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WEATHERVANE

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America's Master Craftsmen in Building Restoration and Preservation

Peterson Uncovers Uncharted Territory in State Capitol Building

When the Pittsburgh, Pa., branch of Harry S. Peterson Company began work on the West Virginia Capitol, the contract called for removing and replacing the pavers on the building's north portico, as well as replacement of the limestone steps leading up to it. Soon after the crew began the demolition of the stone pavers, the scope of work expanded dramatically.

"The decay of the structural slab was much greater than anticipated," said Bill Kostelic, Pittsburgh branch manager. "Beneath the deteriorated slab, we found a cavernous space that was totally unexpected. It was six feet deep, ran the entire length of the portico and had huge five foot tall stalactites from moisture seepage."

The portico was not part of the original plans for the building, which was dedicated in 1932, so there was no record of the "cave" the crew discovered. The space had been undisturbed for nearly 70 years.

"It was quite a surprise," agreed Carol Stevens of CAS Structural Engineering, who was called in to design a new structural system for the portico. "It was large and so unusual, we joked about charging 50¢ for tours of the capitol cavern."

Removing the large structural slabs was complicated by the extensive pedestrian walkways throughout the capitol building grounds.

"We selected cranes based on vehicle weight, to be sure we wouldn't damage the walkway pavers," explained Kostelic. "We saw-cut the slabs, then used the cranes to move them to tilting flatbed trucks. The slabs were taken directly to state highway projects, where they were used for soil stabilization."

The Peterson crew replaced the old structure with galvanized and stainless steel decking components, and installed a plumbed internal weep system. The system, which includes cross-ventilation and a vapor barrier, was designed by Carol Stevens for the state's General Services Administration to deter future deterioration due to moisture.

The original limestone pavers were replaced with bricks, which was the design originally envisioned by Cass Gilbert, the Capitol's architect. The new surface was installed with a waterproof Laticrete®-based system to further protect it from water intrusion. The project was completed in May 2002.

Owner: *State of West Virginia*
Engineer: *CAS Structural Engineering, Inc.*

PROJECT TEAM
Branch Manager: *William Kostelic*
Superintendent: *Brian Pflueger*
Site Foreman: *Tim Walden*

Left: Beneath the deteriorated slab, the Peterson crew discovered a 6 ft.-deep cavernous space that ran the length of the portico.

Center: The previous structural system was replaced with galvanized and stainless steel decking components.

Right: Limestone pavers were replaced with bricks, as specified in the original design by architect Cass Gilbert.

Western Fights Wind to Provide a Facelift to Duluth Landmark

Greysolon Plaza in Duluth, Minn., is a 13-story, twin-tower apartment building that overlooks Lake Superior. Built in 1925, the neoclassical structure served as the city's premier hotel until it was converted to residential use in 1980. Bowman Properties is the building's owner.

More than 70 years of northern Minnesota winters and Lake Superior storms took their toll on the building, which is heavily ornamented with terra cotta on the lakefront side. When the Minneapolis branch of Western Waterproofing began repairs, much of this ornamentation was cracked, spalled or missing.

"Approximately 30% of the façade consists of ornamental terra cotta, and the cornices were definitely in the worst shape," said Mike Mercier, Minneapolis branch manager. "Due to the expense, replacing the damaged areas with terra cotta was out of the question."

Western used cementitious materials to rebuild the damaged areas of the ornamental configurations. The crew applied the materials and then carved them to match existing pieces. Acrylic finishes and sponge painting were used to blend the color of the repairs with the original terra cotta.

"It's difficult to spot where the repairs were done," commented Mercier. "And the owner saved a significant amount of money over the cost of terra cotta replacements."

A year later, Western began a second phase of work to repair open mortar joints that were allowing moisture to leak into the building. The crew removed and replaced mortar from approximately 40% of the terra cotta and brick joints. The loose copper flashing was mechanically fastened, and coping joints were sealed with a two-part urethane sealant.

Above: Much of the terra cotta ornamentation on the nearly 80 year-old building was cracked, spalled or missing.

Left: Cementitious materials were used to rebuild damaged areas, then carved and painted to match the original terra cotta.

Throughout both phases of the project, the wind coming off of Lake Superior was a significant factor. "We had rigging at several elevations, which allowed us to work high or low, depending on the direction of the wind on any given day," explained Mercier.

Both projects were carried out during the summer months. Keeping the work on track was a concern because of the northern climate.

"We absolutely had to be out of there before October," according to Mercier. "Handling the weather after that was just not an option, and we did stay on schedule."

Owner: *Bowman Properties*

PROJECT TEAM

Branch Manager: *Mike Mercier*
Superintendent: *Mike Tripp*
Foreman: *Ryan Eik*
Division Superintendent: *Rich Voshell*

Western Improves Appearance and Acoustics of Seattle Landmark

Although St. Mark's Cathedral in Seattle, Wash., was dedicated in 1931, the exterior wasn't finished. At least, it wasn't finished as it was originally planned. Building funds dwindled in the aftermath of the stock market crash of 1929, and plans for a magnificent stone-clad façade had to be abandoned. The church was left with a board-formed concrete exterior.

When the Seattle branch of Western Waterproofing began work on the Thomsen Chapel at St. Mark's, stopping moisture intrusion through the "unfinished" exterior was a key part of the project.

"That concrete really wasn't meant to be the final outer surface," said Jaime Gaumnitz, Seattle branch manager. "So it's not surprising that the chapel experienced problems with water infiltration."

The scope of the work for the exterior included cleaning, patching and repairing the concrete, as well as the limestone and brick trim. Western also applied stone consolidation to the stone surrounds on windows and doors, cut out and caulked all exterior window perimeters, then applied a clear water repellent to the entire exterior.

In the chapel's interior, the Western crew removed stains and efflorescence and made modifications to accommodate the installation of a new organ. Infills that comprised a significant portion of the interior posed a particular challenge. The acoustical engineer was concerned that the infills, which were made of a rather porous material similar to stuccocrete, would negatively affect the sound quality of the new organ.

The crew did several mock-ups to test both the appearance and acoustic characteristics of different materials. Happily, the treatment church officials liked best passed the acoustic engineer's criteria, too. It was also one of the least expensive alternatives.

"We ended up applying Sonocrete® Gel Patch over the infills. We built it out about 1/16" and finished it with a smooth steel trowel," Curt Romberg, lead foreman, said. "The Gel Patch was a charcoal color and, with the existing material, gave the infill the look of veined black marble."

After a thorough cleaning of the stone floor, the chapel was ready for weddings and other important occasions – looking and sounding better than ever.

A large portion of the chapel's interior was resurfaced with Sonocrete® Gel Patch, a cost-effective solution that also improved the acoustics of the structure.

Owner: *St. Mark's Episcopal Church*
Project Consultant: *Wetherhott & Associates*

PROJECT TEAM
Branch Manager: *Jaime Gaumnitz*
Lead Foreman: *Curt Romberg*

Ben Bishop, Jr., Named CEO of The Western Group

Benjamin M. Bishop, Jr., Chief Operating Officer of The Western Group, has been chosen to succeed William L. Bishop as Chief Executive Officer. The change in leadership became effective September 30, 2003.

Ben Bishop, Jr., is a member of the third generation of Bishops to lead the firm and is only the fifth CEO in the company's 88-year history. He has 31 years of experience with Western, starting in 1972 as a field laborer during college summer breaks. After college he served with the St. Louis branch office as a new construction estimator until 1982. He then opened Western's new Denver branch office, became regional manager of mid-west operations in 1988, and led the Southeast Division from 1992 to 1997.

Past director of the Sealant, Waterproofing & Restoration Institute, he will continue in his capacity as COO.

Western "branches" out to San Antonio

The Western Group recently established two new offices to enhance the company's ability to serve customers in the southwestern and upper Midwest portions of the country. Both offer a range of restoration and preservation services, and neither wasted any time in completing high-profile projects.

The Menger Hotel

The Menger Hotel in San Antonio has a history almost as long and colorful as its close-by neighbor, the Alamo. Built by a German immigrant in 1859, the hotel was an immediate success and has been at the center of the city's social life and history ever since.

The present-day, 316-room structure is the result of a series of additions that began soon after the original hotel was built and continued well into the 20th century. Western's work included removing delaminated stucco, backup walls and window lintels, and anchoring parapet walls to the structure. Then new lintels and stucco that matched the existing finish in texture and color were installed.

"We worked throughout the entire exterior, but we did the most extensive work in areas built in the 1940s and 1960s," explained Shawn Gibson, project manager. "Matching the visible part of our repairs to materials of various ages was a real challenge."

The location of the hotel was perhaps an even bigger challenge. With one of Texas' major tourist attractions less than 100 yards away, pedestrian traffic made safety a major concern.

"It was an incredibly congested area with a constant stream of people coming off tour buses and school buses," said Gibson. "We used a protected pedestrian walkway, with scaffolding above it and made sure the work zone barricades were well marked."

The building owner is Gal-Tex Hotel Corporation of Galveston, Texas, and general contractor for the project was Gilbane Building Company of Houston. The project was completed in *July 2003.*

Owner: *Gal-Tex Hotel Corporation*
Gen. Contr.: *Gilbane Building Company*

PROJECT TEAM
Project Manager: *Shawn Gibson*
Branch Manager: *Ed Talent*
Superintendent: *M.D. Gresham*
Supervisor: *Calvin Critz*

o and Milwaukee

Miller Brewing Company Parking Deck

When Western began extensive concrete repairs on the parking deck at Miller Brewing Company in Milwaukee, Wis., scheduling the work to keep the maximum number of spaces in use was a key concern.

"This is the main parking facility for all Miller corporate employees," said Michael Mehring, Western department manager. "If we took up too much room on any given day, there wasn't any place for 'overflow' parking to go."

The unusual layout of the garage also posed a challenge in Western's efforts to minimize inconvenience to employees.

"This parking deck is only three stories high, but it's almost 500 feet long," according to Mehring. "So we had to be careful about how we routed traffic, so users could enter and exit without too much delay."

The Western crew performed overhead, vertical and horizontal concrete repair throughout the facility. Cracks that spanned the entire length of beams were structurally repaired using epoxy injection.

The project was begun in July 2002 and completed in October 2002.

Owner: *Miller Brewing Company*
Engineer: *Jacobs Engineering*

PROJECT TEAM
Project Manager: *Michael Mehring*
Branch Manager: *Kevin Koske*
Superintendent: *Chet Scott*

Top: Overhead, vertical and horizontal concrete repairs were carried out throughout the facility.

Left: The parking deck serves Miller Brewing Company's corporate headquarters

Above: The structure is long and low – 3-stories high and 500-ft. in length.

PARTIAL LISTING WESTERN GROUP PROJECTS IN PROGRESS

PROJECT NAME AND LOCATION	WESTERN GROUP LOCATION
Masonry Restoration & Waterproofing	
La Towers Shreveport, La.	Jackson, Miss.
University of Chicago Chicago, Ill.	Chicago, Ill.
Grosvenor Park II Rockville, Md.	Washington, D.C.
Copley Plaza Boston, Mass.	Boston, Mass.
650 California San Francisco, Calif.	San Rafael, Calif.
Washington University, School of Medicine St. Louis, Mo.	St. Louis, Mo.
The Fashion Institute of Design & Merchandising Los Angeles, Calif.	Los Angeles, Calif.
Concrete Restoration & Waterproofing	
Sheraton Yankee Clipper Hotel Ft. Lauderdale, Fla.	Ft. Lauderdale, Fla.
University of Kentucky Parking Deck Lexington, Ky.	Cincinnati, Ohio
St. Louis Airport Parking Deck St. Louis, Mo.	St. Louis, Mo.
Central Park Garage Chicago, Ill.	Chicago, Ill.
Discovery Bay Honolulu, Hawaii	Honolulu, Hawaii
Clarkson Garage Omaha, Neb.	Omaha, Neb.
Emory University Atlanta, Ga.	Atlanta, Ga.
Mountainview Towers Hot Springs, Ark.	Little Rock, Ark.
New Construction Waterproofing & Roofing Projects	
Wal Mart Stores St. Louis, Mo.	Western Restoration & Insulation Co.
Lindbergh Tunnel Parking Deck St. Louis, Mo.	St. Louis, Mo.
11 Waverly Place New York, N.Y.	Ridgefield, N.J.

Brisk Handles Restoration for Art Deco Landmark

After removal of the reroofing piles and the original membrane, the Brisk crew installed a new, U.S. Intec roofing system.

More than any other street in Manhattan, Central Park West shows the influence of the Art Deco movement in architecture. During a brief outburst of construction from 1929 to 1931, no fewer than seven buildings in this distinctive style were erected along the street, which overlooks Central Park. One of those buildings is 241 Central Park West. The masonry and terra cotta structure was designed by the architectural firm of Schwartz & Gross, and completed in 1931. The building was designated a landmark by the New York Landmark Preservation Commission in the early 1980s.

Brisk Waterproofing Company was awarded the contract for masonry restoration on the building's rear façade and main roof replacement.

"Our first challenge was figuring out how to handle the scaffolding," said Jeff Sharp, project manager for Brisk. "The building has a series of setbacks that made setting up a swingstage rig more complicated than usual. We ended up suspending it from the top of the building with kickouts at the different elevations to keep the cables from hanging on the railings below."

Repairing the deteriorated corners of the building comprised the majority of the masonry work. The Brisk crew removed 600 lineal feet of masonry at the corners and reinforced the existing steel columns with new steel plating. The columns were then waterproofed, and masonry approved by the Landmark Preservation Commission was installed. In addition, steel lintels were replaced throughout the façade, and several thousand square feet of masonry joints were raked out and repointed.

"Because the building has been designated a landmark, replacement brick had to be the same size and color as the original," Sharp explained. "Luckily, it was a standard type that was still in production, so it wasn't hard to find."

The building's main roof had been replaced a number of times, with the reroofing plies installed over the original membrane. Testing showed the presence of asbestos fibers in the original roofing membrane. A licensed asbestos removal contractor stripped off and disposed of the original membrane after the Brisk crew had removed the other layers of material. Then a new, U.S. Intec roofing system was installed.

Throughout the construction, the Brisk crew worked closely with Richard W. Lefever, civil engineer, and J. Butch Macutay, structural engineer. Architect for the project was Façade Maintenance Design; the building is owned by Rudin Management Co. The project was completed in June 2002.

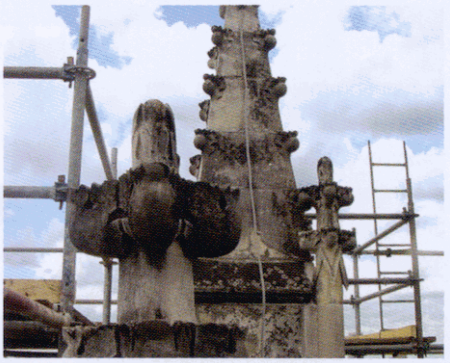
Owner: *Rudin Management Company*
Architect: *Façade Maintenance Design*

PROJECT TEAM

Project Manager: *Jeff Sharp*
Branch Manager: *Jim Rogers*
Foreman: *Jim McNamara*

Persistence of Houston Branch Results in a Brighter Exterior for Church

With extensive experience in masonry restoration, Western Waterproofing's Houston branch is well accustomed to the effort involved with removing decades of dirt, biological matter and environmental discoloration from stone. But during the cleaning of the limestone exterior of the Trinity Episcopal Church in Houston, the Western crew hit a snag.



The bell tower of Trinity Episcopal Church required three cycles of cleaning in some areas to remove the staining from the limestone.

"Cleaning tests were conducted and used to specify methods and materials," explained John Volz of Volz & Associates, preservation consultant on the project. "The work went well elsewhere, but not on the bell tower."

Volz speculates a sealer may have been applied to the tower after the exterior of the church was sandblasted some years ago, causing the difference in outcomes. Whatever the reason for the problem, the prominence of the tower meant its appearance was crucial to the success of the project.

"We went through one cycle of cleaning, then another, and even a third one in some areas before we were able to remove all the staining," explained Charlie West, Houston branch manager. "It took persistence, but we managed to get it done."

The exterior masonry restoration was part of the extensive work done on the church, which was designed by noted architect Ralph Adams Cram in conjunction with a local Houston firm. Fretz Construction was general contractor and Hill Swift Architects was architect for the project. Both firms are located in Houston.

The Western crew repaired cracked and spalled limestone, replaced damaged stones and applied a consolidation treatment. Different degrees of weathering and exposure, as well as variances in stone color, required careful matching for repairs.

"Mixing the mortar was an ongoing task," stated West. "We couldn't do just one match and work out of the same bucket all day. There was a lot of custom blending done on site every day."

The porous nature of the limestone and previous structural problems also created challenges.

"The limestone was used as a veneer, not solid wall construction. Over the years, the stones shifted, and the veneer bulged in places," commented Volz. "Kenneth Walters and his crew did an excellent job of blending their work to make the repairs nearly imperceptible."

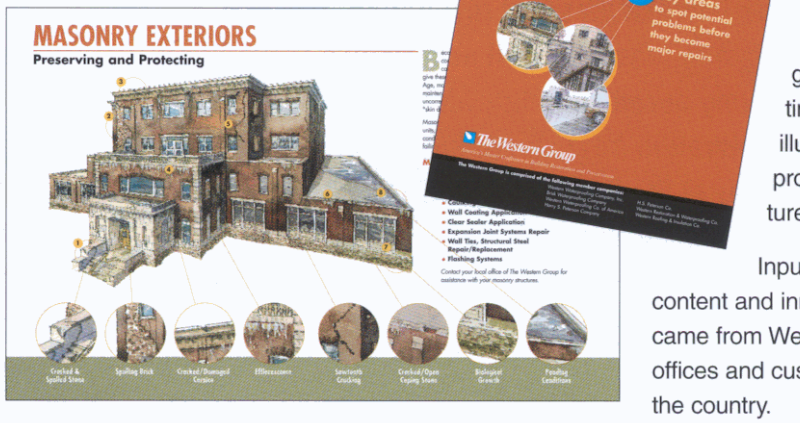
West agreed, citing crewmembers' expertise and pride in their work as key factors in the success of the project.

"The Hernandez brothers – Jose, Sammy and Federico – are real craftsmen and the best darned stone setters in Texas," he said. "You can count on a good outcome when you have guys like that on your team."

Owner: *Trinity Episcopal Church*
Architect: *Hill Swift Architects*
Gen. Contr.: *Fretz Construction*

PROJECT TEAM
Branch Manager: *Charlie West*
Superintendent: *David Parks*
Project Foreman: *Kenneth Walters*

New Visual Guide Helps Identify Exterior Problems



Preventing major repairs with timely maintenance is a key factor in cost-effective building management. Property managers and owners not only avoid the expense and headache of managing a major project, they also increase satisfaction and occupancy rates by reducing inconvenience to tenants.

To help owners and managers identify potential problem areas on the exteriors of their structures, The Western Group of St. Louis, Missouri, recently released a publication entitled *Exterior Building & Structure Restoration* visual guide. The guide contains full-color architectural illustrations of three structure types: a masonry building, a concrete building with plaza decks and a multi-level parking structure. Close-ups of key problem areas show effects of neglect, including delaminated coating, sawtooth cracking, spalling and evidence of water leakage.

William A. McBride, Architect, of WAM Architectural Illustration, Kansas City, Mo., created the illustrations. According to McBride, the assignment was different than any other he'd handled previously.

"Normally, my job is to make an architectural rendering look good. This is the first time a client wanted illustrations to show problems with structures," he said.

Input for the guide's content and innovative design came from Western's branch offices and customers throughout the country.

"We included the conditions our field specialists see every day in a format our customers told us would be easy to use. Our goal was to give property owners and managers a single source to help them identify trouble spots before the damage becomes serious," said Dennis Ahrenhoersterbaeumer, director of business development for The Western Group.

Exterior Building & Structure Restoration visual guide is available free from The Western Group. To order your copy, mail the enclosed postage-paid reply card, go to www.westerngroup.com, or call (800) 325-2801.

The Western Group is composed of seven member companies and has 35 offices nationwide. It is the nation's largest specialty contractor in the areas of masonry and concrete restoration and new construction preventive waterproofing.

Editor's Note:
After 17 years with the same design, it was time for a change. The look of the Weathervane has been updated, with more color and a simplified layout. We hope you enjoy the change. If you have comments, please contact us at (800) 325-2801.

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