

# A 'Jewel' Shines Again THE BRODERICK TOWER

By Clare Desmond, Contributing Editor

Photography by Christopher Lark, Inc.

t was a long time coming, but on Nov. 3, 2012, the historically significant Broderick Tower in downtown Detroit was finally and officially re-opened after being empty for almost three decades. Following a nearly seven-year-long (from initial design to completion) renovation and restoration project, when the ribbon was cut that day in November last year, leases had been signed on all of the residential units. Five residents moved in immediately, and 50 more did a few days later. All 124 apartments in the new Broderick Tower, located at 10 Witherell Street across from Grand Circus Park, were occupied as of March 2013.

It may have taken almost 30 years for the long-shuttered 85-year-old landmark structure to be resuscitated, but the result was surely worth the wait. The renovation transported the 34-story Broderick Tower back to 1928, when it first opened and was considered a "Beauty by Day, a Jewel by Night," as noted by historicDetroit.org. With nearly 30 years of abandonment under her belt, the Broderick had transformed from a state of neglect back to its former glory. The crowds were there to show their pleasure at the transformation, and the Broderick did not disappoint. Indicative of a renewed interest in living in downtown Detroit, or perhaps for the opportunity to say hello to an old friend, more than 1,000 people showed up for tours at an Open House in April 2012, hosted by the building's owners, Motown Construction Partners LLC, Detroit. It was Opening Day for the Detroit Tigers baseball team as well, and the Tigers' ballpark is only one of several outstanding views visible from the Broderick's residences.

"The historic building was completely renovated from obsolete office to state-of-the-art residential," said Brian Rebain, RA, NCARB, CSI, project architect and studio director for Kraemer Design Group, Detroit. Inside, high-end finishes glisten in the rental units: granite countertops, stainless steel appliances, porcelain tile on the floors, upscale bathroom fixtures. It's got them all, plus a host of amenities, including a 24-hour fitness center, 24-hour security, and





Molds were cast to create composite infill pieces to replicate damaged cast iron detailing around windows on the second, third and fourth floors.



Residential apartments at the Broderick Tower feature stainless steel appliances, granite counters, tile floors and other high-end finishes.



View from the living room area of one of the luxurious multi-level penthouse apartments.

separate entrances and lobbies for residential and commercial lessees. Parking is available to lease in the Grand Circus Park underground facility across Witherell Street for an additional \$95 per space per month. All but a handful of the residences have laundry facilities in the units. The apartments range in size from 440-squarefoot studio apartments to 2,200-square-foot penthouses. Several of the residences on

floors 5-24 and almost all of the penthouse apartments offer multi-floor living. In addition to its residential units, the Broderick offers approximately 25,000 square feet of commercial space on floors 1 through 4.

Construction began in January 2011 on the \$53 million project by Construction Manager J.C. Beal Construction Inc., Detroit. The project benefited, start to finish, from the expertise of Kraemer Design Group's

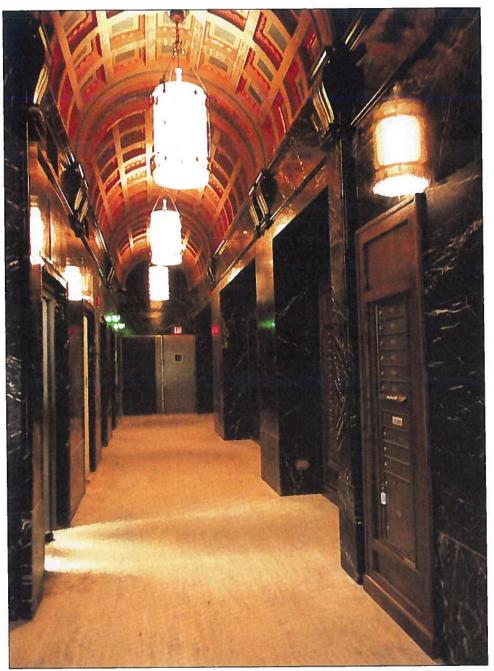
principals, Robert Kraemer, RA, NCARB, IIDA, and Maureen Kraemer, IIDA, NEWH, ISHP, who founded their firm in downtown Detroit in 1996. Both are architects and managers, and both are highly qualified interior designers. Both also have a keen interest in historic building restoration. That expertise was close by, with KDG's headquarters located about a block away from the Broderick. The firm's Heather McKeon, LEED® AP, who heads the firm's interior design studio group, also worked on the Broderick project, continuing to fulfill an aspiration to work for a firm playing a part in Detroit's revitalization. KDG has played significant roles in a number of historic buildings downtown, including the Harmonie Club in Harmonie Park, the Parker-Webb Building on Grand River Avenue, and the Elliott Building on Woodward Avenue at the corner of Grand River Avenue.

In its heyday, the Broderick Tower provided top-rate office space for Detroit professionals in one of the city's most beautiful locations, across the street from Grand Circus Park. Doctors, dentists, lawyers, accountants and other small businesses had their private offices there. On the ground floor, high-end retailers like Capper & Capper custom shirts and the Meyer Jewelry Co., as well as the Flaming Embers restaurant, added to the building's luster. Radio station WJLB was located on the 31st floor for several decades, as well.

neo-classical/Chicago School The architecture style of the building was enhanced with baroque Beaux Art detail at its capital. Typical of Chicago School style, the Broderick Tower was constructed with a base, column or shaft, and a capital, on a structural steel frame encased in concrete with terra cotta, limestone and masonry on the exterior. Speckled granite interrupted by large windows in cast iron surrounds and mullions grounds the lower floors and creates the base. The column is covered with Indiana limestone on the Woodward and Witherell façades, and on the façades of the top nine floors all around, while buff colored brick completes the facing on the south and east elevations. The capital is formed by bands of terracotta, pilasters between windows, and a setback above the 30th floor that emphasizes the loggia at the top.

#### A LITTLE BIT OF HISTORY

The Broderick opened in 1928 as the Eaton Tower, named after its owners, a prominent Detroit family. It was the second highest skyscraper in the city, and probably in Michigan at the time. Theodore H. Eaton arrived in Detroit in the 1830s. He was a



The original black marble walls and barrel vaulted coffered ceiling were restored to their former beauty in the main lobby off Grand Circus Park.

salesman and entrepreneur and developed a thriving business importing and selling dves and other chemicals. In 1904, his son, Theodore Jr., bought the site of what would become the Eaton Tower. Several hotels. Turkish baths and some small office buildings had previously occupied the space. In 1925, Theodore's son, Berrien, demolished the six-story Gladwin Building, then occupying the site, and built the Eaton Tower, Famed Detroit architect Louis Kamper and his son, Paul Kamper, designed the new building. The Eaton family sold the building to David Broderick in 1944, who

renamed the building. In the early-1950s, the Flaming Embers restaurant opened on the building's ground floor and became a showcase downtown restaurant for many years. It remained open for more than 40 years and was the last tenant to leave the otherwise empty building in 1993. Broderick died in 1957 and his family held onto the building until 1966.

A series of owners then followed, including one who did a 1960s-style renovation that included dropped ceilings, florescent lights and air conditioning. That remodeling covered up, but for the most

part did not damage, the coffered barrelvaulted ceiling in the lobby off Witherell Street, according to project architect Rebain. The black marble Belge Noir walls lining the lobby also fared pretty well over the years, he said, but a small trim profile area at the top of one of the walls required some faux painting on hardwood to nicely reproduce it. Decorative bronze elevator doors cover the five elevators in the residents' lobby. Additionally, a new canopy over the Witherell Street entrance was built, and the ground floor storefront was replaced with new, brass-clad glazed doors to compliment the resplendent historic character of the building. The Witherell Street lobby serves the residential occupants, while a separate lobby accessed off Woodward Avenue provides entry for commercial lessees.

In 1976, local businessman Michael Higgins acquired the Broderick Tower. Despite a few setbacks over the years, he held onto it and he is still one of its owners, known collectively as Motown Construction Partners LLC, a Michigan corporation formed specifically for the recently completed project.

Despite its long vacancy, the interior of the Broderick Tower wasn't in terribly bad shape when pre-construction services were begun in 2005 for the current project, Rebain said. Kraemer Design worked with the owners and construction team for about seven years from initial design until financing was secured in December 2010, and actual construction started in January 2011. The opening of the Broderick Tower had been highly anticipated in the metro Detroit area, and was viewed as a symbol of the recovery of the downtown and Midtown residential markets, Rebain noted.

#### **COMPLEXITIES AND CHALLENGES**

The Broderick's renovation was a "highly complex process" Rebain said, noting in particular the building's oddly angled geometry and relatively small and somewhat oddly shaped floor plate. Its Woodward Avenue and Grand Circus Park elevations are roughly 65 feet long, while the east and south elevations are approximately 85 feet long, Rebain explained. The Witherell Street elevation follows the curve of Grand Circus Park so it angles slightly toward the northeast. Those issues forced some creative energy as to how to fit in stairwells, hallways, elevators and mechanical shafts. Then the team was left with some different shapes in which to place the apartments, Rebain said. "So the apartments had to be very efficient," he noted. The jobsite is also very tight, and the city's People Mover runs alongside it on Witherell and Broadway Streets. compounding the difficulties in delivering materials, staging and laydown.

Modern electrical, plumbing and HVAC systems were installed throughout the building. The exterior of the building was also completely restored, with all of the original limestone and terra cotta repaired. The mostly window-free east elevation was decorated in 1997 with a 108-foot-tall mural of a whale, done by artist Robert Wyland. The whale mural remains. Among the exterior repairs done on the project was salvaging the decorative limestone on all four corners, many of which had deteriorated badly. The corners were in such disrepair that two large pieces of the limestone corners fell from the 18th floor during a storm due to rusted anchoring and freeze/thaw damage. The task could have been daunting financially, but Akins Construction Inc., Detroit, responsible for masonry restoration and façade work, partnered with masonry repair supplier Helifix of Streetsboro, OH to find a solution that would repair and preserve the deteriorating exterior limestone corners. Replacing them on all 34 stories would have been cost-prohibitive.

Helifix recommended its patented DryFix Remedial Tying system, a pinning and tying system that provided re-connection, stability, and retrofit strengthening to the existing damaged corners on all 34 floors. The helical ties, made from 10mm austenitic grade (304) stainless steel, were installed into the existing masonry, eliminating the need for tear down and rebuild, while retaining the visual aesthetics of the building. Helifix remained on site to assist Akins during the installation of a variety of lengths and sizes of ties, from 10-inch to 15inch. The process involved power-driving approximately four to six anchor ties into position via a small pilot hole. A special installation tool embedded the ties so they were recessed below the outer face to produce an "invisible" finish. The corners had no sound backup anchor stone available, so the ties were anchored into adjacent limestone corners on each side. In addition to securing all four corners of the building's 34 floors, some re-anchoring was done in other areas of the building, as well.

#### WINDOWS ARE 'SIGNIFICANT'

New energy efficient, thermally broken windows were installed the entire height of the 370-foot tall building, with their shape and dimension conforming to the appearance of the original glazing. At floors two, three and four, the original cast iron detailing surrounding the floor-to-ceiling windows was fully restored by creating original molds of the existing details. From these molds new infill pieces were cast from a composite polyurethane material to create a seamless appearance between old and new. Construction Manager J.C. Beal made the molds and installed the replacement pieces.

"It may not be commonly recognized, but windows are one of the most significant features on any historic restoration project," Rebain noted in KDG's July 21, 2011 Newsletter. "The National Park Service has tiaht standards for window restoration/replacement that recommend maintaining existing window sightlines as 'closely as possible'." The extremely deteriorated condition of the existing window components created a restoration challenge, Rebain said, and removing all the windows was also problematic because of the danger of damage to the structural integrity of the building façade, and to the existing plaster and limestone finishes. Since modern windows are manufactured with an aluminum frame that requires more size and depth than the steel windows original to the Broderick, Kraemer Design Group worked with Don Vainer, owner and president of Environmental Glass Inc., Livonia, to find a solution that would satisfy the owner's needs and meet the requirements of the National Park Service.

The solution was to "pocket" the new windows, Traco TR-9700 Historical Profile Single Hung, into the existing frame, which was left in place. All the old windows' components (sashes, balances, pulleys, etc.) were removed, creating a pocket wide enough to permit installing new windows into the existing frame. A panning system was mounted on the interior and exterior to cover the existing frame. Windows in the residential units are all operable; in the Broderick's commercial spaces, the windows are fixed.

Up-to-date mechanicals, large, energy efficient windows, original restored plaster and other details, along with unobstructed views of the city, are just some of the features of the "new" Broderick Tower. The renovation fully adhered to the Secretary of Interior's Standards for the Rehabilitation of Historic Properties, Rebain said, and the project received both state and federal historic tax credits. The completeness of the 2012 renovation makes it easy to feel that the Broderick will go forward with the City of Detroit for the next 85 years, and beyond. Hopes are high for the same optimism that is enveloping the Broderick will shine on the city, too.®



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