Extensive Renovation Restores Cincinnati Landmark

2-year, $143-million project rebuilds Cincinnati Music Hall

By Tom Renner

Figure 2 - The roofing project included seven double-leaf smoke vents manufactured by The BILCO Company. The vents are designed to open in an emergency to allow smoke and gases to escape, and aid firefighters in their containment efforts. Photo by Imbus Roofing.
When architect Samuel Hannaford designed Cincinnati Music Hall in 1878, he paid extraordinary attention to detail in creating a structure that has become a national landmark and regional treasure. While Hannaford’s original design was noteworthy, recapturing the architectural detail and splendor of the Music Hall more than 130 years after its original design proved to be a labor-intensive, lengthy, and challenging process.

Cincinnati Music Hall, also known as Music Hall, reopened in October 2017 after a two-year, $143-million overhaul. The renovation added more than 31,549 square feet and required a full facility shutdown for more than 15 months. The project included renovations to its centerpiece, Springer Auditorium, along with exterior improvements, seating that decreased capacity but increased comfort, and added code-compliant accessibility for people with disabilities.

“It used to be so long and narrow and cold,” architectural historian and longtime patron Walter E. Langsman said in an interview with the New York Times in October 2017. “It embraces you now in a way that it never did.”

Among the challenges the construction teams faced was the installation of a new roof on the hall. Weather and age had considerably damaged the sandstone finials, and Imbus Roofing went to unusual lengths to match the shingles of the previous roof. The company had installed the most recent roof on the building in 1988. “It required a lot of planning,” said Andrew Imbus, project manager for Imbus Roofing. “Roof replacement was an important part of the project for protecting the interiors and for the overall look of the building. Since it’s an older building, and with all the other work being performed, such as painting, masonry, and HVAC, we had to plan the work very carefully.”

DIVING DOWN TO THE TINIEST DETAILS

Before the reconstruction, visitors looking at Music Hall’s gable peaks detected damage to the finials. Hannaford’s designs had been lost over time, and Thea Tjepkema, a board member of the Society for the Preservation of Music Hall (SPMH), zoomed in on historical photographs to find four unique designs for the finials. SPMH
hired EverGreene Architectural Arts to prepare replacements, and FARO Technologies used high-tech 3-D scans to measure the finials to as close as one-eighth of an inch. EverGreene also used photographic research to design the missing metal cresting pinnacles on the roofline.

Imbus and his team faced their own set of challenges. One of the primary tasks was ensuring safety of workers and setting up scaffolding. “The steep slope of the roof was a big challenge,” Imbus said. “Getting the entire work area scaffolded and creating safe working conditions took time. Because there was so much going on, we had to open up the framing and get it watertight within a day.”

Music Hall’s roof soars 80 feet high at some points, and Imbus said his team had to work quickly because of ongoing work in Music Hall’s interior. He also had to find replacement shingles that mirrored those of the past roof to preserve the historical appearance of the building. Working with PWWG Architects, Midwest Roofing Supply, and 3CDC, Imbus Roofing installed approximately 600 squares of CertainTeed’s Grand Manor shingles in Stonegate Gray and Brownstone.¹

The roof also required new double-leaf smoke hatches, manufactured by the BILCO Company of New Haven, Connecticut. In addition, Imbus’s team installed seven DSH Automatic Smoke Vents. The vents, which measured 66 by 144 inches, are among the largest smoke hatches on the commercial market.

The smoke vents include a Thermolatch® II positive-release mechanism that ensures reliable vent operation when a fire occurs. The vents automatically release upon the melting of a UL-listed 165°F fusible link, and a curb-mounted fusible link allows the latch to be easily reset from the roof level. The vents are fully insulated and gasketed for weathertightness. The vents are hard-wired to the fire suppression system and open electronically if the sprinkler system activates. Corken Steel, the local distributor of the smoke vents, and BILCO representative Joe DeFrain of Welling, Inc., worked with Imbus in procuring the roof hatches. The vents were installed above the main hall, Springer Auditorium, and are designed to open in an emergency to allow smoke and hot gases to escape. That allows better visibility and breathing conditions for audience members and performers to evacuate safely.

The existing smoke vents had been nearly 50 years old, Imbus said, and were larger than the BILCO vents that his company installed. “They allow for the same amount of ventilation as the previous vents, which is all based on fire codes,” Imbus said. “These were the safest solutions for this project.”

REDUCING CAPACITY AND WIDENING AISLES

The improvements reduced seating capacity at Music Hall by as much as 1100 seats. Previous capacity at Music Hall had reached 3417, but the current configuration includes seating for 2263 to 2254, depending on the requirements for the event. Accessibility and sightlines were improved, and seats increased in width from 19–21 to 20–23 inches. The distance between rows also increased, from 33–35 to 35–36 inches. A new stage lift system makes for flexible seating arrangements, depending on the company performing at the auditorium. Music Hall is the home of the Cincinnati Symphony Orchestra, but it is also home to the Cincinnati Opera, Cincinnati Pops,

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Cincinnati Ballet, and the May Festival, the longest-running choral festival in the Western hemisphere.

In addition, the renovations made the building compliant with the Americans with Disabilities Act, with increased wheelchair-accessible seating in prime locations, easier movement between floors, motorized wheelchair charging stations at some seat locations, and new elevators that permit access to every floor. The previous building was constructed before the ADA, most restrooms were inaccessible for physically challenged patrons, and wheelchair guests found it difficult to navigate between floors. Two new fast-traction escalators will make it far easier for patrons with disabilities.

Historical Notes on a Cincinnati Treasure

- Music Hall was recognized in January 1975 as a National Historic Landmark by the U.S. Department of the Interior.

- “Fanfare for the Common Man,” written for the Cincinnati Symphony Orchestra by Aaron Copland, is often used in movies, television, and as an introduction for some sports teams.

- Samuel Hannaford, who also designed City Hall in Cincinnati, served as the architect for more than 300 buildings, and his residential designs appear throughout New England, the Midwest, and South in the United States.

- The May Festival Chorus was the first event held at the Music Hall, which was dedicated on May 14, 1878, the first day of the concert.

- The Cincinnati riots of 1884 began at a protest meeting at Music Hall, with citizens upset at what they believed to be a corrupt legal system. About 10,000 Cincinnati residents marched to the courthouse, and 56 people died in the violence.

Figure 3 – Imbus Roofing used shingles that mirrored those of the past roof to preserve the historical appearance of the building. Photo by Imbus Roofing.
All events in Music Hall are now fully accessible, and improvements included assistive listening devices to enhance the sound quality of performances for hearing-impaired guests. Special seating is also available.

The auditorium will also include a new stage lift system, and acousticians conducted extensive testing to make certain Music Hall’s natural sound was more immersive and evenly distributed to every seat in the auditorium.

Music Hall’s second floor added more than 11,000 square feet with a new flexible rehearsal/event space that includes a high ceiling, exposed brick, a spring floor for dancers, and its own lobby and dressing rooms. The space had previously been a non-public space that had been used for everything from professional boxing matches to basketball games hosted by the University of Cincinnati in the late 1940s and early 1950s. Music Hall was the center of Cincinnati’s boxing universe around 1920, and the facility also hosted political conventions and concerts. Music Hall hosted the 1880 Democratic Convention.

The facility also includes Corbett Tower on the third floor, which is used for events such as weddings, receptions, dinners, and parties. It has seating for up to 200 people.

When SPMH historian Tjepkema researched the history of the room, she found its original ceiling height reached 21 feet high. A drop ceiling installed during a renovation from 1968–71 accommodated air conditioning ducts. When workers in the latest renovation removed the drop ceiling and wall board, Music Hall officials discovered original stenciling believed to have been done in the late 1800s. The condition of the walls and stenciling prevented restoration of the design, but EverGreene, with funding from SPMH, determined the original colors and stencils of the patterns and design were recreated in the room.

Another available rental area is Wilks Studio, which also has seating for up to 200, and is used for weddings, receptions, and other social gatherings. Taft Suite is a new event space that can seat up to 50 for smaller events.

Music Hall also includes a 15,000-pound rose window designed by Hannaford. The large, circular, wood-stained glass window is constructed of iron and is a symbol of the Gothic architecture often used in churches throughout Europe. The rose window’s black brick pattern and original color were restored during the renovation.

Music Hall’s renovations are part of an investment by Cincinnati to improve the “Over the Rhine” neighborhood and Washington Park, which sits adjacent to the Hall.

“We’re proud that we were able to be a part of it,” DeFrain said. “We’re a family-run business and people in our organization have been around Music Hall for generations. We appreciate the opportunity to have an impact on the building and our city.”

EDITOR’S NOTE
Imbus Roofing Co. Inc. received the Asphalt Roofing Manufacturers Association’s (ARMA’s) Gold Quality Asphalt Roofing Case-Study Award for its roof installation on this project.

Tom Renner, an award-winning former journalist, writes frequently on building, roofing, and construction trades. He is a former newspaper editor who worked at publications in Pennsylvania, New York, and Connecticut.

Which Side of the Envelope Does One Open?

This upside-down house in Szymbark, Poland, was designed by Polish businessman and philanthropist Daniel Czapiewski and was originally created as art, meant to represent the communist era in Poland.

The structure, completed in 2007, took about five times longer to build than a conventional home, as tradesmen became disoriented while working inside it. Tourists also experience disorientation after just a few minutes inside the strange dwelling.

The house is entered via a roof window, and once inside, occupants walk on the ceilings. Internally, it is furnished as it would have been during the communist era. The TV even broadcasts propaganda typical of the period when the country was “turned upside down” as communist rule came to an end.

Check out this video: https://www.youtube.com/watch?v=likkjoHppNo.