



The Kenwood Collection: From Rust To Gold

Build Ohio Awards 2017
New Construction Over \$30 million

TruePoint® **Messer**
WeAreBuilding.

Excellence in Project Management



From rust... to gold!

The difference is night and day.

The Kenwood Collection is an unparalleled mixed-use development in Greater Cincinnati. But this wasn't always so.

The project **began more than 12 years ago** by a different owner, designer, contractor (NOT Messer), and vision. Sadly, it became a case study in construction litigation after contractors walked off the project 2008 after not being paid.

The project stalled for five years. The rusting hulk of unfulfilled promises sat exposed to the wind, rain, snow and sun for more than five years. Waterfalls cascaded down eight stories of abandoned steel. Each passing day made the building more of a fire hazard and threat to the public.

Tenants in the finished portion of the building suffered because people kept away, not knowing the status of the unfinished behemoth.

Its visibility on I-71, with 100,000 people seeing it each day, would normally be a benefit in a business that is all about location, but in this case, its prominence became a curse. It was a daily visual reminder of the **ravages** of the Great Recession.

The project became **infamous** and fell under public **scrutiny**, with more than 300 stories written about it in the Cincinnati Business Courier alone.

During foreclosure litigation, **the court-appointed receiver hand-picked - without competition - Messer** to correct safety deficiencies and make the necessary repairs and improvements to keep the existing tenants open for business.

Finally, in 2014, under a new developer, Phillips Edison & Company, Messer lead the way as construction resumed on The Kenwood Collection. **Messer inherited 169 open permits** from authorities having jurisdiction in Hamilton County. Messer worked closely with Hamilton County to closeout previous permits and completed the work associated with the 165 new permits that were needed based on the revised project scope.

Messer completed more than **1.54 million sf** of development. This scope included 280,000 sf of lifestyle retail space, 280,000 sf of class A office space, and a 2,250-vehicle parking garage with an 860-vehicle surface parking area. Messer quickly discovered that the existing parking garage had incomplete work which created what was essentially a punch-list with over 700 items.

The Kenwood Collection was completed in March 2016 and was renewed to the high-end office and retail space that it is today. The Kenwood Collection symbolizes the confidence of the Cincinnati economy being restored to the people of the Tri-State area. **It is also a testament to what is RIGHT in the world** - like a phoenix rising from the ashes, the Kenwood Collection gave new life to office tenants searching for a home, retailers searching for a marketplace, and, perhaps most important to the AGC, second chances for the contractors who began the work in 2007 to return and finish what they started. With an ethical developer and CM at the helm, we ensured human beings were compensated for their business expenses, their talent, and their **passion** to do what we do - BUILD!

Excellence in Project Management



COST

In order for Phillips Edison to be able to make the project meet their pro forma, Messer had to budget several design scenarios while working closely with the architects, engineers, and owner's representatives. Phillips Edison engaged Messer in 2012 to provide a feasibility study to determine the cost of the project. Phillips Edison used this information to define their maximum bid at the sheriff auction.

After the final design was established and the budget determined, it was up to the project management team on-site to bring together the subcontracting team they believed would be best suited to complete the work on time and budget. Messer received accolades from Phillips Edison when the project was brought in on time and **under budget**.

Through cost analysis and value analysis during preconstruction, **Messer was able to save Phillips Edison more than \$10.5 million.**

QUALITY

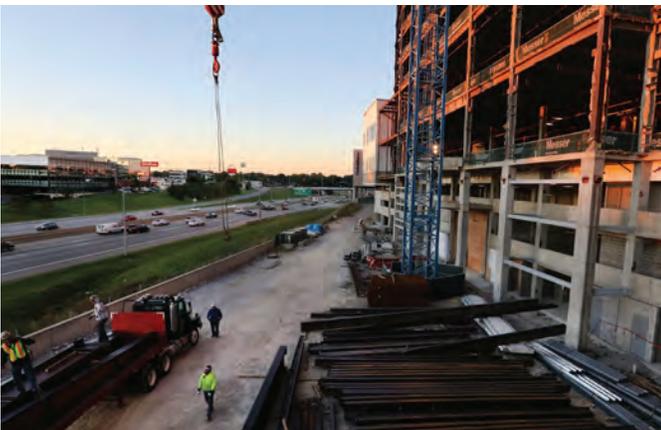
You will read in other sections how quality was ensured via innovations such as point clouds, laser scanning, BIM, Latista, and Messer's proprietary Quality Leadership System with its three-phase inspection process. This was especially important to be able to rescue this building, given **Messer directly managed 131 subcontracts.**

SAFETY

The Kenwood Collection project met all safety goals, with zero accidents or incidents for all construction workers, visitors, and tenants. Recall, retail tenants from the failed first attempt of this development endured the five-year construction stall and the subsequent rescue of this building.

SCHEDULE

After years of delays, after Messer was brought in to finish the development, everything was **completed on time.**



Meeting the Challenge of a Difficult Job



Existing Conditions Analysis Case Studies

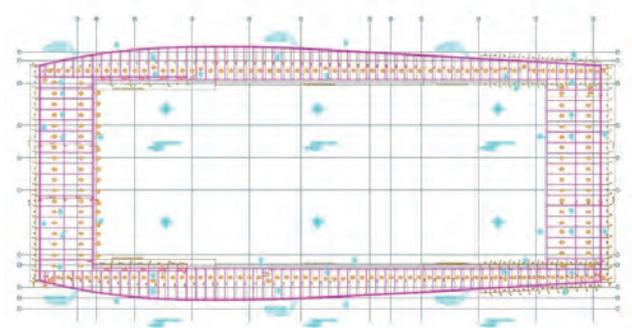
The Iconic Roof at The Kenwood Collection is one of the best examples of Messer's ability to influence modifications for exact fabrication and installation. Our team performed an as-built survey of the existing structural steel framing for the Iconic Roof to identify the future location of metal stud framing to which metal panels would be attached.

The goal was to expedite roof installation to speed up interior fit-out while also ensuring metal framework would properly receive the metal paneling system.

For this portion of scope, Messer field engineers utilized the reflectorless function of our Topcon robotic station to collect data (x,y, z) on the outermost edge of the perimeter. This scanning is a service Messer provides in-house to ensure quality, drive schedule, and control costs. The data acquired was exported into CAD and overlaid onto the metal panel shop drawings.

Messer involved various entities in this process:

- SOFCO Erectors was the structural steel erector.
- Valley Interior Systems executed exterior studs and drywall.
- Spohn Associates, Inc. was the local panel supplier, using SoboTech Architectural Wall System Solutions. Spohn furnished us our team with metal panel shop drawings, which inserted into our existing .dwg file.
- AGM Company, Inc. served as the installer.



- The roof steel was designed on a compound radius (curves were both horizontal and vertical), portions of which extended beyond penthouse and building footprint. The radii were mirrored from the east to west elevations.
- Cold-formed metal stud framing and exterior board were fastened to perimeter steel framing. Insulated panels were installed to stud framing with 1" clips. Vertical panels were 59 1/2" wide, spaced 5/8" apart and had to align with horizontal soffit panels.

Meeting the Challenge of a Difficult Job

Our survey was executed in the middle of winter, exposing steel to sub-zero temperatures and constant movement due to wind. Accounting for the impact of these environmental factors, our team repeated many of our scans to establish a mean for the data acquired and delete outliers and potential errors that would negatively impact the project.

Field Engineering Services (FES) overlaid the design data onto the existing data and determined the extent of deviation. The findings were the proposed radii differed by several hundred feet, causing a shift in framing that would inhibit the designed 1" clip assembly. Based on these findings, the as-built drawing was used to change the design, ensuring it would mitigate the existing conditions.

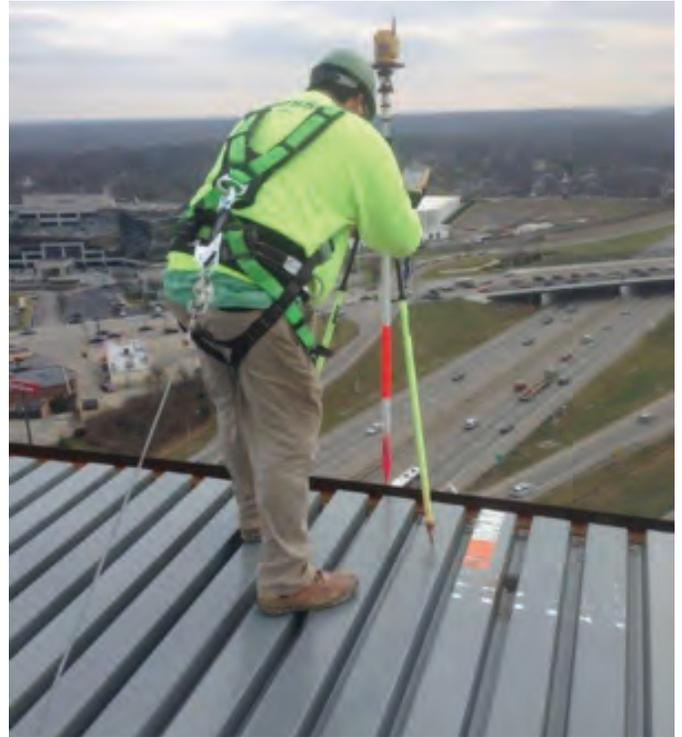
Messer knew we had to do something different in order to complete the project on-time. Thus, we included this as-built data on the metal panel shop drawings, and stamped them "Approved for Fabrication."

Typically, ALL of the framing has to be complete before the metal panel manufacturer comes to the project for field measuring. Those dimensions are then added to a revised set of shop drawings, then submitted to Messer for review and approval.

However, by challenging the original process and taking an alternative approach, the Messer team saved 12 weeks on the project schedule.

To expedite dry-in, metal panel fabrication and metal framework installation occurred simultaneously. To ensure the exact location of the metal framing, FES located an offset point every 59 1/2" with a distance to face and height of metal framework.

The panel installer estimated 45 days for completion of this scope of work. **The Messer team's planning and execution ensured installation was completed 23 days early** with zero panels requiring modification in the field and zero panels needing to be reordered due to deficiencies.



"I had the pleasure to walk the Iconic roof area last Friday with Todd Dunaway. In my thirty years, I don't think I have ever seen anything this complicated and logistically challenging go so smoothly. We here at Valley sincerely appreciate the Messer team's forethought, coordination, and continued support throughout this process.

Without this support, the success we are seeing would not have been possible."

Mr. Darrell Taulbee
Project Manager
Valley Interior Systems

Meeting the Challenge of a Difficult Job



Addressing a Site that Sat Unmaintained for Years

- Executed mold remediation and asbestos inspections.
- Concrete maintenance involved addressing the fact original connection details were installed incorrectly causing large spalls in the concrete walls. Additionally, under-vibrated pours caused honeycombing in the bottom of the slabs. Messer engaged structural engineering firm Schaefer in the process as we completed more than \$1 million worth of repairs necessary to open the garage to the public.
- All expansion joints had to be removed and replaced.
- Fireproofing was incomplete and needed to be addressed.
- The existing stairwell steel was so rusted a majority had to be removed and replaced.
- Concrete Slabs poured during/before rain had to be leveled, skimmed, bushed down, etc.

Design Changes

- To create a two story office entrance lobby in the garage, Messer engineered and designed a plan to use insulation to slope the floors and pour concrete, using minimal ramps for office space while removing the need for stairs to meet disability needs.

Penthouse Modifications to Add an Additional Tenant

- Originally designed to be a mechanical penthouse. However, the tenant wanted a mezzanine inside the 26' structure
- Since the entire area was closed in, Messer used buggies to bring concrete into the building and up the elevator to the top floor to pour a small slab on 3 consecutive nights. This work was executed on this schedule to accommodate the office building's daily operations.
- Steel was lifted from East façade and placed on only portion of roof not covered by metal panel roof above. Additionally, the team reused existing studs from the lantern wall to minimize cost of structural framing for 11 new window openings on North elevation.

Creating the New Plaza

- Removed two retail floors and the above-roof structure to create the new plaza and convert interior space into the exterior plaza.
- Removed and replaced existing indoor escalators with exterior escalators.
- Developed early schedule that allowed time for slab curing prior to placing waterproofing membrane above garage and retail areas.
- Enlisted paver company to accommodate needs for sloping and cost savings (brick/sand/insulator/filter fabric in lieu of pedestals and granite)
- Added structure to hold new planters, fire pit, and fountain.
- Executed addition to lagging wall to meet new grade elevations between garage retaining wall and on-grade parking lot slab.
- Put in place a green roof to improve aesthetics from office tower view above.

Innovation in Construction Techniques / Materials

Laser Scan to BIM

In an effort to mitigate the risk involved with existing conditions analysis and the transition of the building, Messer advised the Owner, Phillips Edison and Architect, BHDP to consider 3D laser scanning and BIM utilization. By scanning over two-million square feet of office tower, retail, parking garage and site, a model based on real time point cloud enabled Messer to process an accurate Revit model of the existing space.

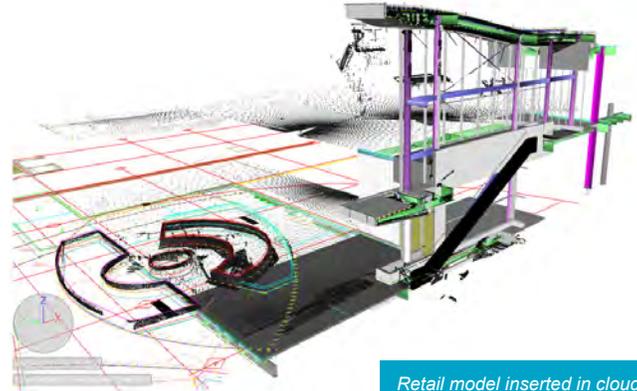
This laser scan not only saved the owner a significant amount of money from the very beginning, but also set the team along the path of transforming this mess of a structure into first a safe, and then iconic building.

From the model, autocad .dwg's and 2D PDF's were produced, replacing original proposed documents with field verified dimensions. This new process gave us an increasing confidence that countless design changes would work through the building's evolution. We were sure the building couldn't be built exactly as planned, and now we had an exact evaluation.

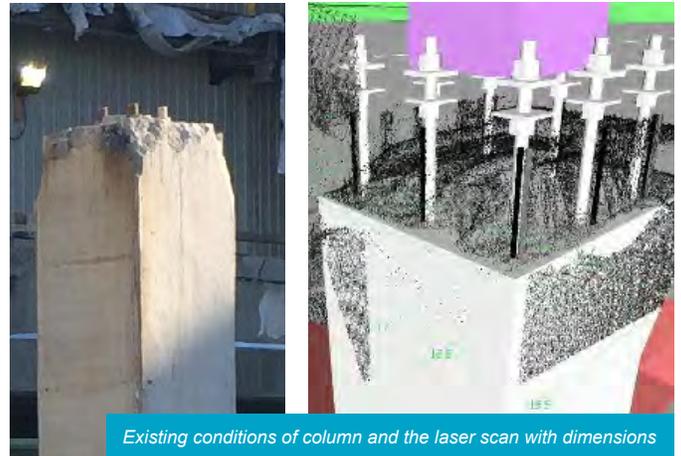
Some of the benefits of point cloud analysis include: detention pond quantity, stair, elevator and escalator shaft alignments, structural steel tolerances, exterior framing, cladding, mechanical coordination and curtain wall systems. Messer maintained a uniform grid on every elevation, from which we compared "proposed" to "actual" (x,y,z) dimensions. Our grid orientation was used to deliver shop drawings in an "as-built" format. Shop drawings were inserted into the model to generate a "best fit" for building components prior to submitting. Contractors installed their products at a very high rate of efficiency, reducing field alterations, while saving both time and money.

The scanning aspect allowed a safe way to measure inaccessible objects with millimeter accuracy; eighth-floor top of steel elevations for framing connections and fifteen floors of elevator analysis for eight shafts for measured with the scan. Through reliance on the model-based element, tape measuring and human error was reduced, as well as the administrative time associated with processing requests for information, submittal approval and change orders. For example, not one panel from the iconic roof had to be cut, because we guaranteed dimensional changes to the model, generated by our field verifications. The cost avoidance impact of our integrated scan-to-BIM work flow saved the project an estimated 5% of total contract amount.

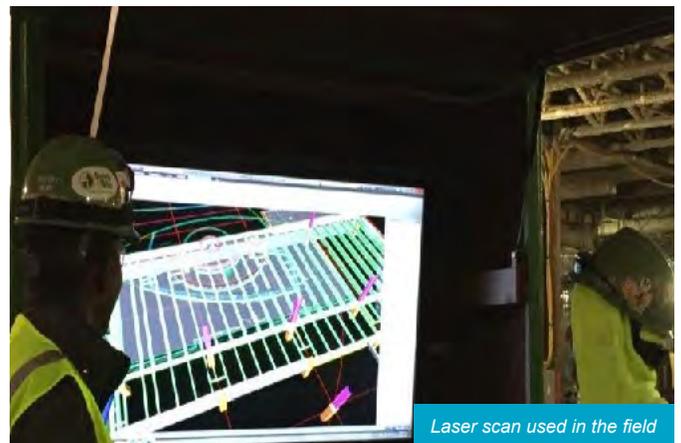
Proactively planning scan to BIM applications enabled Messer to deliver an extremely complicated project, on time, to a very satisfied Owner.



Retail model inserted in cloud



Existing conditions of column and the laser scan with dimensions



Laser scan used in the field

Excellence in Client Service

“Congratulations to all. PREP’s vision has resulted in a landmark building, Messer demonstrated once again why they are **the gold standard** of regional GC/CMs and BHDP and their consultants demonstrated exceptional professional competence and customer service.”

Louis Gibb, LEED AP

RDA, Owner’s Construction Representative for the Kenwood Collection

Successfully completing this ambitious project required our team to be laser focused on providing our clients exceptional service. This building had many constituents including the developer, office and retail tenants, financial institutions, local and state governments, legal entities and subcontractors. Many of their logos can be found on this page. Messer went above and beyond the call of duty to ensure all of our clients were satisfied.

Providing a Safe Environment

Messer is committed to creating and maintaining a zero injury culture. Managing the construction of the Kenwood Collection was no different. Our team continually communicated and coordinated with the existing tenants (Mitchell’s, Crate & Barrel and The Container Store) during construction to ensure a safe environment for their employees and patrons.

Office and Retail Tenant Fit-outs

Creating spaces for tenants that matched their needs and the existing building posed a unique challenge. Messer created a process to review original tenant work letter requirements prior to leasing agreement terms. When the tenant work letters (or TWLs) were signed, Messer reviewed the letter, establishing costs budgets and worked with the designers to double check that all items were included into the drawing sets.

Large tenant changes included:

- Recreating a loading dock to meet tenant needs and providing a new dock for additional tenants.
- Creating a gym space on the second floor directly underneath office space, a salon and retail stores. Engineers had to add special acoustical ceilings and structural components so tenants underneath would not be effected by the noise and vibration of the gym.
- Creating new storefronts for all tenants.
- Providing grease interceptors in a garage five floors below the tenant space.
- Overhauling ceilings to accommodate hundreds of new penetrations for a grocer tenant’s sanitary and grease needs

Doing the Right Thing

When the original developer of the project went bankrupt and construction activities halted, it created Ohio’s largest construction default. Subcontractors on this project either lost money or went out of business entirely.

When Phillips Edison Real Estate Partners and Messer teamed to bring the abandoned building back to life, they tried their best to reengage contractors who worked on the original project. Architectural Glass & Metal Co. and George Steel Fabricating were two of such companies. As Mark Wilhoite, Chief Development Officer of PREP said, “We tried to make as much of that right as we could.”

