Wall Amphitheatre has become a favorite gathering spot for students and the community. But the elements took their toll.

"Over time, the limestone had deteriorated, so we put in a proposal to have it redone," said Joel McIntosh, UWRF grounds supervisor. "We looked at a couple of different types of natural stone and also the VERSA-LOK product. The natural stone was out of our budget range."

The seat walls are made of VERSA-LOK's Weathered Mosaic wall units, which has three shapes of blocks in a four-unit panel to create a random-pattern appearance and resembles the natural limestone it replaced. Stairs are integrated into the seating tiers at several points. Two firepits, also built with VERSA-LOK units, were installed at the top.



location: River Falls, WI

owner: University of Wisconsin-River Falls

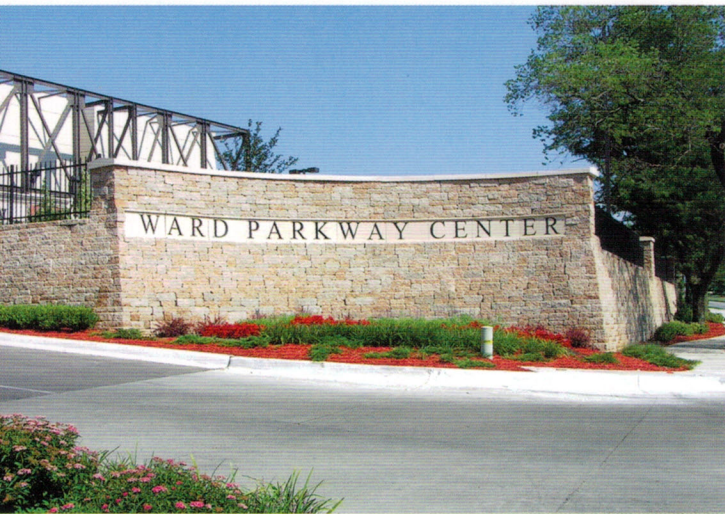
designer: Cedar Corporation, Menomonie, WI

contractor: Pember Excavating, Menomonie, WI

manufacturer: Willow Creek Concrete Products, Kimball, MN

solution: VERSA-LOK Weathered Mosaic

square feet: 3,000



location: Kansas City, MO

owner: Ward Parkway Shopping Center

designer: Shafer, Kline & Warren, Inc., Overland Park, KS

contractor: Innovative Walls, Kansas City, MO

manufacturer: Midwest Block & Brick, Inc., Kansas City, MO

solution: VERSA-LOK Weathered Mosaic

square feet: Approx. 17,000

mall's renovation creates retaining wall opportunities

Kansas City's Ward Parkway Shopping Center underwent a major renovation that transformed the indoor mall into an open-entry mall. The project required considerable modifications to the mall's exterior, parking areas and trafficways. A grade change from a 6 percent slope to a 3 percent slope called for retaining walls to compensate for the large drop-off at the edge of the property.

VERSA-LOK Weathered Mosaic met the city's requirement that the walls match the existing limestone-covered walls on the site. A 970-foot retaining wall with two monument walls was built on the mall's east side, along with smaller monument walls in the landscape beds on the west side.

The monument walls were built using two Mosaic walls laid back-to-back to achieve the random-pattern Weathered look on both sides. Engraved stone signage was inset into the face of the monument walls on either side of the entrance. Black iron fencing was installed between columns that extend above the top of the wall.

"The VERSA-LOK system proved advantageous for many reasons," said Chad Porter of landscape architects Shafer, Kline & Warren, Inc. "It kept the retaining-wall costs within the budget and also allowed curves in the wall—which were desired by the developer—to be affordable." And the mall's residential neighbors found the random-pattern Mosaic wall with its vintage Weathered texture to be more aesthetically pleasing than other alternatives.

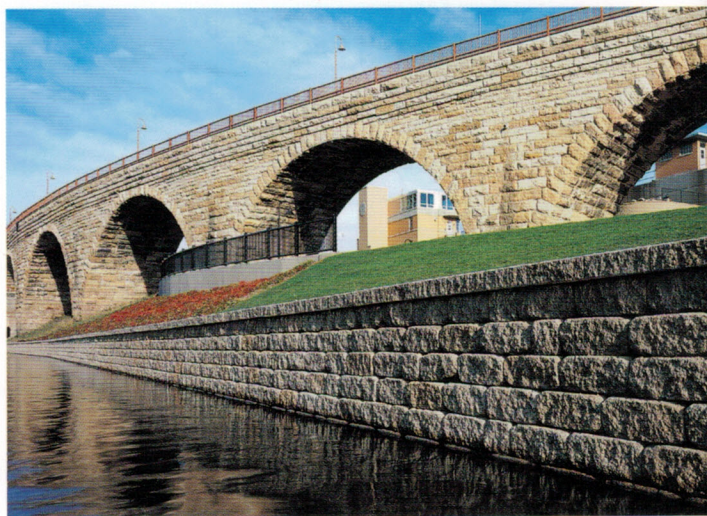
weathered Standard complements renovated historic site

Minneapolis' Mill Ruins Park is on the National Register of Historic Places and preserves what remains of the city's Mississippi River-front past of flour and lumber mills. So when the Minneapolis Park and Recreation Board acquired the park in 1998 to begin restoring this previously neglected area, the agency went to great lengths to maintain the historical integrity of the site wherever possible.

The first phase of the project involved reconstructing a tailrace—an area downstream from the dam where the impounded water re-enters the river—that runs alongside the partially excavated ruins. Architects URS Corporation designed a segmental retaining wall along the north side of the tailrace that would hold back the large mass of soil behind it, have long-lasting durability and also blend well with the historical surroundings.

VERSA-LOK Weathered Standard was the natural choice to replicate the existing stonework of the historic Stone Arch Bridge and other structures at the site, said Bob Kost, URS landscape architect, "because it offered a similar color and texture to the old limestone walls." In fact, VERSA-LOK Weathered Standard was such a perfect match in the renovation, URS decided to use them elsewhere in the project as well.

"Many other needs popped up during the initial phase, including a parking lot wall and river inlet," said Kost. "We found VERSA-LOK to be a very cost-effective solution to those needs as well."



location: Minneapolis, MN

owner: City of Minneapolis, Minneapolis, MN

designer: URS Corporation, Minneapolis, MN

contractor: Lunda Construction, Black River Falls, WI, FM Frattalone Excavation and Grading, St. Paul, MN, Martin Lake Contracting Inc., Stacy, MN

manufacturer: VERSA-LOK Midwest, Oakdale, MN

solution: VERSA-LOK Standard—Weathered™

square feet: 4,833



location: Annville, PA

owner: Lebanon Valley College, Annville, PA

designer: Derck & Edson Associates, LLP, Lititz, PA

contractor: Thomas Masonry, Cleona, PA

manufacturer: Binkley & Ober, Inc., East Petersburg, PA

solution: VERSA-LOK Standard—straight-face; various colors

square feet: 22,000

VERSA-LOK helps transform a field of corn into a field of dreams

What began as a cornfield with a 20-foot grade change today is an award-winning baseball field on the Lebanon Valley (PA) College campus, thanks in large part to the capabilities of VERSA-LOK.

McGill Field, home of the Lebanon Valley Flying Dutchmen, features a 9-foot multicolor VERSA-LOK retaining wall in the outfield and a 500-seat grandstand in matching colors. The 20-foot slope is retained by the outfield wall to maximize the field space.

During the design phase, college officials and architects Derck & Edson Associates searched for an affordable masonry system that would evoke memories of old-time ballparks like Wrigley Field. The attractive split-face texture and efficient installation and design of the VERSA-LOK system fit the bill—at a lower cost than either cast-in-place concrete or brick-and-mortar.

"What makes this ballpark unique is the integration of the bullpens with the outfield wall," said Michael Carroll, sales manager at Binkley & Ober, Inc. "The contractor used VERSA-LOK for a variety of applications, including the dugouts, freestanding walls and planters."

Their efforts didn't go unnoticed. McGill Field was named "College Baseball Field of the Year" in 2000 by the Sports Turf Managers Association.

tiered gardens integrate senior community into hillside

Schenley Gardens, a senior living community in Pittsburgh, PA, is built into a hillside. The dramatic 200-foot elevation change of the property presented an extreme landscaping challenge to the developer.

Kossman Development Company wanted to integrate the building into the hillside and needed a solution that would meet the project's stringent engineering requirements while artfully satisfying the architect's aesthetic demands. They found their solution in VERSA-LOK Standard.

Using more than 13,000 square feet of VERSA-LOK Standard, architect Paul Kossman created a series of six serpentine tiered retaining walls to transform the steeply sloped area between the center's buildings into a lavish complex of gardens, patios and walkways. The tiered walls carved three levels of meandering open spaces into the hillside, all connected by stairs and accessible from the living areas. These gathering areas are adorned with seating, pergolas, a gazebo and multiple raised gardens.

The tan VERSA-LOK walls are a perfect complement to the beige buildings.

"The curved walls helped create a park-like environment," said Kossman. "In addition, the geogrid reinforcement allowed us to plant trees on the tiers, which really added to the site."



location: Pittsburgh, PA

owner: Kossman Development Co., Pittsburgh, PA

designer: Paul Kossman, R.A.

contractor: Kossman Development Co., Pittsburgh, PA

manufacturer: R.I. Lampus, Springdale, PA

solution: VERSA-LOK Standard—straight-face

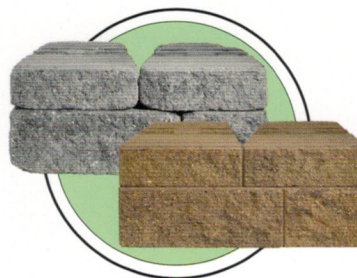
square feet: 13,000

the VERSA-LOK family of products



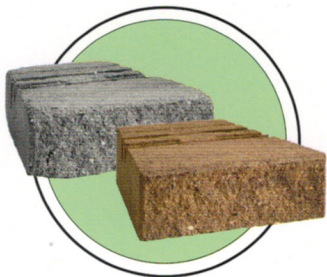
standard

Weight - 82 lbs.,
Size - 6" tall, 16" wide, 12" deep,
Face Area - 2/3 s.f.
Minimum Radius - 8',
VERSA-TUFF® Pins - 2 per unit



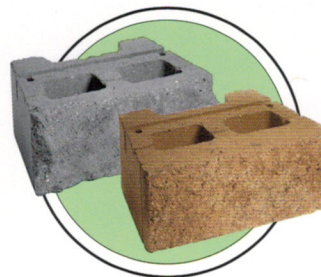
mosaic

Panel Size - 10" tall, 24" wide, 12" deep,
Combination of one Standard,
one Cobble, and two Accent units.
Panel Face Area - 1-2/3 s.f.,
Minimum Radius - 8', VERSA-TUFF
Snap-off Pins - 8 per panel



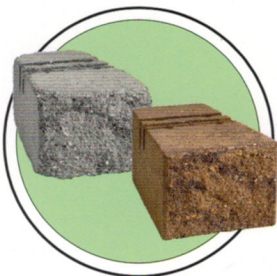
accent

Weight - 36 lbs.,
Size - 4" tall, 12" wide, 12" deep,
Face Area - 1/3 s.f.
Minimum Radius - 3',
VERSA-TUFF Snap-off Pins - 2 per unit



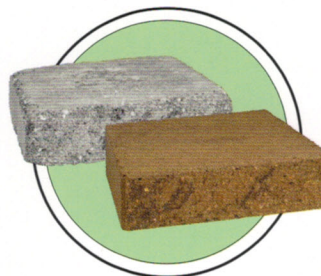
square foot

Weight - 87 lbs.,
Size - 8" tall, 18" wide, 12" deep,
Face Area - 1 s.f.
Minimum Radius - 4' 6",
Setback - 1" (7 degrees)
or 1/4" (1.8 degrees)



cobble

Weight - 38 lbs.,
Size - 6" tall, 8" wide, 12" deep,
Face Area - 1/3 s.f.
Minimum Radius - 4' 4",
VERSA-TUFF Pins - 2 per unit



caps

A Cap: Weight 40 lbs.,
Size 3-5/8" tall, 14" wide (front),
12" wide (rear), 12" deep.
B Cap: Weight 50 lbs., Size
3-5/8" tall, 14" wide (front),
16" wide (rear), 12" deep.



Products shown may be covered by one or more of the following:

U.S. Patent D319,885, U.S. Patent D321,060, U.S. Patent D341,215, U.S. Patent D346,667, U.S. Patent D378,702, U.S. Patent D391,376, U.S. Patent D430,680, U.S. Patent D435,302, U.S. Patent D439,678, U.S. Patent D452,332, U.S. Patent D458,387, U.S. Patent 6,488,448, U.S. Patent 6,960,048, U.S. Patent D537,533, U.S. Patent D552,258, U.S. Patent 7,229,235, U.S. Patent 7,244,079, U.S. Patent D555,810 and other U.S. patents pending; Canadian Industrial Design Registration No. 63929, No. 71472, No. 73910, No. 73911, No. 73912, No. 77816, No. 79058, No. 82288, and No. 89084, I.C.B.O. No. 4625