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Love Story:

A 250-year-old Resort Is Updated while Preserving the Emotional Connections to Its History + More Hospitality & Entertainment Projects

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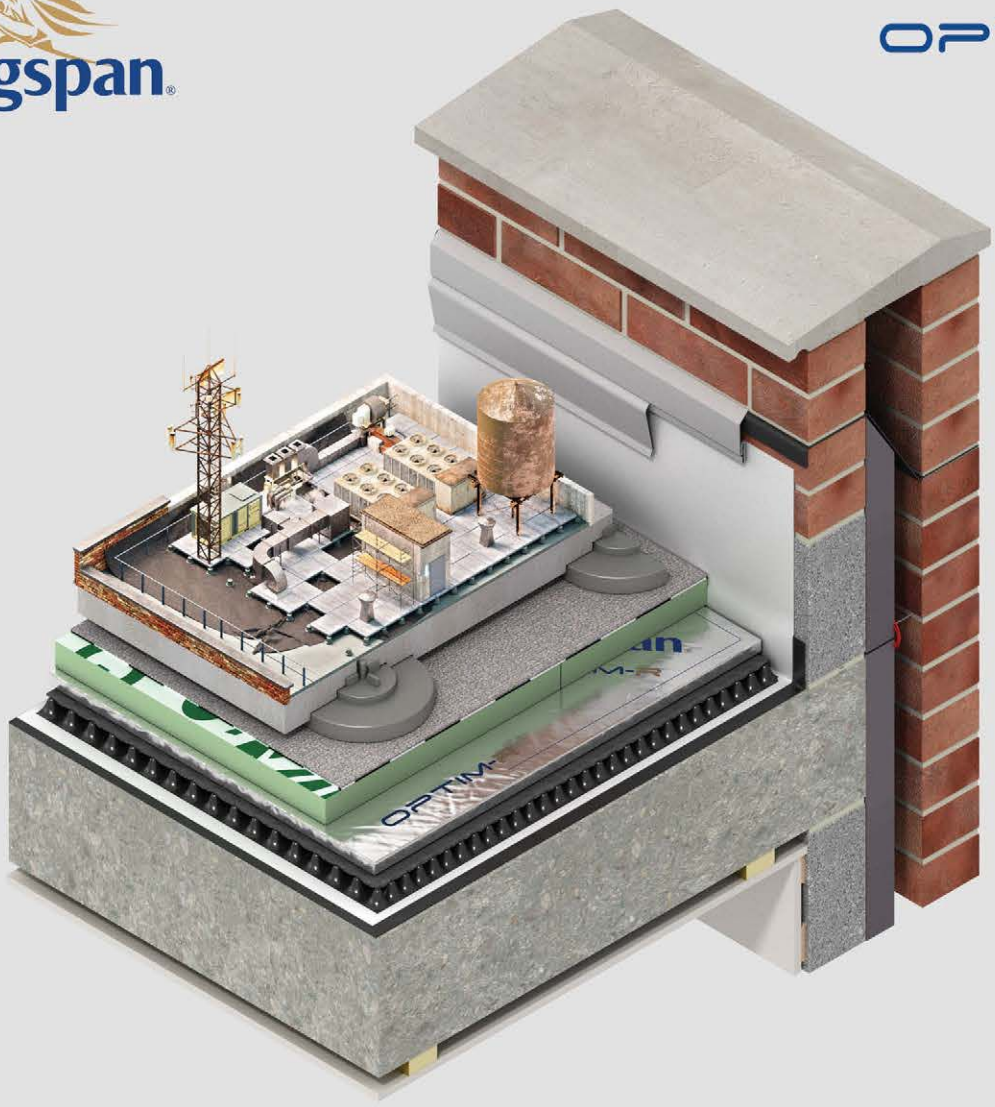

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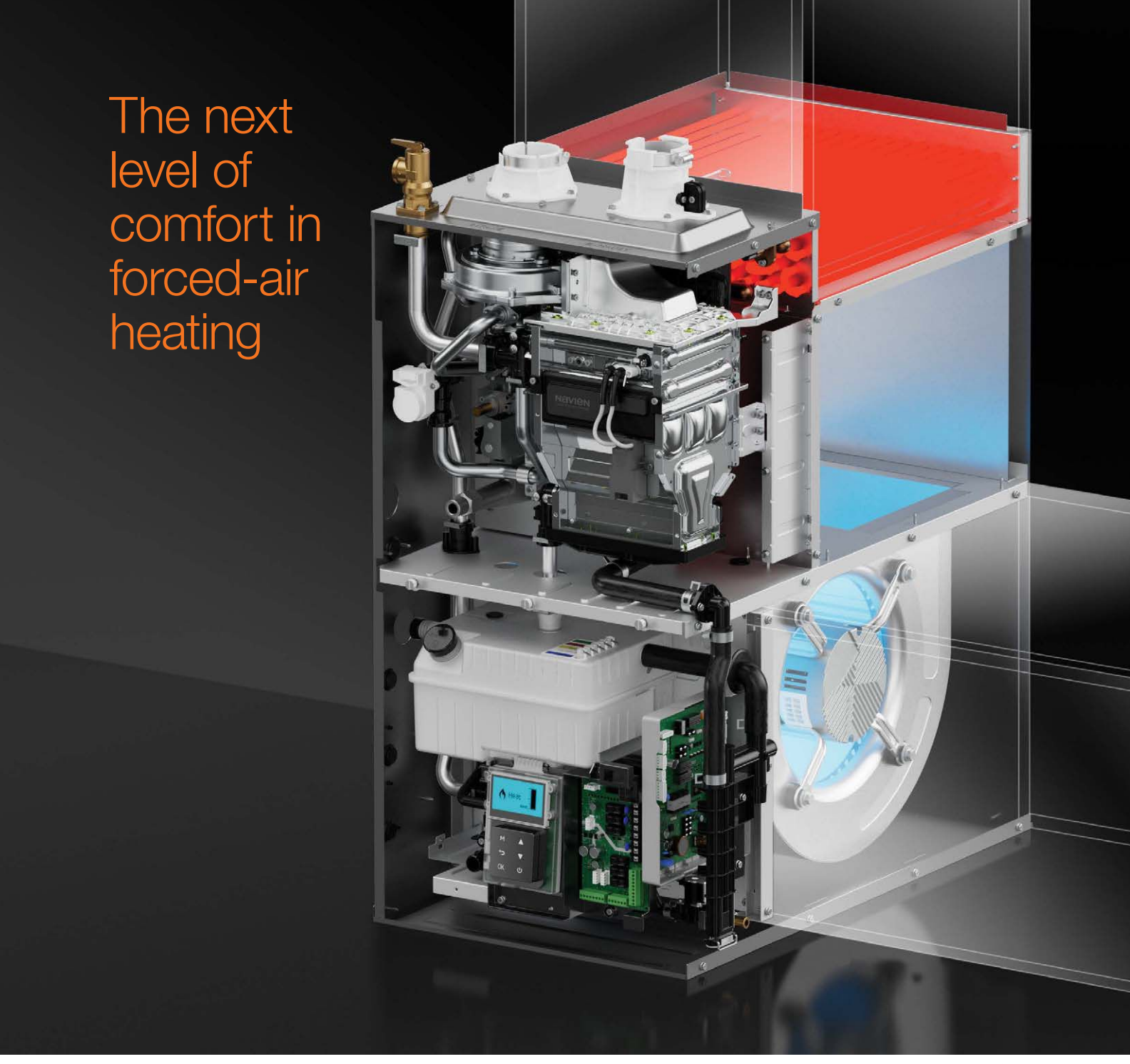

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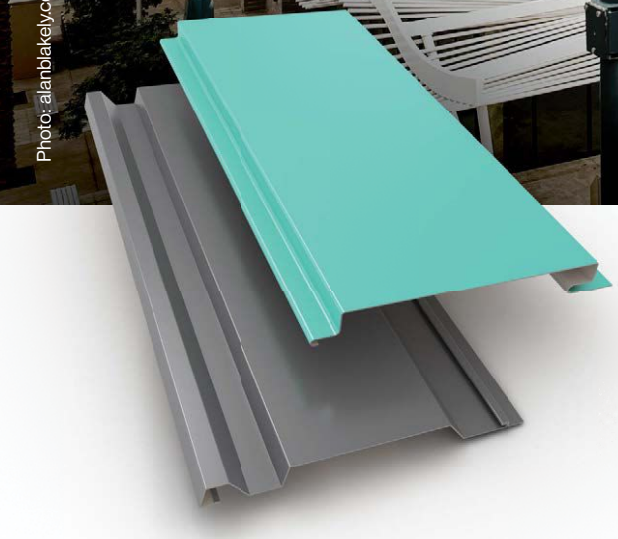

Colorful metal panels mimic signature sculpture

Parc Haven features industrial-style PAC-CLAD Highline B2 metal cladding that references the adjoining train tracks. A punch of colorful Flush panel highlights nod to Symphony Park's Pipe Dream sculpture sited directly across the street.

View the case study and video

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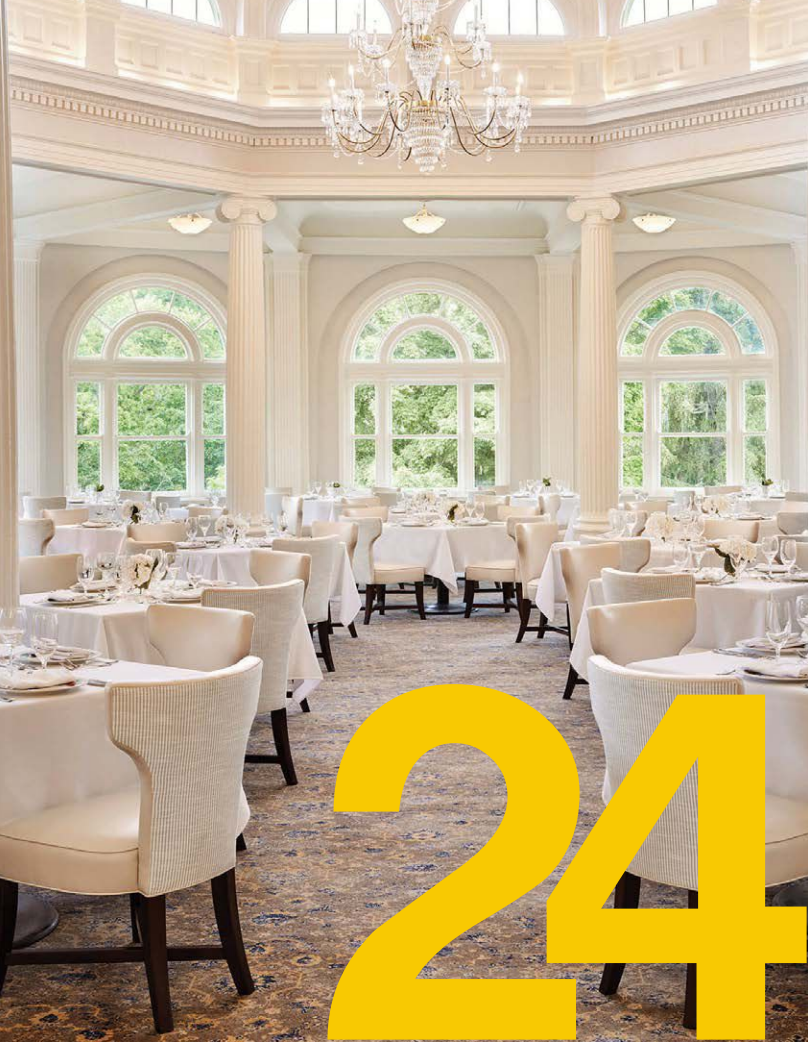
Parc Haven, Las Vegas Installer: TLC Roof Services Architect: CallisonRTKL Profiles: Highline B2, Flush, 7.2, Snap-Clad Colors: Musket Gray, Berkshire Blue, Patina Green



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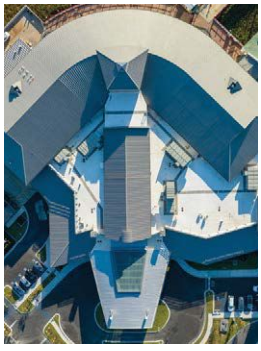
THE REBIRTH OF AN OLD LOVE

A 250-year-old resort in Virginia is updated while preserving the emotional connections to its storied history.



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PERUSE HOSPITALITY AND ENTERTAINMENT FACILITIES FROM ACROSS THE U.S.:

- Luck Ranch Opry House and Saloon, Spicewood, Texas
- Waterloo Park, Austin, Texas
- Queen Casino, Baton Rouge, La.
- Nimoy Theater, Los Angeles
- David Geffen Hall, New York
- AVA Rooftop Bar, Nashville, Tenn.
- Dave's BBQ Bar, Middleborough, Mass.
- Partake, Long Beach, Calif.

cover

COVER PHOTO: **COURTESY OMNI HOMESTEAD RESORT**

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INSIDE THIS ISSUE

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THE STRENGTH OF A TEAM

Thinking back throughout my life, the times I accomplished the most or believed I was most successful were times I was part of a great team. I didn't want to be the cog in the wheel that failed everyone, so I'd work harder, longer, smarter to ensure my entire team was productive.

For example, I loved volleyball in high school, but I wouldn't say I was a great volleyball player until I got to college and found the team that built up my confidence. Those ladies knew how to support my weaknesses, so all our differing abilities could shine together. I believe I was better because of them.

I felt that spark again while watching the Iowa Hawkeyes Women's Basketball team this year. I've always been a Hawkeye fan (I'm originally from Iowa), but basketball (women's or men's) was not a sport I really watched. That changed with Caitlin Clark and that amazing team of women. There's no denying Caitlin is special—who wasn't thrilled by those from-the-logo 3s?!—but Caitlin needed that entire team of incredible ladies who were awe-inspiring together.

In this issue, we highlight some amazing design and construction teams who came together to solve problems, save buildings and even maintain emotional connections. For example, in "Energy", page 20, the facilities team at Ruby's Inn, Bryce Canyon, Utah, had too many guest complaints about insufficient hot water and spent too much time driving the property ensuring boilers were working. By researching options, ultimately deciding on propane-powered tankless water heaters, and entrusting the water-heater manufacturer to complete its largest commercial retrofit ever at Ruby's Inn, the facilities team eliminated 5,200 metric tons of CO_2 equivalent. Wow!

Across the country, in the mountains of Hot Springs, Va., sits the 250-year-old Omni Homestead Resort, a National Historic Landmark that has been a favorite among 23 U.S. presidents and generations of families. The $140 million full-property renovation not only needed to respect the resort's history but also take into account the deep emotional connections guests, employees and locals have with the property. Read in our "Cover Story", page 24, how the architect WATG and its interior design studio Wimberly Interiors honored the resort's past while introducing contemporary elements. Truly inspiring!

Meanwhile, the design team of Dewberry, JLK Architects and Thornton Tomasetti was challenged with evaluating the original terra cotta on the Big White Store, which was constructed in 1904 in downtown Peoria, Ill. The former department store was being upgraded to become the headquarters for a non-profit health-care provider, but the building envelope needed to provide thermal comfort and performance for occupants. The team's use of modern materials and analysis returned the building exterior to its early splendor while maintaining its 120-year-old theme of innovation. Amazing! Read all about the exterior upgrades in "Component", page 50.

All the features in this issue underscore that teams in the working world can have that same "sparkle" sports teams share when they have a common goal, solid leadership and the appropriate motivation.

Christina Koch

CHRISTINA KOCH
Associate Publisher/Editorial Director
retrofit

***retrofit* Has Launched a Podcast!**

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CONTRIBUTING WRITERS

At the onset of a historic renovation project, it is vital that thorough research takes place to ensure that the building's historical context is respected, appreciated and maintained wherever possible. **Lisa A. Haude**, senior vice president and director of Interiors for LK Architecture, shares her historic-preservation approach and process on The Roosevelt New Orleans, A Waldorf Astoria Hotel, in "Business", page 16.

Jim Bunsey, senior manager, Safety and Compliance, at the Propane Education and Research Council (PERC), had the pleasure of bestowing PERC's Energy for Everyone Hero Award to the team at Ruby's Inn in Bryce Canyon, Utah. Bunsey writes about the inn's commitment to sustainability and its use of propane as a reliable energy source for enhanced customer satisfaction in "Energy", page 20.

Liana Hawes Young (left) is associate principal and creative director and **Laura Smiros** is senior project architect with Wimberly Interiors and WATG, respectively. The pair write about the $140 million full-property renovation that took place at the 250-year-old Omni Homestead Resort, a National Historic Landmark in the scenic mountains of Hot Springs, Va. Read about how the extensive restoration honors the resort's past while introducing contemporary elements in our "Cover Story", page 24.

Rachel Michelin, AIA, LEED AP BD+C, is a principal and Chicago co-office director at Thornton Tomasetti. She leads an architectural group focused on building envelope improvements and renovation projects for the firm's Renewal practice. Michelin's team was challenged with evaluating the original terra cotta and improving the exterior envelope performance of a 1904 building in downtown Peoria, Ill., that was being upgraded for a non-profit health-care provider. Read how modern technologies were utilized in "Component", page 50.

Michael Brookshier, vice president of Development for Keystone, shares the story of Hotel West & Main in Conshohocken, Pa., a 127-key Tapestry Collection by Hilton hotel that includes a 146-year-old firehouse as its grand entrance. The firehouse connects the hotel to its community and provides a sense of place for visitors. Read the story in "Transformation", page 56.

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THE ART OF BLENDING HERITAGE AND MODERNITY

The Roosevelt New Orleans' Interior Design Tells the Story of Its Past, Yet Offers Contemporary Comforts

WRITTEN BY | **LISA A. HAUDE**

PHOTOS: **COURTESY THE ROOSEVELT NEW ORLEANS, A WALDORF ASTORIA HOTEL** unless otherwise noted

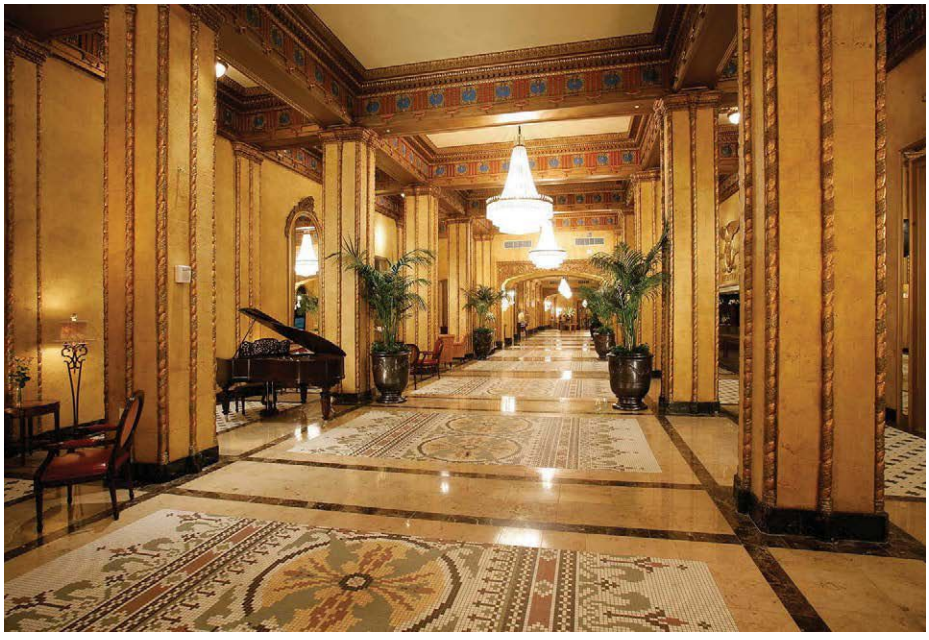
HISTORIC/BEFORE PHOTOS: **COURTESY THE MUSEUM OF YESTERDAY**

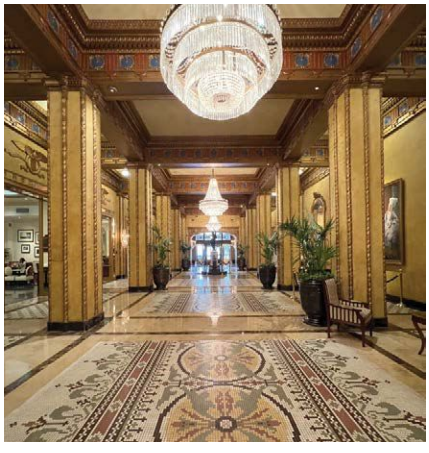
Every building has its own architectural and design heritage that serves as a link to the past, reflective of a specific region and cultural identity. As architects and designers, diving into the restoration and preservation of historic properties grants us a distinct privilege—a chance to weave the rich legacy of a building's past into the very fabric of its narrative. During these projects, designers become storytellers, blending a building's history seamlessly into creative designs.

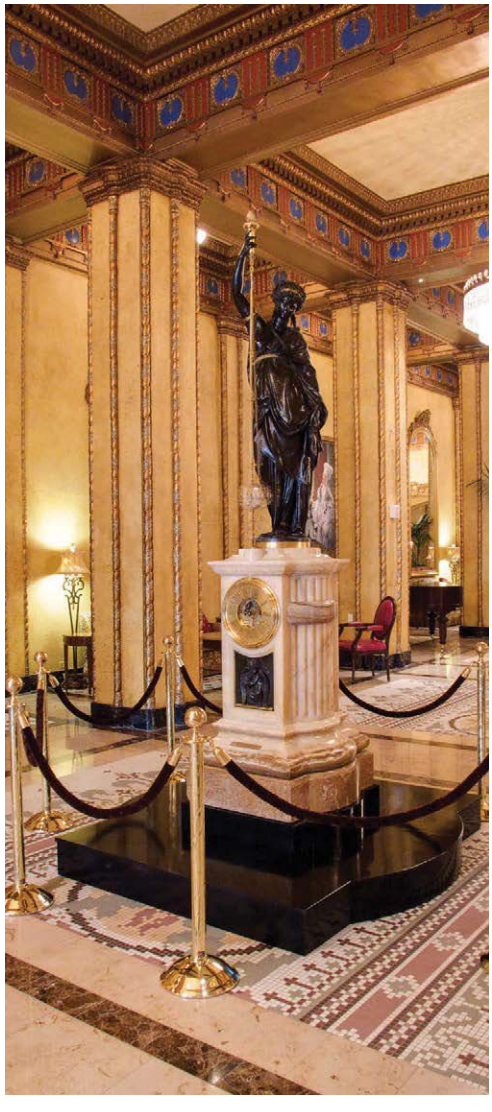
When it comes to hospitality, heritage preservation helps tell a property's story to guests. By preserving a building's historical elements and harmoniously integrating contemporary design elements, these spaces become more than just places to stay—they become immersive experiences that connect visitors with the surrounding community and culture.

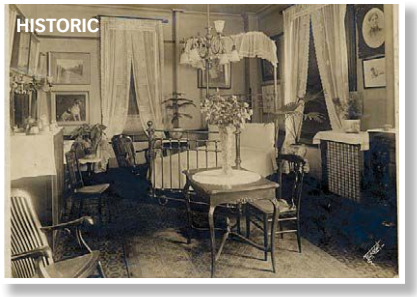
THE PRESERVATION PROCESS

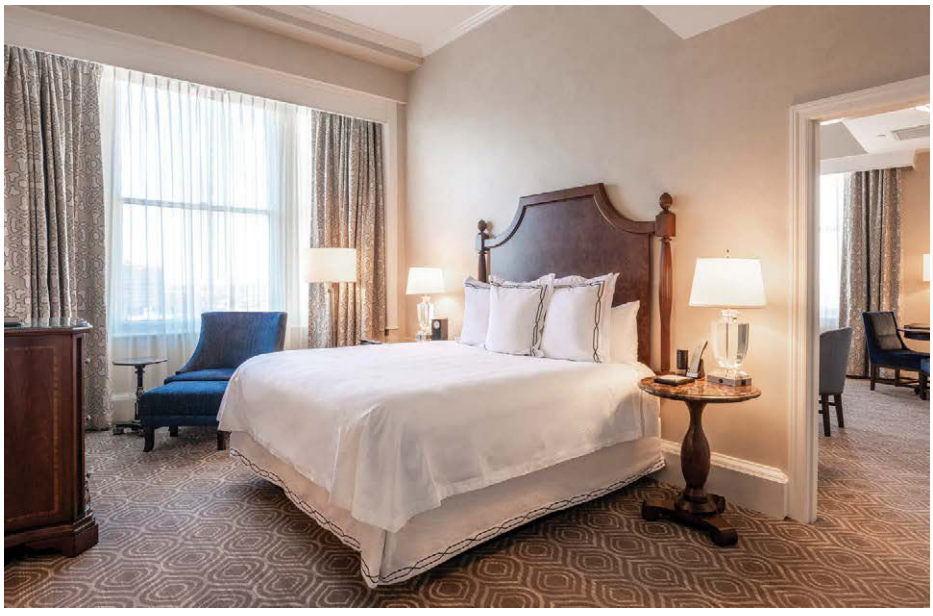
At the onset of a historic renovation project, a comprehensive approach











By preserving a building's **historical elements** and harmoniously integrating **contemporary design** elements, these spaces become more than just places to stay—they become immersive experiences that connect visitors with the surrounding community and culture.

is taken to identify and preserve a building's core features that contribute to its historical significance. This initial phase is crucial; it sets the foundation for effortlessly integrating these elements into the overall design. To begin, a deep understanding of the roots and history of a building is essential. It is vital that thorough research takes place to ensure that the historical context is respected, appreciated and maintained wherever possible.

This approach was implemented at The Roosevelt New Orleans, A Waldorf Astoria Hotel. Built by Louis Grunewald, the hotel opened in 1893 as The Hotel Grunewald and was renamed in 1923 to honor President Theodore Roosevelt. In 2009, after the property suffered immense damage from Hurricane Katrina, there was an opportunity to make changes that would improve and enhance the guest experience and restore the property's historic elements and iconic moments. The goal of the revitalization project was to celebrate the beauty of New Orleans, highlight the building's integral role in the lives of its people and breathe new life into the structure.

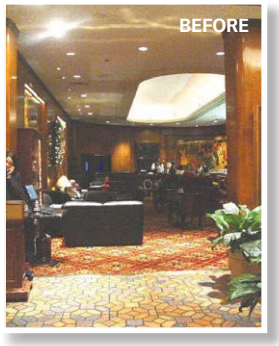
When the project began, extensive research was conducted to better understand the story of The Roosevelt and the impact the building has had on the city. The research involved reading articles to gain a deeper understanding of the building's history, examining historic photos from the Historical Preservation Society, and talking to those who grew up in New Orleans and had the hotel as part of their history. The team also extensively explored the property, dedicating time to uncover unique pieces hidden in the attic or basement. This investigative phase allowed the team to identify and preserve key historical elements that formed the essence of The Roosevelt's narrative.

During the demolition process, the team discovered original terrazzo flooring under carpet and layers of glue. After photographing and precisely graphing the mosaic, a tile manufacturer replicated the tile. With meticulous care, the flooring was reinstated, extending it from entrance to entrance, providing a visual journey through the hotel's past.

Additionally, during a visit with the ownership group to LeMieux Galleries, a local art gallery, gallery representatives shared a private collection of some of Paul Ninas' work, which included doodles, sketches and design studies he created when developing the murals located in the Sazerac Bar within the hotel. This artwork, along with a commemorative plaque, now is framed and located on a side wall in the new Sazerac Bar. By incorporating these pieces, the team not only preserves a piece of artistic history but also adds layers to the narrative of the hotel.

BLENDING HERITAGE WITH MODERNITY

Preserving the distinctive historical features that impact character while seamlessly integrating modern elements to meet present-day functionality and aesthetics requires a delicate balance. The incorporation of updated design techniques and materials allows for a seamless transition between the old and new. The result is not only a visually striking space, but also one that narrates



a story of continuity, bridging the gap between different eras.

Within the The Roosevelt New Orleans, for instance, the historic Sazerac Bar was carefully restored to its original design with the addition of new flooring that complements the space and era. To enhance its authenticity, historically accurate curved booths were seamlessly incorporated into the new layout, preserving the charm of the bar. Similarly, architectural details, such as millwork and ceiling work, were thoughtfully restored throughout the facility. Statues in the Waldorf Astoria Ballroom also were restored, paying homage to the past while ensuring a sense of continuity and connection between the original design and the revitalized space.

Ultimately, the collaborative effort between heritage preservation and modern design not only revitalizes a space, but also contributes to the evolution of its narrative, creating a timeless and dynamic environment that resonates with history and the modern essence.

THE BENEFITS OF HISTORIC PRESERVATION

Rehabilitating old buildings brings a multitude of benefits to offer guests a truly distinctive experience. In choosing to repurpose these structures, owners can rescue them from potential vacancy or demolition, reinvigorating spaces that might otherwise have been forgotten. This undertaking goes beyond mere renovation, acting as a respectful effort to preserve and honor a piece of history that is tied to the identity of a city.

One of the remarkable advantages lies in the careful preservation of intricate details that have stood the test of time and are often too difficult to replicate today. By retaining these nuances, the revitalized buildings not only acknowledge their historical roots but also exude a unique charm that resonates with the essence of the structure's past. Beyond physical rehabilitation, this approach provides an enriched and authentic backdrop contributing to the cultural tapestry of the city.

The revitalization of these buildings not only makes a lasting impression on guests, but also deeply resonates with the locals living in the surrounding area. The Roosevelt New Orleans' completion and reopening were met with immense joy and anticipation from the community. Given the building's significant role in the city, locals were thrilled to witness the restoration of such a historic landmark to its former glory. The revitalization of The Roosevelt not only resurrected a symbol of the city, but also instilled a renewed sense of pride among its residents.

The role of design in the historic preservation of buildings is vital, serving as a pivotal element in transforming the restoration process into a compelling storytelling journey. The blending of historical elements and modern design results in spaces that seamlessly bridge eras, preserving the timeless charm and beauty of buildings. Beyond visual appeal, the benefits extend to preserving intricate details and injecting renewed pride into local communities. The process of heritage preservation in design creates an enduring legacy, leaving a lasting impression on visitors and the community.

RETROFIT TEAM

INTERIOR DESIGNER // Lisa A. Haude (formerly at Paradigm Design Group LLC/PDG Studios), LK Architecture (Interiors Division), lk-architecture.com

MATERIALS

WALLCOVERINGS // Koroseal, koroseal.com; Maya Romanoff, www.mayaromanoff.com; and MDC Interior Solutions, www.mdcwall.com

LEATHER // Moore & Giles Leather, www.mooreandgiles.com, and Edelman Leather, www.edelmanleather.com

FURNITURE // Kimball International, www.kimballinternational.com/home; Uttermost, www.uttermost.com; Lily Jack, www.lilyjack.com; MunnWorks, munnworks.com; and Grand Manor Furniture, www.grandmanorfurniture.com

FIXTURES // Kohler, www.kohler.com

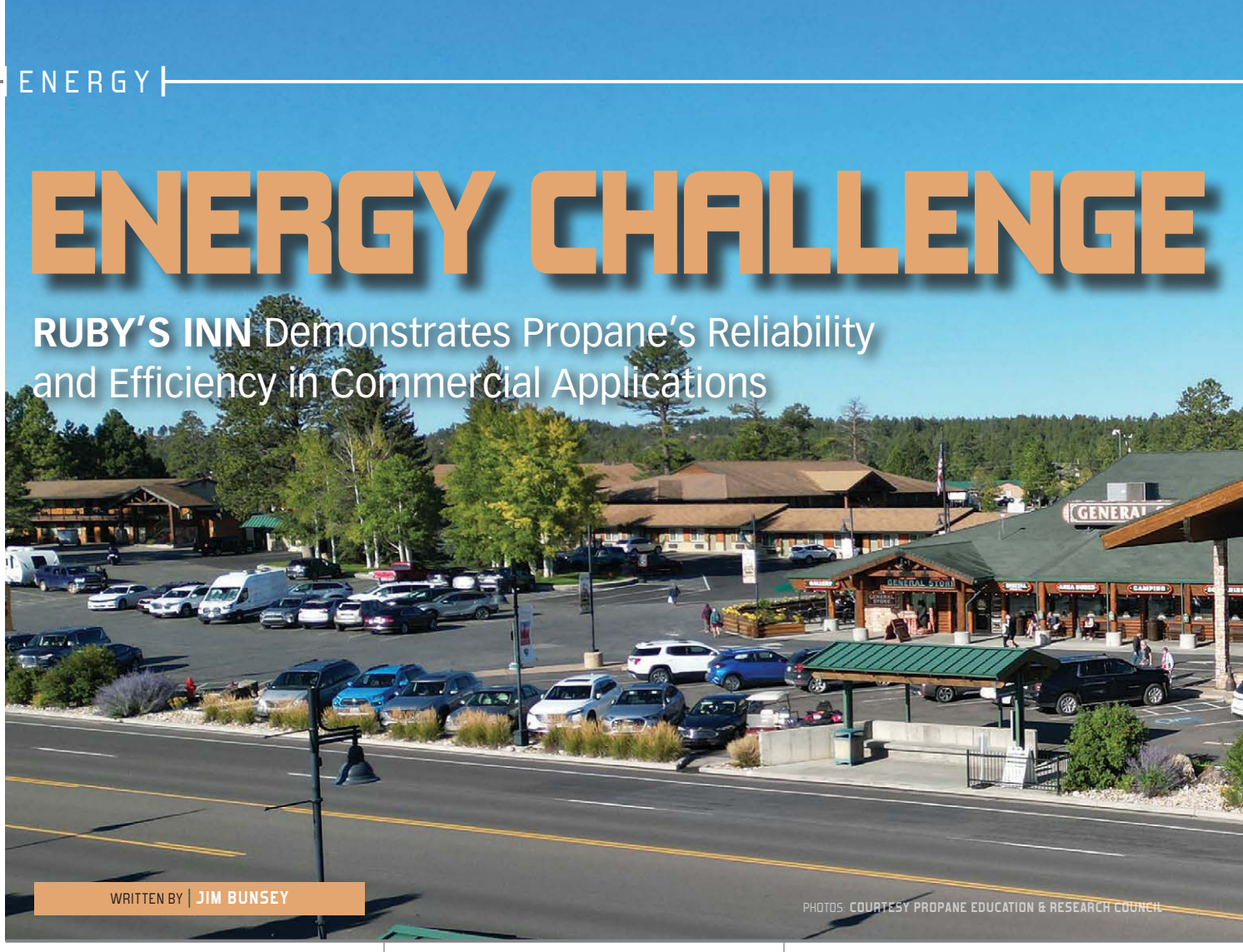
TILE AND REPLICATED MOSAIC FLOORING // Daltile, www.daltile.com

CARPET // Couristan, www.couristan.com, and Brintons, www.brintons.net

LIGHTING // Studio AT, www.studio-at.com, and Uttermost, www.uttermost.com

ENERGY CHALLENGE

RUBY'S INN Demonstrates Propane's Reliability and Efficiency in Commercial Applications



WRITTEN BY | JIM BUNSEY

PHOTOS: COURTESY PROPANE EDUCATION & RESEARCH COUNCIL

Located in southern Utah, Bryce Canyon National Park offers visitors the geological wonders of dramatic skies, breathtaking views and the largest concentration of crimson-colored hoodoos (irregular columns of rock) found anywhere on Earth. With more than 2 million visitors coming to experience the magic each year, Bryce Canyon has become a top destination for tourists and outdoor enthusiasts alike.

RETROFIT TEAM

PROPANE SUPPLIER // KIVA Energy, www.kivaenergy.com
PROPANE SALES AND SERVICE // Blue Star Gas, bluestargas.com

MATERIALS

TANKLESS WATER HEATERS // Rinnai, www.rinnai.us
HIGH-EFFICIENCY STORAGE-TANK WATER HEATERS AND BOILERS // Lochinvar, www.lochinvar.com

Ruby's Inn, founded in 1916 by Reuben Syrett, is a top-rated lodging facility serving the tourists of Bryce Canyon. Ruby's Inn itself is a destination with nearly 700 hotel rooms, three restaurants, an RV park, three swimming pools, a car wash and a massive laundry facility.

On a single summer night, the resort could host as many as 4,000 visitors seeking to take in all that Bryce Canyon has to offer on foot, horseback, mountain bike, in an ATV or helicopter. But more importantly, the inn has visitors who are looking for lodging, a delicious meal and a hot shower after a long day of exploring. Many of the inn's guests arrive on tour buses, requiring the same services at the same time.

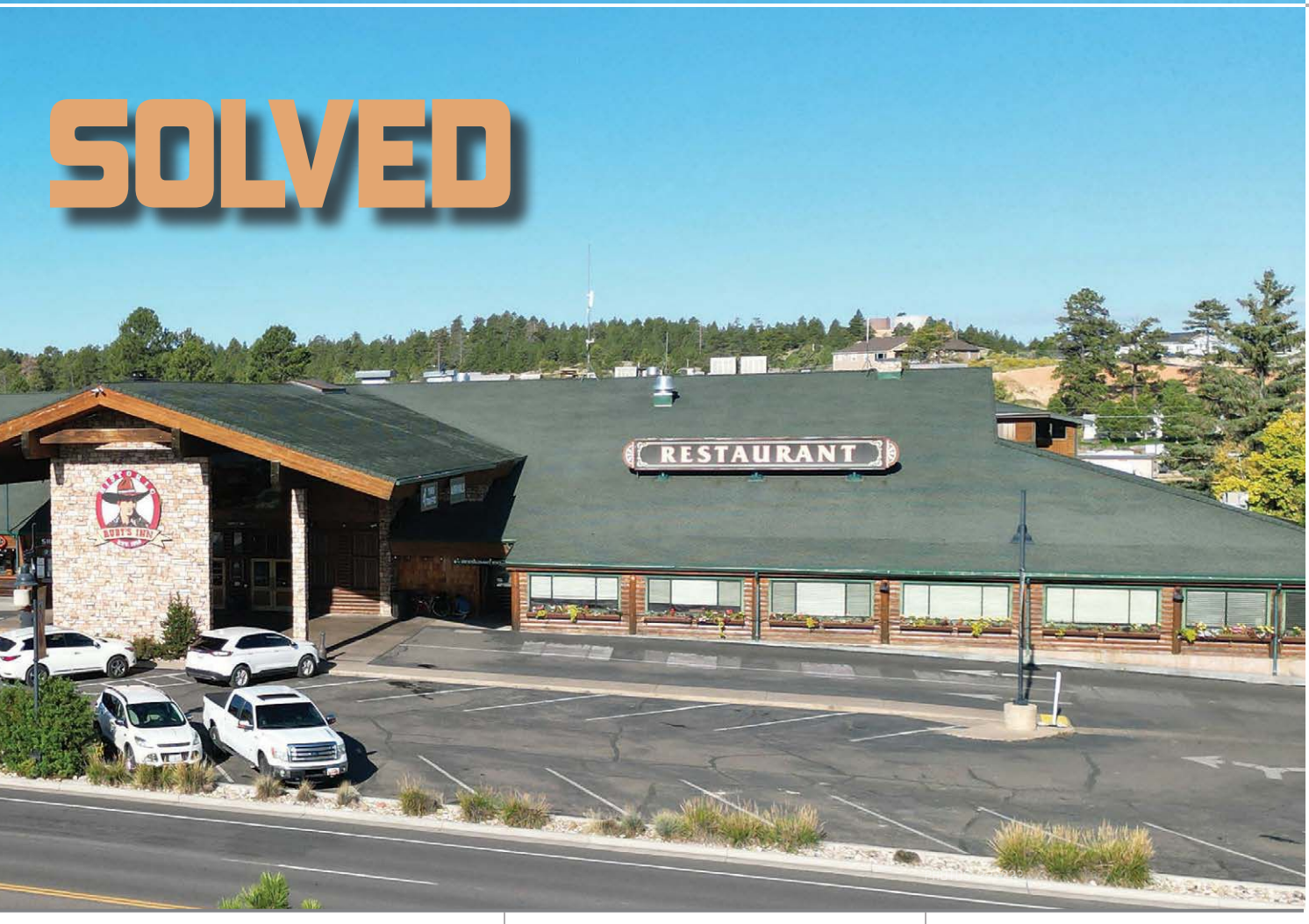
Consequently, Ruby's Inn was in a constant state of trying to meet the needs of its customers. And, unfortunately, the large resort was operating with aging equipment on older infrastructure that simply could not keep up with the customers' demands for hot water. Customer dissatisfaction with cold showers alone resulted in a hefty financial loss of nearly $60,000 for the resort in one year simply because of guest discounts and refunds. It was clear Ruby's Inn needed a more efficient water-heating solution. Once the original outdated boiler system was beyond repair, it was time to quickly determine a replacement solution.

THE ENERGY SOURCE CHALLENGE

The team knew that finding an efficient and reliable energy source for Ruby's Inn's robust customer demand would be a challenge. With the nearest gas line nearly 30 miles from the resort, natural gas was not an option. And the amount of electricity needed to go all-electric was not available in the area. A new electric infrastructure would have to be built to support the inn.

In addition, it was important the new system and its energy source not only

SOLVED



support the needs of the several thousand guests visiting each day, but it also had to be environmentally friendly for the local community and nearby national park.

After exploring several energy options, it became clear that propane was a resilient, sustainable and reliable energy source that would support the demanding needs of the resort today and in the future.

Ruby's Inn fixed its hot-water demand issues by removing older-model open-flame boilers and replacing them with several high-efficient 199,000 Btu storage-tank water heaters and 175 propane-powered tankless water heaters. Propane-powered tankless water heaters deliver endless, on-demand hot water and are available in rack systems that offer redundancy and higher flow rates.

Because Ruby's Inn is in such a remote location, propane is stored onsite for easy accessibility and reliability in case of potential natural disasters or other grid interruptions.

ENERGY FOR EVERYONE

Learn more about the benefits of propane in commercial and hospitality buildings by visiting propane.com/commercial-buildings-and-construction.

RUBY'S INN itself is a destination with nearly 700 hotel rooms, three restaurants, an RV park, three swimming pools, a car wash and a massive laundry facility.

> It was important the new system and its energy source not only support the needs of the several thousand guests visiting each day, but it also had to be environmentally friendly for the local community and nearby national park.

This upgraded and turnkey solution provides a completely revitalized system the Ruby's Inn team and customers can rely on.

THE PATH TO SUSTAINABILITY

Ruby's Inn is 90 percent complete with its transition to this more efficient system and plans to make a full transition in the next five years. Upgrading to a more efficient system, like the propane-powered tankless water heaters, has helped Ruby's Inn lower operational costs and enhance the overall comfort for guests. This system update has led to a reduction of up to 7,000 gallons of propane per month, which is a monthly savings of nearly $6,000. Since the upgraded system has been installed, the resort has not issued a single refund for hot-water issues.

The propane tankless water heaters also support the inn's environmental priorities. Based on an energy and environmental analysis of different energy sources, propane tankless systems reduce carbon emissions by up to 50 percent compared with electric storage-tank systems. Even more, the use of propane produces 52 percent fewer greenhouse-gas emissions than using an equivalent amount of electricity generated from the U.S. grid.

The inn's new system has helped eliminate 5,200 metric tons of CO_2 equivalent. This is equal to 1,410 gasoline-powered passenger vehicles driven for one year; 771,822,585 smartphones charged; or fulfilling the energy needs for 795 residential homes for one year.

Not only that, but the system has saved time for the staff at Ruby's Inn. Prior to the retrofit, Ruby's Inn's maintenance team members would spend nearly three to four hours a day driving around the property to check on the temperatures of each boiler, ensuring they were all properly working. Now, the team spends less than 20 minutes of the day checking boilers because of propane's ability to self-regulate. This has allowed the team to focus more of its efforts and finances on other updates for the resort, such as new furnishings and updated fixtures.

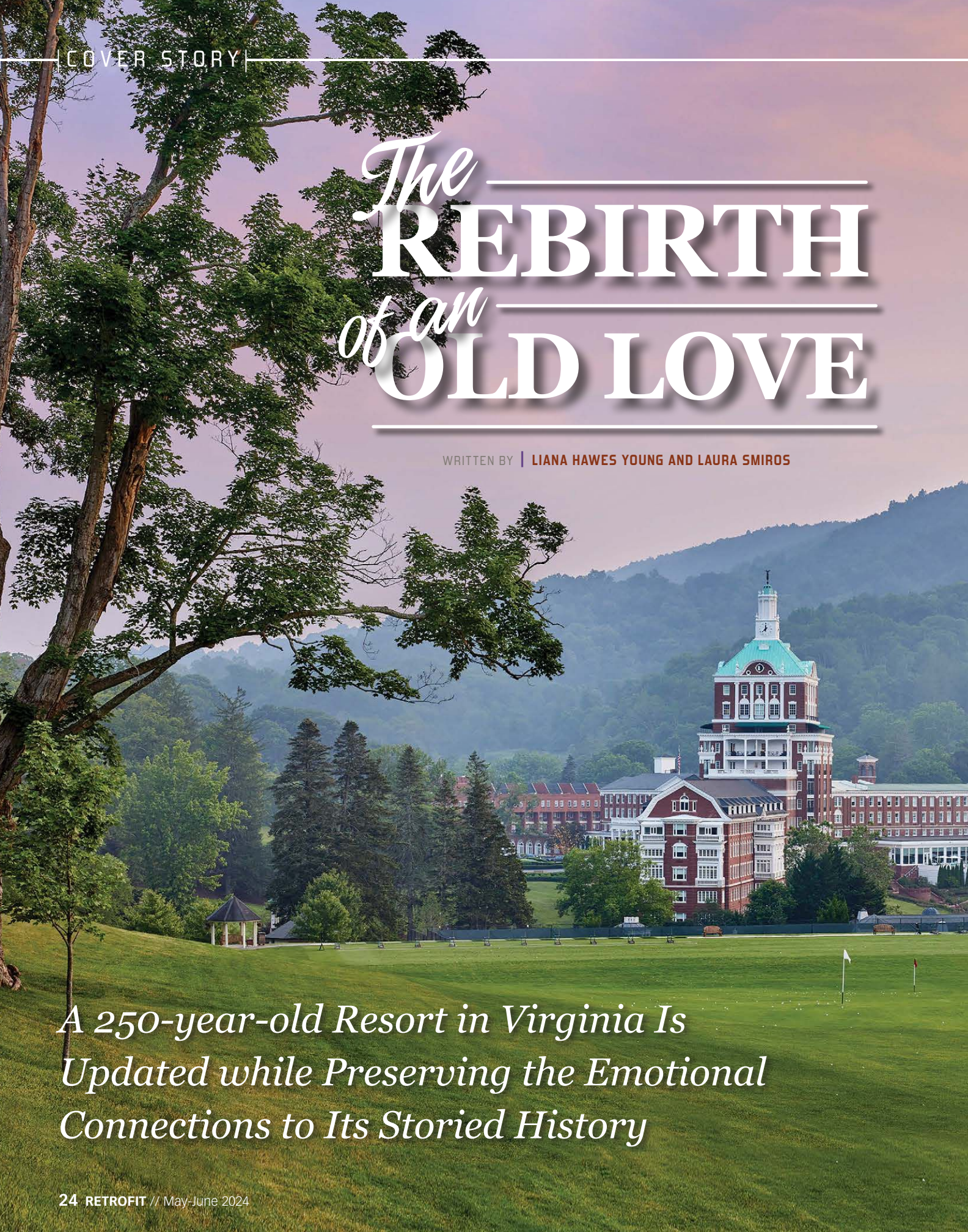
Ruby's Inn is the largest commercial retrofit with which the tankless water heater manufacturer has ever been involved. The inn's commitment to sustainability and its use of propane as a reliable energy source for enhanced customer satisfaction were key contributors to Ruby's Inn achieving The

SAVANNAH COLLEGE OF ART AND DESIGN

Propane Education & Research Council's national Energy for Everyone Hero Award in 2023. (Learn more about the award at bit.ly/3Pv8XRE.)

The team at Ruby's Inn continues to prove that using propane, in combination with other energy sources, truly reduces emissions and increases operational efficiency. "Being located next to a national park, we always think about our carbon footprint," says Lance Syrett, Ruby's Inn general manager and great grandson of Ruby's Inn founder Reuben Syrett. "We are confident about using propane. It's efficient; it's always available; and it's a clean energy source for us to use."

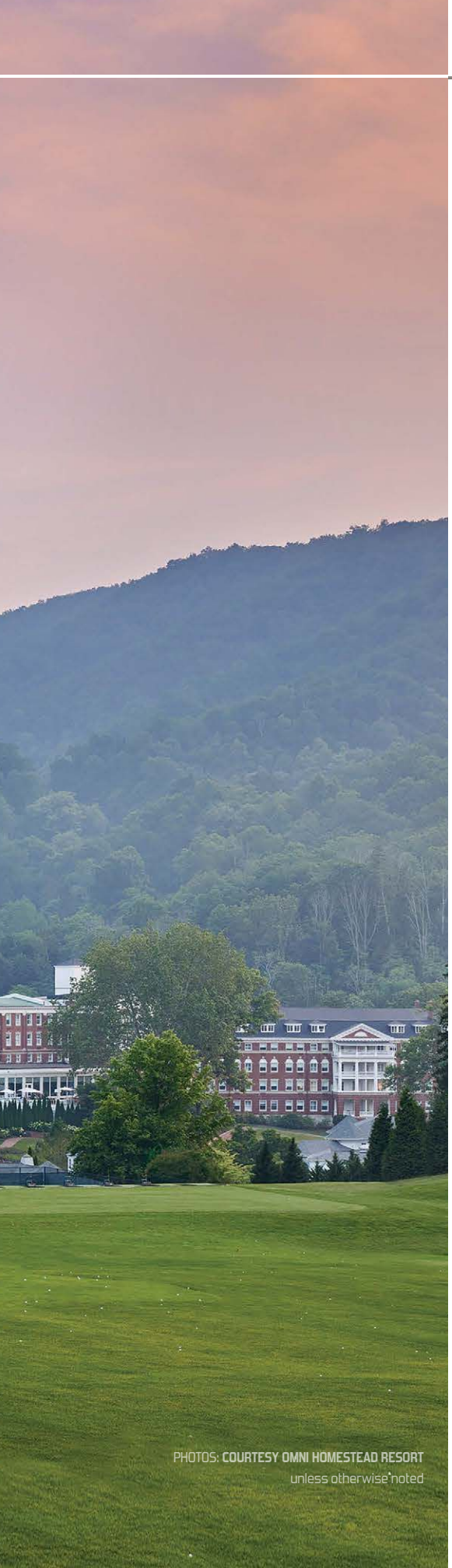
THE TEAM that brought propane, an efficient and reliable energy source, to Ruby's Inn, earned the Propane Education & Research Council's (PERC's) 2023 Energy for Everyone Hero Award. Top photo, from left to right: Brannon Morse, Kiva Energy: Karl Munford, Ruby's Inn; Ron Harris, Ruby's Inn; Lance Syrett, Ruby's Inn; Jim Bunsey, PERC; Jeff Stewart, Blue Star Gas; Michael Prayoonvech, Rinnai; and Steve Rutherford, Blue Star Gas.



The REBIRTH of an OLD LOVE

WRITTEN BY | LIANA HAWES YOUNG AND LAURA SMIROS

A 250-year-old Resort in Virginia Is Updated while Preserving the Emotional Connections to Its Storied History



PHOTOS: COURTESY OMNI HOMESTEAD RESORT
unless otherwise noted

In 2021, the Omni Homestead Resort, a National Historic Landmark in the scenic mountains of Hot Springs, Va., embarked on a transformative, $140 million full-property renovation. Nestled within the breathtaking Allegheny Mountains of southwestern Virginia and spanning more than 2,300 acres, America's first resort is instantly recognizable by the lovingly restored tower that hovers above the treetops, just beyond the golf courses. With the goal of preserving the resort's rich American history, luxury hotel company Omni collaborated with architecture firm WATG and its interior design studio Wimberly Interiors for a restoration that would honor the resort's past while introducing contemporary elements.

This historic, 250-year-old resort, a favorite among 23 U.S. presidents and generations of families, provided a unique opportunity for renewal. The existing architecture is iconic, and the challenge was to breathe new life into the beloved property while respecting the emotional connections guests and employees held. The delicate balance required a strategic approach to weave the past and present into a cohesive narrative for future generations.

LAY OF THE LAND

The Omni Homestead Resort property encompasses a vast area and includes a ski resort, rifle range, equestrian center and championship golf courses.

The resort's **BREATHTAKING, NATURAL SETTING** and rich history provided the inspiration for the extensive restoration.

The main lodging facility is 790,000 square feet and features 483 rooms. After a 1901 fire destroyed the original hotel, which was built in 1766, the current hotel's Great Hall and main core guestrooms were constructed in 1902, followed by the west wing two years later and the east wing a few years after that. In 1929, the iconic 181-foot-tall tower was built.

The recent renovation included the east and west wings, which feature masonry walls and wood-framed floors and roof; the south wing of the hotel


BEFORE

and ballroom, which are steel and concrete; and the tower, which is steel and reinforced concrete. The team also updated the spa building, which is masonry walls and wood-framed floors, and the indoor pool, which is wood framing and a brick exterior.

Although the property had always been in use and was maintained, the team encountered a number of challenges, like west-wing floors damaged by steam leaks and rusted tower columns that required reconstruction, during the two-year renovation project. The resort closed for about six months during construction to maintain schedules.

THE INTERIOR DESIGN reflects a sophisticated, residential style with a nod to the resort's classic architecture and finishes.

GUIDING PRINCIPLES

Fueled by a clear vision, the design team defined five guiding principles for the renovation:

- **TRADITIONAL:** Honoring the history of the resort while giving the design a fresh perspective to carry it forward to the next century.
- **LIGHTNESS:** Enlivening the traditional palette with a light and airy feel.
- **RESIDENTIAL:** Creating spaces that make guests feel as though they have arrived at the country house of their dreams with all the touches and details they would find in their own homes.
- **SOPHISTICATED:** The design is founded on tradition but elevated with sophistication in palette and details.
- **ICONIC:** Incorporating memorable elements that stand the test of time.

Omni strategically invested in modernizing the infrastructure; prioritizing stability; and restoring key elements, like

plaster finishes and brickwork. Façade improvements, including repointing and/or reconstructing the previously damaged tower terraces, rehabilitating the sleeping porches, painting and window restoration, set the stage for a harmonious blend of traditional and contemporary style.

The design strategy extended to public spaces and guestrooms, where a careful balance of traditional and contemporary elements was sought. Drawing inspiration from the natural surroundings and historic patterns, each guestroom wing boasts a unique palette of vintage colors and patterns, capturing the essence of Virginian hospitality.

THE ICONIC TOWER

One of the first sights visitors see as they approach the Omni Homestead Resort property is the tower, which is a beloved building for guests and residents of the surrounding Virginia area. The tower's renovation required careful consideration because of its height and because of fire concerns. The goal was to ensure the tower was fireproof. When peeling back the layers beneath the tower's walls, copper was revealed, so the project team called in a coppersmith to reshape, clean and preserve the material so it could be left exposed.

MANY EXISTING PIECES of furniture and artwork were reused as part of the Omni Homestead Resort's refresh.

Although the tower terrace columns were not part of the scope of work, the architects spotted plants growing out of the tops, and the structures did not have proper flashing. The architects recommended exploratory openings and found rusted steel and corrosion. The solution was to remove all non-historic brick around the columns and, after studying historic photos, build smaller white columns to match what was originally constructed.

Throughout this intricate process, the team collaborated closely with the Virginia Department of Historic Resources and historic preservation consultant Sadler & Whitehead to ensure the exterior restoration efforts adhered to The Secretary of the Interior's Standards for the Treatment of Historic Properties.

FLEXIBLE SPACES

Because the Omni Homestead Resort is known for its celebration of seasons and holidays, the landscape design ensures year-round flourish, from dramatic fall foliage to spring's pink mountain laurel

(continues on page 30)

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RETROFIT TEAM

ARCHITECT AND LANDSCAPE ARCHITECT // WATG, www.watg.com

INTERIOR DESIGNER // Wimberly Interiors, www.watg.com/wimberly

HISTORIC PRESERVATION CONSULTANT // Sadler & Whitehead, sadlerandwhitehead.com

GENERAL CONTRACTOR // HITT, www.hitt.com

EXTERIOR RESTORATION CONTRACTOR // Complete Property Services, www.completeproperty.com

ROOFING CONTRACTOR // Lionberger Construction, www.lionberger.com

STRUCTURAL ENGINEER // Walter P. Moore, www.walterpmoore.com

MEP/FP ENGINEER // Vanderweil, www.vanderweil.com

LIGHTING CONSULTANT // Reveal Design Group, www.revealdesigngroup.com

MILLWORK // Allegheny Millwork, www.alleghenymillwork.com

blooms. A new freestanding pavilion was placed at the end of the first hole of the golf course, which happens to be the oldest first hole for a U.S. golf course, created in 1892. Modeled after early 20th-century architecture, the 4,000-square-foot pavilion features whitewashed wood-clad walls, stained-concrete floors, modern heavy timbers and steel tie rods. Guests are offered the option to take horse-drawn carriages to their pavilion event for a quintessential experience.

The theater, located in the main hotel building, received a refresh for a classic, distinguished look and feel. The projection room's original candlelit projectors now are on display for visitors. It was important to preserve the history of the theater while incorporating updated amenities, including a new screen and AV equipment, repaired stage and improved

(continues on page 32)

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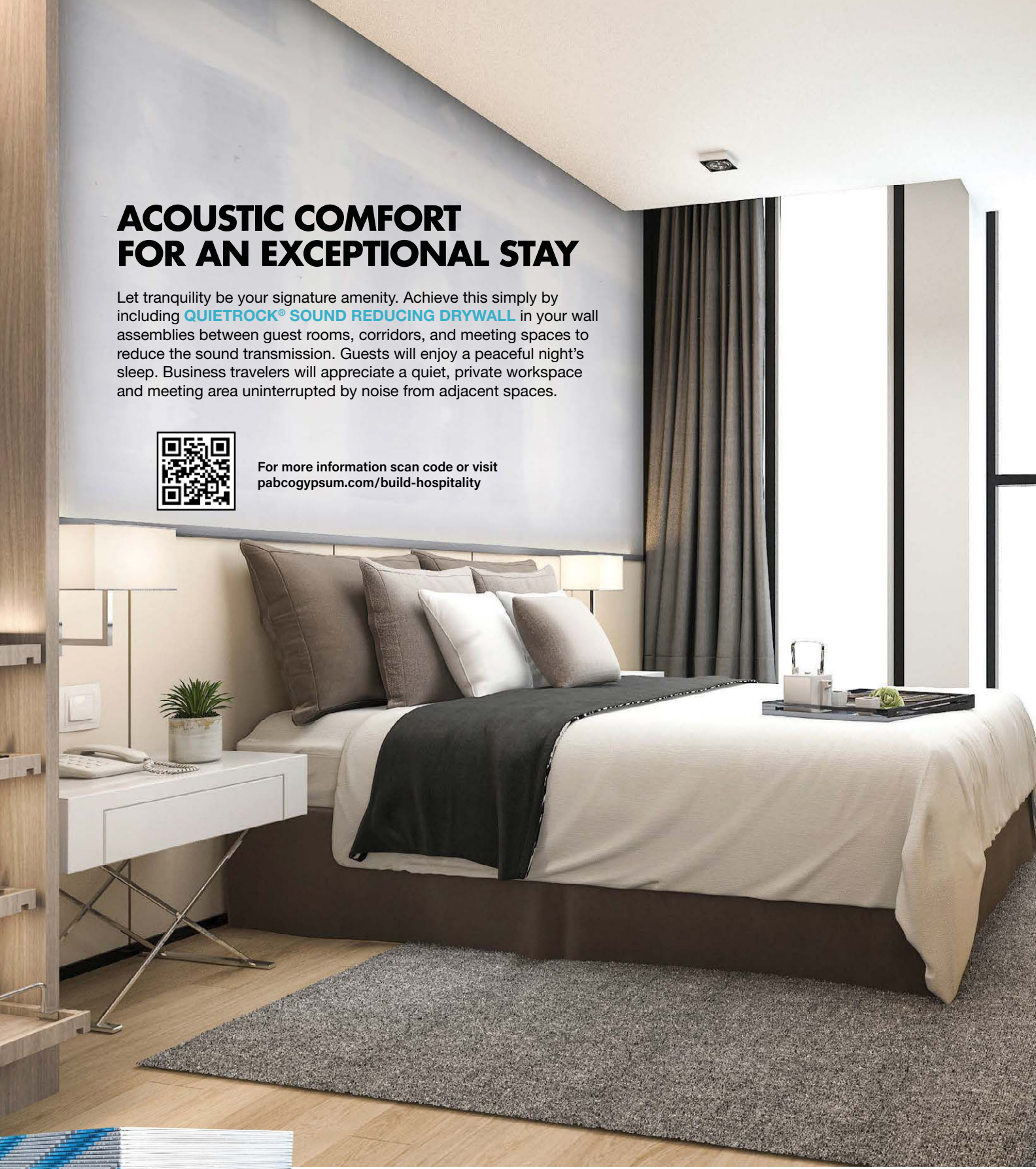

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CARPET // Brintons, www.brintons.net

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PAINT // Sherwin-Williams, www.sherwin-williams.com

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DOORS // Kawneer, www.kawneer.us

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WINDOW TREATMENTS // Tritex, www.tri-tex.net, and 5-Star Upholstery & Drapery, www.5starupholsteryanddrapery.com

SIDING // James Hardie, www.jameshardie.com

ROOFING // TruDefinition Duration from Owens Corning, www.owenscorning.com

PLUMBING FIXTURES AND FITTINGS // Kohler, www.kohler.com

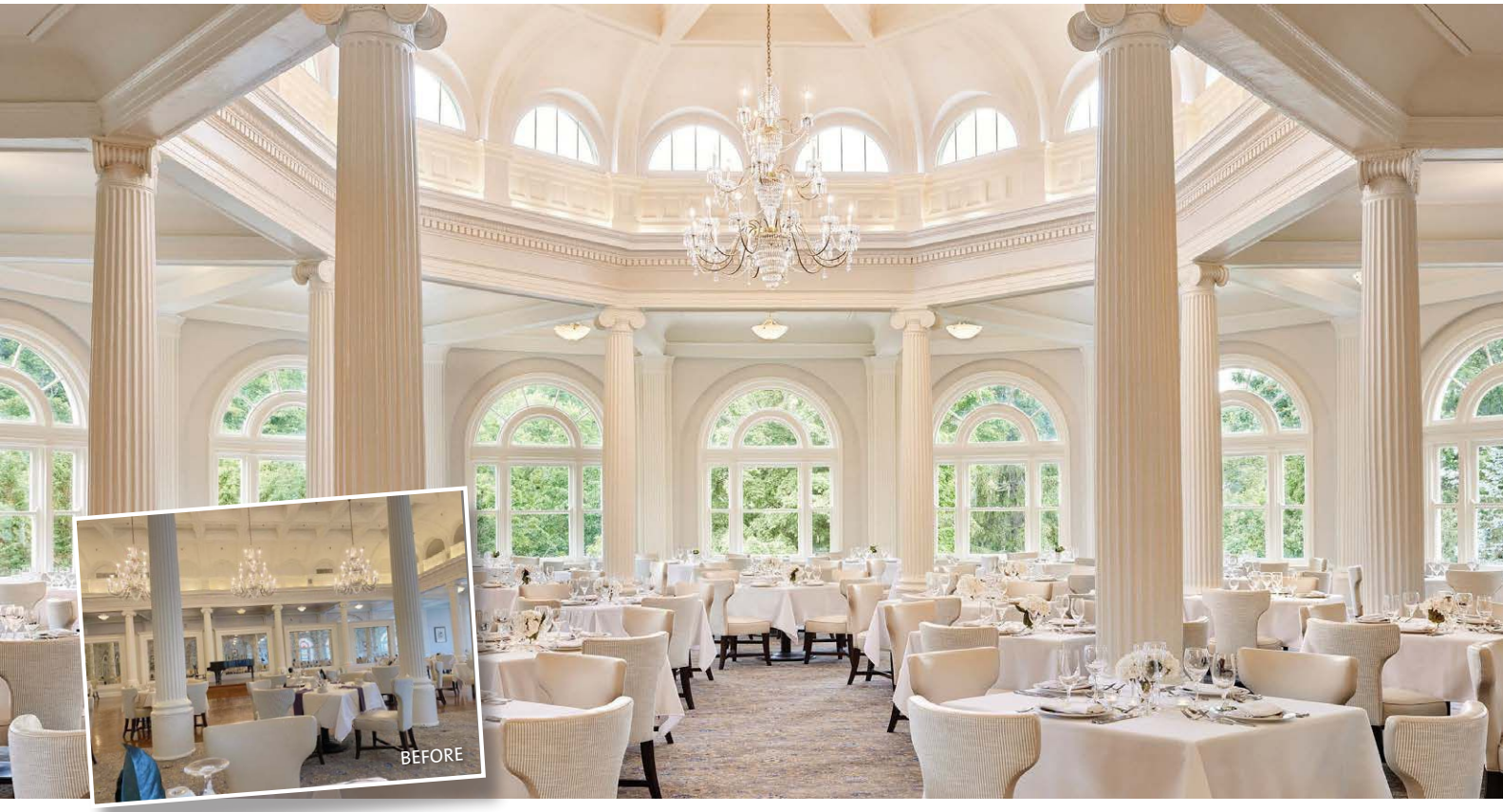
seating. The first row of seating remains historic, but platforms were added, allowing the rest of the seating to be raised. The multifunctional space offers a Prohibition-style cocktail bar, where the ticket booth once was located, and is used for movie screenings, musical performances, TED Talks, magic shows and more.

The timeless Great Hall, which is the entrance lobby of the hotel, received a lighter and more airy ambiance, anchored by a custom rug celebrating Virginia's nature. Historic spaces within the Great Hall, like the Lobby Bar and Washington Library, underwent thoughtful redesigns, balancing dark tones with brighter elements. To ensure the Great Hall receives natural light through its stained-glass windows, the team removed a metal hip roof that had been improperly constructed as part of an earlier renovation. The Great Hall now is a beautiful, comfortable space for guests to linger. In fact, the Omni Homestead Resort holds afternoon tea there each day at 4 p.m.

LASTING LEGACY

The collaboration between Omni, WATG and Wimberly Interiors has preserved the Omni Homestead Resort's legacy. Every nook and cranny of the property was examined with consideration for the past, present and future.

Now welcoming guests in its new form, the redesign empowers the Omni Homestead Resort to embrace a fresh and new chapter, deeply rooted in its own storied legacy. The design details, meticulously curated, tell a personal story to all who have visited for generations and those yet to come.



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PHOTOS: **CASEY DUNN**
unless otherwise noted

LUCK RANCH OPRY HOUSE AND SALOON

Spicewood, Texas

RETROFIT TEAM

ARCHITECT: Cushing Terrell, cushingterrell.com
STRUCTURAL ENGINEER: Hollingsworth Pack, www.hollingsworthpack.com
GENERAL CONTRACTOR: Bill Ball

MATERIALS

This project utilized as many of the original building materials as possible. New materials included red cedar plank siding and corrugated metal roof panels from the local McCoy's Building Supply. Southern yellow pine was used for framing, and the client found rusted corrugated metal roof panels from local ranches that were incorporated into the building. The team sourced light fixtures and old doors from antique shops around the Austin area.

THE RETROFIT

Sometimes architecture isn't solely about serving functional needs; sometimes its purpose is to create a magical backdrop for family and friends. This is the case for Willie Nelson's 500-acre Luck Ranch.

Set within the ranch is the pop-up town of Luck, built in the mid-1980s as a set for the film adaptation of Nelson's iconic 1975 album "Red Headed Stranger". The original script for the movie called for burning the set to the ground but, because Nelson loved the makeshift western town so much, the script was revised, and Luck was saved. Nelson now had the Western town he'd always dreamed of having.

Luck's collection of buildings includes the Opry House and Saloon, general store, Luck Building and Whiskey Barrelhouse, jail, chapel and Nelson's world headquarters. Beginning with a masterplan to study opportunities and operational needs within the ranch, the first phase of implementation focused on the Luck Opry House and Saloon.

The Opry House, essentially an unconditioned structure, features a small stage and dance floor, saloon-style bar and back-of-house support spaces.

The challenge was to stabilize the building, which was never meant to last, and adapt it to meet current building standards and contemporary use without losing its Old West look and feel. "Looking at the Opry building from the outside, it's hard to tell that we did anything at all and that was the point," notes Alexander Bingham, who served as project architect for Cushing Terrell.

Initial plans for a much larger renovation, including demolishing the Opry House and Saloon except for its front façade, were scaled back to focus on the essence of the 1,340-square-foot building. Although the structure is not historic, the design team adopted an approach that brought the same level of care as if it was a preservation project. There was a focus on only touching the things that had to be fixed. A 624-square-foot addition—bringing total square footage to 1,964—was paired with structural upgrades, egress improvements and general repairs to the building. The building exterior was left as is, except for repairs to the siding and roof.

One of the biggest challenges was meeting the aggressive construction schedule, which meant repairs needed to be completed in time for the Luck Reunion, Nelson's music festival held every spring that brings nearly 4,000 guests to experience more than 35 bands on five stages.

The Opry House continues to serve as a venue for photo shoots and videos—a magical backdrop that creates a feeling of nostalgia and community that, in Nelson's mind, is worth preserving. "We converted a movie-set Old West-style saloon into a functional event venue while keeping the magic intact. Generations will share a part of Willie Nelson's legacy every time a note comes off that stage," notes Bill Ball, who served as general contractor for the project.

PHOTO: LUCK REUNION

PHOTO: LUCK REUNION

PHOTOS: **ALICIA WELLS** unless otherwise noted

WATERLOO PARK | Austin, Texas

RETROFIT TEAM

LANDSCAPE ARCHITECTS: Michael Van Valkenburgh Associates Inc., www.mvvainc.com, and dwg., www.studiodwg.com

MATERIALS

The Meredith Heritage Tree Deck is designed for the preservation of two of the oldest heritage oak trees in Waterloo Park. The floating deck, made from Thermory Benchmark Ash, encircles the trees and creates a safeguard for the trees' intricate root systems. The deck offers a serene retreat for communal gatherings, picnics and leisurely moments, sheltered beneath the sprawling canopy of the two majestic live oak trees, each believed to have been standing for more than two centuries.

Thermory offers real wood decking and cladding that has gone through a heat and steam process to modify each wood fiber, making it more durable and stable than traditional wood boards. The products are third-party certified for rot-, fire- and termite-resistance, strength and stability, as well as the reduction of formaldehyde. Thermory is installed with a clip system, so the fasteners are completely hidden.

WOOD DECKING: Benchmark Ash from Thermory, thermoryusa.com

THE RETROFIT

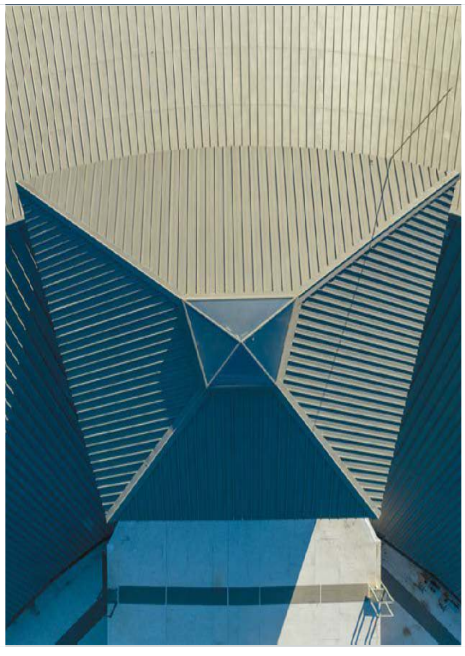
Waterloo Park is Austin's most significant investment in parkland, spanning 11 acres along the rejuvenated Waller Creek corridor. Guided by local landscape architect, dwg., and designed by Michael Van Valkenburgh Associates, the park is representative of a transformative vision for converting this once neglected urban creek into a premier open space.

At its core, Waterloo Park underscores the vital role of urban ecology in shaping the fabric of a growing city. Its journey from blight to beauty showcases the profound impact of parks and open spaces as engines of economic renewal, social cohesion, and environmental stewardship within the community. By prioritizing equitable access; fostering connectivity across various modes of transport; and providing a platform for community engagement, art installations, educational initiatives and nature-centric activities, the park sets a new standard for inclusive urban park design.


PHOTO: **LAUREN SLUSHER**


PHOTO: **LAUREN SLUSHER**

QUEEN CASINO | Baton Rouge, La.



PHOTOS: **ENGLERT INC.**

RETROFIT TEAM

ROOFING CONTRACTOR: Willoughby Roofing & Sheet Metal Inc., www.wrsminc.com

MATERIALS

Willoughby Roofing & Sheet Metal's crew installed 39,200 square feet of Englert Standing Seam Series 2500 2-inch-high profile in 22-gauge panel over metal deck construction.

Kyle Willoughby, vice president at Willoughby Roofing & Sheet Metal, explains: "Englert provided a quality panel in a timely manner that allowed our team to effectively install the roof. Englert's inspection process was made simple by their team and very thorough for Willoughby Roofing to provide a quality warranty. We look forward to working with Englert on the next project."

Englert's standing-seam roofing was chosen for its quality, durability and low maintenance, which are essential for the casino's roofing. This will serve the casino building well for many years to come.

STANDING-SEAM ROOFING: Englert Inc., www.englertinc.com

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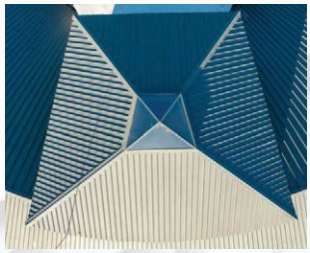

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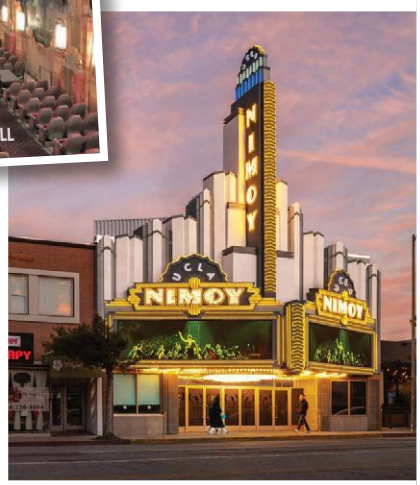

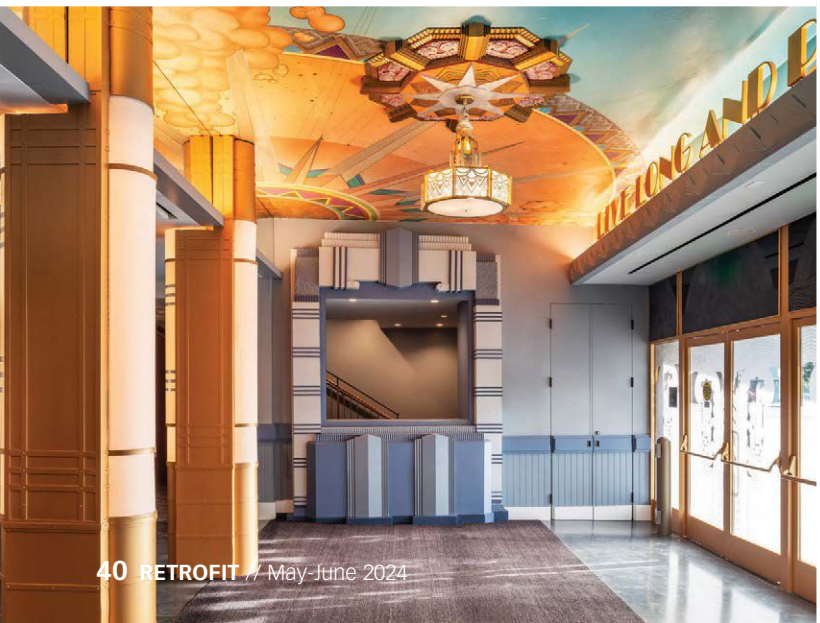

RETROFIT TEAM

PROJECT ARCHITECT: BAR Architects & Interiors, www.bararch.com
PRESERVATION ARCHITECT: Page & Turnbull, www.page-turnbull.com
CIVIL ENGINEER: KPFF, www.kpff.com
STRUCTURAL ENGINEER: Holmes Structures, www.holmes.us
MEP ENGINEER: Interface Engineering, interfaceengineering.com
THEATER AND AV CONSULTANT: The Shalleck Collaborative Inc., www.shalleck.com
LIGHTING DESIGNER: HLB, hlblighting.com
ACOUSTICAL CONSULTANT: Salter, www.salter-inc.com
GENERAL CONTRACTOR: Shawmut, www.shawmut.com

MATERIALS

The following is a sampling of materials used in the project:

Exterior

- Painted galvanized sheet-metal marquee and blade sign.
- Neon and "Hollywood" bulb lighting; the bulb lighting was converted into LED.
- Aluminum-framed storefront with frosted glass and mirrored glazing integrated.
- Glass-fiber reinforced concrete panels.

Interior

- Decorative glass-fiber reinforced gypsum panels, sometimes faux-painted to replicate stone.
- Acrylic paint on muslin murals.
- "Starry Night" LED panels at vestibule ceilings by CineStar Panel, www.cinestarpanel.com.

THE RETROFIT

Now known as The Nimoy and named for the actor and philanthropist Leonard Nimoy, the updating reimagines the historic Crest Theatre from a historic 1940s movie and performing-arts venue and its 1980s Art Deco-inspired and landmarked renovation, into an engaging, modern cultural offering full of original architectural detailing and art.

The latest renovations of The Nimoy—which UCLA acquired in 2018 in part through a major gift from Leonard Nimoy's widow Susan Bay Nimoy—focused on enhancing the theatergoing experience, enlarging the entrance lobby, adding a new bar, and improving the upper lobby and support spaces.

Page & Turnbull's preservation of the live performance venue's historic fabric centered on the restoration of the historic auditorium mural, a 230-foot-long depiction of a stylized 1930s Los Angeles cityscape, created by scenic artist Bill Anderson and a centerpiece of the 1987 renovations.

The design team's additional preservation work extends to Art Deco-inspired elements that highlight the prominent character of the 299-seat performing-arts space, including versatile staging and seating. Among the distinctive elements preserved by Page & Turnbull's architects are the theater's historic marquee, lighting fixtures, decorative columns and wall-mounted interior decorative pylons, designed by Disney Imagineer Joseph Musil during the 1987 work. The stage proscenium also has been preserved yet is hidden from view. Pending certification through the U.S. Green Building Council's LEED program, the venue's renovation adds energy-efficient systems, creates healthy indoor air quality, and extensively reuses existing structures and finishes.

The preservation and modernization of the UCLA Nimoy Theater transforms an unusual, idle landmark into an active community asset that helps fill the niche for smaller-scaled live performances. "It's rewarding to know this theater's preservation and revitalization are supporting the arts and bringing people together, strengthening the vitality of its Westwood Village neighborhood," says John D. Lesak, AIA, FAPT, principal of Page & Turnbull.

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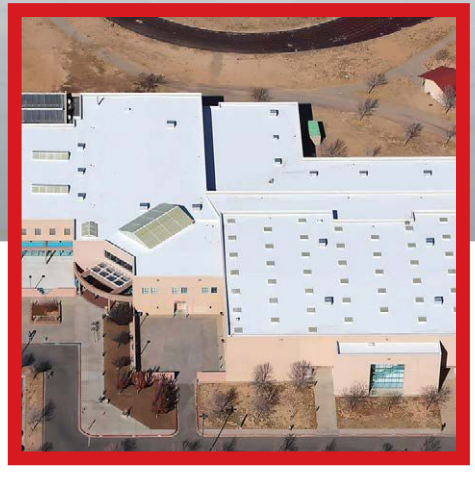

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DAVID GEFFEN HALL | New York

PHOTO: LAWRENCE SUMULONG, LINCOLN CENTER FOR THE PERFORMING ARTS

RETROFIT TEAM

ARCHITECT: Tod Williams Billie Tsien Architects, twbta.com
GENERAL CONTRACTOR: Turner Construction Co., www.turnerconstruction.com
STRUCTURAL ENGINEER: Thornton Tomasetti, www.thorntontomasetti.com
GLASS INSTALLER: Lafayette Metal and Glass, www.lmgny.com

MATERIALS

Architects specified a wall of custom glass from Bendheim to meet complex challenges at David Geffen Hall, the newly renovated home of the New York Philharmonic Orchestra. An ambitious redesign of this high-profile venue, previously known as Avery Fisher Hall, began with plans unveiled in 2019. With concerts suspended during the pandemic, an accelerated construction schedule allowed the newly rechristened facility to reopen in October 2022.

Although the renovation plan was largely focused on the interior, one key difference in the building is clearly visible from Lincoln Center's central plaza: the dramatic presence of new illumination. A 12-foot-high band of ceramic fritted glass from Bendheim is framed by the distinctive tapered pillars of the concert hall's portico, providing a projection screen for lighting along the top tier. Bright bands of colored light now add vibrancy and definition to the building's well-known façade.

Unbeknownst to the public, however, this band of glass also serves as the windows for a row of offices, occupied by New York Philharmonic staff. For Tod Williams Billie Tsien Architects, the challenging assignment had to support the desired illumination of the exterior while allowing a view and protecting the comfort and privacy of the staffers inside. Specifically, the designers were requested to provide one-way windows, allowing occupants to see out without being seen.

To take full advantage of Bendheim's custom-design capabilities, Principal Tod Williams visited Bendheim's Design Lab for an in-person consultation. In the final specifications, ceramic fritted glass (fully opaque from the exterior) was laminated to Bendheim's "vision glass"; a proprietary coating creates the one-way view from inside. The glass was provided in 5- by 12-foot panels, totaling approximately 8,000 square feet.

CUSTOM GLASS WALL: Bendheim, bendheim.com/professional

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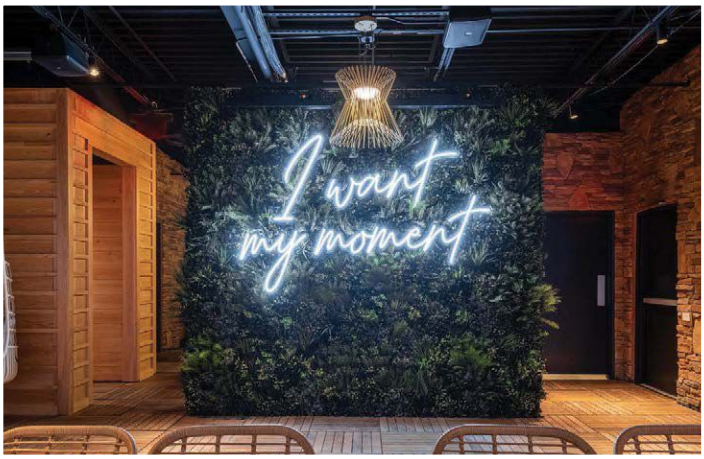
PHOTOS: **NASHVILLE LIVE!**

AVA ROOFTOP BAR | Nashville, Tenn.



RETROFIT TEAM

OWNER: Nashville Live!, nashvillelivedowntown.com

MATERIALS

Lined with lush greenery, expansive lounge-style seating and a dazzling 25-foot tree as its centerpiece, the Mediterranean-inspired space offers a rooftop escape with lively daytime programming leading into a vibrant nightlife.

THE RETROFIT

Nashville Live! has unveiled its latest rooftop concept at the historic George Jones Building. Nashville Live! is a 50,000-square-foot, multi-level dining and entertainment destination. The new rooftop venue offers an elevated indoor/outdoor experience with sweeping views of Nissan Stadium, the Cumberland River and downtown Nashville.

"We knew that creating a vibrant rooftop experience had to be a vital part of our plans for Nashville Live!," explains Erik Storms, director of Operations for Nashville Live!. "We're thrilled to be debuting AVA Rooftop Bar—the first riverfront rooftop bar to open since 2019—and are certain it will become Nashville's new go-to hot spot."

Spanning vertically across five levels, Nashville Live! features a different concept on each floor. In late 2023, the venue opened two levels—featuring nationally acclaimed concepts—to the public. On the first floor, DraftKings Sports & Social offers guests an immersive game-day experience. PBR Cowboy Bar, located on the second floor, brings an authentic country-western experience that marries an electric combination of cowboy cool and big-time entertainment, serving as the flagship location for PBR's Nashville Stampede team.

Earlier this year, Nashville Live! opened The Gallery, a 10,000-square-foot private event space occupying the entire third floor with room to host up to 450 people. The final concept, named The Possum, will bring the catacombs of the historic George Jones Building to life as an exclusive speakeasy bar.

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DAVE'S BBQ BAR | Middleborough, Mass.

PHOTOS: CLOPAY

RETROFIT TEAM

ROLLING SECURITY GRILLE INSTALLER: HQI Garage Doors, www.hqidoors.com

MATERIALS

When Dave Fisher, owner of Dave's Diner, decided to expand his dining options to include barbecue, he had a clear vision for how he wanted to proceed: When the diner closes after serving breakfast and lunch, Dave's BBQ Bar would open on the same property. Fisher wanted this hangout to be an open-air pavilion where diners could feel as though they were out on the back deck, but with the option of "closing the walls" when weather required.

What was less clear was how to achieve this open-air vision. Fisher had seen sectional glass doors in other New England eateries but even when open, that door style always was visible. The tilt-up style of garage door, which is gaining popularity in the restaurant industry, would interfere with the plan for ceiling lighting and television installations at Dave's BBQ Bar. To determine how to make his walls fully disappear when not in use, Fisher reached out to Jay Delaplain, president of HQI Garage Doors, who recommended the Cornell VistaGard ESG11 rolling security grille. The durable steel grille, glazed with Lexan polycarbonate, serves as a weathertight theft deterrent. The curtain rolls up for storage in a tight overhead curve.

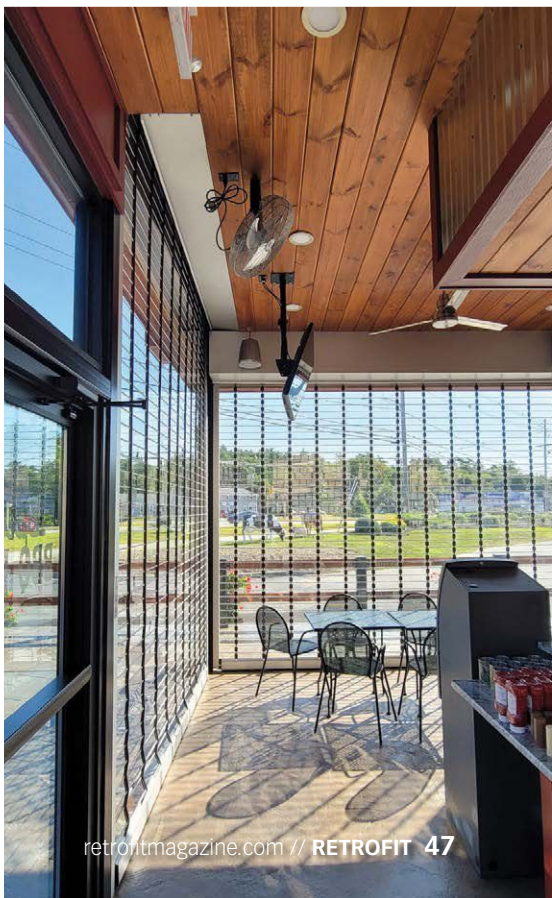
The plan was to install the grille guides on the 6- by 6-foot steel pillars supporting the roof. The goal was to keep framing minimal to avoid widening the columns. HQI Garage Doors worked with Cornell to customize 12 separate doors, all measuring between 10- to 13-feet wide by 12- to 13-feet tall. Doors at the corners vary in height to prevent conflicts from headers installed too closely together. "Because the doors were all custom sizes, we had to go through engineering two or three times to make sure we got things right. We were down to the 1/4-inch; that's how precise we got with them," Delaplain says. "Cornell was great about revising drawings and working with the customization of the mechanisms to make sure they were all right."

None of the tricky customization—or the mechanisms that operate the door—are visible to diners. Motors, charge wheels and other mechanical components are covered by a custom hood that HQI Garage Doors' lead installer modified to create the appearance of a single continuous aluminum box.

Bringing this open-air illusion to life took three installers two weeks of onsite work. The result, Delaplain says, is a seamless installation for the largest garage door project he has completed for a restaurant in his two-plus decades of working in the industry.

Today, bartenders at Dave's BBQ Bar can easily control every door at the first threat of rain or when closing for the night.

ROLLING SECURITY GRILLE: Cornell VistaGard ESG11 from Clopay, www.clopaydoor.com



PARTAKE | Long Beach, Calif.

PHOTOS: STUDIO ONE ELEVEN

RETROFIT TEAM

ARCHITECT: Studio One Eleven, studio-111.com
INTERIOR DESIGNER: RDC, www.rdcollaborative.com
GENERAL CONTRACTOR: Howard CDM, www.howardcdm.com

MATERIALS

Housed in a 1922 brick building that was originally home to a Pacific Bell switchboard and more recently an office for a local non-profit, Partake offers customers the option to support local businesses via food delivery or by dining onsite in a communal food hall, outside on the sidewalk or in a soon-to-be-completed bulb-out. (A bulb-out leverages excess street space and converts it into people space, resulting in additional outdoor dining nestled in the landscape.)

Studio One Eleven arranged kitchens around the freight elevator and skylit stair core. Large openings were cut into the existing masonry to achieve structural retrofitting, resulting in framed interior portals. The existing heavy timber, steel and concrete structure with brick infill was retained and exposed in public areas. Original materials are juxtaposed with exposed modern steel structural frames, blending the historic with the contemporary.

Studio One Eleven endeavored to make as light an intervention as possible on the exterior to celebrate the façade and retain its connection to the neighborhood. The original arched windows and doors at street level have modern steel shrouds to provide shade and frame views from the inside. Signage was added in a playful contemporary manner, distinguishing it from the restored historical elements.

The 25,000-square-foot culinary incubator facility features 21 kitchens, including 10 prep kitchens, nine commercial kitchens, one show

kitchen and one communal kitchen with five full cook lines. The show kitchen with a private dining room encourages chefs to do demonstrations and podcasts, menu development, recipe testing and content creation. Partake also features meeting rooms where entrepreneurs can connect with and pitch potential investors. Partake is designed to promote a healthy work environment for up to 200 employees, in contrast to the typical windowless ghost-kitchen model, offering generous natural light and air, as well as employee amenities, such as break rooms, bike storage, lockers and showers.

THE RETROFIT

This flagship ghost kitchen, dining hall and market space was created for Partake Collective, a minority-owned company focused on providing access and opportunity for entrepreneurs to launch, grow and expand their culinary businesses.

The project is built on a model that promotes social engagement and community building, rather than focusing strictly on food preparation for delivery-only meals in an isolated drab industrial setting. Partake Collective is committed to being an active and engaged member of the community by working with local educational institutions to support pathways to private enterprise, business ownership and job opportunities to the most under-represented communities.

Partake's design focuses visitor activity on the ground floor around a central retail amenity that has direct pedestrian access. The pick-up zone features a retail kiosk for operators to sell packaged premade goods, in addition to their in-house culinary creations. A completely automated ghost kitchen system delivers orders made online via an app to cubbies and lockers.

Reusing the existing building achieved LEED and WELL Platinum certifications.

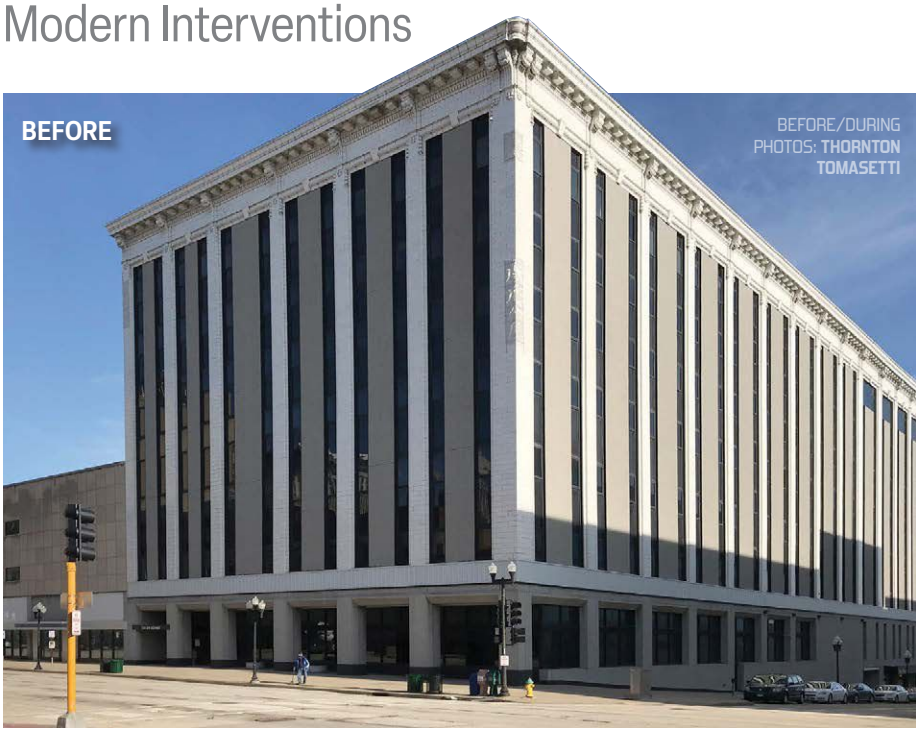
The BIG WHITE STORE

WRITTEN BY | RACHEL MICHELIN, AIA, LEED AP BD+C

Before a 1904 Department Store Could Be Transformed into Office Space, Its Cladding, including Original Terra Cotta, Required Modern Interventions

THE PROJECT provided a unique opportunity to consolidate the Order of Saint Francis HealthCare Ministry's administrative teams while revitalizing downtown Peoria, Ill.

PHOTO: ©2022 BALLOGGPHOTO.COM



BEFORE/DURING PHOTOS: **THORNTON TOMASETTI**

The Block & Kuhl Department Store, designed by the renowned architectural firm of Holabird and Roche, was constructed in downtown Peoria, Ill., in 1904. Known locally as The Big White Store for its gleaming white terra-cotta cladding and soaring 7-story height, the building was the first steel-framed structure in the city.

During the past 120 years, various additions were made to the complex, including the Art Deco 2-story, brick masonry A&P Market Building in 1932, one of the earliest contemporary grocery stores in America, and the Annex in 1949, a stylistically separate retail building with a modernist aesthetic. While in operation, the complex served as an anchor point for a thriving downtown. However, as shoppers migrated to suburban malls in the mid-century, the building was subdivided and eventually completely vacated—a story that is echoed across many Midwestern towns.

Saved from demolition after sitting vacant for several years, the complex recently underwent an adaptive reuse program and is now office space for the non-profit health-care provider, the Order of Saint Francis (OSF) HealthCare Ministry.

PHOTO: ©2022 BALLOGGPHOTO.COM

» As part of the project, the **BIG WHITE STORE** and its additions were identified as contributing structures within the Downtown Peoria National Historic District, recognized on the National Register of Historic Places and received a 2023 Richard H. Driehaus Foundation National Preservation Award.

Established in 1876 when a group of nuns began caring for local patients, free of charge, OSF has a long history and strong ties to the Peoria area, and it is currently the city's largest employer. This project provided a unique opportunity to consolidate OSF's administrative teams while revitalizing downtown Peoria. As part of the project, the buildings were identified as contributing structures within the Downtown Peoria National Historic District, have been recognized on the National Register of Historic Places and received a prestigious 2023 Richard H. Driehaus Foundation National Preservation Award.

To effectively upgrade the buildings, the design team of Dewberry, JLK Architects and Thornton Tomasetti was challenged with evaluating the original terra cotta that remained while improving the exterior envelope performance. Additionally, the original materials were gone from the spandrel areas—ripped out during prior renovations—resulting in the need for replication of the 120-year-old designs with modern technologies.

ORIGINAL TERRA-COTTA CLADDING

Prior to the recent renovation, the only original terra-cotta cladding that remained on the former department store consisted of the original column covers and elaborate cornice, crowning the building. Close-hand reviews and exploratory openings determined that the remaining terra cotta was in remarkably good condition for a building that had been vacant for years. There were only localized areas of cracking and spalling.

Terra cotta often suffers from deterioration related to embedded support steel. In an exterior wall system, small cracks allow water to enter, which can cause issues during freeze-thaw cycles (accumulated water freezes within the system and causes damage to the materials) or the corrosion of embedded, unprotected steel elements, such as shelf angles, ties or rebar. As steel corrodes, it expands in volume, resulting in pressure on the surrounding masonry materials system and eventual spalling. This is especially apparent on historic buildings, which did not have the high-performance coatings or flashing systems that exist today.

For this building, the present-day condition of the terra cotta benefited from its original design, which included a waterproof glaze and tight mortar joints—

only 1/8- to 1/4-inch wide in most areas. Additionally, the structural steel was held back from the building face to provide protection from the elements.

As part of the renovation project, the team evaluated the terra-cotta construction to determine if the addition of insulation and/or vapor barriers was feasible without detriment to the historic building fabric. Materials testing was conducted and incorporated into a hygrothermal (WUFI) model to understand the current, as-built performance, as well as to study several conceptual retrofit options, including the addition of closed-cell spray foam or mineral wool. The evaluation revealed that the team's instinct on the existing performance was correct: The exterior glaze on the terra cotta served as an effective weather barrier. Any additional vapor barriers applied to the inside face of the wall could potentially trap moisture. Furthermore, additional insulation would prevent drying by the heating system because the terra-cotta would be isolated from the interior, undergoing more frequent freeze-thaw cycles. At the conclusion of the study, the team determined the best course of action would be to eliminate additional insulation at the areas of original terra cotta from the design scope and instead focus on improving the roof and secondary elevations clad with durable face brick.

REPLICA MATERIALS

Additional thermal improvements were made possible with the inclusion of replica windows and spandrel panels constructed with modern materials. Because the original spandrel panels and windows were removed decades ago, the team hunted down the building drawings at the Chicago History Museum, which boasts a large Holabird and Roche collection. The collection showed the original construction at spandrel panels to consist of terra-cotta cladding supported by backup brick masonry and steel shelf angles and window lintels. The team also found some early versions of "shop drawings", which demonstrated the architect's original design intent shown as a detail section with the terra-cotta fabricator's

Prior to the recent renovation, the only **ORIGINAL TERRA COTTA CLADDING** that remained on the former department store consisted of the original column covers and elaborate cornice, crowning the building.

THORNTON TOMASETTI personnel investigated existing conditions during the construction phase.

Additional **THERMAL IMPROVEMENTS** were made possible with the inclusion of replica windows and spandrel panels (the originals had been removed decades ago) constructed with modern materials.

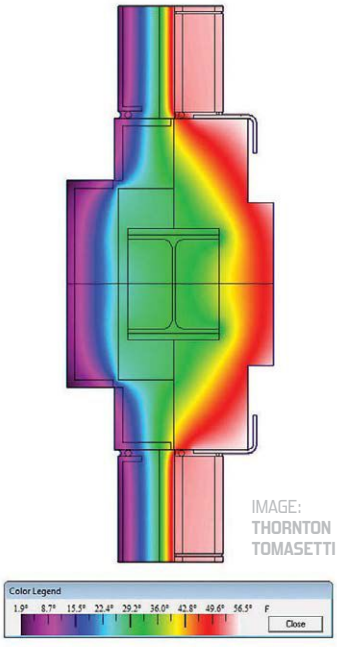


IMAGE: THORNTON TOMASETTI

THERMAL ANALYSIS of column covers during the design phase was conducted using THERM to ensure the anchors for new windows did not introduce areas of thermal bridging, which could result in cold spots and related condensation issues.

RETROFIT TEAM

ARCHITECT // Dewberry, www.dewberry.com

PRESERVATION CONSULTANT // JLK Architects, jlkarch.com

STRUCTURAL ENGINEER AND BUILDING ENVELOPE CONSULTANT // Thornton Tomasetti, www.thorntontomasetti.com

GENERAL CONTRACTOR // POINTCORE Construction, www.pointcoreconstruction.com

MASONRY RESTORATION CONTRACTOR // Otto Baum Company Inc., ottobaum.com

MATERIALS

GLASS-FIBER REINFORCED CONCRETE SPANDREL PANELS // DeVinci Precast, devinciprecast.com

ALUMINUM WINDOWS // Wausau Window and Wall Systems, www.wausauwindow.com

CLOSED-CELL SPRAY-FOAM INSULATION // PSI Preferred Solutions Inc., preferredsolutions.net

> CLOSE-HAND REVIEWS AND EXPLORATORY OPENINGS DETERMINED THAT THE REMAINING TERRA COTTA WAS IN REMARKABLY GOOD CONDITION FOR A BUILDING THAT HAD BEEN VACANT FOR YEARS.

notes and slight revisions overlaid by hand.

These original drawings provided the foundation for the appearance of the replica materials. However, the design team understood that the lead time and sequencing for the project, which also required new aluminum windows, would be critical to its success. Rebuilding each spandrel panel with hand-set masonry would have added time to the schedule and complicated sequencing. Additionally, a solution that matched the historic construction did not allow for much space to add thermal insulation. As such, the team turned to glass-fiber reinforced concrete (GFRC) panels as a solution. GFRC panels are a composite material that is lighter weight and thinner than traditional terra cotta.

The spandrel design ultimately relies on a grouted concrete masonry unit (CMU) knee wall. The large windows at each floor bear on the knee walls; the design intended to provide flexibility, allowing either the GFRC panel or the window to be installed first at the contractor's discretion. The design also allowed the building to become fully enclosed early on, which enabled interior finishing work to begin during critical winter months.

The knee wall functions as a cavity wall, consisting of the grouted CMU, closed-cell spray-foam insulation, an air cavity and the GFRC panel. Support anchors for the panel were installed in the grouted cells of the CMU wall prior to installation of insulation, providing continuity to the system, which also functions as the vapor barrier.

Careful study was necessary where the new windows and spandrel panels met the original columns clad with terra cotta. Heat-transfer analysis was conducted using THERM to ensure the anchors for the new windows did not introduce areas of thermal bridging, which could result in cold spots and related condensation issues. Because of the historic nature of the project, many mockups and samples were necessary to ensure the color, sheen and joint pattern of the GFRC matched the surrounding original terra cotta.

DECORATIVE CAPITALS at the tops of more than 100 interior columns were part of the OSF HealthCare restoration project.

The use of modern materials and analysis has returned The Big White Store to its early splendor while maintaining its 120-year-old theme of innovation. Careful study and evaluation have allowed the building's original elements to function as they have historically performed while new construction methods have provided better thermal comfort and performance to building occupants. As the OSF HealthCare headquarters, the building once again serves as a focal point in downtown Peoria.

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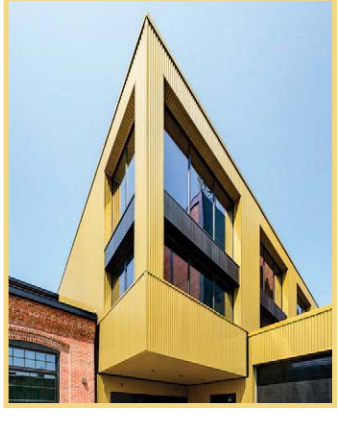

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CAMBRIDGE, MA

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Architect:
CambridgeSeven
Contractor:
T.J. McCartney, Inc.
Photographer:
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HOTSHOT

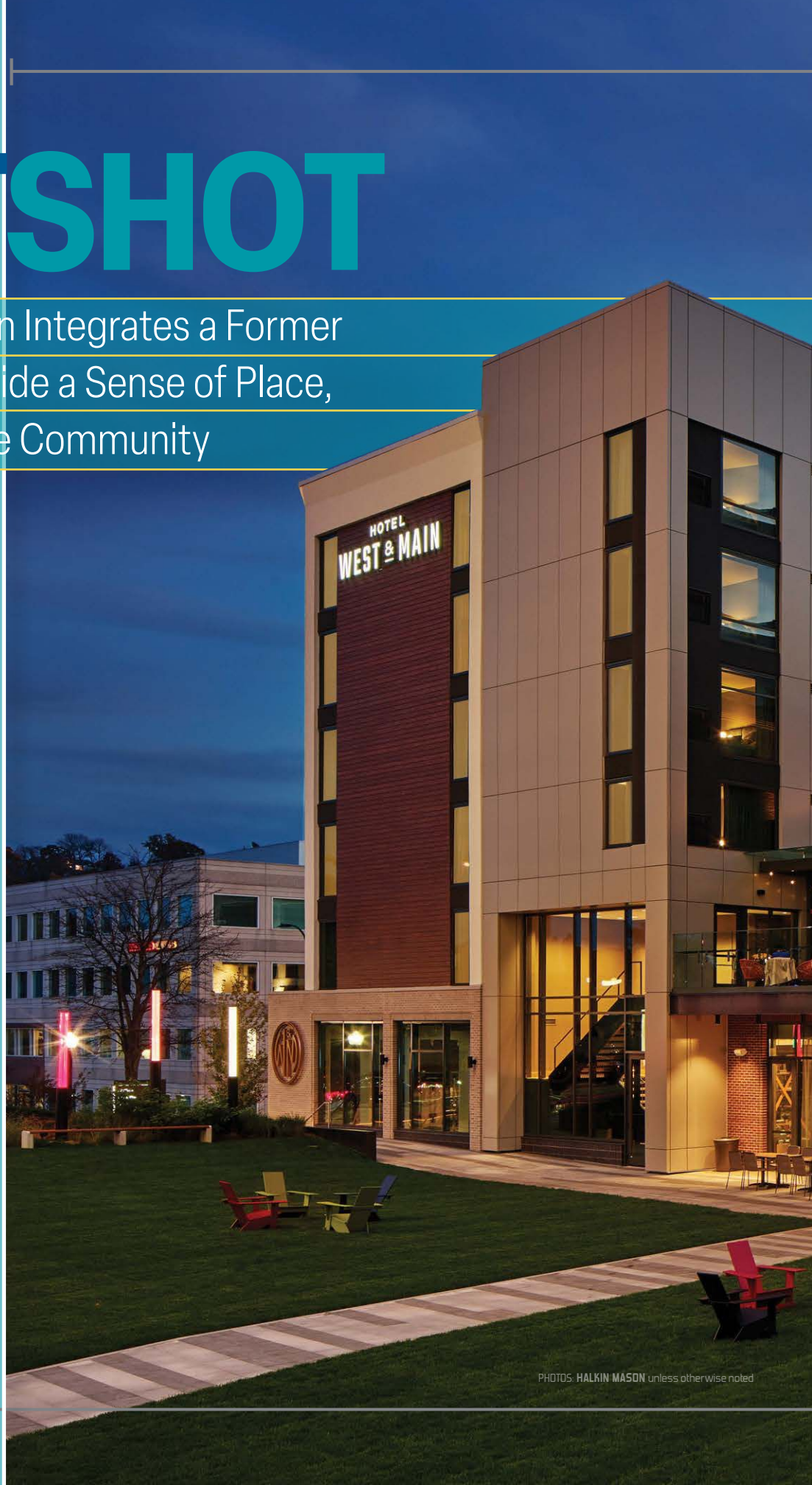
Hotel West & Main Integrates a Former Firehouse to Provide a Sense of Place, Connection to the Community

WRITTEN BY | **MICHAEL BROOKSHIER**

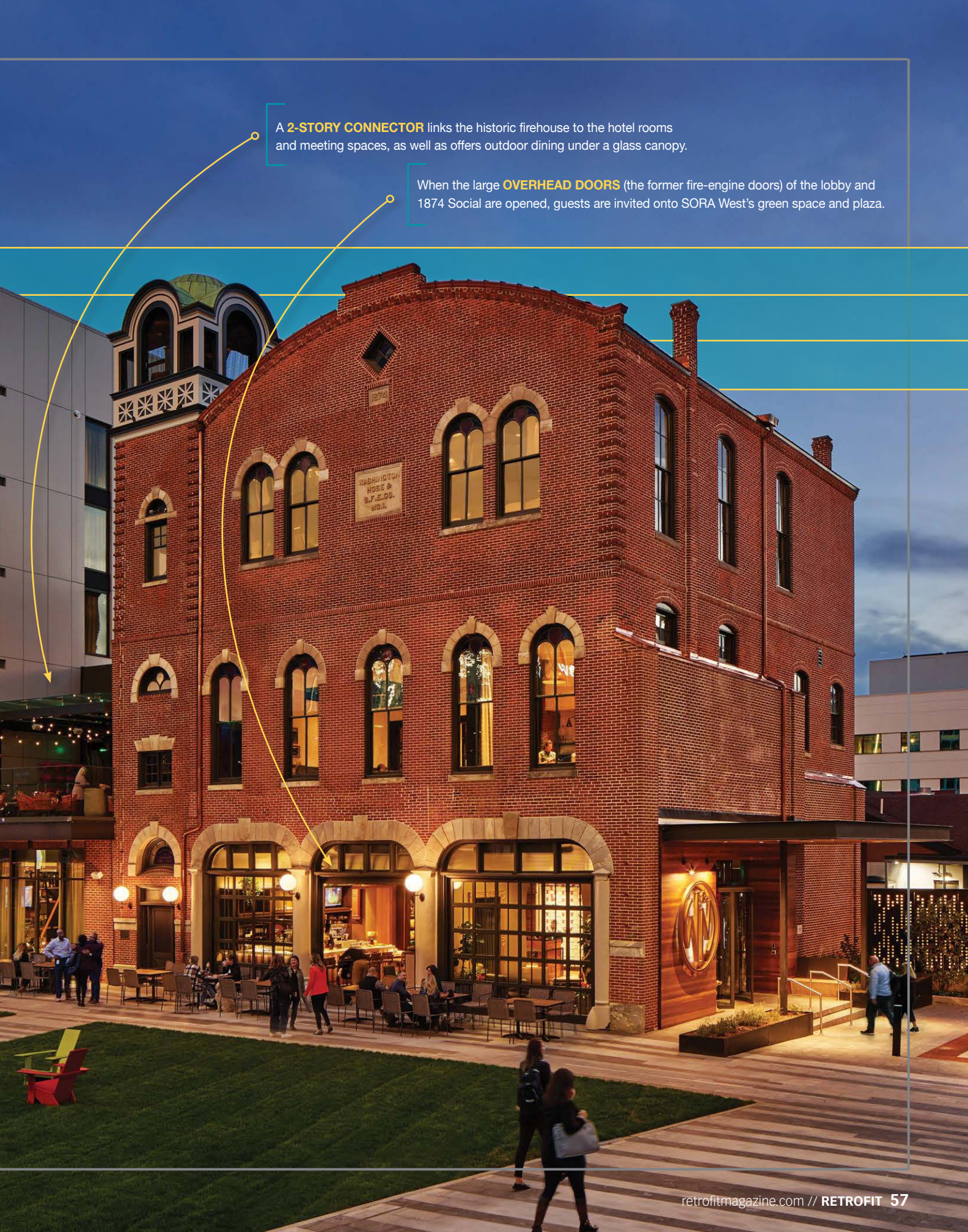
Hotel West & Main in Conshohocken, Pa., a burgeoning suburb of Philadelphia, is a 127-key Tapestry Collection by Hilton hotel, completed in the fall of 2022. It is the final component of Keystone's larger SORA West development, which exemplifies a forward-thinking approach to urban regeneration, community integration and market adaptation. Through a blend of critical insight, partnership and innovation, Keystone has not only ventured into hotel development (from its primary focus on office and mixed-use properties), but also has set a new benchmark for integrating hospitality within mixed-use environments.

THE GENESIS OF AN IDEA

The 520,000-square-foot SORA West development represents a collective vision for a vibrant, walkable town center, which was championed by Conshohocken community leaders, the Montgomery County Redevelopment Authority and Keystone. Keystone happened to own a significant portion of the real estate within the block that would become SORA West, including a historic 146-year-old firehouse that was home to the Washington



PHOTOS: **HALKIN MASON** unless otherwise noted


A **2-STORY CONNECTOR** links the historic firehouse to the hotel rooms and meeting spaces, as well as offers outdoor dining under a glass canopy.
When the large **OVERHEAD DOORS** (the former fire-engine doors) of the lobby and 1874 Social are opened, guests are invited onto SORA West's green space and plaza.

KEYSTONE WITH CONCORD HOSPITALITY SELECTED HILTON'S TAPESTRY COLLECTION BECAUSE IT ALLOWED FOR MORE FLEXIBILITY IN DESIGN AND A STRONG FOCUS ON LOCAL IDENTITY.

Hose and Steam Fire Engine Company, better known as the Washies. The firehouse, which was added to the National Register of Historic Places in 1975, had been in a state of disrepair for more than 50 years.

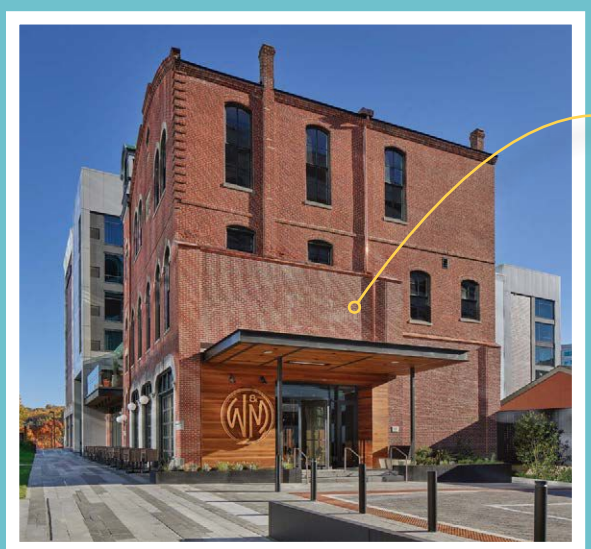
As planning for SORA West began, several factors propelled the decision to include a hotel in the development. The area's existing hospitality options were aging and failing to meet the growing demands of an increasing residential population and the expanding business sector. Furthermore, the ability to offer the development's office tower, which is world headquarters for Fortune 11 Cencora, accommodations for its visitors and employees underscored the hotel's pivotal role in Keystone's broader vision for SORA West.

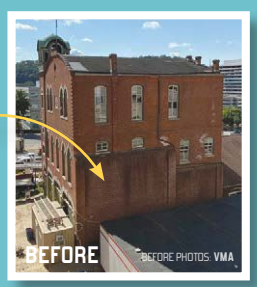
Recognizing the importance of expertise in this new hospitality venture, Keystone partnered with Concord Hospitality, an award-winning hotel developer. This decision was instrumental in navigating the intricacies of the hospitality industry, especially as the COVID-19 pandemic necessitated a reevaluation of the project's scope and design. Initially, the hotel was envisioned as a 168-key site, but the idea of connecting the firehouse as the hotel's grand entrance resulted in a shift in the number of rooms to 127, which worked financially.

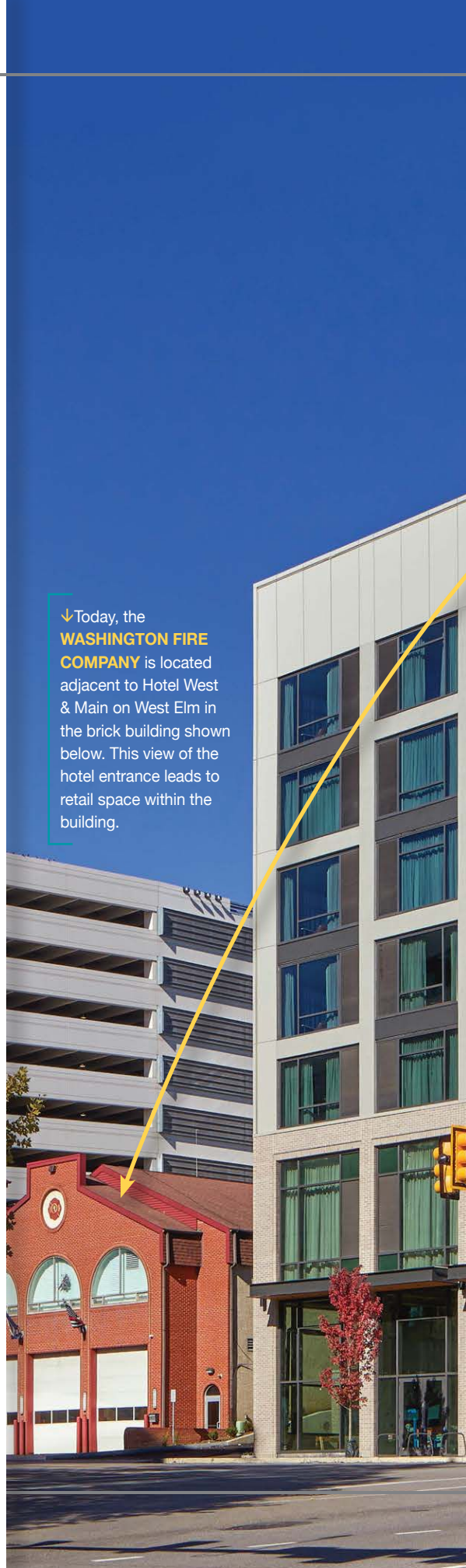
Differentiation through Design and Heritage

The historic firehouse, originally 2 stories, was built in 1877 next to the former borough hall (now demolished). In 1908, a third story was added to the firehouse to serve as a social hall. In the 1980s, the Washies moved into a new firehouse on an adjacent parcel facing West Elm Street, and the historic firehouse was deeded to the Montgomery County Redevelopment Authority.

Keystone never contemplated demolishing the old firehouse because it had been a centerpiece in the borough for nearly 150 years. Even though it had fallen into disrepair, it was a beautiful building with great appeal for the SORA

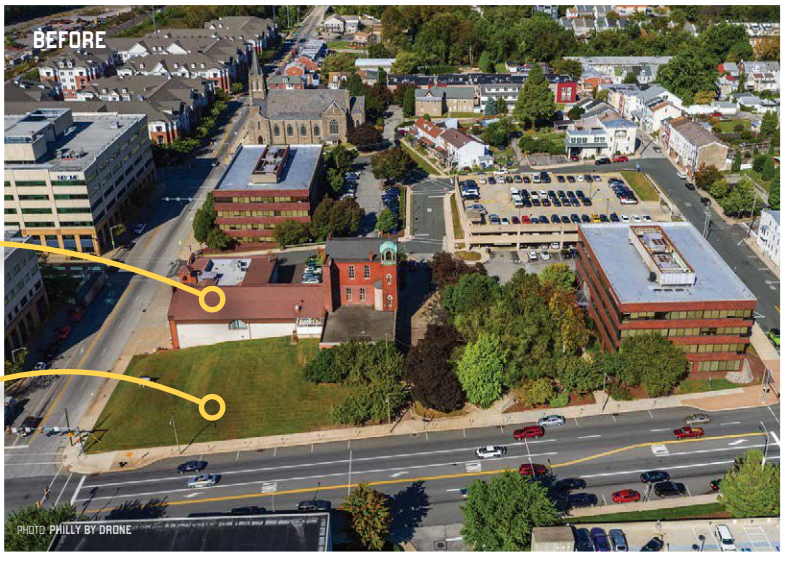






↓Today, the **WASHINGTON FIRE COMPANY** is located adjacent to Hotel West & Main on West Elm in the brick building shown below. This view of the hotel entrance leads to retail space within the building.

→**KEYSTONE** won development rights to the historic firehouse and adjacent vacant land at the corner of Fayette Street (Conshohocken's main street) and West Elm. The vacant parcel was long and narrow, geometrically suitable only for hotel or apartment use.

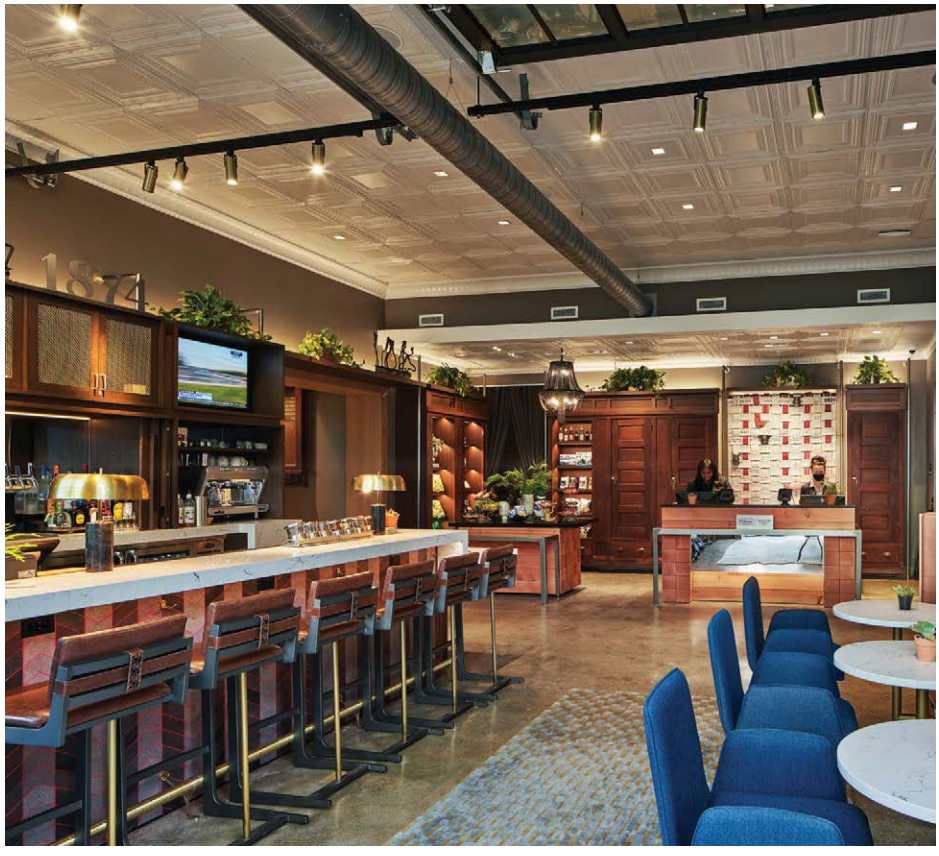


West development.

Keystone with Concord Hospitality selected Hilton's Tapestry Collection because it allowed for more flexibility in design and a strong focus on local identity. Keystone was able to explore creative avenues in integrating the historic firehouse into the hotel's design, paying homage to Conshohocken's rich history while offering a distinctive guest experience. This focus on design and heritage not only enhances the hotel's appeal but also aligns with contemporary consumer preferences for accommodations that provide a sense of place and connection to local culture.

Ultimately, the first and second floors of the historic firehouse and the entire exterior were restored. The first floor serves as the hotel entry and registration area, as well as houses the restaurant 1874 Social, named for the year the Washington Hose and Steam Fire Engine Company formed. The second floor is the Hook and Ladder Sky Bar & Kitchen. The third floor is not in use because it has no elevator access. The bell tower contains a staircase restored for use by hotel staff only.

There are many embellishments and



The **FIRST FLOOR** of the former firehouse serves as the hotel entry and registration area, as well as houses the restaurant 1874 Social, named for the year the Washington Hose and Steam Fire Engine Company formed.

Retrofit Team

DEVELOPER/LANDLORD // Keystone, keystone.us/#1, and Concord Hospitality, www.concordhotels.com

CONSTRUCTION MANAGER // Intech Construction, www.intechconstruction.com

ARCHITECT/DESIGNER // DLR Group, www.dlrgroup.com

INTERIOR DESIGNER // Interior Image Group (IIG), www.iigdesign.com

CIVIL ENGINEER // Pennoni, www.pennoni.com

LIGHTING CONSULTANT // Paragon, www.discoverparagon.com

LANDSCAPE ARCHITECT // Ground Reconsidered, www.groundreconsidered.com

PRESERVATION ARCHITECT // VMA, voithandmactavish.com

PRESERVATION STRUCTURAL ENGINEER // Keast & Hood, keasthood.com

Materials

LIGHTING // Acuity Brands, www.acuitybrands.com

WALLCOVERINGS // MDC Interior Solutions, www.mdcwall.com; Momentum Textiles and Wallcovering, momentumtextilesandwalls.com; and Wolf-Gordon, www.wolfgordon.com

ROOFING // Versico Roofing Systems, www.versico.com

HVAC // Daikin, www.northamerica-daikin.com

CEILING TILES // Armstrong World Industries, www.armstrongceilings.com

CARPET // Royal Thai, www.royalthai.com

PAINT // Sherwin Williams, www.sherwin-williams.com

WINDOW TREATMENTS // Draper, www.draperinc.com

GLASS CANOPY // Paragon, paragontemperedglass.com

ENTRANCES, STOREFRONT AND WINDOWS // Oldcastle BuildingEnvelope, obe.com

artifacts throughout the entire hotel, paying homage to the history of the Washies and Conshohocken. For example, the firemen's pole still runs from the second floor of Hook and Ladder Sky Bar & Kitchen down to the lobby. The original stained-glass windows were restored; the floors and doors in the second-floor restaurant are original; and the piano from the old social hall is in the lobby entry.

A new, 2-story connector links the historic firehouse to the hotel rooms and meeting spaces. It was important to Keystone and Concord Hospitality to have outdoor dining visually connected to the plaza. The dining space is sheltered by a glass canopy included in the connector.

When the large overhead doors (the former fire-engine doors) of the lobby and 1874 Social are opened, the dining experiences are connected to SORA West's green space and plaza, making Hotel West & Main the perfect space for special events, like weddings. The venue not only caters to hotel guests, but also attracts locals and visitors, fostering a vibrant community space that blurs the lines between the hotel and its suburban context.

Strategic Integration and Community Focus

The strategic integration of Hotel West & Main within the SORA West development is a testament to Keystone's holistic approach to real-estate development. This approach goes beyond the mere co-location of diverse property types; it involves creating a symbiotic environment where each component enhances the value and experience of the others. The hotel's placement, with direct access to a public plaza and adjacency to corporate headquarters and vibrant local amenities, exemplifies this strategy. It reflects a deep understanding of how mixed-use developments can catalyze suburban revitalization and community engagement.

Through a combination of visionary planning, strategic partnerships and a deep respect for local heritage, Keystone has successfully navigated the challenges of entering the hospitality sector. Hotel West & Main is a landmark development in Conshohocken and a model for future hotel projects that seek to integrate seamlessly into mixed-use environments and contribute positively to their communities.

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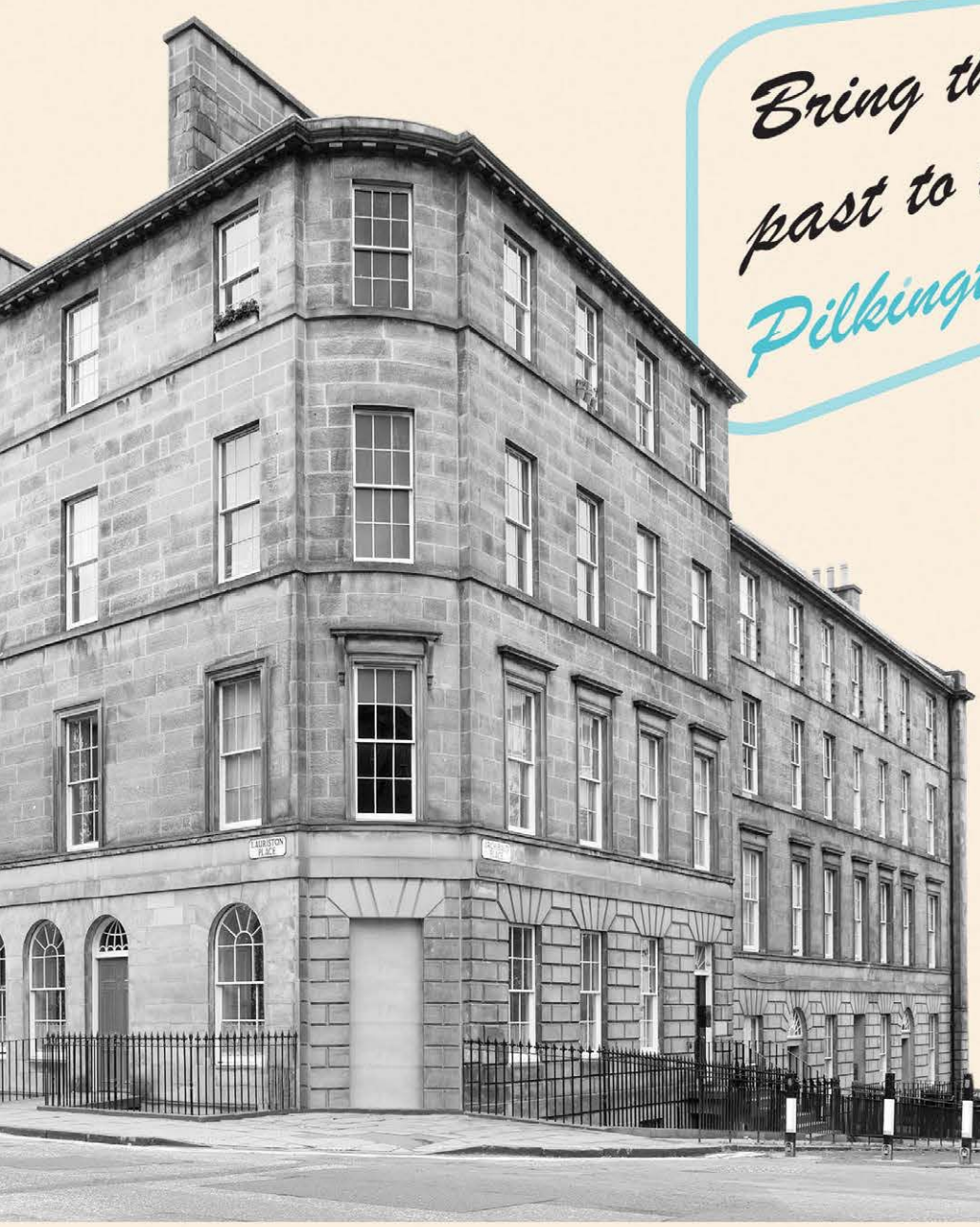

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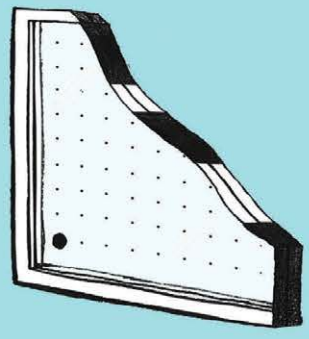
Archibald Place (left) was able to maintain its existing building appearance while upgrading its monolithic glass to modern IGU performance.



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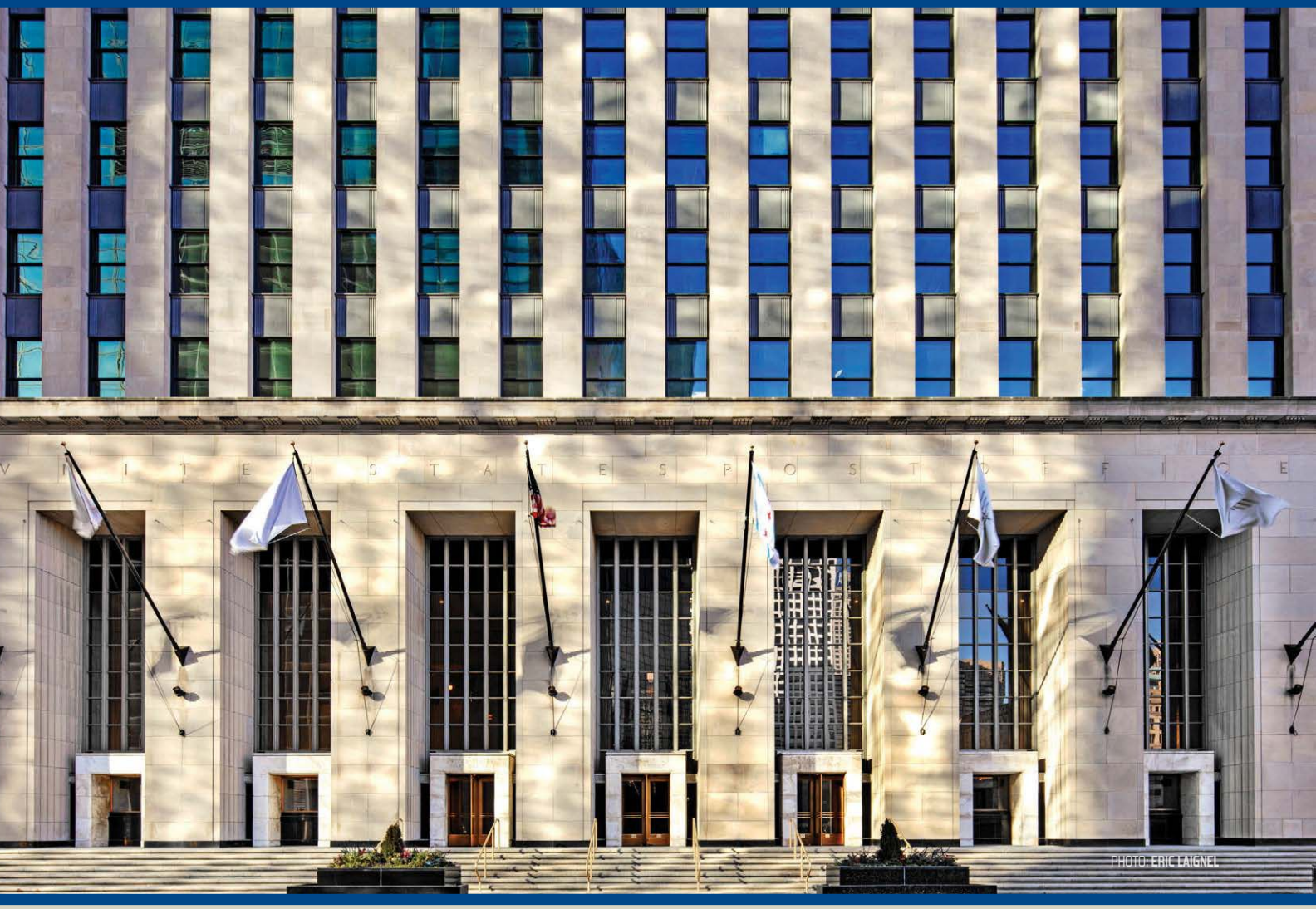

PHOTO: ERIC LAIGNEL

HISTORIC AND ENERGY-EFFICIENCY TAX CREDITS CAN BOOST RETROFIT BUDGETS

WRITTEN BY | JIM SCHNEIDER

There are many reasons to choose to retrofit an existing building instead of building new. Adaptation and reuse of structures serves to preserve the historic fabric of communities. Perhaps even more importantly, the material, energy and embodied carbon impacts involved in new construction are enormous. According to a 2023 report from RMI, retrofitting an existing building emits 50 to 75 percent less carbon than constructing a new building. (Read more at rmi.org/insight/transforming-existing-buildings-from-climate-liabilities-to-climate-assets.)

"Reuse of existing building stock is increasingly important," says Nate Gillette, AIA, president of Natura Architectural Consulting LLC and a ***retrofit*** editorial advisor. "Raw land costs are increasing at unprecedented levels and good raw land is hard to come by. We have

REAP REWARDS

PHOTO: DAVID MITCHELL, COURTESY OF TWA HOTEL

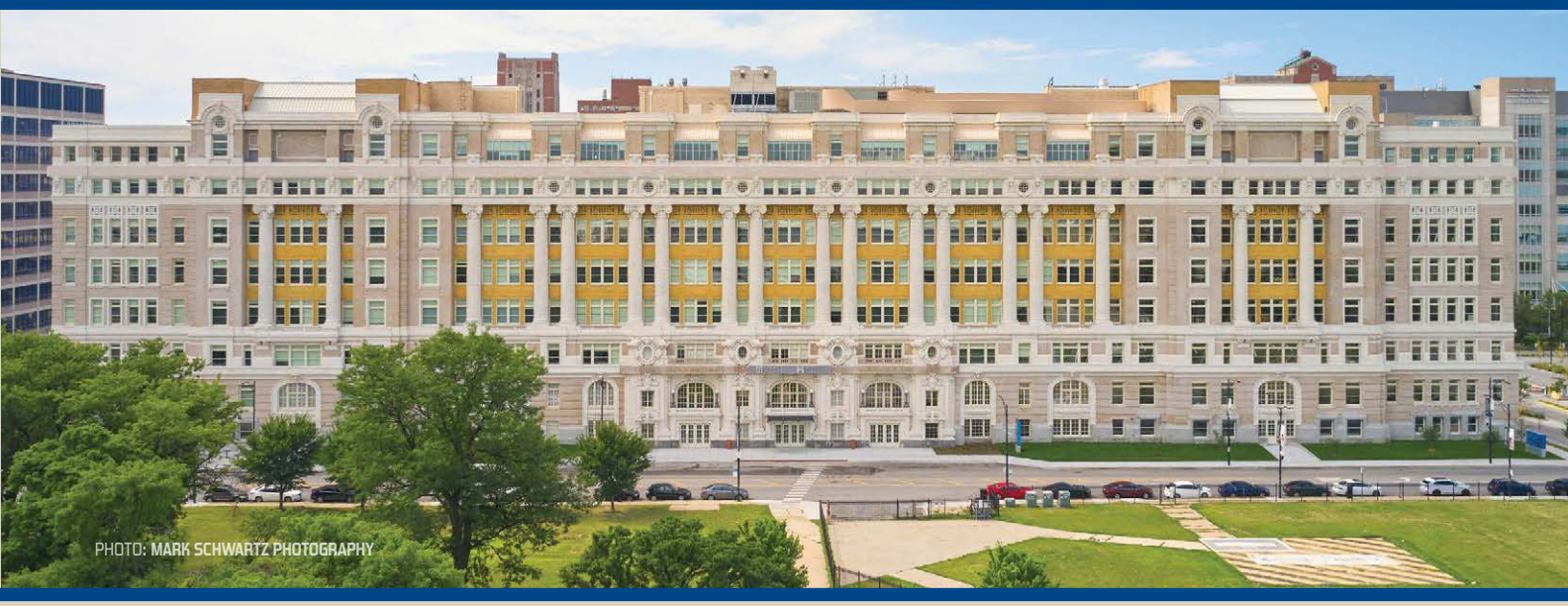

PHOTO: MARK SCHWARTZ PHOTOGRAPHY

so many structures that are underutilized. Why not take advantage of that? Assuming you have four good walls and a good roof to start with, it is much more cost-effective to reuse existing structures."

Although it is obviously important from a sustainability standpoint to preserve and reuse existing buildings, developers always face the literal million-dollar question: Is it economical to pursue a retrofit? The answer is complicated and varies from project to project.

"When reusing an existing building, speed to market is a major advantage," says Jennifer Picquet-Reyes, principal, director of Hospitality, Historic/Adaptive Reuse at Merriman Anderson Architects. "Depending on the age of the building, when it was last renovated and what the existing HVAC looks like, you may convert the building

HISTORIC TAX CREDITS became a gap-filler in Chicago after the banking crisis of 2008, when banks weren't lending 100 percent of the value of a building project anymore. For example, The Old Main Post Office Building (left) sat vacant for two decades before historic tax credits helped it be redeveloped for office space. The rescue of Chicago's historic Cook County Hospital (bottom) would not have happened without around $24 million in historic tax credits from the City of Chicago Landmarks Commission, State Historic Preservation Office and National Park Service. Today, the building is hotel and restaurant space for the Illinois Medical District. Meanwhile, if world-renowned designer Eero Saarinen could walk into the TWA Flight Center (top) at New York's John F. Kennedy International Airport today, he'd see much of his Mid-century design remains, thanks to historic tax credits. Ryan, a global tax-services firm based in Dallas, was involved with all three projects.

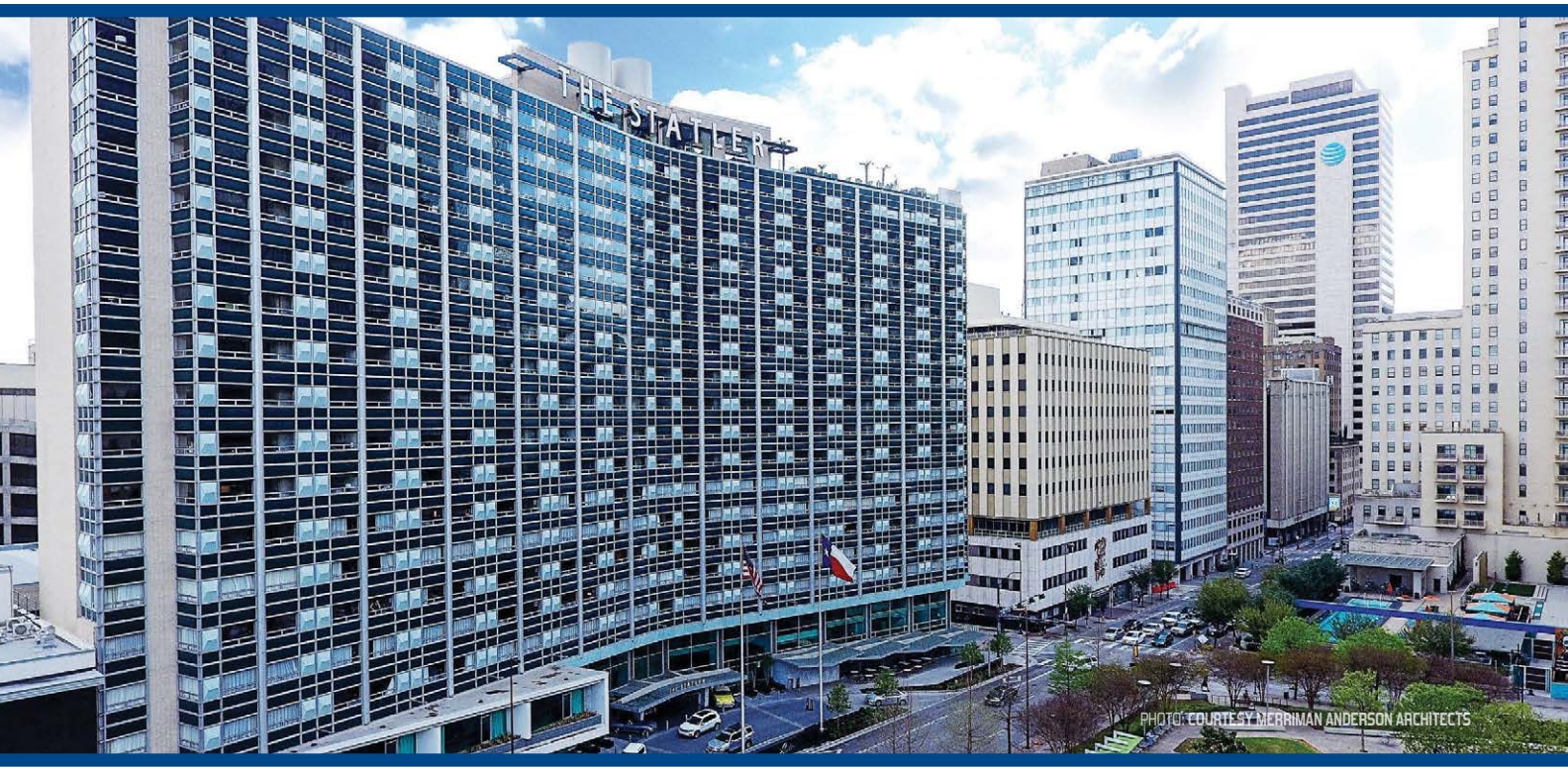

PHOTO: COURTESY MERRIMAN ANDERSON ARCHITECTS

THE STATLER HILTON opened in 1956 as a 1,001-room hotel, convention center and gathering place for the "Who's Who" to lodge in downtown Dallas. After many failed redevelopment attempts, the building was acquired by Centurion American Development in 2015 and has been renovated with the help of historic tax credits. It now includes a 159-room Curio Hilton Hotel, 219 luxury rental apartments, retail and restaurants. Merriman Anderson Architects served as architect on the project.

and have it occupied more quickly. Or you may have projects where you face challenges with floor plate and whether it's converted easily to the use you need."

Historic Support

One way to help tip the balance in favor of cost feasibility is to explore various local, state and federal incentive programs. For example, buildings that are at least 50-years old and could be added to the National Register of Historic Places may qualify for tax credits or other benefits.

"What we know now as the federal historic tax credit began as a deduction in the early 1970s and developed into a tax credit in the early 1980s. It really came into its current form in 1986," says Albert Rex, principal of Historic Tax Credits at Ryan, a global tax-services firm based in Dallas. "Today, along with the federal credit, there are 37 states with historic credits available. These credits have been important in driving restoration and rehabilitation."

"We're really seeing a resurgence of state historic tax credits," Gillette says. "Many states that had done away with them are bringing them back. But these are geared toward historic buildings. Another driver out there is the Low-Income Housing Tax Credit program, which incentivizes affordable housing. Developers that are pairing those credits with acquisition of an existing building are seeing lower costs than new construction by taking advantage of the economic incentives of the tax credits."

"You can piggyback federal and state credits," Picquet-Reyes adds. "The federal historic tax credit is 20 percent, and the states vary. Some cap their historic tax credit, which can make it more difficult to work with. Texas has a robust 25 percent historic tax credit without a cap. The state has found that it really spurs development and brings people back to the cities. This results in more jobs and a stronger tax base, so it really pays itself back."

Getting the historic tax credit can be helpful to finance a retrofit; however, the federal tax code is an ever-moving target. Developers need to navigate the waters to find the best solutions for their projects and their bottom lines.

"Since COVID and all the supply issues and increases in labor costs, the need for historic credits grew. Many clients will look at using that historic credit, knowing they need it to pencil out the project," Rex says. "There have been some changes in the tax code that have made the historic credit a little less valuable in recent years. In 2017, it went from being a one-year credit to a five-year credit. That brings the market for these credits down a little bit for investors because it spreads the benefit out over five years, but there are efforts underway at the federal level to

potentially address this change in value."

Energy Upgrades

Beyond historic tax credits, there are other federal tax benefits that can be reaped in a retrofit project. Efficiency upgrades are one of these to explore.

"It's important to think about the inherent green nature of reusing the structure and the windows and envelope," Picquet-Reyes says. "The savings in embodied energy and material is good for the environment."

The Section 179D Commercial Buildings Energy-Efficiency Tax Deduction (www.energy.gov/eere/buildings/179d-commercial-buildings-energy-efficiency-tax-deduction) has incentivized building-envelope upgrades and other improvements common in retrofits since its adoption in 2006. The deduction was updated and enhanced (bit.ly/3xfkCxw) as part of the Inflation Reduction Act (IRA), passed in 2022. There are provisions under the revised Sec. 179D that expand the opportunity for energy-efficiency retrofits of older buildings to become eligible for the deduction by reducing applicable requirements.

In the old version of the deduction, the requirement for 50 percent energy savings set a threshold that couldn't be met by most retrofits. The update includes amendments that make it easier for these retrofits to be eligible for a deduction. A sliding scale starts the benefit at 25 percent energy savings and lowers the barrier to entry for retrofits. A base deduction begins at 54 cents per square foot if 25 percent energy savings has been achieved. An additional deduction of 2 cents per square foot up to a maximum of $1.07 per square foot is allowed for each additional percentage point of energy savings achieved.

There are other financial avenues that encourage building preservation and retrofits, but they require a little research and creativity to tap into the right resources.

"I think one of the better examples of other kinds of funding are in the rise of local land banks," Gillette says. "Land banks can go after funding and incentives that are not always available to private developers, so we're seeing more public/private partnerships on projects. In a lot of states, brownfield incentives can possibly extend to obsolete

> "THERE ARE MANY REASONS TO VALUE AND INCENTIVIZE THE UTILIZATION OF EXISTING BUILDING STOCK. IT'S CHEAPER TO RENOVATE THAN BUILD NEW AND ADVANTAGEOUS TO COMMUNITIES TO GET BUILDINGS BACK ON THE TAX ROLLS AT THE HIGHEST AND BEST USE OF THE PROPERTY."
>
> *— Nate Gillette, AIA, president, Natura Architectural Consulting LLC,* ***retrofit*** *editorial advisor*

buildings and don't necessarily mean they are environmentally contaminated."

Penciling Out

Construction projects of any kind encourage developers and owners to find every avenue toward the best financing structure. For those who identify good potential retrofit projects, historic and energy-efficiency tax incentives can be extremely helpful. Retrofitting an existing building can be a win-win for the planet and the profit line.

"Often rehabbing a historic building into a hotel makes a great historic tax credit project," Rex says. "Chicago is a good example. It was not a huge historic tax credit market for a long time, even with some of the best historic buildings in the country. But after the banking crisis of 2008, the Chicago market went crazy. Because banks weren't lending 100 percent of the value of a building project anymore, they wanted to see some equity, and historic tax credits were a gap-filler."

Although tax and funding support programs exist, they aren't necessarily common knowledge and often aren't sufficiently promoted. But for those who take the time to seek them out, they are there.

"There are many reasons to value and incentivize the utilization of existing building stock," Gillette says. "It's cheaper to renovate than build new and advantageous to communities to get buildings back on the tax rolls at the highest and best use of the property. We just need to figure out which financing mechanisms work and which don't."

RESOURCES

There are many incentives available for retrofit projects. Some are at the federal level, but many are operated by state and local governments. Following are a few examples:

- There are many facets to the federal historic preservation tax credit. Learn more on the IRS website: www.irs.gov/businesses/small-businesses-self-employed/rehabilitation-credit-historic-preservation-faqs.
- The federal 179D Commercial Buildings Energy-Efficiency Tax Deduction primarily enables building owners to claim a tax deduction for installing qualifying systems in buildings: www.energy.gov/eere/buildings/179d-commercial-buildings-energy-efficiency-tax-deduction.
- The U.S. Department of Energy lists resources for funding retrofit projects: www.energy.gov/eere/buildings/financing-efficient-and-healthy-retrofits.
- Check out the Low-Income Housing Tax Credit: www.huduser.gov/portal/datasets/lihtc.html.
- RMI provides a list of resources: rmi.org/our-work/buildings/deep-retrofit-tools-resources/deep-retrofit-case-studies.
- Land banks rehabilitate properties and then transfer them back to responsible ownership and productive use in accordance with local land-use goals and priorities: communityprogress.org/nlbn/land-bank-faqs.
- Brownfield recovery funds may be available for some retrofit construction: cityparksalliance.org/funding-hub/brownfields-funding.

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Two Rivers Public Charter School, Washington, D.C.

Architect: Studio Twenty Seven Architecture

Photo credit: Hoachlander Davis Photography

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AIA

COLUMN LIGHTS AND BOLLARDS ILLUMINATE PEDESTRIAN APPLICATIONS

U.S. Architectural Lighting has introduced the AXIM Series of contemporary columns and bollards. Available in height ranges from 3 to 16 feet for varying scale and applications, the high-performance AXIM Series includes two column lights and a bollard built around U.S. Architectural Lighting's PLED Optical System. The AXIM Series can light pedestrian applications, such as parks, pathways, entries, plazas and walkways. In terms of photometric output, the series include wattages, ranging from 7 to 66 watts, and maximum lumen output, ranging from 4800 to 8500 Lumens, depending on the PLED distribution. The series is available in standard 2700K, 3000K, 4000K and 5000K. All Standard LEDs have a minimum of 70 CRI. The drivers, which are UL and cUL recognized, have a minimum operating temperature of -40 F.

www.usaltg.com

ELEVATOR DRAINS PREVENT WATER FROM ENTERING SHAFT

Infinity Drain has made available a line of elevator drains that prevent water from entering elevator shafts in the event of a fire and triggered sprinkler system. Designed to keep the pathway clear for fire-safety professionals while evacuating water at 100 gallons per minute, these commercial drains are typically positioned in front of the elevator door or elevator bank and comply with SFFC Code, Section 511.1 for a 100 GPM flow rate. The elevator drains are available in 36-, 42- and 48-inch kits, two finishes—Satin Stainless and Polished Stainless—with removable grates for easy cleaning and maintenance.

infinitydrain.com

WINDOW FILM BOLSTERS WINDOWS AGAINST THREATS

3M ScotchShield Security Window Film S2400 is engineered to bolster windows against potential threats by employing new film technology using patented urethane construction and a proprietary 3M adhesive. The 24-mil construction forms a resilient barrier that helps hold glass fragments together upon impact, thereby reducing risks associated with forced entry or smash-and-grab incidents. The film represents an evolution in thin-film technologies designed for glass safety and security and outperforms the existing polyester-based PET products that have permeated the industry since the 1970s.

www.windowfilmdepot.com/product/3m-scotchshield-safety-security-window-films-s2400

MODIFIED BITUMEN MEMBRANE IS OFFERED WITH BRIGHT WHITE GRANULATED SURFACE

GAF has released its RUBEROID & GAFGLAS EnergyCap Bright White Granulated membranes. The new surfacing replaces the previous coated membrane version with a new premium bright white solar reflective granule to help address cool roof initiatives across the country with the durability of modified bitumen. The product makes installation easier by allowing for simplified side- and end-lap embedment, improving adhesion and loose granule application on lap bleed-out. EnergyCap membranes can be used in heat-welded (torched), cold asphalt or hot-mopping asphalt applications. EnergyCap membranes are FM Approved (refer to RoofNav.com for specific assemblies), classified by UL in accordance with ANSI/UL 790 (refer to UL Product iQ for specific assemblies), and rated with the Cool Roof Rating Council for their reflective properties. To comply with the requirements of the California Energy Code, Title 24, an Ultra Bright White version also is available on a made-to-order basis.

gaf.com

IMPROVE AIR CLEANLINESS WITHIN A STERILE ENVIRONMENT

Greenheck's new modular air distribution systems accommodate the specialized medical, mechanical, and electrical considerations of operating and imaging rooms. Incorporating laminar diffuser arrays that simplify coordination during design and installation, these modular systems maximize diffuser coverage over the patient, ensuring optimal conditions for medical procedures. Model HLC-MPA modular plenum array utilizes configurable diffuser segments assembled onsite to create a single low-profile diffuser array. Model HLC-SPA features high-grade structural steel tubing that creates a frame to attach to the building structure and support all the diffuser modules. Model HLC-HCG heavy-duty ceiling grids seamlessly integrate laminar flow diffusers, equipment booms and surgical luminaires to create the central diffuser array. Greenheck operating and imaging room modular air distribution systems are designed to meet FGI, ANSI/ASHRAE Standard 170, and ANSI/IES RP-29-16 requirements.

www.greenheck.com/products/air-distribution/healthcare-laboratory-cleanroom-products/operating-and-imaging-room-systems

SLIDING DOOR LEAVES OVERLAP TO MINIMIZE WALL SPACE NEEDED FOR OPERATION

AD Systems has launched its XtendSlide Telescoping Sliding Door System, which allows door leaves to overlap to maximize opening width and minimize the wall space needed for full operation. XtendSlide was designed for classrooms, exam rooms and other low-traffic areas that may function as flexible spaces. Available in two-, three- and four-door configurations, XtendSlide can provide a range of flexible opening widths. The system is available in a top-hung, surface-mounted configuration or inset with an integral sidelite. For configurations with three or more doors, a floor track is required. For other configurations, the door is available with a concealed door guide. Both options come with Allegion's ADA-compliant hardware. XtendSlide also includes soft-close dampening technology to support a long-service life and quiet operation.

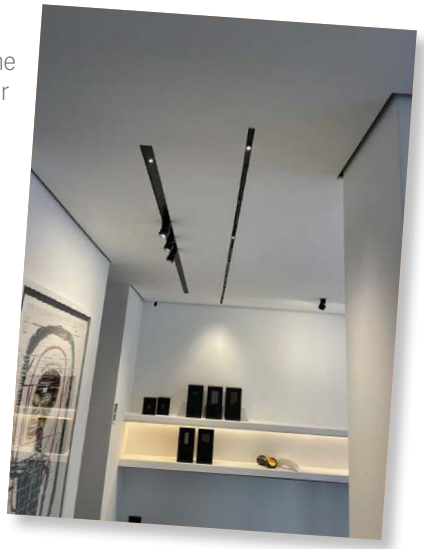
www.specadsystems.com

DOCK SOLUTIONS MAINTAIN SAFETY

Overhead Door has launched innovative dock equipment—a Mechanical Pit Leveler; an Edge of Dock; and a comprehensive line of seals, shelters and accessories. The Mechanical Pit Leveler and Edge of Dock designs deliver durability specifications outlined in ANSI MH 30.1. The Mechanical Pit Leveler also creates an easy-to-install solution with adjuster feet that help to quickly position the dock to floor height, so the installer never needs to be under the leveler. A textured, proprietary powder coat offers traction and slip resistance, even when wet. This EPA-recommended powder coat enhances safety, durability and corrosion resistance. Complementing these products are the seals and shelters, fabricated from premium-grade, fire-retardant foam and bolstered by UV-resistant fabrics. In addition, the company's accessories, from lighting and track guards to multi-bumper options and chocks, round out the one-stop-shop of dock and door solutions.

www.overheaddoor.com

ARCHITECTURAL LINEAR DIFFUSER IS INTEGRATED WITH LIGHTING MODULE



Titus has launched the FL-10 LED architectural linear diffuser system, which fully integrates the Titus FlowBar architectural linear diffuser with the Apure MINUS 2 lighting module. The FL-10 LED FlowBar system maximizes air-diffuser performance while giving architects and designers greater aesthetic freedom than conventional air supply diffusers. Integrating HVAC and lighting also can reduce costs and installation time. With a low-profile, 1-inch slot width, the aluminum FlowBar system features a frameless border for a clean look. It has integral pattern controllers on standard 24-inch centers, which allow the airstream to be directed left and right for horizontal and vertical airflow. The FlowBar system is available in 6-, 8-, 10- and 12-foot segments, along with HighThrow and JetThrow versions. Mitered corners and angle cut ends also are available.

www.titus-hvac.com/Products/Diffusers/FL-LED

LONGTIME EXTERIOR METAL WALL PANEL MANUFACTURER RELEASES INTERIOR PANELS

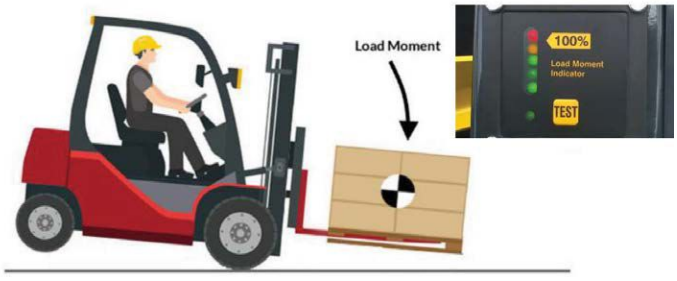
3A Composites USA has launched MONARC, a range of composite wall panels for interior spaces. Three MONARC collections, consisting of 19 original designs, have been thoughtfully curated and developed to enable designers and developers to elevate interior spaces with ease. MONARC is made from two sheets of .012-inch aluminum bonded to a fire-retardant mineral core in a continuous extrusion process, creating a rigid and durable aluminum composite panel. It offers formability and flatness and requires no special cleaners. MONARC's high-quality finishes are resistant to fading and surface damage. The panels also can be specified in wet-wall applications. Made in the U.S., MONARC is quick and easy to install—no trim work or grout needed—and transport to any job site.

3acompositesusa.com/monarc

AVOID OVERLOADING FORKLIFTS

Forklift operators who are insufficiently aware of the load they are lifting and the risks that come with exceeding forklift rated capacity not only compromise their own safety, but also place everyone working around them at serious risk. There are several factors that can influence a forklift to become overloaded: load center, weight of load, lift height and type of load. Combilift's new Combi Safe-Lift is an anti-overload device that enables operators to avoid the pitfalls of overloading. The Combi Safe-Lift incorporates a strain sensor on the mast section and a lift cut-out valve on the hydraulic line to disable lifting if the unit is being potentially overloaded. An audible alarm warns the operator of an overload situation while a load moment indicator—fitted to the dashboard in the cab—signals red and amber when there is risk of overloading or when the forks are not fully engaged.

combilift.com/us



POLYISO IS TAILORED FOR BELOW-GRADE APPLICATIONS

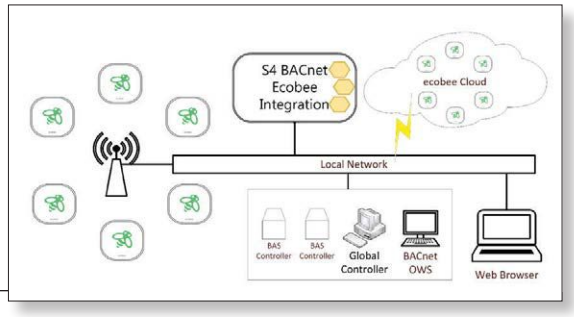
Rmax, a division of Sika Corporation that specializes in developing and producing insulation solutions, has launched Rmax Below Grade, which insulates and protects below-grade foundation applications while meeting energy-code requirements. Polyiso insulation historically is a popular choice for continuous wall and roofing applications, enhancing the energy efficiency of buildings by effectively insulating against heat transfer. Rmax has tailored polyiso for below-grade applications by incorporating a durable water-resistant facer onto the closed-cell foam core. Rmax Below Grade meets the R-10 requirement with only 1.5 inches of polyiso. By using 25 percent less material, the solution requires fewer truckloads and less floor space per square foot of inventory compared to other below-grade insulation options.

www.rmax.com

COMMUNICATIONS GATEWAY INTEGRATES WITH SMART PORTAL FOR COMPLEX BUILDINGS, CAMPUSES

S4 Integration Solutions Inc. develops and distributes communications gateway technology to cost effectively, and with minimal interruption, make buildings more efficient. S4 products support any BACnet-compatible application or service. Meanwhile, ecobee's SmartBuildings portal addresses the needs of small- to mid-sized commercial buildings where there is no BAS installed. Now, the S4 BACnet ecobee Integration takes over for larger and more complex buildings. The S4 BACnet ecobee Integration adds the ability to incorporate ecobee thermostats into the BAS via BACnet, thus enabling the optimization of the entire building (or campus). This solution retains all the services, benefits and flexibility of the ecobee SmartBuildings technology, delivering the best of IoT and the BACnet building automation standard. The S4 BACnet ecobee Integration introduces value-added applications, such as energy management, analytics, fault detection and diagnostics, or continuous commissioning to further improve the efficiency of the building.

www.s4integrationsolutions.com/products/ecobee



AD INDEX

MAY-JUNE 2024

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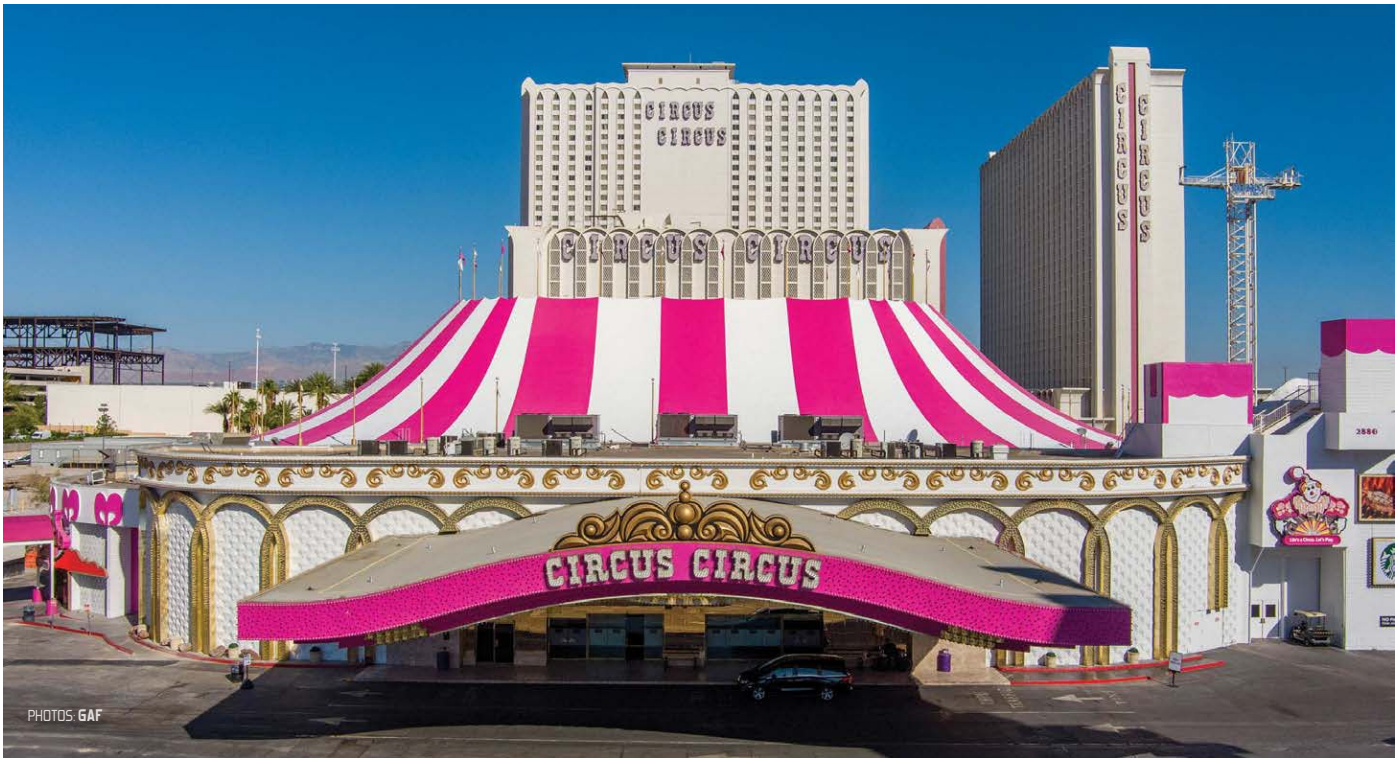
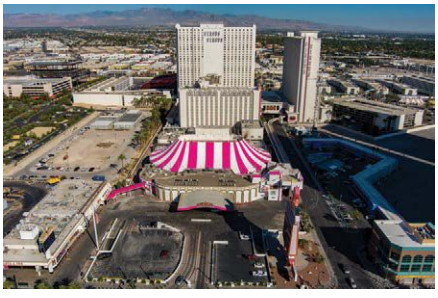
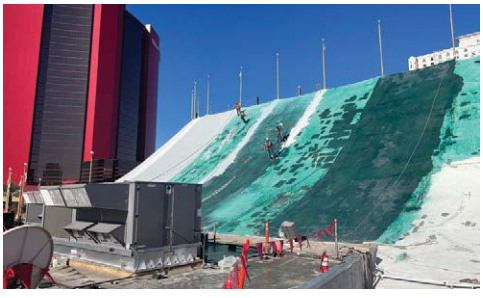
CIRCUS CIRCUS

Coatings on Circus Tent Roof Maintain a Las Vegas Icon



PHOTOS: GAF





Circus Circus Hotel and Casino is the largest permanent circus in the world and even includes an indoor amusement park, making it an iconic Las Vegas landmark since its opening in 1968. To maintain its symbolic status on the Strip, Circus Circus leaders wanted to give the exterior a fresh new look. The roof, which is shaped like a circus tent, provided a technical challenge that required extensive planning for safety, design and structure.

After years in the blazing desert sun, the roof and its iconic pink and white colors had faded, requiring a solution that would not only repair the steep and unique roof, but also revitalize the vibrant colors of the signature tent.

The 43,500-square-foot roof consists of 41,300 square feet on the tent proper, which presented technical challenges because of its 12:12 pitch and 90-degree angle at the top, and 2,200 square feet of low-slope area.

A crew from Commercial Roofers partnered with the roofing manufacturer to ensure the installation went smoothly. Commercial Roofers began its work by prepping, patching and repairing the substrate. Then a moisture barrier, primer, topcoat and custom coatings, including Exuberant Pink, were added to ensure a long-lasting, fade-resistant roof system that will withstand extreme Las Vegas heat, wind and weather conditions. The coatings were installed with guards on each side of the border to avoid overspray into other roof areas. Given the steep incline of the roof, the workers had to rappel down with a rig, pump, hose and spray system set in place.

Despite working in windy and rainy conditions, the crew remained safe and completed the project without disruption to Circus Circus' business operations.

RETROFIT TEAM

ROOFING CONTRACTOR //
Commercial Roofers, commroof.com

MATERIALS

ROOFING // HydroStop BarrierGuard Waterproofing, UniBase Primer, High-Tensile Acrylic Top Coat, HydroStop Hydro-Fiber Bulking Agent, Kymax Coating and United Coatings Roof Mate Fabric from GAF, www.gaf.com

VIEW THE **2023** WINNERS AT

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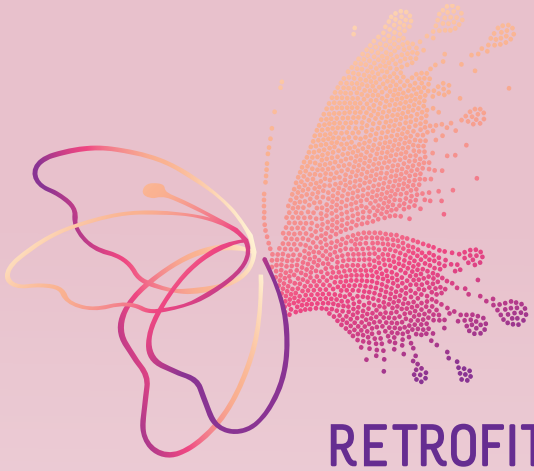

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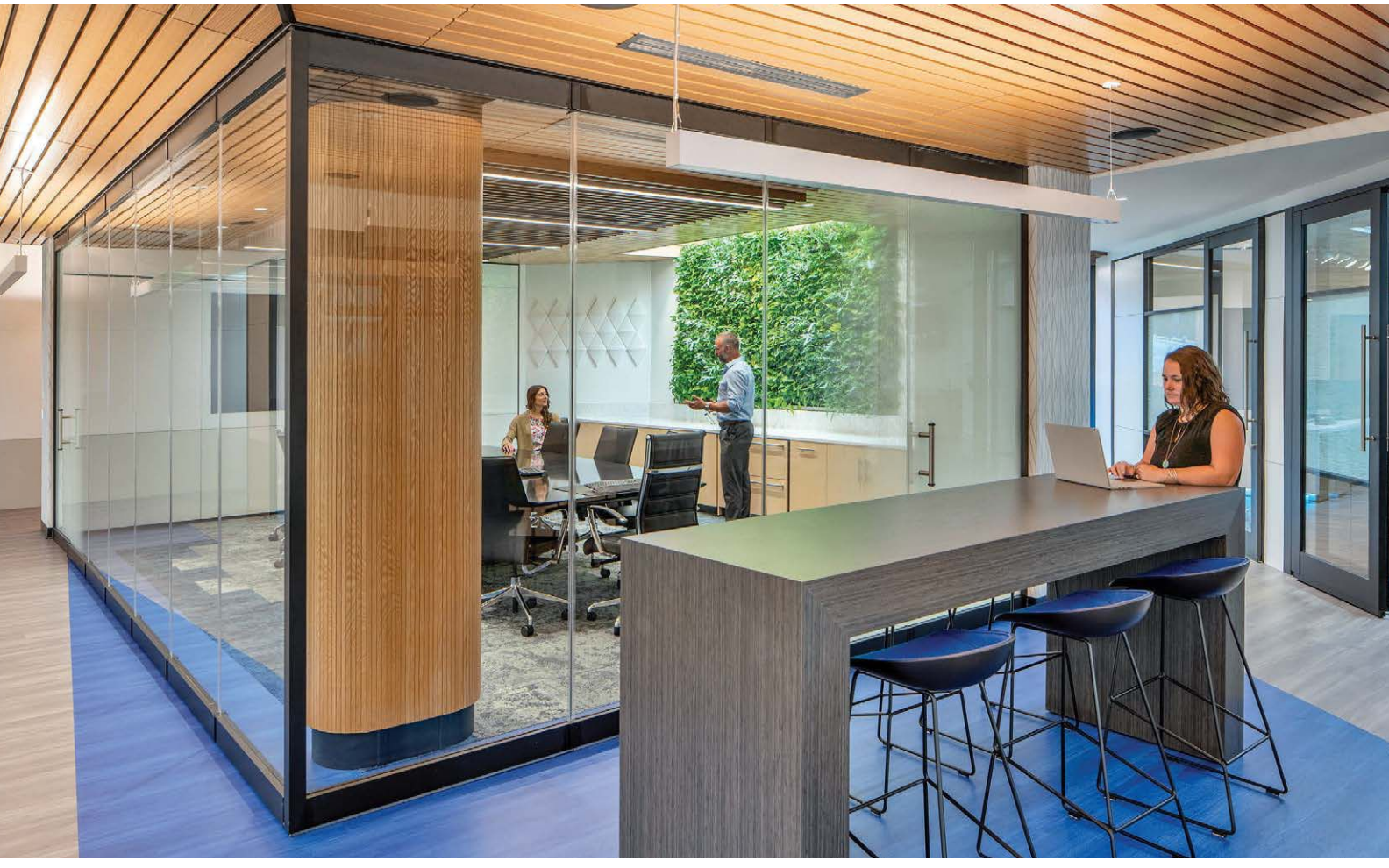

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