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Elements at a California Winery Relate Stories from Its Past and Inspire New Ones

+ More Hospitality & Entertainment Projects

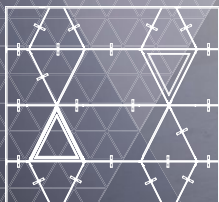


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Cade Museum for Creativity + Invention, Gainesville, FL Installing contractor: Architectural Sheet Metal, Inc.
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- Point at Poipu, Koloa, Kauai, Hawaii
- Broadway Center for the Performing Arts, Tacoma, Wash.
- DoubleTree by Hilton Hotel, St. Louis Park, Minn.



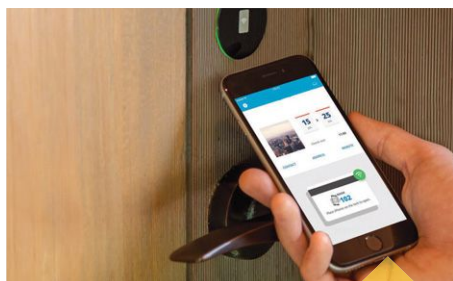
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COVER PHOTO: ADAM ROUSE

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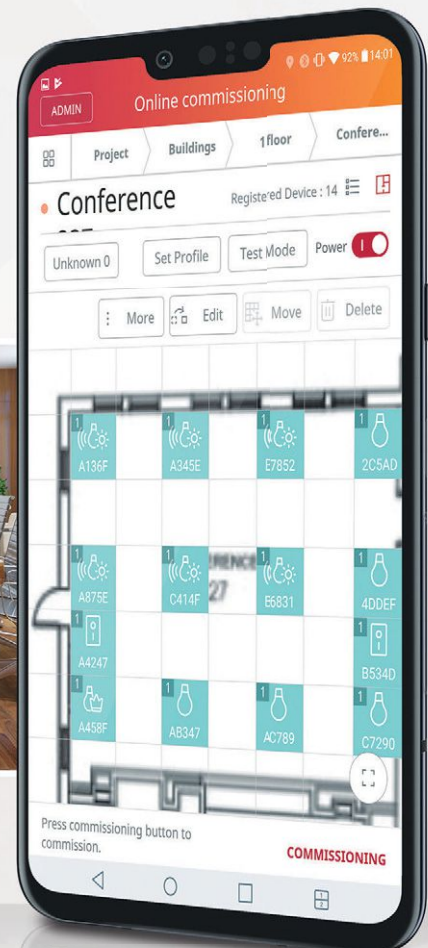
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RETROFIT // Vol. 10 // No. 3 is published bimonthly by Fisher Media LLC, 98 Booth Meadow Lane, Durham, NC 27713, (919) 641-6321. POSTMASTER: Send address changes to **retrofit**, 2409 High Point Drive, Lindenhurst, IL 60046.

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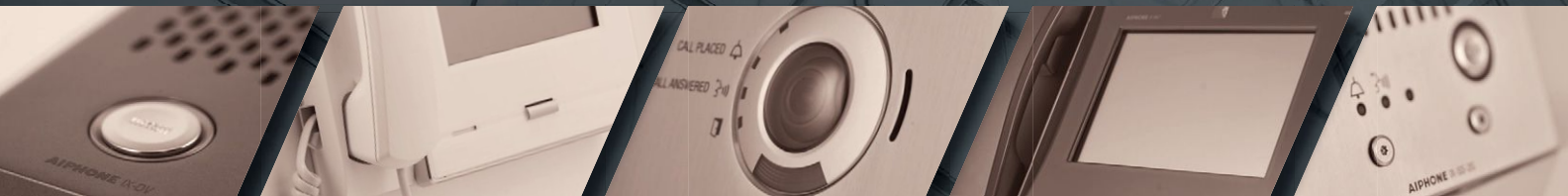


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CHALLENGE YOURSELF FOR A BETTER MIND, BODY, SPIRIT

When was the last time you did something that challenged you? And I mean really challenged your mind (or your body) to the point where you thought, “I just can’t do this!”? I’m willing to bet as an adult you aren’t challenging yourself to try new (and possibly frightening) things on a daily or even weekly basis. Maybe you don’t challenge yourself at all.

I have to admit, I thought long and hard about whether I wanted to start piano lessons as an adult. Was this a commitment I wanted to make? I had mentioned fleetingly to my husband once that I’d always wanted to learn to play. He never forgot this and, for our first anniversary, he bought me a piano and scheduled lessons for me with one of his work colleagues, Pat, who teaches piano to children and adults in her spare time.

After a couple years of lessons (with breaks when my daughter was born and for the unexpected loss of Pat’s husband), I’ve suddenly gotten to the point where my lessons are incredibly difficult. I just can’t seem to make my left and right hands do very different things at the exact same time! Last night, during my piano lesson, I literally said to Pat, “I just can’t do this!” I was frustrated and certain I was wasting Pat’s time—and my own.

Because she’s a fabulous instructor (and person), Pat said she’s proud of me for not giving up. As adults, we can walk away from things we struggle with much more easily because, well, we’re adults and can do about anything we want (within reason, of course). Pat reminded me learning something new, especially music, is great exercise for our brains as we age. The brain never stops changing through learning. It’s called neuroplasticity, or brain plasticity. Genetics, your environment and the actions you take to learn new things affect your brain plasticity. Pat told me there has been a lot of research that playing music improves the areas of the brain that help with body movement and body orientation, as well as process visual information. She noted music therapy has become very popular in assisted living and retirement communities because of all the benefits it provides the brain and body.

While reading our “Cover Story”, page 26, and “Historic”, page 60, I couldn’t help but wonder whether the project teams ever doubted whether they could truly overcome the formidable challenges retrofitting these buildings posed. Did they ever say, “I just can’t do this!”? Both buildings’ structures were failing, requiring the project teams to perform “surgery” to stabilize them while preserving their beloved features. I am in awe of the amount of dedication these project teams put into these two buildings, and I think you will be inspired by their extraordinary preservation feats, too.

After reading these articles (and speaking with Pat about my future as a pianist), I’m encouraged to continue with my lessons and to even find more time each day to practice. With Pat’s guidance, I have challenged (and improved) my brain in the past couple years. I’ve also made a wonderful friend in Pat; we make time during each lesson to talk about children, marriage, work and life. If I wasn’t taking piano lessons from her, I’d still want to sit down with her at least weekly just to talk. She has enriched my life, and I’d wager the preserved buildings we profiled in this issue are enriching lives, too.

WHAT INSPIRED ME IN THIS ISSUE?

“I loved the Cavalier Hotel story on page 60! If Virginia Beach, Va.-based Gold Key | PHR hadn’t been the project’s developer, the circa-1927 hotel that hosted presidents and celebrities likely would’ve been demolished for condos or another more lucrative business venture. Design Principal Greg Rutledge, AIA, of Norfolk, Va.-based Hanbury, which restored the Cavalier, told me he receives at least two emails per week raving about how nice the hotel is. Visitors’ reactions to the hotel—and the community’s gratitude—confirm restoring the Cavalier was worth the time and cost.”

Christina Koch

CHRISTINA KOCH
Editorial Director, *retrofit*

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Anthony J. Spata, P.E., LEED AP, was director of building systems

design, Americas, for Hyatt Hotels for 11 years before forming Spata Global Design Group and becoming an at-large consultant to the hospitality, retail and food-service industries. Spata shares his vast hospitality knowledge in "Business", page 18, in which he reveals the six technology systems commonly being updated in today's hotel guestrooms.



In Sonoma, Calif., Scribe Winery's land and buildings have stories to tell.

KJ Fields, a Portland, Ore.-based **retrofit** contributor, tells some of those stories through her interview with David Darling, principal at San Francisco-based Aidlin Darling Design, one of the collaborators who helped preserve the winery for visitors. Read our "Cover Story", page 26, while sipping your favorite glass of vino.



Nate Sanders (left), CIH, is vice president of Florida-based Liberty Building Forensics Group. With more than 15 years' experience in occupational and environmental health and

safety, Sanders has conducted hundreds of evaluations of physical, biological, and chemical hazards. **George DuBose**, CGC, president of Liberty Building Forensics Group, has more than 25 years' experience in building forensics with a focus on mold and moisture issues, as well as HVAC and building envelope failures. In "Component", page 50, the pair uncovers the cause of a sudden mold issue in a hotel undergoing renovation work.



No stranger to a good beer or church service, Chicago-based

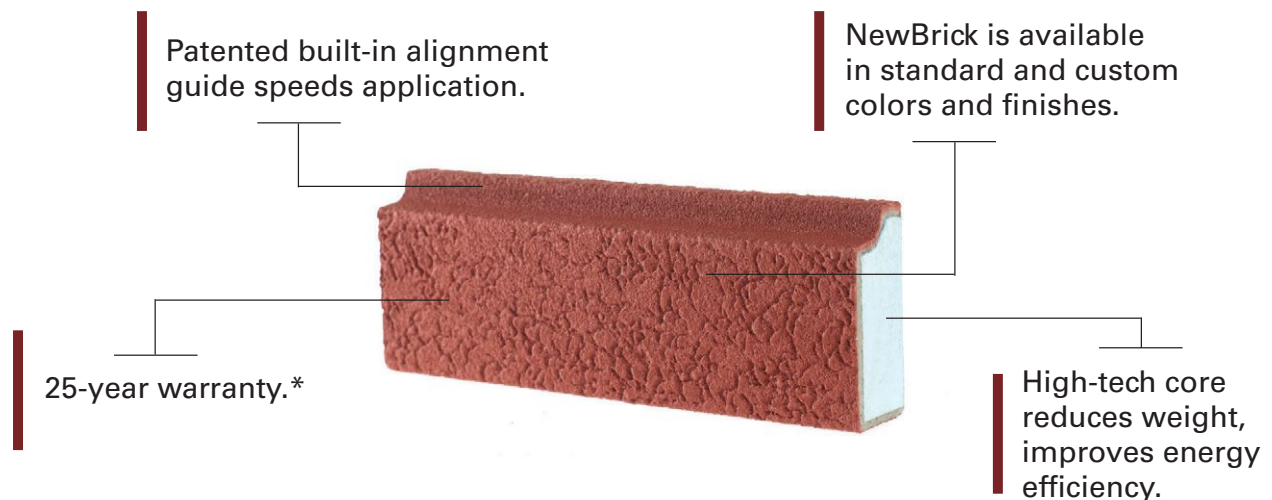
writer **Dan Ochwat** takes us on a tour of Obed & Isaac's in Peoria, Ill., in "Transformation", page 54. The prominent 1889 church was transformed by Springfield, Ill.-based Conn's Hospitality Group into its second Obed & Isaac's brewpub. Conn's Hospitality Group has a history of transforming historic buildings in central Illinois for hospitality use.



Portland, Ore.-based freelance design journalist, critic and architec-

tural photographer **Brian Libby** tells the story of the circa-1927 Cavalier Hotel, Virginia Beach, Va., in "Historic", page 60. During its illustrious history, the hotel hosted a succession of U.S. presidents and celebrities, but as recently as a few years ago, its future was in doubt. Zoning would have allowed hundreds of new condos or apartments to be built on the site, seemingly a more lucrative endeavor. Had Virginia Beach-based Gold Key | PHR not been the successful bidder, the hotel would have been lost.

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TOP FIVE TRENDS FOR REPLACEMENT OF COPPER-BASED NETWORKS IN SMART BUILDINGS

The Association for Passive Optical LAN (APOLAN), the non-profit organization driving education and adoption for Passive Optical Local Area Networks (POL), has announced the top five trends driving the replacement of copper-based networks with Passive Optical LAN to meet 21st century smart-building demands.

■ **The Cloud:** A classic copper-based LAN was designed to carry traffic between computers in a building or campus. POL environments, on the other hand, can reliably connect users to their SaaS applications running in the cloud.

■ **Data Growth:** Passive Optical LAN enables capacity growth at a fraction of the equipment and cabling required with classic LAN architectures, which also decreases OPEX and CAPEX.

■ **IoT on the Rise:** Smart buildings are defined by sensors, devices and systems

in the building connected to the LAN to operate more efficiently. However, classic LAN technology from the 20th century was never designed to support a network robust enough to stay ahead of the increasing device growth.

■ **The Density Demand:** As the number of devices and sensors in a building increases, density will be an issue for traditional copper-based LANs.

■ **Investment Protection:** Passive Optical LAN has proven to deliver CAPEX and OPEX savings beyond that of a traditional copper-based LAN. More impressive is that the investment made today will deliver benefits for decades to come.

Across the globe, POL is a vital component for smart buildings and smart campuses to enable the various communication and analyzation systems that supply data and optimize building performance. With

POL in place, management and operations, as well as end-users, can take advantage of valued services while being sustainable, secure, safe, reliable and resilient.

“A smart building can be thought of as an ecosystem, a dynamic entity with many devices of varying age that need to communicate and depend on each other,” says Mario Blandini, Marketing Committee chair, APOLAN. “If a smart building’s ecosystem was the human body, Passive Optical LAN would be the central nervous system, transmitting vast amounts of data with seamless connectivity and communications, regardless of the various components in the network.”

For additional information about POL, visit www.apolanglobal.org.



USGBC Finds Americans Don't Connect Buildings with Environmental Issues

public feels about issues at the core of the green building community’s mission: sustainability, green buildings and the environment. The report takes a closer look at Americans’ views about environmental issues and how the green building industry can be better positioned as a global solution. USGBC commissioned ClearPath Strategies to conduct qualitative and quantitative research across five regions of the U.S.

¶ The report found that while three-quarters of respondents said environmental problems are very or somewhat important to them, they do very little to address the problems in their own lives, considering it too daunting a task. ¶ The research also shows people want to live in a healthy environment but don’t typically associate green buildings with being part of the solution. When asked which terms most strongly relate to the environment and being green, only 11 percent said green buildings. ¶ When considering the connection between green buildings and personal health, 32 percent indicated they have direct, personal experience with bad health associated with poor environments or living situations. In addition, when ranking how healthy their local environment is on a scale of one to 10, 65 percent gave it less than an eight. ¶ The research suggests there is a gap between the enormity of the problem and how people seek to address it in their daily lives, and that the green building community can mobilize and inspire change by connecting messaging to healthy outcomes for human beings. ¶ “When people think about emissions, they think about cars, power plants and industries. They rarely think about buildings, leaving the green building community with a messaging mountain to climb,” says Mahesh Ramanujam, USGBC’s president and CEO. “We are not reaching the broader population effectively enough to change their behavior or decisions on the scale necessary to combat climate-related risks.” ¶ Visit livingstandard.org to learn more, join the initiative and submit stories. USGBC will be releasing additional research reports quarterly in 2019, each with a particular issue and regional focus. ¶



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HOTEL TECHNOLOGY

MAKEOVER

Six Systems Commonly Are Being Updated in Today's Guestrooms

WRITTEN BY | ANTHONY J. SPATA, P.E., LEED AP

Not that long ago, when a hotel guestroom underwent renovation, it entailed new wallcoverings, window treatments and replacement of some furniture pieces. Although that still applies today, trends point toward bathtubs being removed for walk-in showers; carpeting giving way to wood planking, ceramic or luxury vinyl tile; and upgrading everything associated with technology.

Throughout the renovation process, it is imperative that contemplated technologies are validated as being truly beneficial for guests and/or staff. In the hospitality industry, one must always recognize a guest stays at a hotel for just a few days; how to operate everything in their room must be intuitive. Further, as there can be significant variation on the level of understanding or acceptance for some of today's technology-driven concepts, it is important to know the mindset of the target/anticipated guests. Market research and/or guest feedback is typically the initiator for change with subsequent vetting by a hotel company's IT, Design, Financial Feasibility and Operations groups to verify a positive impact will result. Systems that are over-complicated to use, "gimmicky" or provide minimal gains should not be considered.



UNLIKE INDIVIDUALS that can (as examples) upgrade their cell phone annually or change their internet service provider with a month's notice, a hotel's major capital expenditure investments are expected to be in place for five to seven years. This is dictated by a number of factors, including tax-code depreciation benefits, the desire to minimize service disruptions that typically occur to guests and staff during installation/construction, and to realize a financial payback from the installation. Because of this expectation of a significant service life, the hardware component of a deployed technology must be robust and durable, and its software (or operating system) must be easily upgradable to install the inevitable updates that will be issued. The ability to install updates seamlessly with little-to-no disruption of service is vital; hotels operate 24/7/365 and cannot afford for a guest-facing or administrative technology to be down or offline.

Because guestroom technology makeovers often occur in phases, a clear understanding of the sequence the overall program must follow is critical. For hotels that previously had minimal connectivity for guests' general use, upgrading to support the myriad internet protocol (IP) devices that exist today is often the first

(continues on page 20)



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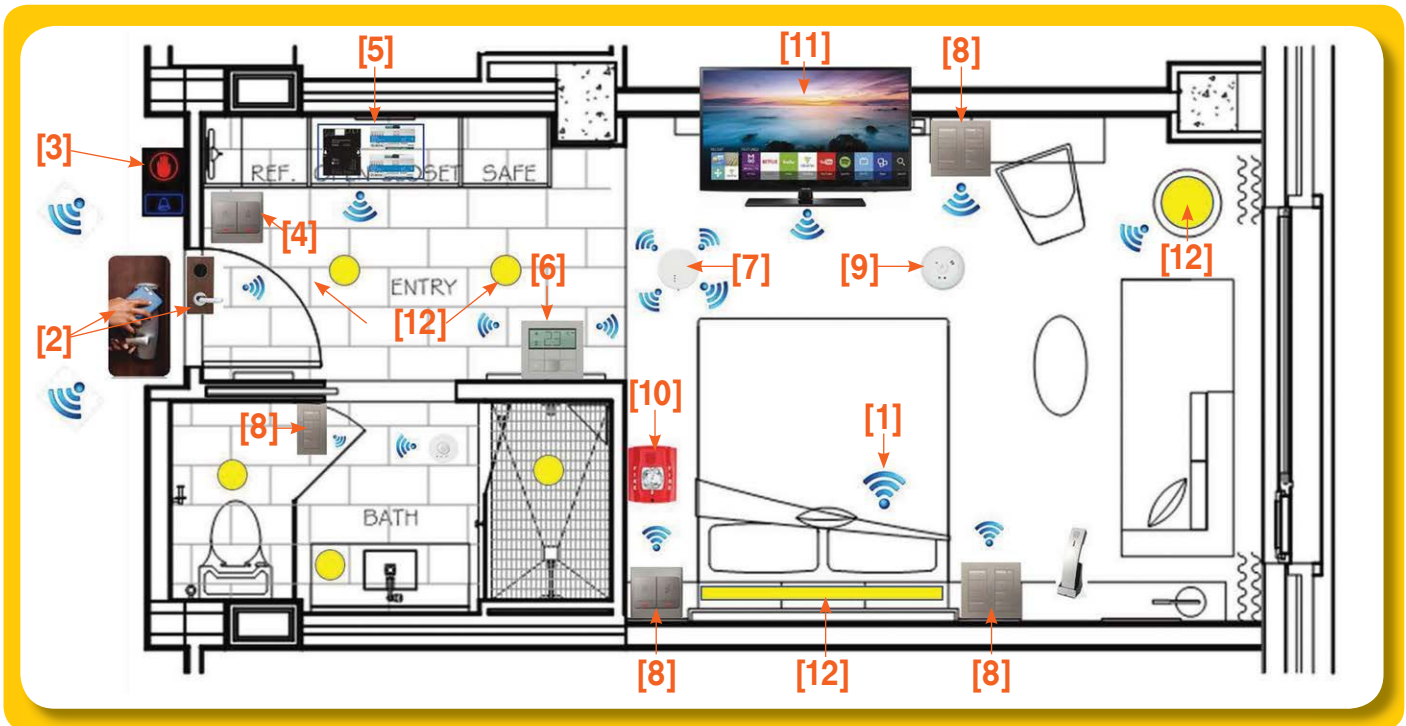
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- [7] Ceiling-located, supplemental presence detection sensor (if not part of thermostat)
- [8] Electronic lighting control (typical, multiple locations)
- [9] Smoke detector with optional CO detection (if required by local code)
- [10] Audible/visual fire alarm with emergency communication capabilities
- [11] Smart HDTV capable of streaming guest-provided content
- [12] Lighting fixtures (typical)

(and significantly expensive) step in their technology makeover process. Today's internet/Wi-Fi infrastructure must be able to support concurrent operation of an unlimited number of guest devices (each with their own potentially high-bandwidth requirements), in addition to the IP devices to be incorporated into the guestroom. Further, hotels must ensure their guest-facing and administrative IT systems remain secure when IP door locks, thermostats, lighting controls, TVs, telephones, smart speakers, etc., are deployed. All components considered for integration, especially those to which a guest will connect or have access, must be subjected to thorough evaluation to identify and eliminate any potential for hacking. Most (if not all) hotel companies have their own internal cybersecurity departments that establish strict

protocols for third parties that interact with their networks.

ALTHOUGH THE VAST majority of today's IT-based systems have a high reliability, not all are perfect. There must be a clear understanding of what "failure mode" looks like for each system and any potential for a cascading negative impact on other devices/functions they interact with if a single malfunction occurs. As an example, a centralized, online guestroom access control system must continue to allow independent operation of individual door locks even if its server goes down. A temporary loss of "nice to have" features may be tolerated; any interruption of basic or critical functions will not be.

Once the prerequisites are completed, the only limitation on the desired tech-

nologies to be incorporated is the available budget. Following are systems that are commonly being updated today:

■ RFID Locks/Mobile Entry

Mechanical keys vanished long ago for hotel guestrooms and their replacement, the magnetic stripe card, also is rapidly disappearing. Radio frequency identification, or RFID, key card technology—with inherent better security and the ability to hold more data—has become the standard. (Please note, this increased storage is NOT for guests' personal information but required to give a guest additional access rights to other hotel doors with an RFID lock, such as an exterior entrance or fitness center.) Many existing RFID locks can be upgraded through field installation of a

(continues on page 22)



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Already used as a credit card, camera, texting device and (occasionally) a means of verbal communication, cell phones are now gaining favor as electronic keys.

small antenna; new locks have this feature factory installed.

Today, the movement toward cell phones acting as a key (similar to how they function as a payment device) has necessitated the inclusion of Bluetooth or Near Field Communication into guestroom door locks. These “digital keys” typically are sent to a guest’s mobile device via a hotel’s loyalty app.

A further enhancement of the guestroom door lock is the option for locks to be online. Although all door locks provide a local record of when and from which side of the door they were opened, online locks provide this information in real time to a server. Automatic alarms are generated if a door is propped open, slightly ajar or forced open.

■ Guestroom Presence Detection

For several years, energy-efficiency codes have mandated various degrees of manual/semi-automatic shutoff of lighting (and in some states also power outlets) when a

guestroom is unoccupied. Now, codes are starting to require automatic detection of guest presence for lighting, power and air-conditioning to be fully enabled.

Various methods exist with the most reliable utilizing some form of multi-factor authentication (multiple methods to verify if a guestroom is occupied or unoccupied). Typically, the entry door is monitored to determine when it opens, using a contact switch or a signal from the door lock, indicating someone is entering or leaving the room.

Within the guestroom, an occupancy detector provides the defining information if the room is now occupied or unoccupied. For either condition, that state remains in effect until the entry door opens again, and the occupancy detector then performs another check of the room.

Lighting in bathroom areas is exempt from this requirement. Here, lighting is on a vacancy detector that automatically turns the bathroom lights off after a prescribed time.

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■ Online Digital Thermostats

Digital thermostats are not new but having them communicate directly with hotels' property management systems is a relatively recent enhancement. When a room is unsold, significant energy savings are realized by automatically adjusting the maintained temperature up or down from the nominal setpoint. Even when sold, the temperature can be offset slightly during periods when the guests are not in the room.

The thermostats specified today are typically the "thinking" portion of a guestroom's presence detection system, interpreting the signals from the entry door and occupancy sensor, which is often incorporated into the thermostat. As such, the thermostat may also communicate with the guestroom's lighting controls, automatically turning lights off when it is verified the room is unoccupied.

■ Smart Televisions

Every hotel has HDTV, but can guests easily stream their own content to it? Not long

ago, guestroom TVs had multiple, physical connectors for different cables from VGA (anybody remember that?) to HDMI. The problem is, nobody carries cables. Today, wireless connectivity is being provided via TVs with built-in capability or an external dongle. Further, a guest should be able to access his or her personal service provider(s) without disclosing confidential sign-on or account information to the hotel's IT system.

■ Lighting Controls

Electronics and wireless communication have benefited lighting controls significantly. Previously, a simple electric switch was typically present only at the entry of a guestroom and at the bathroom, and each controlled the off/on function of only those lights in their respective area. Today, electronic lighting controls allow lighting throughout a guestroom to be operated in a flexible manner as desired by the guest. Individual and/or groups of lights may be set to the intensity best suited for work

or relaxation. Some initial installations of systems that can also change the temperature of lighting from cool (energizing) to warm (relaxing) also are occurring. Further, wireless communication between lighting controls permits additional devices to be placed at bedside, desk and lounging areas for increased convenience to the guest at minimal additional cost.

Additional, related features are the implementation of electronic Do Not Disturb (DND) and Make-Up Room (MUR) systems. Activating DND not only provides a visual indication in the corridor, but also disables the guestroom doorbell (if present) and non-emergency calls to the telephone. Requests to MUR are transmitted directly to Housekeeping and, for security, an indication is not provided in the corridor. This also eliminates hangtags that disclose when a guestroom is unoccupied.

■ Distributed Antenna Systems

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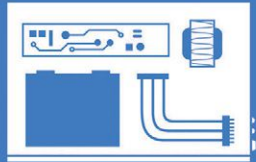


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from below-grade levels to its highest floor. Similar to the deployment of multiple wireless access points for continuous internet connectivity, a distributed antenna system, or DAS, is basically an internal array of mini cell towers. Usually, a single DAS is designed to handle many of the major cellular services providers in the area, and those companies may heavily subsidize the cost. Also of note, municipalities are now beginning to require a separate DAS for exclusive use by emergency responders because cellular communication is rapidly replacing their older two-way radios.

Although most consumer apps will function fundamentally the same on a multitude of devices regardless of manufacturer or service provider, commercial technology systems often have unique or proprietary requirements. Further, with many of the technology systems relying on wireless (but not necessarily Wi-Fi) communication, especially in a renovation application, it is imperative they “speak the same language”. (At least seven different wireless communication protocols exist among manufacturers of devices found in the hospitality industry.) Significant interdependence exists between many of these systems and what may appear to be an “equal” substitution of a specified component may result in unforeseen system problems. When assembling a comprehensive technology package from multiple manufacturers, it is critical that a systems integrator is retained to evaluate the operating characteristics of each component and their ability to function cohesively. 

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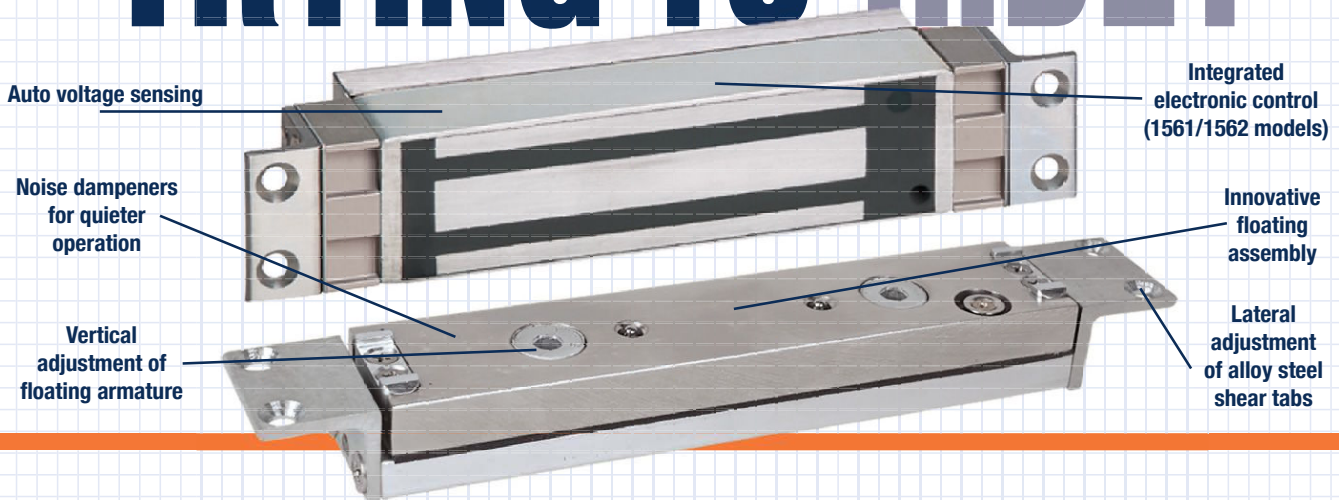
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NOVEL APPROACH

Elements at a California Winery
Relate Stories from Its Past
and Inspire New Ones

WRITTEN BY | KJ FIELDS



In the world of wine, each glass recounts a story: about its grapes of origin, the region it was grown, the properties of the soil and the care that went into production. At Scribe Winery in Sonoma, Calif., the land and structures have stories to tell, too: about its history, ecology and layers of culture. To preserve the winery's tale and highlight its character for visitors, the owners tapped a group of collaborators, including San Francisco-based Aidlin Darling Design.

"This property was incredibly dynamic, both ecologically and historically," says David Darling, principal at Aidlin Darling Design. "Some of the stories we wanted to reveal are macro-scaled, like the transformations of place and its connection to the land. Others were micro-stories that show up in unusual places and quirky ways."

PLOT POINTS

Resting at the base of Arrowhead Mountain on the edge of a forested wilderness,

the 250-plus-acre property had been inhabited by Native Americans, transformed into a vineyard in the mid-1800s, became a password-protected speakeasy and stopover for bootleggers during Prohibition, and was repurposed into a turkey farm after that. Two brothers, Andrew and Adam Mariani, purchased the property in 2007 with plans to restore it to its vineyard roots. Aidlin Darling Design helped the Marianis envision an overall masterplan and obtain a Sonoma County use permit.

The use permit required numerous environmental studies. During one site report, the landscape architect discovered the land was part of the San Francisco Bay watershed, which classified it as gray whale habitat. "That gave us a starkly broader perspective of what site and site impacts mean," Darling says.

The Marianis grow Chardonnay, Pinot Noir, Riesling and Sylvaner grapes onsite. Ruins from several late-1800s buildings

throughout the property were carefully preserved and now frame a variety of outdoor tasting venues. Nearly all of the concrete turkey barns from the site's turkey farming days were demolished and reused as backfill material, but one turkey barn remains as a nod to the property's most recent chapter. The team repurposed this concrete barn into a wine cellar.

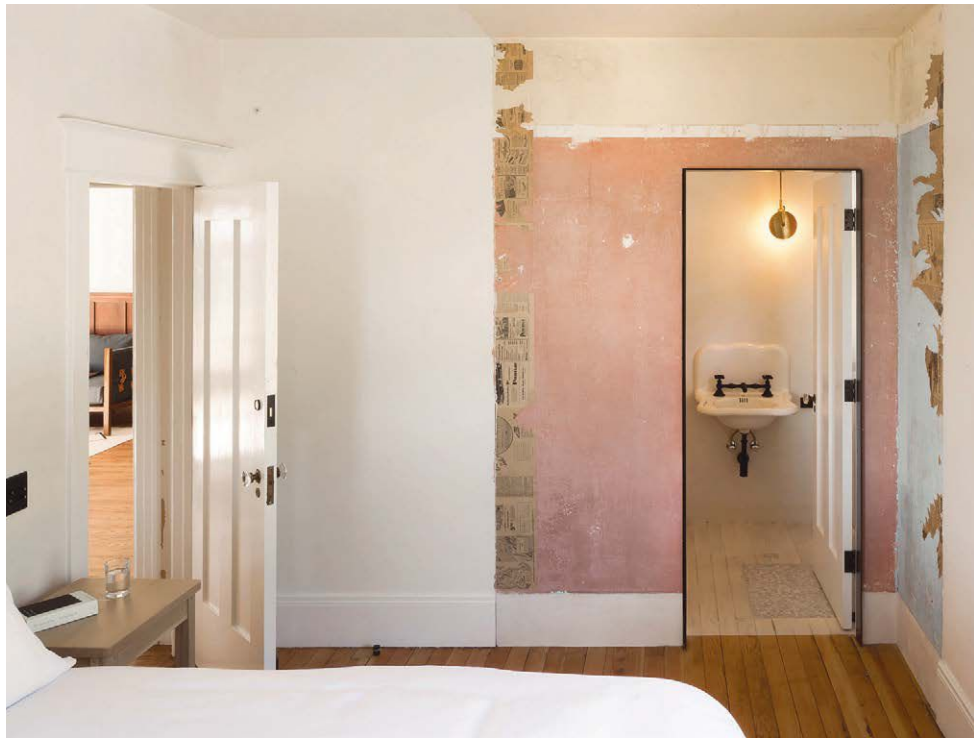
CHARACTER DEVELOPMENT

The first phase of the masterplan converted the basement of the site's 1960s suburban home into a wine cellar and tasting room. The team widened the basement opening and built a custom slide-in door, creating enough space for a long table to host diners. Situated on the slope of the hill, the tasting room affords visitors a spectacular view of the vineyard across to the hacienda, the property's main structure.

The hacienda is the 4,043-square-foot dwelling originally built from onsite stone in the 1850s. In 1915, it was transformed with brick and stucco into a Mission Revival-style building, the first of many subsequent

PHOTOS: ADAM ROUSE unless otherwise noted





✧ Retrofit Team ✧

ARCHITECT // Aidlin Darling Design, San Francisco, www.aidlindarlingdesign.com

■ **Principals:** David Darling, Joshua Aidlin

■ **Project Leads:** Leonard Ng, Michael Pierry

■ **AD Project Team:** Adam Rouse, Pete Larsen, Mason Hayes, Ben Damron

LANDSCAPE ARCHITECT, MASTERPLAN // CMG Landscape Architecture, San Francisco, www.cmgsite.com

LANDSCAPE ARCHITECT, DESIGN/BUILD // Terremoto Landscape, Los Angeles, terremoto.la

STRUCTURAL ENGINEER // Pemberton Engineering, Davis, Calif., pembertonengineering.com

STRUCTURAL CONSULTANT // Wiss, Janney, Elstner Associates Inc., San Francisco, www.wje.com

GENERAL CONTRACTOR // Cello & Maudru Construction, Napa, Calif., cello-maudru.com
■ **Co-owner:** Bill Schaeffer

interventions. “The hacienda is a weird mix of styles with additions that span more than a century. The result is an incredible collage from different eras,” Darling describes. “Our goal was to try to make the interactions between the different layers legible.”

The Marianis wanted the hacienda to support their guest-chef program, providing light meals and a relaxation space for visitors, and become a guest house. But the building had been abandoned for decades. Open to weather (daylight even crept through some of its walls), it was nearly crumbling under its own weight. Still, it remained an iconic structure in the region, and the Marianis volunteered the idea to the county to designate it as a landmark.

REVISION PROCESS

When Bill Schaeffer, operations manager and a co-owner of Cello & Maudru Construction in Napa, Calif., joined the team, he quickly realized the hacienda’s formidable challenges. The project vision was to leave the hacienda exactly the way it was and upgrade the electrical and plumbing, but the building envelope was cracked and spalling, and

converting it to a commercial space would require a full seismic upgrade.

To preserve as much of the interior as possible, major work took place from the outside. “We surgically took the building apart, cataloged the materials, sensitively repaired and reinstalled them,” Schaeffer says. “Even the casual observer can see that it’s been lovingly preserved.”

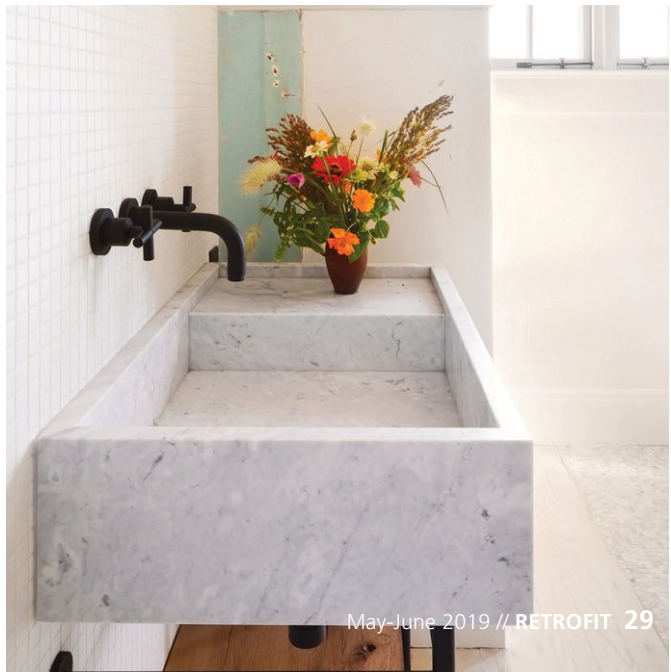
Using California State Historic Building Code guidance and applications, the team identified methods to fully seismic retrofit the hacienda while keeping the historic fabric of the building. Once team members removed all the exterior finishes, they improved the building’s anchors and connections, as well as added structural steel and shear walls in ways that are almost invisible. Then, they water-proofed the hacienda, replaced the exterior stucco in-kind, and reinstalled the doors and windows. Only the trim was repainted.

The hacienda’s roof was made of pressed tin pop-riveted together to emulate clay tile roofing. Shortly after construction began in 2014, a 6.0 earthquake struck just 1 1/2 miles from the building. “It toppled the two chimneys, which punched holes in the roof,”

THE PROJECT VISION WAS TO LEAVE THE HACIENDA EXACTLY THE WAY IT WAS AND UPGRADE THE ELECTRICAL AND PLUMBING. CRACKS IN THE WALLS AND PEELING WALLPAPER RECOUNT YEARS PAST.



PHOTOS: AIDLIN DARLING DESIGN





Schaeffer recalls. "To save the roof, we peeled the roof back, repaired the holes, put down a modern roofing membrane and laid the old rusting tiles back on top. In the places where tiles were missing, we formed new metal tiles and painted them so it's clear they aren't original."

VISIBLE BACKSTORY

Although the hacienda's iconic front face is perfectly restored to its 1915 condition, Aidlin Darling Design reoriented the main entrance to the back side (where a newer wing had formerly been added) to accommodate better access for the disabled. The driveway now leads around the building's far side to a parking area. From there, visitors approach a main courtyard adjacent to the kitchen and tasting-area entrance, where new large 5-foot pivot doors create a moveable wall for easy access.

Once inside, the hacienda's rooms remain mostly untouched. Cracks in the walls and peeling wallpaper recount years past. A beautifully painted poem dating back to the early 1900s adorns the dining room's molding. "The house is filled with little hidden treasures," Darling says. "It's an interesting tapestry that speaks of the building's inhabitants and

SCRIBE WINERY'S OWNERS WANTED THE HACIENDA TO SUPPORT THEIR GUEST-CHEF PROGRAM, PROVIDING LIGHT MEALS AND A RELAXATION SPACE FOR VISITORS, AND BECOME A GUEST HOUSE.



✧ Materials ✧

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DOOR RESTORATION AND WINDOW WATERPROOFING AND FLASHING // Cello & Maudru Construction, cello-maudru.com

WINDOW RESTORATION // Raven Restoration, www.ravenrestorationsf.com

NEW DOUBLE-HUNG WINDOWS // P&K Woodworks, www.pkwoodworks.com

EXTERIOR AND INTERIOR PAINT // Benjamin Moore, www.benjaminmoore.com

ROOF MEMBRANE // Gaco Western, gaco.com

ROOF REPAIRS // Grace, grace.com

FORCED HEATING AND AIR // Bryant, www.bryant.com

PIVOT DOORS // Northstar Woodworks, www.northstarwww.com

CONCRETE COUNTERTOP // Custom by Cello & Maudru Construction

COURTYARD/PORCH LOUNGE REDWOOD AND CEDAR CHAIRS AND BENCHES // Custom by Pinocchio Furniture, pinocchiofurniture.com

HALL CHANDELIER, PENDANTS AND SCONCES // Custom by Michael McEwen, mcewenlighting.com

BATHROOM PENDANT // Workstead Orbit Pendant, www.workstead.com

POEM ROOM LIGHTING PENDANT // Custom by Omega Lighting Design, www.omegalightingdesign.com

KITCHEN LIGHTING // Custom by Adam Silverman, www.adamsilverman.net

KITCHEN AND BATH FLOOR TILE // Salvaged by Exquisite Surfaces, xsurfaces.com

KITCHEN WALL TILE // Renaissance by Country Floors, www.countryfloors.com

BATHROOM CONCRETE SINK // Custom by Aidlin Darling Design, www.aidlindarlingdesign.com

BATHROOM VANITY WITH INTEGRAL BOWL // Custom by Carrera Marble, www.carrera-marble.com

UPSTAIRS TOILET // Carolina II by TOTO, www.totousa.com



shows how things change. We purposefully walked through each room and asked, 'What story is this room begging to tell?'. If there was a distracting layer, we edited it. If it needed a new layer, we added it in a very clean way that juxtaposed the complexity of what was already there."


Before the main work began, the Marianis brought various artists to the hacienda in 2008 to create art installations in different rooms. Some of that art is now part of the building fabric. In one upstairs bedroom, a former stovepipe inlet that had become a bees' nest inspired one of the artists to draw honeycombs on the walls. Adjacent to this artwork, an outline remains where an original sink once stood before the bedroom was reconfigured.

"As meticulous as the project was, there was a kind of freedom when we added in something new," Darling notes. "In those places, we did it unapologetically and never tried to mask anything; it was simply a new part of the evolution."

EMOTIONAL INVESTMENT

A newer story in the winery's saga took place in October 2017, when one of the most destructive fires in Northern

California's history threatened to burn down the hacienda. A 20-foot wall of fire was descending the forested hill and Schaeffer raced to the site. Although cell-phone service was down, his company's service and maintenance person also arrived to fight the fire. The two men joined the Mariani brothers, their uncle and two firefighters to battle the blaze. "We all had such a deep emotional investment in this property," Schaeffer asserts. "We cut down and removed the underbrush to prevent the fire from rising into the trees and slow its approach to the hacienda. The firefighters had to move on to protect other properties around 9 p.m. but the rest of us worked until after midnight. We wouldn't leave until we felt everything was safe."

The Marianis chose the name "Scribe" as it pairs perfectly with the storytelling concept behind the renovation of the land and hacienda. "Here, new stories are told and old stories become subverted," Darling remarks. "When you are dealing with a building like this, there's a spirit involved where certain things rise above the value of standard aesthetics. We learned not to underestimate what those things can mean to others." 



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DEMOCRACY BREWING | Boston

►► RETROFIT TEAM

ARCHITECT: EMBARC, Boston, www.embarcstudio.com

GENERAL CONTRACTOR: James J. Welch & Co. Inc., Salem, Mass., jjwelch.com

►► MATERIALS

EMBARC Interior Designer Michelle Acosta knew Parterre's LVT designs would fit the look and needs Democracy Brewing's owners were seeking. A challenge in any hospitality space, the flooring needed to stand up to heavy foot-traffic and food or drink spills that were likely to happen in such a busy space. Acosta eventually selected Heart Pine, a natural wood look from Parterre's InGrained Resilient Plank collection, for the entire second-floor space.

"We wanted the luxury vinyl to have a reclaimed-wood appearance. The color fit in seamlessly with the other design elements while also acting as the perfect backdrop for the space," Acosta says. "Everything fell into place: The graining was right; the color was ideal; the price point was perfect. It was a no-brainer for the project."

The design team paired exposed brick walls and textured plaster ceilings with the flooring to tie the old in with the new. "All the finishes in the space are grittier, but with a warmth and refinement to them. The flooring tied in well with that aesthetic," Acosta adds.

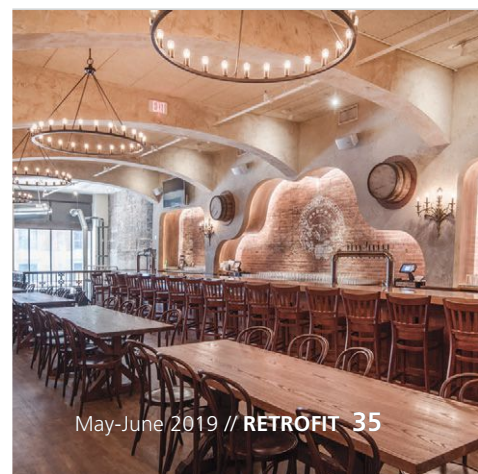
LVT FLOORING MANUFACTURER: Parterre, parterreflooring.com

►► THE RETROFIT

Former economic justice organizer turned brewer, James Razsa, and veteran brewer, Jason Taggart, opened up the brewery in 2018. Razsa, Taggart and their team wanted to establish a brewery that blended old-world brewpub charm with classic Boston character. Democracy Brewing opened for business on the Fourth of July—fitting for a brewery that describes itself as celebrating "Boston's rowdy revolutionary history from the 1700s to the present."

PHOTOS: FLAUNT BOSTON





MARRIOTT FAIRFIELD INN & SUITES AND MARRIOTT SPRINGHILL SUITES | New York



IMAGES: GENE KAUFMAN ARCHITECT PC

» RETROFIT TEAM

ARCHITECT: Gene Kaufman Architect PC, New York, www.gkpc.com
 DEVELOPER: McSam Hotel Group LLC, Great Neck, N.Y., (516) 773-9300
 GENERAL CONTRACTOR: OMNIBUILD, New York, omnibuild.com
 BRICK AND ARCHITECTURAL PRECAST INSTALLER: RVB Construction Inc., Dobbs Ferry, N.Y., (212) 299-7080
 ARCHITECTURAL PRECAST FABRICATOR: Denoto Precast Inc., Lyndhurst, N.J., (718) 922-1977
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» MATERIALS

The following materials were used in the project:
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 THIN-BRICK SUPPLIER: Belden Tri-State Building

Materials, www.btsbm.com
 HISTORIC WINDOW MANUFACTURERS AND INSTALLERS: Fenestra Architectural Systems, www.fenestra-llc.com, and Pioneer Window Mfg. Corp., www.pioneerwindows.com
 EXTERIOR LIGHTING: RAB Lighting, www.rablighting.com, and WAC Lighting, www.waclighting.com
 EXTERIOR LIGHTING SUPPLIER: Expressive Lighting, www.expressivelighting.com

» THE RETROFIT

This dual Marriot hotel, which includes a 286-key Marriott Fairfield Inn & Suites and a 280-key Marriott SpringHill Suites, required two years and eight months of careful design and construction to maintain the façade of a six-story Gothic church on the property.

Gene Kaufman Architect (GKA) PC proposed a 26-story 570-room hotel. During the process of filing and design, the community board requested to maintain portions of the historical

church, which was completed in 1905. GKA proceeded to integrate the base of the church with the new building.

The team accentuated the church wall by designing a glass wall in between the historical wall and the new tower. This provided separation and union of the new and old architectural languages.

One portion of the original church wall was maintained and restored, while the other portion of the façade was reconstructed meticulously following the original church design.

"My team went to great lengths to preserve the old church wall and overcame significant logistical and design-related challenges to protect the existing structure, which was a priority for this project from day one," explains Gene Kaufman, GKA's principal. "Efforts to remove and rebuild the upper portion of the wall were undertaken and ultimately resulted in a successful preservation initiative."

The dual Marriott is set to open in early May.

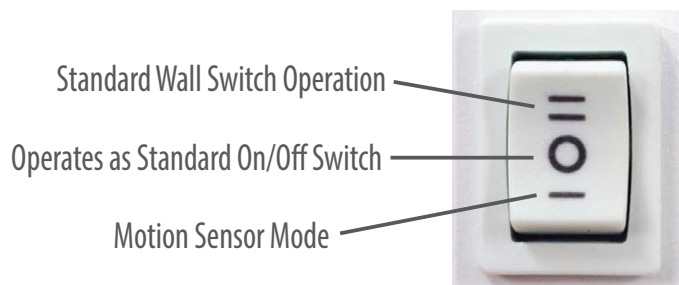
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THE MARLTON | New York



►► RETROFIT TEAM

HVAC SPECIALIST: Klima New York, Kennett Square, Pa., Klimany.com

►► MATERIALS

The building, which was built in 1900, had no central air-conditioning system, so Owner Sean MacPherson sought an efficient HVAC system that would not only preserve space, but also create an atmosphere for individual guest comfort. The hotel's management settled on three criteria for the new HVAC system: The system needed to be highly economical and efficient in terms of its energy consumption; it must preserve the architectural integrity and charm of the design details while maximizing the limited space available; and it had to provide superior occupant comfort.

Klima New York specified the LG Multi V IV Variable Refrigerant Flow (VRF) system. The Multi V system's features, like Smart Load Control and Active Refrigerant Control, optimize energy use based on the demands of the system and account for changes in ambient temperature to regulate performance for efficiency and comfort. The LG system also allows for multiple rooms to be maintained by a single outdoor unit.

The Multi V system's design flexibility worked with the building's architectural features. In the guestrooms, the returns were discreetly hidden in the crown molding. In other areas, duct-free units were used to avoid covering up the Marlton's ornate features with soffits for ductwork. Additionally, the design of the LG system maximized space. The Multi V systems do not require a mechanical room, which enabled the Marlton's designers to use space downstairs, which would have served as a mechanical room, as a kitchen for the restaurant. Similarly, the compact footprint of the outdoor units combined with their quiet operation meant the outdoor units could reside on the roof while guests sunbathe, lounge and relax on the rooftop next to the units.

Lastly the zoned capabilities of the LG VRF system allow guest spaces and common areas to be independently controlled and conditioned for occupant comfort.

"I personally think the best aspect of the system is the fact that the design has been integrated with the functionality, so we didn't lose any of the architectural integrity. We were able to preserve many of the building's original and thoughtful design details," explains Eric Rosenfeld,

the Marlton's general manager.

"Besides space saving and design flexibility, efficiency is the best feature for the hotel," adds James Moran, sales engineer at Klima New York. "Generally, the LG Multi V VRF system will provide a 30 to 40 percent savings over conventional air conditioning systems.* That return alone on a hotel and hospitality application represents quite a return on investment in a relatively short time."

VRF SYSTEM MANUFACTURER: LG, lgvac.com

**Actual energy savings may vary based on system configuration, application and environmental elements.*

►► THE RETROFIT

A 9-story building located in the heart of Greenwich Village, the Marlton has a storied history, serving as home to some of the most famous and influential artists and writers of the modern era, such as Jack Kerouac and Neal Cassady. Purchased in 2013 by Sean MacPherson, the vision for the Marlton was that of an upscale, boutique hotel where textures and details are layered with a fastidious and eclectic eye. The design required keeping many of the building's original features, including herringbone-wood floors, intricate crown molding, marble bathrooms and brass fixtures.

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CYPRESS BREWING | Edison, N.J.

►► RETROFIT TEAM

BREWERY COMPONENTS ENGINEER:

Diversified Metal Engineering Brewing Solutions,
Charlottetown, Prince Edward Island, Canada,
www.dmebrewing.ca

BOILER INSTALLER: DL Mechanical,
Port Reading, N.J., (732) 266-5386

►► MATERIALS

As a result of its success, brewery owners decided to increase beer output 10 times—from a two-barrel system to a 20-barrel system. "This was a major expansion and adding the much larger vessels required us to move from an electric-heating-elements system to a more robust and precise steam-heating system," explains Charlie Backmann, co-owner of Cypress Brewing.

The Cypress Brewing team tapped Diversified Metal Engineering (DME) Brewing Solutions, a recognized leader in the craft beer industry, to specify the requirements for the new system. DME recommended the steam heating system's

necessary Btu ratings and provided blueprints for the design.

David LaBar, owner of DL Mechanical, specified a Weil-McLain 88-Series cast-iron low-pressure steam boiler, a unit that offers ease of maintenance, thermal efficiencies up to 85.7 percent, and is suited for single- or multiple-unit systems. "The boil kettle required about 550,000 Btus, but we wanted to exceed the heating-load requirements to give us some room for future growth," LaBar says. "The 88 Series boiler is rated at 1,050,000 Btus."

LaBar also specified a power plant with gas burner as part of the system.

In a low-pressure steam brewery operation, the boiler converts the water into steam. This steam enters the steam main and travels to the boil kettle and the hot liquor tank, which just holds water and heats the water. The steam then enters jackets inside the boil kettles where it unleashes its latent heat.

According to Backmann, there are three different jackets inside the boil kettle, depending

on the amount of beer being brewed. "The steam starts in the very bottom jacket, which makes up about five barrels," Backmann explains. "The next level jacket is five barrels to 10 barrels and the last one on top is 15 to 20."

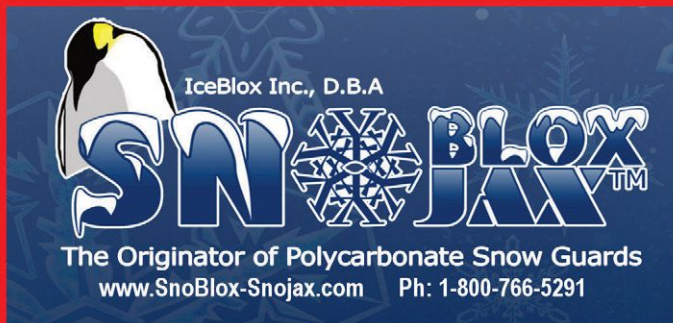
A low-pressure steam system operates between 10 and 12 PSI. Most breweries require a minimum of 10 pounds steam pressure, which is equivalent to about 240 F for the boil.

To add efficiencies to the system, LaBar designed it to feature two 5-inch steam risers from the boiler into a 6-inch drop header to provide the dry steam. This design ensures the steam used in the process is extremely dry.

Once the kettle condenses the steam, it releases the condensate via float and thermostatic (F&T) steam drip traps to a condensate receiver and pump that moves the condensate to a boiler feed pump. The boiler feed pump returns the condensate to the boiler when the water level falls low enough. A total of seven F&T traps were used.

The Cypress Brewing operation now is in full swing with the production process from start to

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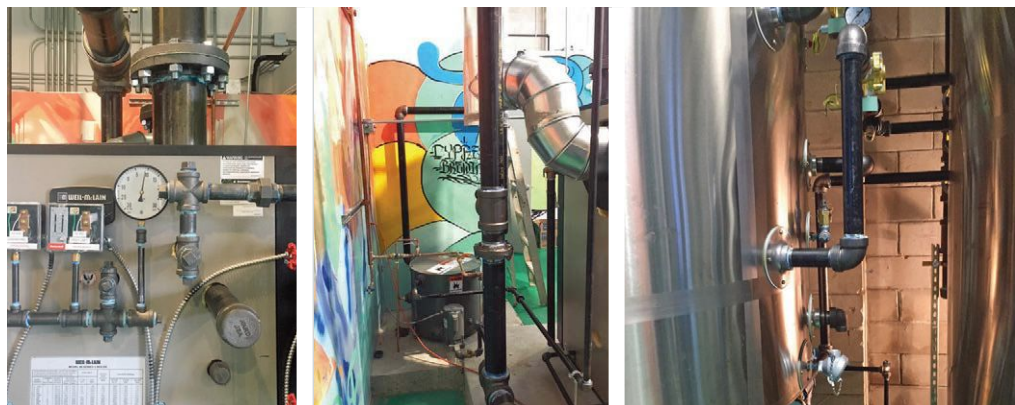
ready-to-drink brews taking an average of 28 days. The entire process is automated through a computer that manages the temperatures and the solenoid valves, which control the steam entering the coils.

Backmann reports one major benefit of the new process is there is less charring of the beer. "Before, with the lighter beers, we sometimes tasted a slight burnt flavor in the background because the electric element came in direct contact with the beer," he recalls. "Now that the vessel itself is jacketed, there is a much better dispersion of the heat. Everything is very balanced and heats from the bottom all of the way to the top."

STEAM-HEAT BOILER MANUFACTURER:
Weil-McLain, www.weil-mclain.com

► THE RETROFIT

Cypress Brewing, a three-year-old brewery, produces several different varieties of beer including IPAs, stouts and porters. Best sellers include Insane in the Grain, 17 Mile and Runway Model.





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MILLENNIUM KNICKERBOCKER HOTEL | Chicago

► RETROFIT TEAM

ARCHITECT: Gibson/Darr Architecture and Consulting, Chicago, (312) 467-9790

INTERIOR DESIGNER: Jinnie Kim Design, Brookline, Mass., www.jinniekim.com

► MATERIALS

Because the Millennium Knickerbocker Hotel is on the list of Historic Hotels of America (HHA), which has its own sustainability policies, a challenge presented itself during the hotel's renovation. "Our challenge in updating the restrooms was to utilize the original restroom space to its fullest extent and use the most water-efficient, space-saving toilets, which meant an in-wall carrier system," explains Carl Darr, principal of Gibson/Darr Architecture and Consulting, which managed the project design, including the mechanical, electrical, plumbing and fire-protection components.

The HHA sustainability policies recognize that historic preservation can—and should—be an important component of any effort to promote sustainable development, including saving water. Darr also had to adhere to the Millennium Knickerbocker Hotel's corporate water-savings policy: Rooms must be equipped with showerheads, faucets and toilets that conserve water.

Darr and his team addressed the challenges of space and water conservation by replacing more than 300 floor-mounted toilets with Geberit Concealed Tank and Carrier Systems, Geberit Dual-Flush Actuators and Duravit Darling wall-mounted toilets. The Geberit system's water-saving capability meets and exceeds the guidelines of 0.8 gpf or 1.6 gpf. "We chose Geberit's in-wall system because of the product availability and technical support," Darr explains. "Installation of the UP300/UP320 was easy because we could run the pipe horizontally at the right slope and not have to drill new holes in the floor, especially important in a renovation."

The Duravit Darling wall-mounted toilet was chosen because of its contemporary design, versatility, coordination ease and budget-minded pricing.

CONCEALED TANK AND CARRIER SYSTEMS AND DUAL-FLUSH ACTUATOR MANUFACTURER: Geberit, geberit.us

WALL-MOUNTED TOILET MANUFACTURER: Duravit, www.duravit.us

► THE RETROFIT

The Millennium Knickerbocker Hotel in the heart of downtown Chicago is rich in tradition and exudes timeless elegance and luxury. Opening its doors on May 16, 1927, the hotel was designed in an eclectic style. Today, after renovations, the 186,000-square-foot, 14-floor hotel offers the glamour and allure of the roaring '20s combined with modern amenities, the latest technology, and highest standards of hospitality and eco-friendliness.



PHOTOS: GEBERIT

GRAND LUX CAFÉ

Chicago



PHOTO: RENOVATE BY BERKOWITZ

» RETROFIT TEAM

GLAZING CONTRACTOR:
Clifton Architectural
Glass and Metal,
Fairfield, N.J., (973)
287-6162

» MATERIALS

Located on the "Magnificent Mile", the café featured 3,800 square feet of single-pane plate-glass windows that were installed when the building was constructed in 1997. Although the large expanses of glass provided abundant natural daylighting to

illuminate the restaurant's grandiose décor, the windows lacked the technology found in newer glazing options. As a result, restaurant managers and patrons had to contend with excessive solar heat gain in summer, poor heat retention in winter, recurring condensation caused by fluctuating temperatures and disruptive noise from busy streets.

"The café had a number of goals in mind with regard to the window retrofit project but, overall, they were looking to improve the dining experience for guests, especially those seated near the windows," explains Ron Chmura, owner of Clifton Architectural Glass and Metal. "We explored different window retrofit strategies and were intrigued by the RENOVATE by Berkowitz system."

The RENOVATE by Berkowitz system is a factory-made insulating glass unit (IGU), which typically adds two lites of low-e glass to the interior surface of a building's existing single-pane windows, as well as optional argon gas. The result is a high-performance, triple-pane IGU.

"After talking with our engineers, we initially determined the RENOVATE system wasn't going to work for this project," Chmura recalls. "We were concerned that the existing window framing would not support the system's additional weight. Fortunately, we were able to work closely with the team at RENOVATE by Berkowitz to develop a customized solution."

For the Grand Lux Café, RENOVATE by Berkowitz's design team was able to adapt the system and hermetically seal a monolithic lite of heat-treated Pilkington Energy Advantage low-e glass to the existing glass, creating a permanent IGU.

The window retrofit project took 30 days to complete, according to Chmura. "We were able to complete our work afterhours so there was no disruption to the café's daily operations," he says.

The café experienced immediate results with better energy and thermal performance, as well as less street noise infiltration.

WINDOW RETROFIT SOLUTION PROVIDER: RENOVATE by Berkowitz,
www.RbBwindow.com



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POINT AT POIPU | Koloa, Kauai, Hawaii



► RETROFIT TEAM

EIFS INSTALLER: Creative Partition Systems, Lihue, Kauai, cpshi.com
EIFS DISTRIBUTOR: Honsador Lumber, Lihue, www.honsador.com

► MATERIALS

Managers at the Point at Poipu, a 220-unit, 10-building compound, overlooking the secluded sands of Shipwreck Beach, set out to tackle water-intrusion problems.

"The existing buildings were a direct-applied skin and, in the coastline environment, it was very apparent it wasn't holding up very well," explains Preston Lingaton, project manager for Creative Partition Systems. "The decision was

made to tear off the existing cladding and install the Outsulation Plus MD system. We saw a range of water-intrusion problems as we started opening up the existing buildings, which made us realize the decision to pull off the existing cladding was the right move."

Given the 500,000 square feet of Outsulation Plus MD needed for the project, the decision was made to renovate two buildings per year during a five-year period. This approach not only made the workload more manageable for the construction team, it also allowed the resort to remain open during the entire project. Residents and guests were shifted to other buildings as their buildings underwent renovation.

"We wanted a product that was going to,

number one, insulate to save on energy bills and give a return to our ownership and, number two, protect from the elements, which is what the original siding did not do," says Mario Moreno, senior chief of Facilities for Diamond Resorts, the brand overseeing the property.

"Any time you can save energy and save costs, of course it goes to the bottom line and that's what makes an owner really happy," adds Jaime Shigeta, general manager at the Point at Poipu. "The biggest change we have seen is in the exterior of the buildings and how great the buildings look. That is usually one of the first things the owner sees when they return ... The buildings just look really exquisite."

EIFS MANUFACTURER: Dryvit, www.dryvit.com



Image: Sam Morris/Las Vegas News Bureau

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PHOTO: CYBERLOCK INC.

BROADWAY CENTER FOR THE PERFORMING ARTS | Tacoma, Wash.

► RETROFIT TEAM

LOCK INSTALLER: Sybis LLC, Kirkland, Wash., sybissolution.com

► MATERIALS

With a staff of 85 full- and part-time employees and a volunteer base of 200 people, Broadway Center representatives needed to control and manage access to theaters, rehearsal halls, classrooms and the office building. With many keys in circulation, security to buildings was compromised whenever a key was lost. Center representatives couldn't afford the time and expense to re-key every time a key was missing. David Fischer, executive director of Broadway Center for the Performing Arts, says, "The Rialto and Pantages theaters were built in 1918 and are listed on the National Register of

Historic Places. We required a system that could be installed without altering their historic nature."

Fischer and his team found CyberLock met their requirements and had the system installed throughout their buildings. No expensive wiring or damaging concrete core-drilling was needed for installation. Installers simply replaced the cylinders inside the door locks with CyberLock electronic cylinders.

"Theaters are dark and inherently dangerous. There are places to fall into and out of. Knowing that we have only authorized, experienced people in these hazardous areas is an important benefit of the CyberLock system," Fischer says. In addition, Fischer can audit activity at each door and restrict each person's access to the areas he or she needs to do a specific job.

Most importantly, CyberLock's electronic key cannot be duplicated and a missing key can quickly be deactivated. "With CyberLock, we gained the access and key control we needed without compromising the historical integrity of our buildings," Fischer confirms. ELECTRONIC LOCK MANUFACTURER: Cyberlock Inc., www.cyberlock.com

► THE RETROFIT

Broadway Center for the Performing Arts began operation in 1983 but its buildings have been a vital part of Tacoma for 90 years. Situated at an intersection that has been the town's center for generations, Broadway Center's Pantages Theater originally was a vaudeville house and the smaller Rialto Theater was a silent movie palace. In 1994, Broadway Center added a third theater, Theatre on the Square.



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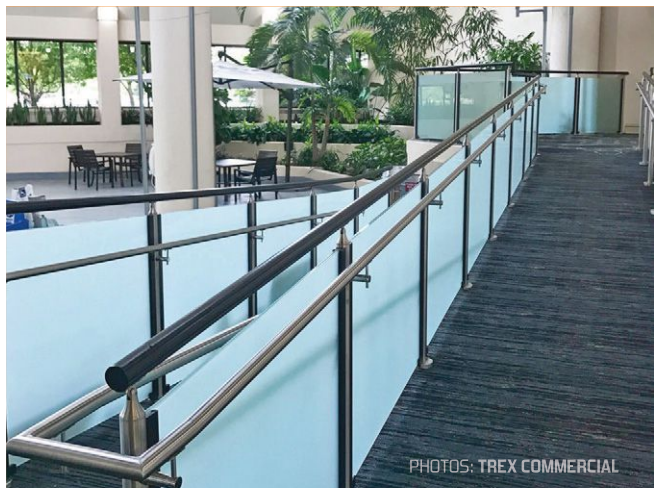
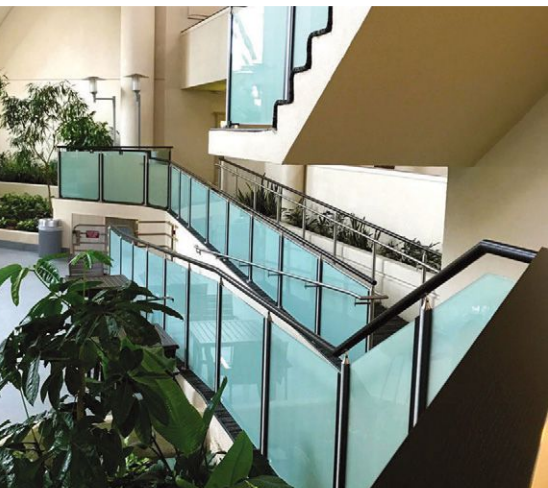
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DOUBLETREE BY HILTON HOTEL

St. Louis Park, Minn.



PHOTOS: TREX COMMERCIAL

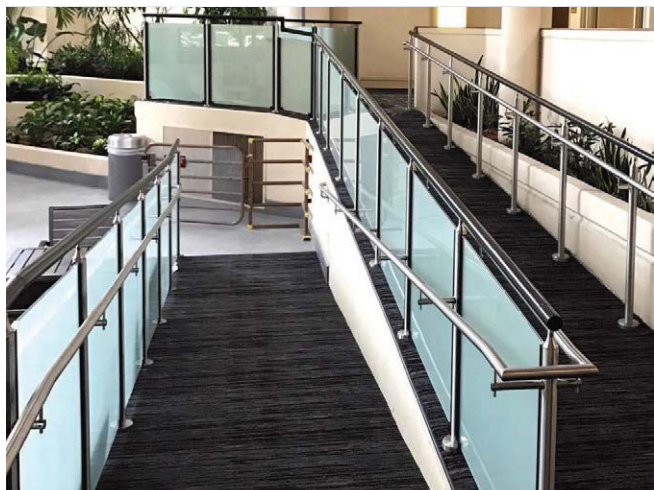
► RETROFIT TEAM

ARCHITECT: RSP Architects,
Minneapolis, rsparch.com
GENERAL CONTRACTOR:
PCL Construction,
Minneapolis, www.pcl.com
GLAZIER: W.L. Hall Co.,
Hopkins, Minn., wlhall.com

► MATERIALS

The DoubleTree by Hilton Hotel's renovation was completed in June 2017. Updates included installation of the Aspen glass railing system in the indoor pool area. The project featured vertical black anodized aluminum channels running the height of the stainless-steel post, securing the 1/2-inch clear laminated glass with opaque white PVB interlayer. A stainless-steel handrail and custom dark-stained white oak top cap complete the look.

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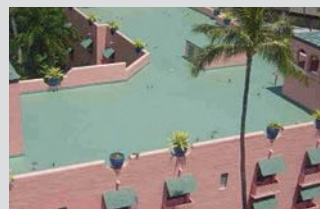
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STUCK ON BAND-AIDS

WRITTEN BY | NATE SANDERS, CIH, AND GEORGE DUBOSE, CGC

A Pre-renovation Peer Review Could Have Prevented a Hotel's Mold Problem

When it comes to catastrophic mold and moisture building failures, the design and construction industry uses litigation as its primary feedback system. Unfortunately, this reflects a failure to understand that good building performance starts early and is continuous throughout the design, construction and operation processes.

Peer reviews done during construction or just prior to a renovation project can build a bridge across the gap that often exists between what building designers and contractors know and what they need to know. This tool also serves to improve the communication between architects and mechanical engineers.

A peer review is basically introducing a subject matter expert (SME) into the

design and construction processes—whether it's new construction or a renovation. The SME helps to ensure the right people get the right information at the right time. There has been resistance to peer reviews in the design and construction community because, at face value, they appear to add an extra layer of consultants and unnecessary additional expenses that can only make the overall cost of the project go up.

Interestingly, however, other industries, such as health care, have learned that second opinions (peer reviews) actually lower costs and support better decision-making. An SME has the experience and knowledge to be confident there are less-costly options that can still achieve the desired project results. Peer reviews in

the design and construction process have been shown to keep costs in check, especially in view of the tendency of architect and engineering practitioners who take a “belt and suspenders” approach to their building design in an effort to ensure that a mold and moisture problem does not occur.

If you've recently purchased a hotel (or were already an owner) and are about to undergo your first renovation in the existing building, it would be very worthwhile to conduct a peer review prior to beginning the project. You don't want to stumble upon any unexpected mold or moisture issues, like the unfortunate new owner of the hotel in the following example did.

(continues on page 52)



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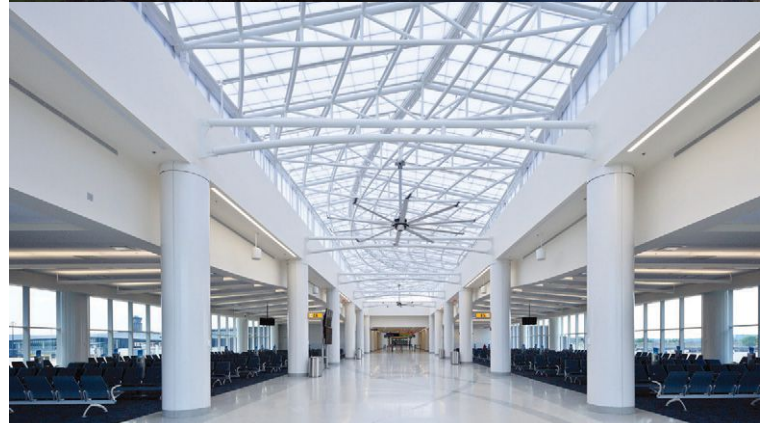
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MOLD GROWTH WAS FOUND BEHIND NEWLY INSTALLED VINYL WALLCOVERING AT A RECENTLY PURCHASED HOTEL. THE ROOT CAUSE COULD BE TRACED BACK TO A DECISION MADE JUST BEFORE THE PURCHASE OF THE HOTEL.



A RECENT PAINTING PROJECT HAD SEALED THE OUTDOOR AIR VENTS TO THE VERTICAL AIR CONDITIONERS, CAUSING TOILET-EXHAUST-INDUCED AIR INFILTRATION TO ENTER THE ROOM AND WALL CAVITY DIRECTLY AND WASH BEHIND THE NEWLY INSTALLED VINYL WALLCOVERING.

Now You Don't See It; Now You Do

A mid-rise hotel in Florida had recently undergone a sale. The new owner, who was changing brands, was updating the furniture, fixtures and equipment to meet the new brand's standards. This 400-plus-room hotel, located in a commercial district of Florida, was fairly basic in design with a corporate feel. Although there were no major influential factors present that would elevate the probability of a mold and moisture problem (such as being located next to a large body of water), the hotel was unexpectedly impacted by a severe mold problem behind new vinyl wallcovering that was installed during the renovation process.

What makes this particular case study so interesting is the fact that the Property Condition Assessment had not detected any mold in the building, nor had the construction team observed any mold as renovations began.

The mold problem was introduced during the first renovation phase in the first wing of the first floor. Within a week of the walls being finished with a skim coat and new vinyl wallcovering, mold was found growing behind the new vinyl. This was a bewildering development; the construction team had followed the manufacturer's guidelines for the drying and installation of the new finishes.

Obviously, there was significant urgency because of the hotel renovation schedule and the threat that extended room outages posed. A distress call was issued to Florida-based Liberty Building Forensics Group and an investigation began.

A Simple Band-Aid 'Fix'

The project team was under pressure to quickly solve the problem so that it would not progress when the construction team moved to the next floor, thereby increasing costs for the client because of unanticipated remediation efforts and extended room

outages. Liberty Building Forensics Group began its investigation by looking at the HVAC system. By examining the vertical air-conditioning (VTAC) units in each of the guestrooms, the forensics specialists were able to trace the duct to the outdoor air intake but then couldn't find where the outdoor air was brought into each of the guestrooms from the exterior.

A conversation with the owner and general contractor revealed that the exterior of the building had been given a paint job by the previous owner prior to the hotel sale. In doing so, the painting contractor had painted over the old louvered screens. Although this action had been requested by the previous owner to make the building look more appealing, the screens were in fact how the outdoor air was introduced into each of the guestrooms. The paint had sealed the screens shut and altered the amount of outdoor air coming in, thus causing the vents to no longer meet the design requirements for the VTAC units. This design change was causing the now-oversized units to short cycle, dropping the temperature very quickly without adequately dehumidifying the rooms.

The general contractor, wall-prep contractor and vinyl contractor had carried out their usual processes of skimming the wall, allowing three days to dry, then continuing with the vinyl wallcovering installation. Because of the increased humidity, however, the skim coat did not dry within the manufacturer's normal recommended dry time. The typical three days recommended by the manufacturer was under the assumption the hotel was operating at 50 percent humidity and 75 F. Instead, the hotel was now operating closer to 70 percent humidity and 75 F, making three days of dry time insufficient. As a result, the moisture from the undried skim coat was closed in by the new vinyl wallcovering, creating an environment that was very conducive for mold growth.


ALTHOUGH THIS HOTEL'S MOLD PROBLEM HAD BEEN CAUSED BY A SIMPLE MISTAKE, IT HAD EVOLVED INTO A COMPLEX ISSUE THROUGH A SERIES OF EVENTS.

Peeling Off the Band-Aid

Supplemental dehumidifiers were deployed to allow the construction team to continue with their three-day planned work schedule. Meanwhile, the forensics team conducted further evaluations to determine whether the blocked vents were the only issue causing the mold problem, which was confirmed. The previous owner's decision to paint the screens rather than replace them had led to a mold problem that could have been catastrophic for this new owner if the mold had not been detected early on in the renovation process.

The options for long-term solutions provided were quite simple: introduce new equipment to pressurize the corridor to provide the proper dehumidification or return to the original building design by fixing the vents. The new owner opted for the easier and less expensive option of fixing the exterior vents and restoring the building back to its original design.

Although this hotel's mold problem had been caused by a simple mistake, it had evolved into a complex issue through a series of events. Fortunately, the forensics team was able to get involved as soon as the mold made its appearance and addressed the issue before it got out of control. This kept the renovation project moving forward on schedule and prevented any future mold outbreaks.

Hotel owners or general contractors can spare themselves the panic and additional expense of hiring a forensics consulting firm by conducting a peer review prior to starting their renovation project. In this case, the forensics' SME would have been able to spot the Band-Aid fix and alert the owner to the problem it would pose. 

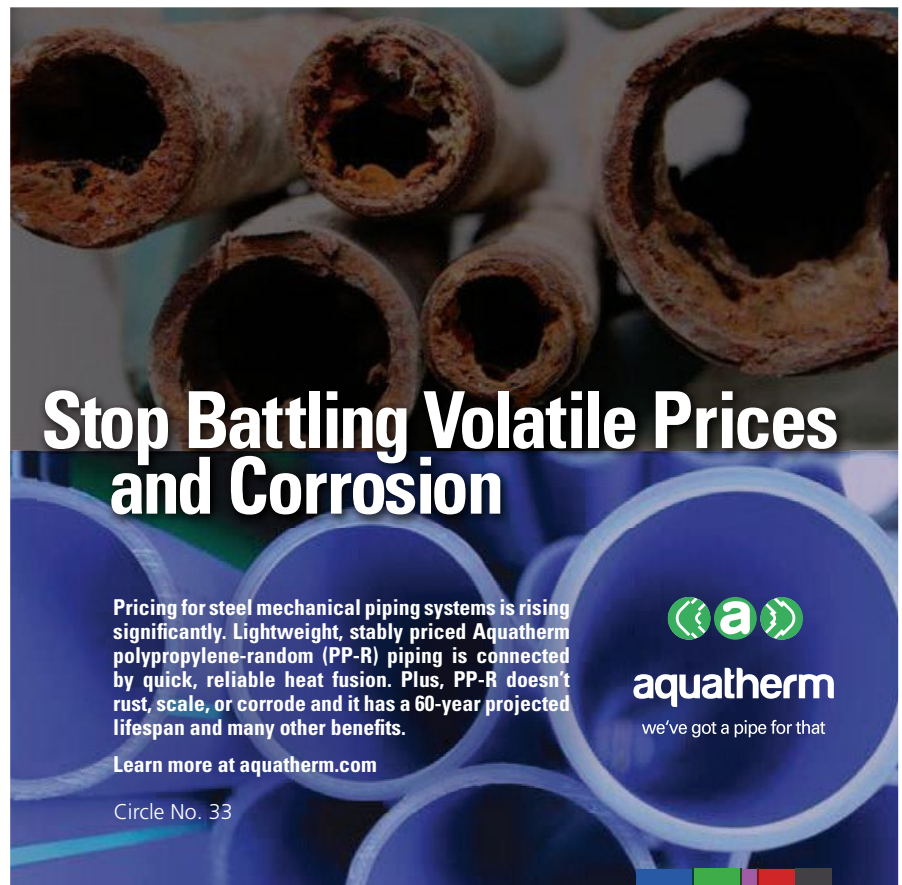
WARM, HUMID CLIMATES POSE UNIQUE RISKS

Based on the considerable experience of Florida-based Liberty Building Forensics Group, certain factors are more critical than others in avoiding catastrophic moisture and mold problems. Warm, humid climates offer a set of unique conditions that tend to dramatically increase the potential for moisture and mold problems in four distinct and specific areas:

1. Building envelopes that are not sufficiently tight.
2. Building envelopes that are not water-resistant.
3. An improperly sized air-conditioning system coupled with improper dehumidification.
4. Inadequate building pressurization and infiltration control.


Each of these factors brings a unique set of issues to the problems associated with moisture control.

At face value, these four items would appear to be very well understood by the design and construction industry. After all, a plethora of published information, training, and how-to materials exist to explain what these four items mean and what is required to avoid problems in these areas. Yet these same issues are at the heart of some of the largest and most catastrophic mold and moisture problems in the world.



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Circle No. 33

OBEY & ISAAC'S

An 1800s-era Church
in the Heart of Illinois Turns
Brewery and Restaurant

WRITTEN BY | DAN OCHWAT

K

nown around town as the Cornerstone Building, a limestone church built in 1889 on the fringe of downtown Peoria, Ill., has become the cornerstone of a burgeoning revitalization for the area.

Soon to celebrate three years in business, the Obed & Isaac's brewpub from Springfield, Ill.-based Conn's Hospitality Group Inc. has preserved as much of the church as possible—crypt included—to provide a new type of communal space for Peoria residents. The business has catalyzed nightlife foot traffic to the periphery of downtown, as well as a new 40,000-square-foot development from Ronald McDonald House. The Catholic Charities of the Diocese of Peoria has invested in its facilities and education centers nearby, too.

In addition to a brewing facility, Obed & Isaac's has a beer garden and bocce court. The location has twice the beer capacity of the original Obed & Isaac's in Springfield, where Conn's Hospitality Group transformed an Abraham Lincoln-era house for its original brewpub (see "Preserving Springfield", page 58).

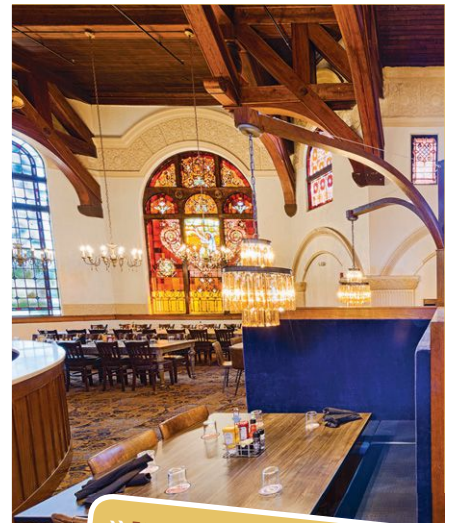
Cornerstone Building History

Designed by W.W. Boyington, the same architect who conceived the Chicago Water Tower, the Cornerstone Building began as the Second Presbyterian Church. In 1949, it became a chapter headquarters for the Eastern Star—a Freemason group—and was purchased by a grant from the Isaac and Ellen Donmeyer family, a prominent family in Peoria tied to the masonic organization. In 1969, the Donmeyer Association nearly sold the building

to Shell Oil, which planned to demolish the building for a gas station, but the public interfered. Later, Isaac, Ellen and their daughter Rose Donmeyer's ashes were interred in the building until it was sold in 1987 to be used for banquets and weddings, at which time the moniker, the Cornerstone Building, began. The Cornerstone Building was vacant for a period and, in 2014, the building was listed for \$350,000.

When a local architect first invited Karen Conn, CEO of Conn's Hospitality Group, and her husband Court to visit Peoria to potentially renovate some of its older buildings, the couple was given a tour of downtown buildings but nothing struck them. It wasn't until the two went on a second visit on their own, "a reconnaissance mission," Karen calls it, that she spotted the church. She wanted a space that was unique and cozy that could fit a second Obed & Isaac's. "It's all about an experience to us and none of the buildings that they showed us had that vibe to it," she says.

Upon entering the Cornerstone Building, Karen says her jaw dropped. She recalls "it was virtually untouched," when her family purchased the Cornerstone Building in October 2015. Notably, the church included more than 30 stained-glass windows and stunning hammerbeam roof trusses in the sanctuary, which became the dining room.



» FAST FACT: Obed & Isaac's, Peoria, Ill., qualified for federal and state historic tax credits. Conn's Hospitality Group Inc. retained the tax credits and did not sell them for capital investment into the property.

WHEN PURCHASED IN 2015 BY CONN'S HOSPITALITY GROUP, THE CORNERSTONE BUILDING STILL CONTAINED MORE THAN 30 STAINED-GLASS WINDOWS AND STUNNING HAMMERBEAM ROOF TRUSSES IN THE FORMER CHURCH SANCTUARY, WHICH EVENTUALLY BECAME OBED & ISAAC'S DINING ROOM.



A PARKING LOT WAS REMOVED TO PUT IN THE BEER GARDEN AND BOCCE COURT, AS WELL AS THE BREWHOUSE FACILITY.

Conn's Hospitality Group entered into a design-build contract with Springfield-based O'Shea Builders, a partner on its Springfield projects, which include a bed and breakfast, coffee shop, and the first Obed & Isaac's.

Becoming a Brewpub

The existing church is 12,000 square feet, transforming into the main restaurant, and then a covered patio (2,300 square feet) and brewhouse (2,300 square feet) were added, complementing the look of the church. The brewhouse carries serving tanks and refrigerated kegs that flow 24 lines of beer underground through refrigerated pipes into the basement of the church and up a center post in the bar, as well as 24 lines outside to the beer garden.

The main challenge of the project was converting the sanctuary into a cozy restaurant. The pews already had been removed and the concrete floors were covered with low-pile carpet. The existing broadloom carpet was replaced with carpet tiles that match the colors—a rich blue and gold—and characteristics of the Obed & Isaac's logo.

A unique stained-oak circular bar anchors the middle of the

dining room and was designed to complement the existing beams above. Seating in the dining room includes long tables and high-walled quads, as well as double banquettes that accentuate the cozy feel of the restaurant and are laced with fabric to absorb sound. Half walls with fabric were placed at the entrance of the restaurant near the hostess stand to absorb sound, as well.

Chandeliers extend off the banquettes and hang above the tables. Original brass lighting fixtures on the old beams were rewired and given LED lights under the watch of a historic-preservation team. The more than 30 stained-glass windows are being treated over time. Fortunately, none were broken or severely damaged and some have been removed, cleaned and treated with storm windows; it proved too costly to complete all the windows at once. Natural lighting through the stained-glass windows changes the ambience of the restaurant from morning to noon to night, Karen says.

Adding a sprinkler system posed a challenge. O'Shea Builders performed a laser scan of the building to create a virtual model that helped the team identify where unexposed sprinkler piping could run without interfering with the existing beams. The laser scan was used throughout the design process, providing a visual



PHOTO: COURTESY O'SHEA BUILDERS

» WHAT IS IT ABOUT BEER AND CHURCHES?

Perhaps it's the long history of Trappist monks brewing beer in Europe since the 1600s that gives beer its spiritual connection, or maybe ornate sanctuaries are just a cool place to sip beer. Here's a six-pack of notable renovated churches turned breweries:

- **ST. JOSEPH BREWERY & PUBLIC HOUSE**, Indianapolis, is housed in a former Catholic parish first erected in 1873.
- **3RD TURN BREWING**, Louisville, Ky., restored a Methodist church space first built in 1878.
- **URBAN ARTIFACT**, Cincinnati, features a taproom in the basement of the St. Pius X Catholic church, built in 1876 (events are held in the sanctuary).
- **SALT SPRINGS BREWERY**, Ann Arbor, Mich., renovated a Methodist church from 1899.
- **CHURCH BREW WORKS**, Pittsburgh, is housed in a St. John the Baptist Church, built in 1902.
- **BREWERY VIVANT**, Grand Rapids, Mich., is considered the first LEED-certified brewery. It transformed the chapel of a funeral home first built in 1915.



» **FAST FACT:** After the renovation, Conn's Hospitality Group Inc. added the Peoria Obed & Isaac's to the National Register of Historic Places.



PHOTO: COURTESY O'SHEA BUILDERS

THE BELL HAS BEEN REMOVED FROM THE BELL TOWER BUT WINDOWS HAVE BEEN INSTALLED, HELPING TO PRESERVE THE INSIDE OF THE TOWER.

»» RETROFIT TEAM

OWNER // Conn's Hospitality Group Inc., Springfield, Ill., www.connshg.com

DESIGN BUILDER // O'Shea Builders, Springfield, www.osheabuilders.com

ARCHITECT // Design Solutions Group LLC, East Peoria, Ill., (309) 213-0534

CIVIL ENGINEER // Mohr and Kerr Engineering and Land Surveying, Peoria, www.mohrandkerr.com

MEP ENGINEER // Keith Engineering Design, Peoria, www.kedmep.com

HISTORIC CONSULTANT // IDEA Architecture, Peoria

INTERIOR DESIGNER // Savvy Shoestring & Interiors, Springfield, (217) 793-0077

»» MATERIALS

CARPET TILE // J+J Flooring Group, www.jjflooringgroup.com

LVT FLOORING // Armstrong Flooring, www.armstrong.com/commercialflooring

VINYL FLOORING // Protect-All Flooring, www.protect-allflooring.com

PORCELAIN TILE // Crossville, www.crossvilleinc.com

PLUMBING FIXTURES // Peerless, www.peerlessfaucet.com; Elkay, www.elkayusa.com; Sloan, www.sloanvalve.com; and Gerber, www.gerberonline.com

LIGHTING // Lithonia Lighting, www.lithonia.com

PAINT // Benjamin Moore, www.benjaminmoore.com

ACOUSTICAL CEILING TILE // Armstrong Ceiling & Wall Solutions, www.armstrongceilings.com

SOLID SURFACE // Wilsonart, www.wilsonart.com

HVAC // Trane, www.trane.com

for Conn's Hospitality Group and the historic preservation commission, explains Greg Doolin, AIA, LEED AP, director of preconstruction services for O'Shea Builders.


Other renovations include an HVAC system with ductwork in the basement, preventing any ductwork from being hung in the dining room. Although there is nothing in the works, Conn says if the company rolls out another hospitality concept or bar feature, it will do so in the basement where there is large open space and high ceilings.

In the back of the restaurant, the kitchen, prep room, manager's office and utilitarian functions are housed in former classrooms that were not part of the original church.

Two offices (one for the minister and one for the secretary) have been preserved with the same woodwork, fireplaces, windows and bookshelves, and turned into banquet or meeting rooms. Updated bathrooms stand out in the old church with their modern accents.

As for the tall bell tower, the bell has been removed but windows were installed, helping to preserve the inside of the tower. A catwalk winds around four levels to the top, and lights have been added so patrons can view up into the tower though they cannot access it.

Outside of the tower, additional tuckpointing was required, and minor repairs were done to shingles on the roof. A parking lot was removed to put in the beer garden and bocce court, as well as the brewhouse facility.

Obed & Isaac's opened Sept. 26, 2016, the day of Ellen Donmeyer's birthday. "It's an iconic building; everybody in Peoria knows this building," Karen says about the church, which is perched just above I-74. "For tourists or visitors coming from the south to Peoria, it's one of the first buildings they see, so the community embraced the fact that it needed to be adaptive reuse." 

»» PRESERVING SPRINGFIELD

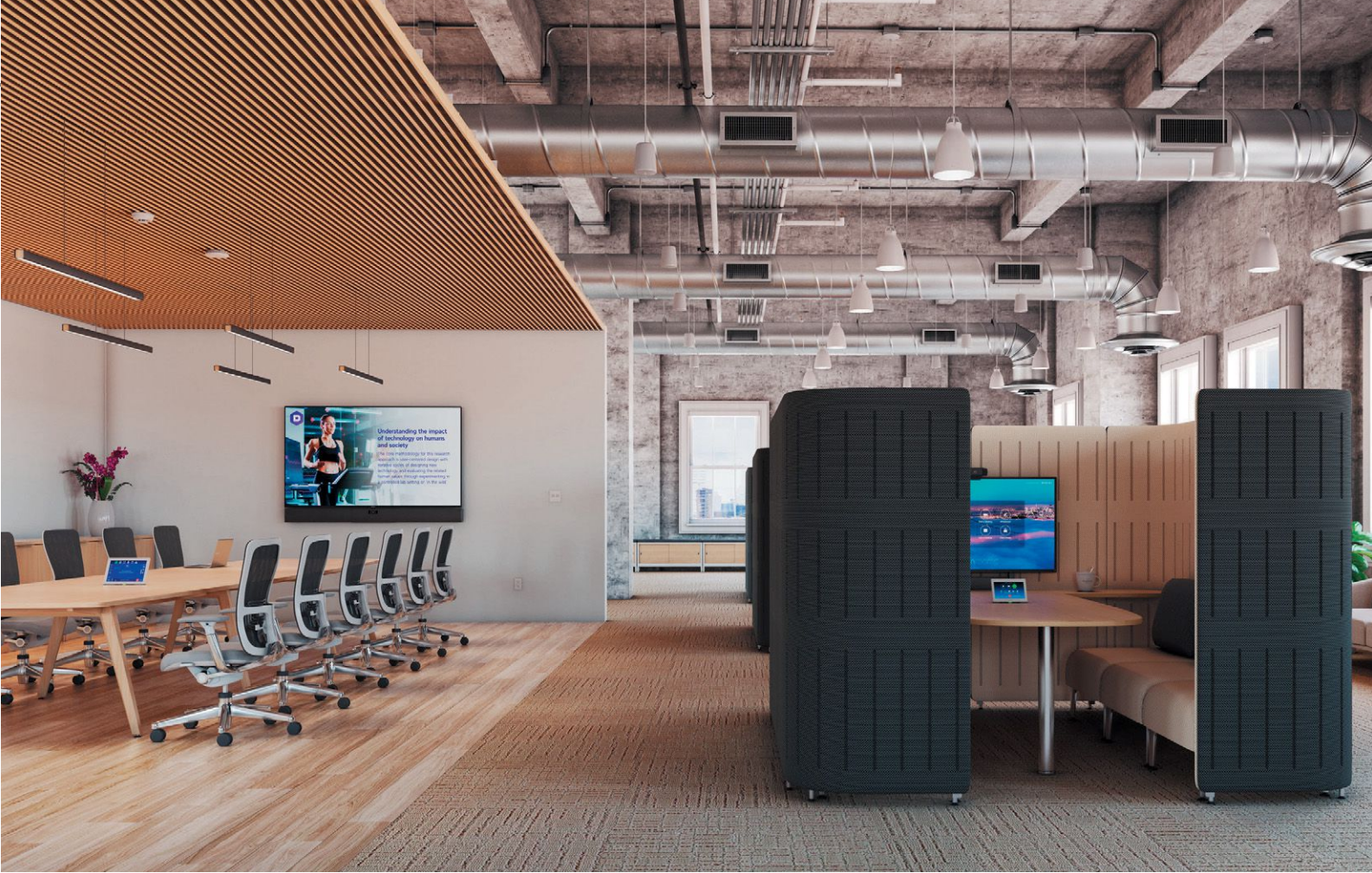
CONN'S HOSPITALITY GROUP was established in 1948 when Court Conn's father opened a small restaurant in downtown Springfield, Ill., eventually expanding to five restaurants. Those businesses sold by the '90s, but Court and Karen Conn—the group's current owners—remain focused on the past.

The couple began by buying a six-flat apartment building that was converted to a 13-room boutique hotel in Springfield called Inn at 835. For a year and a half, Karen emailed the owner monthly with a new historical tidbit she researched about the 1909 property until the owner caved and sold. Later, a small wedding and banquet facility was added to the back of the building, beginning the relationship the Conns have with O'Shea Builders, Springfield.

The couple's follow-up project was a rundown house in Springfield built in the 1850s that has a direct tie to Abraham Lincoln. Lincoln loaned the owner \$650 to complete construction. Karen found the original loan document at the Abraham Lincoln Presidential Library and Museum in Springfield.

The house, which was renovated and reopened as a coffee shop in 2014, shares property with another renovated house from the era that became the first Obed & Isaac's brewpub. Knowing the Conns' interest in old buildings, the city of Springfield reached out to them as the house was about to be demolished. Conn's Hospitality Group transported the home a few blocks to the coffee shop property soon after, and the first Obed & Isaac's was born.

During renovation of these buildings, Conn's Hospitality Group saves all it can to preserve the integrity, look and history. For example, when paneling had to be torn down, it was reused to make a bar. "We wanted to try to convey to people that this is the way people used to live, and this is how our families lived in Springfield during Lincoln's time," Karen says.

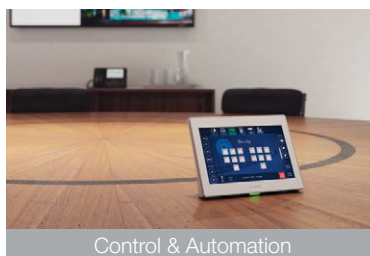


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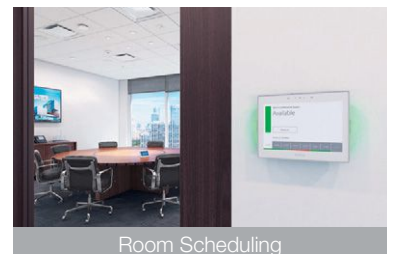
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Room Scheduling

WRITTEN BY | BRIAN LIBBY

RESPLENDENT RESTORATION

Virginia Beach's Landmark Cavalier Hotel Nearly Collapsed; Now It's Ready for Another 100 Years

When the historic Cavalier Hotel in Virginia Beach, Va., reopened its doors on March 7, 2018, after an \$85 million restoration, it was the end of a long journey for the circa-1927 icon and its owners—longer than anyone had anticipated. But it was also a new beginning. “For those who were familiar with the hotel from its earlier years, they appreciate the attention to detail and restoring pieces of it they loved,” says Bryan Cuffee, vice president of Virginia Beach-based Gold Key | PHR, the project’s developer. “At the same time, people who had not seen the property before appreciate that it touches on history but also brings forth a modern feel.”

For example, in the historic Raleigh Room, a social lounge off the main lobby that greets visitors with elegant gilded style, there is a reimagined likeness of the Mona Lisa in which DaVinci’s heroine is holding an iPhone. “That’s what we were really trying to do: be sensitive to that history but bring it to today,” Cuffee says. But the Raleigh Room also exemplifies just how many physical challenges there were.

During renovation, a section of its ceiling collapsed, and some 25,000 square feet of concrete decking had to be replaced.

Believe it or not, this was just the beginning. “There were physical challenges all over the place,” Cuffee says, “but I can say that our owners were committed to doing it right.”

Grand Style, Bad Bones

Designed by esteemed local architect Clarence Neff, the 7-story Cavalier Hotel’s neoclassical design was inspired



In its heyday THE CAVALIER HOSTED A SUCCESSION OF U.S. PRESIDENTS, AS WELL AS CELEBRITIES, LIKE FRANK SINATRA.



View a short video demonstrating the plumbing installation at the Cavalier Hotel, featuring the crew from JRC Mechanical.





RALEIGH ROOM

PHOTO: ASHLEY LESTER PHOTOGRAPHY



by a host of Virginia landmarks. “It’s like walking through a slice of Virginia history,” says Design Principal Greg Rutledge, AIA, of Norfolk, Va.-based Hanbury, which restored the Cavalier. “The motor court is flanked by serpentine walls like those at the University of Virginia. The main portico is a replica of one at Monticello. The plaster medallion in the rotunda is an exact copy of one in a historic building in downtown Norfolk. The lobby reflects the big paneled walls of the historic plantation homes there. Every room is adorned with the most beautiful plaster work and woodwork. What’s interesting is he created this crazy Y-shaped floor plan and a 7-story tower to capture views, yet was still very successful at applying classical motifs to the building. A lot of people say it looks bigger than it really is because it’s so grand in its setting.”

Yet behind the architectural ornament, the approximately 130,000-square-foot hotel was about as sturdy as a sandcastle: its steel framing so rusted that it was literally disintegrating from the inside out. This was true not only of the original 1927 framing, but even the steel from a 1990s renovation of one wing. Why so much damage? Coastal high winds and salt air contributed, but the real problem was façade penetration. The original frame was

built directly behind the masonry veneer, which opens up potential for cracks in the masonry, as well as steel rust. Then there were the head joints in the façade, where holes had been drilled into the brick to allow water to drain. Instead, the holes let the water inside.

Fixing the problem was tricky. “We had to perform all the steel replacement from the inside out. We didn’t want to disrupt the masonry skin,” Rutledge explains. “We knew we couldn’t repoint the brick on the whole building. We’d have done more damage than good. So we hung scaffolding around the building and for a year we found every hole we could, cut out the head joint and repointed it.” What the architects did not do, however, was repaint the exterior cast stone decoration, a decision that initially caught the client off-guard. “It had been painted a few times over the years, and we spent a lot of time stripping that paint off,” the architect adds. “The cast stone has an aged patina, which I think adds a whole lot to the façade.”

The famed indoor saltwater pool provided a typical if mysterious problem. “It leaked like a sieve, and we did not know where the water was going. It would just disappear,” Rutledge remembers with a laugh. “So we had to basically build a new



Attention to details ALTHOUGH THE CAVALIER'S BONES NEEDED RADICAL RECONSTRUCTIVE SURGERY, THE GRANDEST PUBLIC SPACES ONLY NEEDED COSMETIC ATTENTION. THE ORIGINAL PANELING, PLASTER ORNAMENTATION, TERRAZZO FLOORING AND PAINTED CEILINGS WERE ALL RECONDITIONED TO HISTORICAL ACCURACY.



↓ Retrofit Team

ARCHITECT // Hanbury, Norfolk, Va., www.hewv.com

■ RICHARD RUSINAK, AIA, project manager

■ GREG RUTLEDGE, AIA, design principal

GENERAL CONTRACTOR //

W.M. Jordan Co., Newport News, Va., www.wmjordan.com

INTERIOR DESIGN // Stonehill Taylor, New York, stonehilltaylor.com

RESTAURANT AND DISTILLERY DESIGN // Streetsense, Bethesda, Md., www.streetsense.com

LIGHTING DESIGN // Kugler Ning Lighting, New York, kuglerning.com

LANDSCAPE ARCHITECTURE // WPL, Virginia Beach, Va., wplsite.com

PLASTER RESTORATION // Hayles & Howe, Baltimore, haylesandhowe.com

MASONRY // Sprinkle Masonry Inc., Chesapeake, Va., (757) 545-8435

MASONRY AND CAST-STONE RESTORATION // Conley Brothers Inc., Virginia Beach, (757) 481-4111

ONSITE STEEL FRAMING FABRICATION // Chesapeake Bay Steel Inc., Norfolk, chesbaysteel.com

TERRAZZO RESTORATION // Pompei, Newport News, www.pompeiinc.com

POOL DESIGN AND CONSTRUCTION // Gracia & Vigil, Virginia Beach, (757) 493-2905

POOL-AREA IRON BALCONIES // Circle M Contracting, Portsmouth, Va., www.circlemcontracting.com

ELECTRICAL // David R. Hall Electrical Contractor, Newport News, (757) 873-0187

MECHANICAL AND PLUMBING // JRC Mechanical, Chesapeake, jrcmechanical.com

DISTILLATION PROCESS DESIGN // VITOK Engineers, Louisville, Ky., vitok.com



PHOTO: ASHLEY LESTER PHOTOGRAPHY

Painstaking restoration THE CAVALIER'S FAMED INTERIOR SALTWATER POOL LEAKED LIKE A SIEVE. BECAUSE THE TEAM COULD NOT IDENTIFY WHERE THE WATER WAS GOING, THEY CREATED A NEW POOL WITHIN THE ORIGINAL ONE.

pool inside that old pool." The renovation did something more, though: It made the Cavalier pool area feel like 1927 again, with its originally high ceilings, crown moldings and arched windows made operable again to capture the sea breezes. Surrounding balconies with their iron detailing, as well as the tiled monogram of the hotel's name on the pool floor, were all made new again, as well, and a new spa and fitness center were added.

Intact Charm

If the bones of the building needed radical reconstructive surgery, the good news was that the interiors, particularly the grandest public spaces, were mostly still there as originally designed and only needed cosmetic attention. The original paneling, plaster ornamentation, terrazzo flooring and painted ceilings were all reconditioned to historical accuracy.

Upstairs, the team received permission from the Virginia Department of Historic Resources, Richmond, to make one major change: combining two rooms into one (as long as the original circulation path was maintained) to substantially increase the

size of each room. But it took a more than 200-room hotel down to 85 rooms. "You almost never want to reduce the number of rooms in a hotel. Most people are fighting to get more rooms," Cuffee explains. "But we felt we had to deliver the guest experience that we wanted." Despite the added space per room, general contractor W.M. Jordan Co., Newport News, Va., and subcontractor JRC Mechanical, Chesapeake, Va., also faced a kind of Houdini act to give the Cavalier all new plumbing and electrical wiring without disturbing the rooms' historic ceilings.

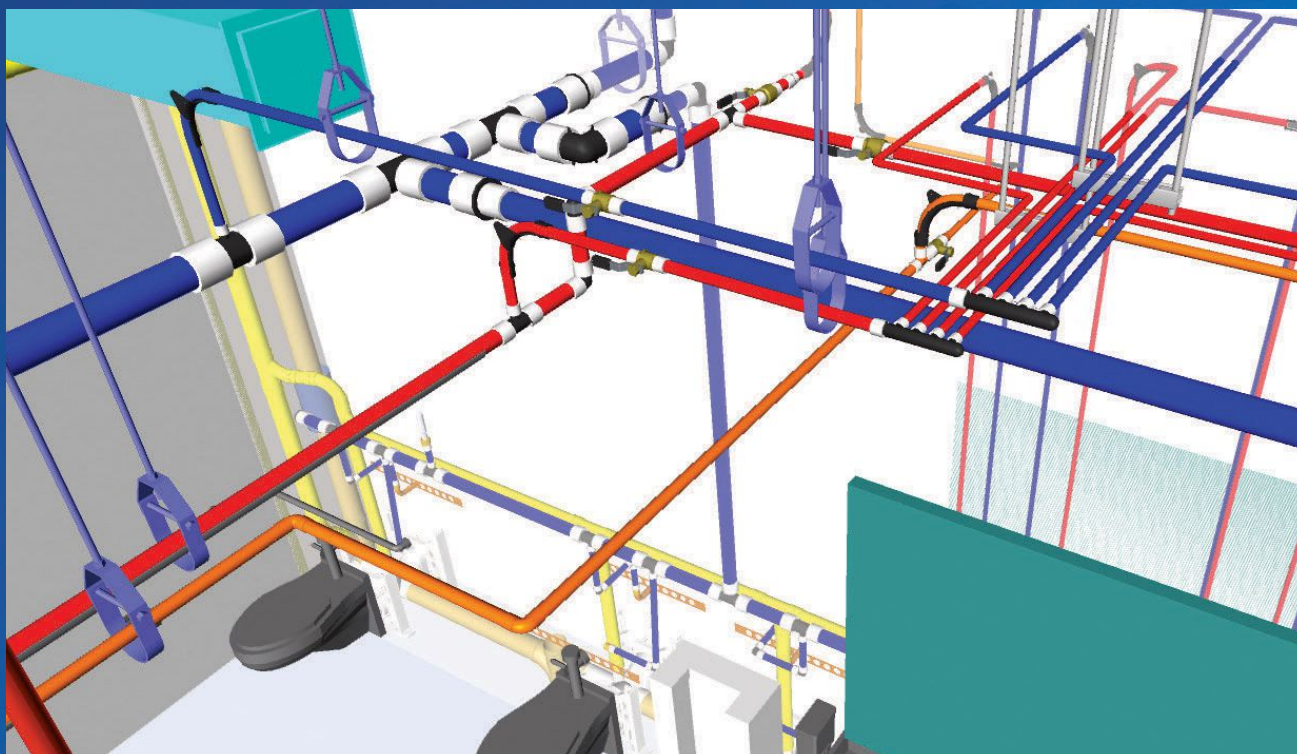
According to Nathan Berryman, vice president of operations for JRC Mechanical, in the hotel's heyday, the water tower on top of the building had a vat in which maintenance workers tossed blocks of ice. The water then was gravity-fed into the building so guests would have cold water. During the renovation, a flexible PEX product was run through the interstitial space between the hotel's irreplaceable ceilings and its floors. "When it comes to a plumbing and mechanical system in this type of building, one of the largest challenges is the space constraints," Berryman states. "We had to run large

(continues on page 66)

“IT'S LIKE WALKING THROUGH A SLICE OF VIRGINIA HISTORY.”
—Greg Rutledge, AIA, design principal, Hanbury

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↓ Materials

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FITNESS CENTER FLOORING // Resilient Athletic Flooring from Shaw, www.shawcontract.com

GUEST BATHROOM FLOORING // Florentine Glazed Porcelain Floor from Daltile, www.daltile.com

LOWER LOBBY FLOORING // Terrazzo from Pompei, www.pompeinc.com

GUESTROOMS/SUITES CARPET // 100 percent Nylon Tufted Carpet from ulster, www.ulstercarpets.com

BALLROOM/PUBLIC SPACES/GUEST CORRIDORS CARPET // Wool Axminster from ulster

GUESTROOM WINDOWS // Fiberglass Window by Andersen Windows Inc., www.andersenwindows.com

WOOD DOORS // Masonite Architectural, architectural.masonite.com

CUSTOM DOORS IN HISTORIC PUBLIC SPACES // Premier Millwork & Lumber Co. Inc., www.premiermillwork.com

SKYLIGHT IN POOL AREA // Crystal Structures Glazing, www.crystalstructuresglazing.com

PUBLIC SPACE LIGHTING FIXTURES // Royal Contract Lighting, royalcontract.com

VERANDA PORCHES CHANDELIER FIXTURES // Circa Lighting, www.circalighting.com

GUEST TOWER BATHROOM FIXTURES // American Standard, www.americanstandard-us.com; Kohler, www.us.kohler.com/us; Pfister, www.pfisterfaucets.com; and Signature Hardware, www.signaturehardware.com


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

diameter piping throughout the entire building, and we wondered how we would be able to do that given the space constraints. It is one of the reasons we [used PEX].”

The Cavalier Hotel’s basement level also has been brought back to its original splendor, anchored by the Hunt Room, which began as a Prohibition-era social lounge for men but is now the hotel’s primary restaurant. Its signature oversized hearth was substantially deteriorated, but the team carefully dismantled the fireplace brick by brick, gave it a new foundation and carefully mortared all the bricks back into place. Adjacent to the Hunt Room downstairs is what may be the first distillery in the U.S. within a hotel: Tarnished Truth Distilling Company, which specializes in small-batch bourbon and vodkas. Luckily, the truth is this is the only tarnish left.

During its illustrious history, the Cavalier

has hosted a succession of U.S. presidents, as well as celebrities, like Frank Sinatra. But as recently as a few years ago, its future was in doubt. Zoning would have allowed hundreds of new condos or apartments to be built on the site, seemingly a more lucrative endeavor. And clearly the old beauty needed a lot of work. Gold Key | PHR was the only bidder for the Cavalier that intended to restore the hotel. “I honestly think if they weren’t the successful bidder, the hotel would have been lost,” Rutledge says.

But as the rave reviews have poured in, betting on the hotel’s matchless presence seems to be paying off, as does the decision to rebuild it the right way. “I’ll tell you right now, if the Big Bad Wolf or another big storm comes through, that’s where you want to be,” Cuffee says with a laugh. “It’ll be there for another 100 years. That we made sure of.” 

All Rise for Virginia THE CAVALIER’S BASEMENT IS HOME TO WHAT MAY BE THE FIRST DISTILLERY WITHIN A U.S. HOTEL: TARNISHED TRUTH DISTILLING COMPANY, WHICH SPECIALIZES IN SMALL-BATCH BOURBON AND VODKAS.





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The Arms Race for AMENITIES

Hospitality-inspired Amenities Are Essential to Attracting Tenants and Competing in Today's Commercial Real-estate Marketplace



PHOTOS: ©CHRIS EDEN PHOTOGRAPHY unless otherwise noted

WRITTEN BY | ROBERT NIEMINEN

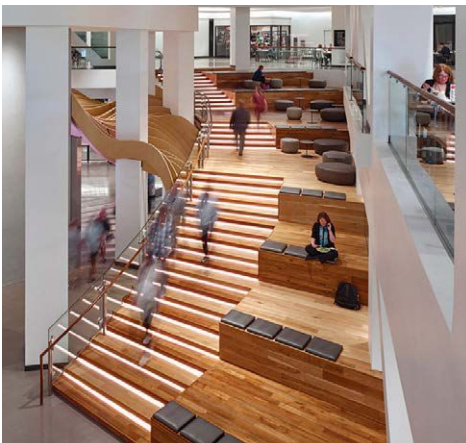
Corporate America is a war zone. As companies compete for greater market share and profits, the battle to attract and retain the best employees has never been fiercer. In fact, Gensler's 2016 U.S. Workplace Survey revealed many companies are struggling to draw and keep good people. Increasingly more workers are stepping out of the corporate structure to work from home or other "third places," such as coffee shops and libraries—with 40 percent of the workforce expected to become independently employed by next year. To up the ante, Apple, Google, Facebook and the like have raised the stakes in the war for talent by introducing residentially and hospitality-inspired amenities to entice the best and brightest to the workplace and, ultimately, keep them there.

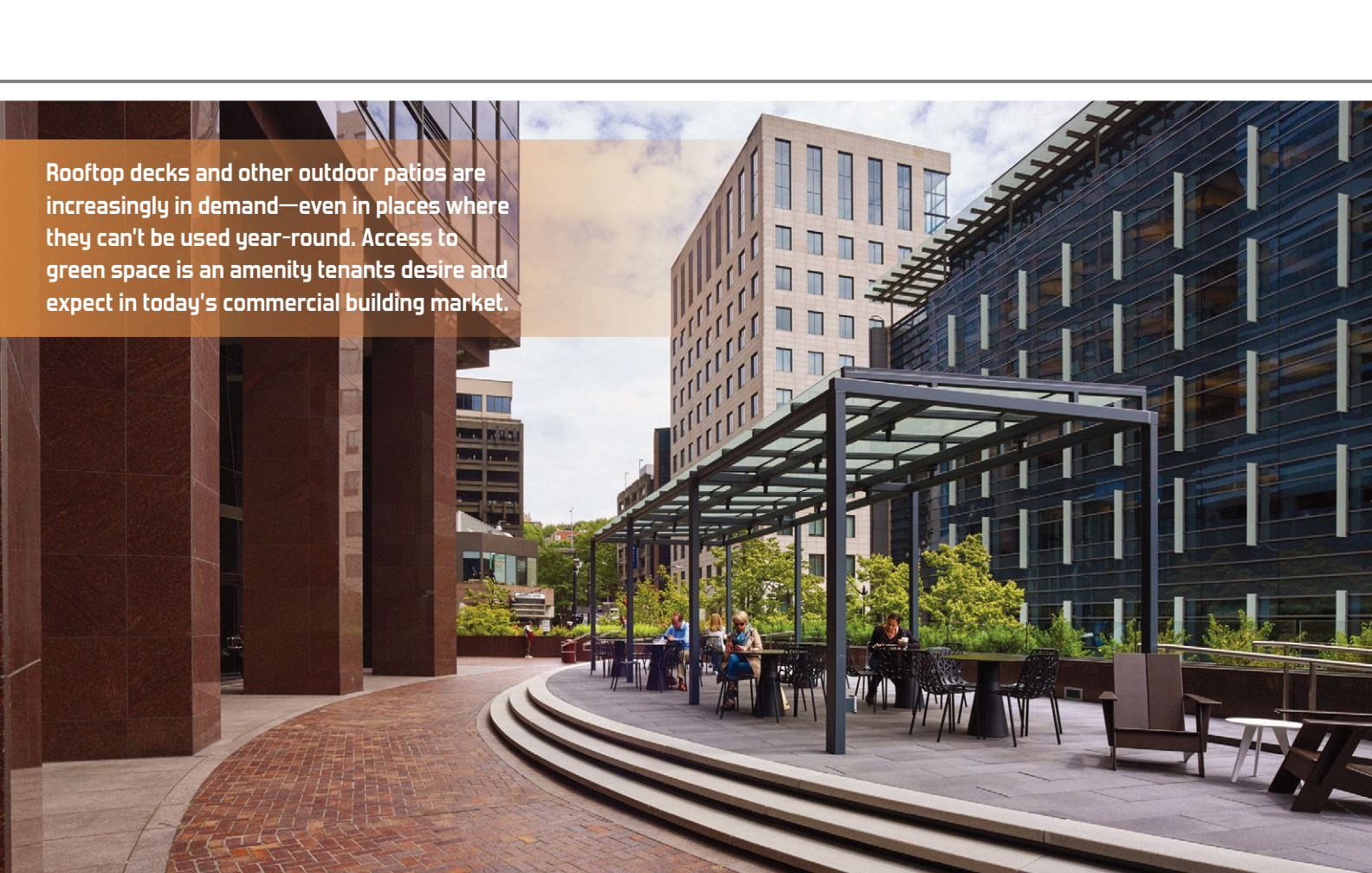
"By creating environments that reduce the contrast between home and work, organizations can attract the most passionate employees to an environment where people want to do their best work," writes Samantha Goldberg of *Commercial Property Executive* magazine (see "Trend Alert", January-February 2018 issue, page 76 or bit.ly/2HACRBF, for our story about this movement). "Just as corporations are competing in the war for talent, office owners are striving to attract top-quality tenants by bringing hospitality-like amenities and services to their buildings."

The result is a sort of "amenities arms race" in the commercial real-estate market, and existing building owners would be wise to evaluate their current position and strategy.



In an effort to attract and retain talent, companies are looking to lease space within commercial buildings that are equipped with inviting, hospitality-inspired amenities, like social spaces, cafés and fitness centers, that encourage employees and visitors to extend their stay or can be used to host after-hours events.





Rooftop decks and other outdoor patios are increasingly in demand—even in places where they can't be used year-round. Access to green space is an amenity tenants desire and expect in today's commercial building market.

“
THE STANDALONE
OFFICE BUILDING
IS PROBABLY
NOT THAT VIABLE
IN TODAY'S
MARKETPLACE.

—Marc Fairbrother,
vice president,
CallisonRTKL Inc.

”

Opportunities and Expectations

Marc Fairbrother, AIA, NCARB, vice president and office leader, CallisonRTKL Inc., Washington, D.C., describes the aforementioned changes in the workplace as a “secular shift” that calls into question the efficacy of the office as we know it. “[Employees] don’t have to be there, so it brings into question: What’s the future of the workplace?” he asks. “We won’t know the answer to that for another 10 to 15 years, but I bring that up to say the standalone office building is probably not that viable in today’s marketplace.”

Rather than lament the death of the status quo, Peter Sloan, AIA, RCID, director of interior design, HOK, Kansas City, Mo., sees tremendous opportunity in repositioning existing buildings to become more attractive to current market conditions and expectations. “The idea of repositioning or upgrading buildings—or however we want to classify taking existing assets and enhancing them—is perhaps at a premium at the moment, in my opinion,” he says. “If you take into consideration the location and the fact that there’s already an incredible investment and equity within those buildings, and by transforming them in the right way

there’s a great opportunity [...] to take buildings that have been underperforming and think about, ‘How do we enhance and invest in them in a way that’s going to increase tenancy and, ultimately, have a different appearance within the marketplace?’”

Case in point: Fairbrother recalls a recent client who struggled for three years to find a tenant for a 25-story, 425,000-square-foot office building in an urban setting, in spite of spending \$20 million on a five-level underground garage. After repositioning the building into a mixed-use facility with half the space dedicated to office and the other for residential, “they got a tenant immediately,” he recalls. Real-estate investment trust AvalonBay Communities took 200,000 square feet of residual office space in the building for its headquarters, yet “they couldn’t get anyone to be interested in a standalone spec office building in an urban location,” Fairbrother notes.

The anecdote is illustrative of the fact that commercial building tenants today expect to have access to retail, fitness and hospitality offerings to appeal to the next generation arriving

(continues on page 72)



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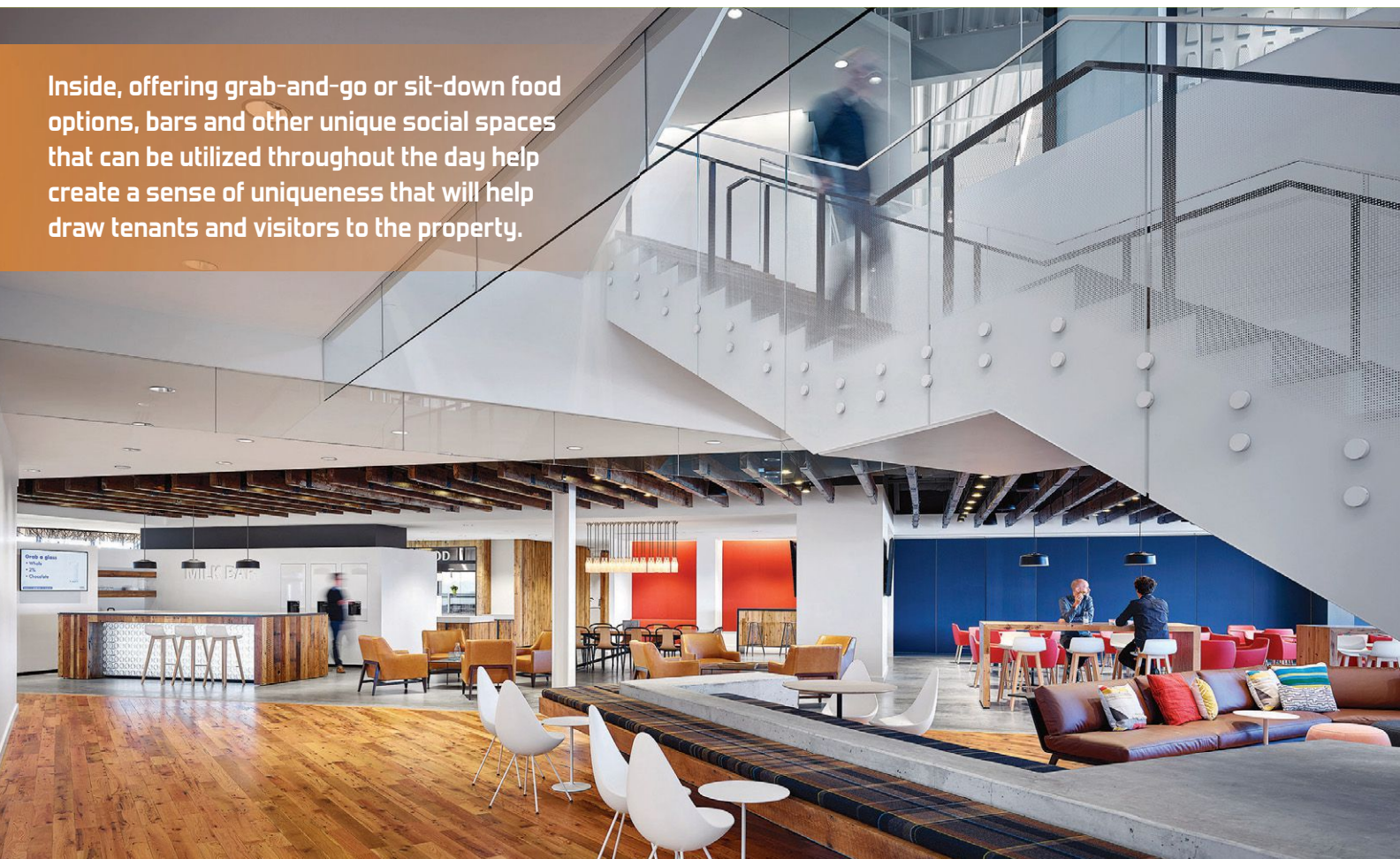
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Inside, offering grab-and-go or sit-down food options, bars and other unique social spaces that can be utilized throughout the day help create a sense of uniqueness that will help draw tenants and visitors to the property.



PHOTOS: MICHAEL ROBINSON



in the workforce that tends to have rather high expectations. “It’s really become the norm,” Sloan observes. “The millennial employees and the younger employees who have grown up with what I’ll call a level of entitlement, there’s an expectation that’s already there, and the companies are having to be pretty aggressive in terms of either doing that themselves or moving to buildings offering those opportunities and amenities.”

To that end, Fairbrother notes how Amazon recently announced it is bringing its second headquarters to Arlington, Va., not only because it’s among the nation’s safest cities and boasts one of the highest percentages of college graduates, but also because it contains a high concentration of mixed-use environments. “That’s what the employees want—they want access to leisure time,” he explains. “That’s really the critical factor: giving people leisure time and convenience. Because the minute you start doing that, that’s when the project becomes more valuable.”

Sloan adds for landlords who are looking for class A tenants, offering hospitality-like amenities “is absolutely the expectation.” As a result,

he says they must begin to ask themselves how much they are willing to invest in their buildings to even be considered in the marketplace.

Armed and Ready

Fairbrother characterizes the commercial rental market as “an amenities arms race,” and given the types of services being offered today, it’s clear amenities are a form of ammunition in the war to attract and retain tenants. As such, facility executives should be looking to devote resources to several areas increasingly sought after by prospective tenants, including food and beverage offerings, fitness centers, business centers, social spaces and lounges (indoors and out) and access to retail.

Sloan notes the amenities that tend to draw the most attention are food- and outdoor-related. Rooftop decks, in particular, are desired even in markets where they can’t be utilized year-round. “Rooftop areas have become an incredible driver because, even though tenants may not use them all the time, the ability of having selective client events and access to high-end

views is something that's really been important [to prospective tenants]," he says. Even more attractive is if the rooftop area is adjacent to a bar or hospitality space that can host weddings or other social events.

Likewise, he says outdoor green space at the ground floor of the building that connects to the streetscape can be instrumental in drawing people in. "Outdoor spaces—not just the roof decks but the entry plazas, as well—where you're really creating a front yard is another part of the process that can be really transformational in terms of the building."

Inside, creating cafés, bars and other unique social spaces that act as "mixing chambers" with the goal of extending people's stay throughout the day is increasingly important. "It's really creating a uniqueness about the property that establishes it as a different place people will really gravitate toward and connect with that has life at different parts of the day, be it morning, mid-day, afternoon or drinks later on," Sloan says. He adds offering a variety of grab-and-go food options and "fast-casual" choices with personality (in other words, not chain-based) to complement the speed of business are also essential.

The fitness component is especially relevant

given the current wellness trend happening in interiors (see **retrofit**'s story in "Trend Alert", March-April 2017 issue, page 76 or bit.ly/2TCR0nJ). "There's a wellness factor everybody's grappling with right now," Sloan says, adding buildings can support people's desire for health by including not only fitness centers with showers and locker rooms, but also space for yoga, Pilates and stretching, for example. "We're seeing everything from meditation to quiet rooms that have emerged as people are trying to manage the stress side of the world," he explains.

Likewise, Fairbrother observes among the more popular amenities people are looking for is simply a space for positive distraction. Whether it's a coffee shop or other social space where they can engage, these other "third places" can help employees shift their concentration and think more clearly. "If you think about what Amazon just built in Seattle, for example, there are two office buildings that just finished, and they put this beautiful, elegant soap bubble architecture out in between the two of them and that's really meant to be an alternate thought environment; someplace where you're working on something big and you're stuck," he explains. "Go there, and maybe it will free your mind."

A photograph of a modern interior hallway. The hallway has large glass walls on the left side, allowing natural light to enter. The floor is a solid purple color. On the right side, there is a white wall with a wooden handrail. The ceiling is white with a grid pattern. The overall design is clean and minimalist.

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photo: Marc Sourbron

Battling the Budget

Any discussion about amenities must be preceded by a baseline assessment of a building's existing condition and performance. In other words, the cost conversation must begin with the question: How much will it take to bring the existing facility up to building and energy codes?

"That's one of the first things we ask," Fairbrother says. Assessing the basic infrastructure, like the column grid; the capacity of the mechanical, electrical and HVAC systems; and the condition of the elevators, for example, must come first. "Those boxes have to be checked before you even get into the discussion of what amenities you will put in place," he adds.


Sloan agrees and says there are a handful of factors building owners need to consider before thinking about amenity upgrades—and infrastructure is critical, especially with the high-tech demands of most companies today. "There's so much demand, particularly in getting a building to be tech-savvy and tech-responsive and making sure the internal pathways and hardwiring will support the new

generation of spaces coming in," he says.

Similarly, with the focus on energy efficiency today, a building's performance also needs to be evaluated and improved, if necessary, before investing in amenities. "There's so much energy consciousness in terms of how buildings need to perform, which has a great deal to do with the mechanical and electrical systems," Sloan observes. Upgrading to more efficient glazing is a significant first cost but something most tenants expect to achieve lower utility bills and better light levels, for example.

Assuming the building is up to date, adding amenities often comes at a significant price, which is why many building owners are offsetting them by splitting costs with neighboring properties. "One of the things I'm seeing a lot more of and people starting to embrace is this whole idea of either a mixed-use stack or adjacent mixed use where it's shared amenities," Fairbrother says. If an office tower and residential building are next to each other, why build a fitness center in both? Rather, he suggests creating an enclosed connection between the two and sharing the amenity.

Additionally, Sloan says when traditional lobbies that essentially function as circulation paths that eat up usable square footage are transformed, there are savings to be realized as they move from "wasted space" to "active space." Although difficult to measure in terms of direct ROI, he says these newly activated spaces increase circulation and the impression of the building as a destination, which can impact the bottom line in the long run with improved occupancy rates.

Sloan also points out calculating ROI is an ongoing exercise, but "there is an opportunity with tenants coming in that there is a willingness to command higher rents if there is a really robust amenity package." But rather than simply reducing the process to the bottom dollar, he suggests looking at facilities not merely as a commodity but as an attraction and retention tool. Once the building is up to code and the amenities are in place, "then, obviously, you can fill up the building and manage that accordingly, and then the ROI plays itself out pretty quickly," he concludes. 

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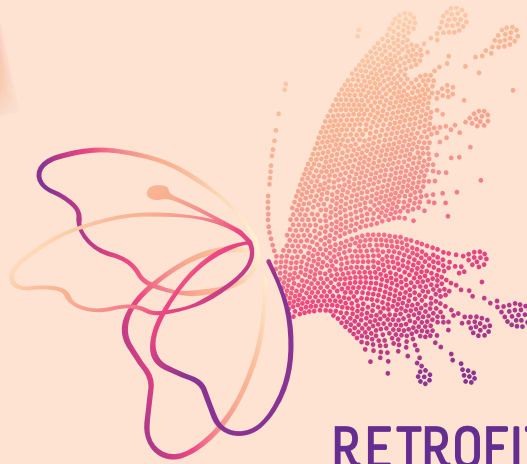


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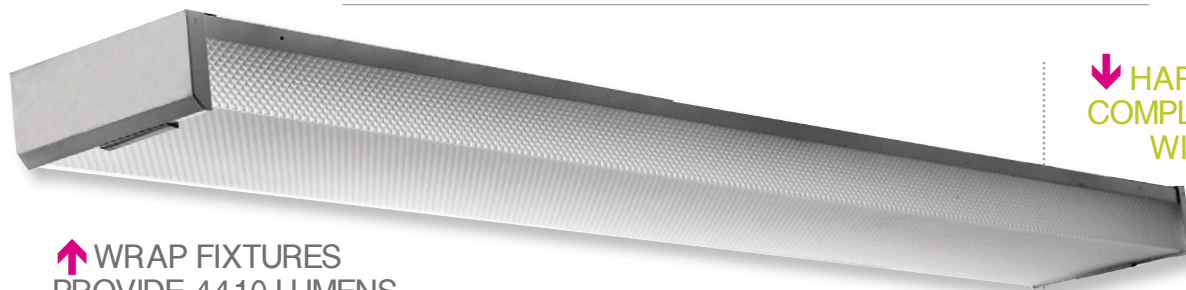
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➔ PHONE BOOTH PROVIDES PRIVACY FOR RETAIL SETTINGS

Cubical has launched the Diamond Room, a phone booth model designed for luxury brands and retailers. The Diamond Room offers customers privacy in settings where personal space has all but disappeared. An efficient solution to the increasingly social world, Cubical Diamond Room ships flat, easily assembles and can be repositioned. Each Diamond Room can sit up to four occupants and comes equipped with a diamond light, high-resolution monitor, oversized workbench and all essentials for modern communication. The phone booth also can be customized to match a store's color palette or brand style guide. The glass bi-fold door panes come in a variety of forms, including clear, one-way mirror and Smart Tint.

www.cubicalbooth.com // Circle No. 40



⬆ WRAP FIXTURES PROVIDE 4410 LUMENS

Earthtronics has introduced its LED 4-foot Wrap Fixture Series with advanced lighting control capabilities for offices, stairways, bathrooms and storage areas in new construction and retrofit commercial projects. Available in 4000K and 5000K with an 80+ CRI, the LED 4-foot Wrap Fixtures provide 4410 lumens, operating at 120 to 277 volts. They are equipped with a 0- to 10-volt continuous dimming driver with a dimming range capability of 10 to 100 percent. Advanced control options include daylight harvesting, as well as motion detection. An optional emergency-light battery pack and driver are available. The LED Wrap Fixtures have a 50,000-hour performance life.

www.earthtronics.com // Circle No. 41



High Plains Drystack LedgeStone

⬅ STONE COLORS LEAN TOWARD THE MODERN

Cultured Stone has unveiled two colors in Handmade Brick: Canvas and Titanium. Canvas presents an array of saturated white and off-white tones while Titanium includes hand-stained silvery grays. Two new colors have been added to Country LedgeStone: Gunnison and Wheaton. Gunnison is charcoal and gunmetal punctuated with powdery light gray, and Wheaton is a mix of tawny silvers and cool neutral grays. The large-format Stanhope Textured Cast-Fit presents a weather-worn array of dusky grays. Carbon Cast-Fit features subtle shifts of light and dark tones present in morning fog. A panelized version of Drystack

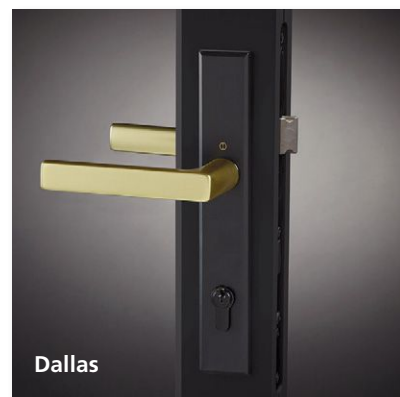
LedgeStone is available in three color options: Rubicon, Melrose and High Plains. Rubicon is a blend of deep grays and carbon-inspired tones. Melrose incorporates light-gray hues, and High Plains showcases an earthy color with tan undertones.

www.culturedstone.com // Circle No. 43


⬇ HARDWARE COMPLEMENTS WINDOWS AND DOORS

Kolbe Windows & Doors has introduced two hardware options designed to coordinate with its VistaLuxe Collection. Kolbe's Ashlar handle, which comes standard on VistaLuxe Collection casements and awnings, is available as an option for Ultra Series and Heritage Series. Constructed of metal, it has a square silhouette to complement the characteristics of the VistaLuxe product line. The crank-out handle is available in white, satin nickel, rustic umber and matte black finishes. In addition, the two-toned matte black/brushed gold Dallas handle adds to the VistaLuxe inswing entrance door flanked by direct sets with transoms mullied above. The lever is brushed gold and the escutcheon, turn knob and key cylinder are matte black. This finish option also is available for Ultra Series and Heritage Series inswing and outswing doors.

kolbewindows.com // Circle No. 42



➔ ABSORB NOISE IN SPACES WITH AN INDUSTRIAL AESTHETIC

 To remedy acoustical problem in spaces with an industrial aesthetic, Armstrong Ceiling Solutions has debuted options for installing its InvisAcoustics Basics panels and Tectum Direct-Attach panels vertically onto trusses and I-beams. Because the panels virtually disappear into these structural elements, the solutions maintain the aesthetic of exposed-structure designs while providing noise absorption. Available in White, Black and Field Paintable, Armstrong Truss Fastening Kits are compatible with InvisAcoustics Basics panels and 1-inch-thick Tectum Direct-Attach panels up to 2 by 4 feet in size. Installation onto I-beams is accomplished using hat track and standard screws or fasteners. InvisAcoustics Basics panels have a Noise Reduction Coefficient (NRC) of 0.75, meaning they absorb 75 percent of the sound that strikes them. Tectum Direct-Attach panels have an NRC of 0.40. Both panels can be painted to match the deck while maintaining their acoustical properties.

armstrongceilings.com/invisacoustics, armstrongceilings.com/tectum // Circle No. 44



InvisAcoustics truss installation

➔ WIRELESS IN-WALL SENSORS CAN REPLACE STANDARD WALLBOX CONTROLS

Lutron Electronics has released two Maestro Wireless in-wall sensors for its Vive solution. The 0- to 10-volt dimmer/sensor model combines automated, occupancy-based control of light, manual dimming control and wireless communication to other Vive system devices in a single piece of hardware. The sensor/switch model provides manual or automated, occupancy-based on/off control, as well as wireless communication to Vive devices. Both models can be direct replacements to existing controls in a standard wallbox. The sensors can communicate wirelessly to Lutron Pico remote controls or other Vive wireless sensors, making it easy to add additional wall controls without running new wire. Use the sensors as standalone devices or connect them to a Vive wireless hub at any time to deliver system features, such as timeclock control and energy reporting.

www.lutron.com/vive // Circle No. 45



↑ TEMPER VENTILATION AIR WHILE SAVING ENERGY

Daikin's Rebel DOAS with CORE pairs the high efficiency of Rebel's inverter compressor, which maintains consistent tempering of ventilation air, with energy savings of CORE's full enthalpy heat exchanger to provide clean, cool, dry air to an occupied space. From the moment the required volume of ventilation air enters Rebel DOAS with CORE, the air is pretreated with full enthalpy heat transfer in the CORE while having less than 0.5 percent exhaust air transfer ratio to maintain the air's purity. Traveling through the MERV 14 filters removes greater than 75 percent of airborne particulates as small as 0.3 to 1.0 microns, cleaning even smoke from the air. In cooling season, the air will be conditioned with the two-point independent control of the evaporator and modulating hot gas reheat coil, allowing for control to specified dry and wet bulb leaving air temperatures.

www.daikinapplied.com // Circle No. 46

➔ OPEN-CELL SPRAY FOAM DOES NOT REQUIRE MIXING

Icynene-Lapolla has debuted its Icynene OC No-Mix insulation, an open-cell spray foam solution for homes and commercial structures. The product is suited for application in critical insulation areas within the structure, including cavity walls, crawl spaces and attics (vented and unvented), as well as floor, ceiling and interior roof assemblies. The professionally installed spray-applied material seals the structure, providing a continuous air barrier and reducing unmanaged moisture. The insulation offers the added benefit of noise attenuation. Icynene OC No-Mix can be used across climate zones and may be spray-applied in a wide range of temperatures. The insulation firmly adheres to framing members and substrates and can be used to fill stud wall construction.

www.icynene-lapolla.com // Circle No. 47





↑ SEALING SOLUTIONS ARE EXPANDED AND ENHANCED

Huber Engineered Woods has expanded its line of ZIP System sealing solutions and enhanced its flashing tape performance. ZIP System sealing solutions now include five ZIP System stretch tape options and five ZIP System flashing (straight) tapes. While developing tape options for new widths and lengths, the company enhanced its tape formula to provide even stronger performance in a broader range of temperatures. ZIP System sealing solutions also include ZIP System liquid flash, a fluid-applied flashing alternative to ZIP System flashing and stretch tape. All ZIP System tapes are backed by a 180-day exposure guarantee and a 30-year limited warranty, feature a split-liner for easy application (on tapes 6 inches or wider), and can be applied between 0 and 120 F.

zipsystemsealingsolutions.com // Circle No. 48

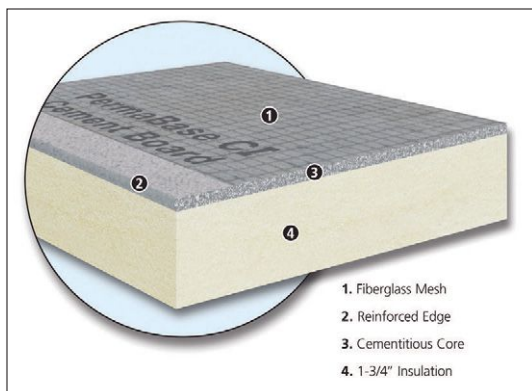


← CALIFORNIA INSPIRES CONCRETE ROOF TILE COLORS

Boral Roofing LLC has released the California collection, five concrete roofing tile colors inspired by the Golden State. Each of the new shades is available in four tile profiles. All considered darker neutral options, the new shades include: Graphite, Oceana, Saddleback Blend, Sepia and Shadow Black. The collection offers a Class A fire rating and is a low-

maintenance roofing solution with replacement expected at 75 years. Boral Roofing's concrete tile is fully recyclable at the end of its life on the roof, reducing landfill waste. The new concrete roof tile colors now are available throughout the state of California.

www.boralroof.com // Circle No. 50



← CEMENT BOARD INCLUDES POLYISO INSULATION

National Gypsum's PermaBase CI Insulated Cement Board is a composite cement board that combines the strength of PermaBase with high-density polyiso insulation to create a substrate for exterior finishes. PermaBase CI meets or exceeds energy code requirements in all seven climate zones across the country with an R-Value of R-10. For use in residential, multifamily and low-rise commercial applications, PermaBase CI is lighter weight than using separate cement board and insulation products. The mold-resistant product, which was validated by UL Environment, has achieved NFPA 285 Approvals for Adhered Veneer Finishes and is GREENGUARD GOLD certified.

permabase.com/permabaseCI // Circle No. 51

↓ STAINLESS-STEEL FITTINGS PROVIDE QUICK CONNECTIONS

Viega has made available MegaPress Stainless XL fittings for 2 1/2-, 3- and 4-inch pipe. The new fittings join the current MegaPress Stainless offerings of 1/2-, 3/4-, 1-, 1 1/2- and 2-inch sizes to create a comprehensive lineup for a broad variety of applications, including maintenance and repair. Designed for Iron Pipe Size stainless steel, the line of MegaPress Stainless XL fittings makes secure connections in seconds. The fittings are equipped with patented Viega Smart Connect technology, which allows installers to identify unpressed connections during pressure testing. MegaPress Stainless XL fittings are available in 304 and 316 stainless steel and are approved for use with Schedule 10 to Schedule 40 pipe.

www.viega.us/mpstainless // Circle No. 49





← INTERIOR WALL PANELS INCLUDE A FIBERGLASS CORE

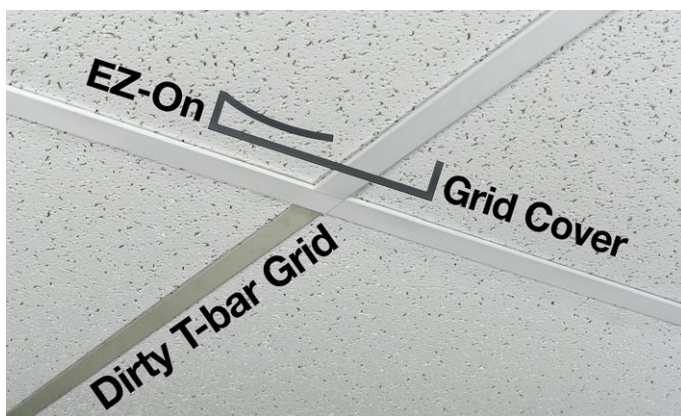
Formica Corp. has launched HardStop Decorative Protection Panels, a line of high-performance wall panels featuring a fiberglass core for durability, strength and fire resistance. HardStop panels are available in the full spectrum of Formica Brand colors, allowing for color coordination with other Formica Laminate products. HardStop Panels are designed to be applied directly to a variety of substrates, including drywall, bringing additional strength and style to vertical applications and settings. The panels may be installed using a selection of seam treatments. Formica Group offers a variety of anodized aluminum trims that come in five profiles for any application: inside corner, outside corner, division bar, end cap and corner guard. All trim profiles are available in five anodized colors, and color-coordinated 100 percent silicone or acrylic caulk also may be used as seam treatments.

www.formica.com/hardstop // Circle No. 52

→ SILICONE ROOF COATINGS RESIST NATURAL WEATHERING

Duro-Last Inc. has unveiled Duro-Shield Silicone Roof Coating and materials. The silicone-based roof coating is designed to resist natural weathering while providing long-lasting watertight protection on a variety of substrates. Its white finish offers reflectivity and energy savings for building owners. Five-, 10-, 15- and 20-year limited warranty options are available. Additional Duro-Shield Silicone materials include Duro-Shield Silicone Brush Grade Sealant, Polyester Reinforcement Scrim, Duro-Shield Silicone Roof Primer: Universal 2-Part Epoxy and Duro-Shield Silicone Roof Primer: TPO. The line expands the existing Duro-Shield coatings solutions, which feature Duro-Shield 20 and Duro-Shield 10 Acrylic Roof Coatings.

www.duro-last.com/duroshield // Circle No. 53



↑ RETROFIT EXISTING CEILING T-BAR GRIDS IN SUSPENDED CEILINGS

EZ-On Grid Covers from Ceilume are a solution for suspended ceiling T-bar grids that have become stained, damaged or yellowed with age. The system has only two components: one to cover grid members, the other for perimeter angles. It installs on virtually all grids with 15/16-inch (1-inch nominal) flanges. The vinyl strips slide over the T-bar and snap into place. No pre-cleaning is needed; no adhesives are applied; and no tools or special training are needed. A 400-square-foot room could be completed by one person in about an hour without removing panels. Made from 100 percent recyclable rigid vinyl in a cool-white, semi-gloss surface, EZ-On grid covers require no maintenance and are easy to clean with soap and water. Impervious to moisture, they resist mold growth and are non-yellowing.

www.ceilume.com/ez-on // Circle No. 54

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ON THE FARM

Germantown, Tenn., is a municipality accustomed to playgrounds and sports fields. The idea of a working farm as a public park felt overwhelming to constituents, but with intensive public involvement throughout the design process, Memphis, Tenn.-based archimania created a new recreational model that will ensure the community remains aware of where its food comes from, as well as the value of educating children.

The northern portion of Lanier Farm Park's property has become the public/education zone while the southern part is the production zone. The layout provides flexible spaces that allow activities to overlap. The community garden, discovery garden, kitchen garden, chicken yard, orchard, horse barn and performance lawn are closely grouped and connected via paths that allow children to view and participate in multiple activities in a relatively small area.

Assorted lawn areas accommodate various-sized groups for outdoor classrooms, fall festivals and concerts. Two renovated barns are used for classes and to provide an income stream through rentals for weddings, reunions and parties.

Today Lanier Farm Park has developed partnerships with the local university, hospital and several non-profits, each contributing to seasonal and annual educational programs for children and adults. The bio-intensive growth methods produce a yield providing enough food for the community-supported agriculture association members, as well as generate a significant donation for local food banks. 



LANIER FARM PARK was recognized as a Merit Award winner in the American Institute of Architects Tennessee Chapter's 2018 Design Awards.



An Abandoned Farm Is Reopened as a Public Park, Reconnecting a Suburban Community to Its Agricultural Roots

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