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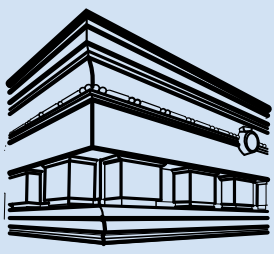
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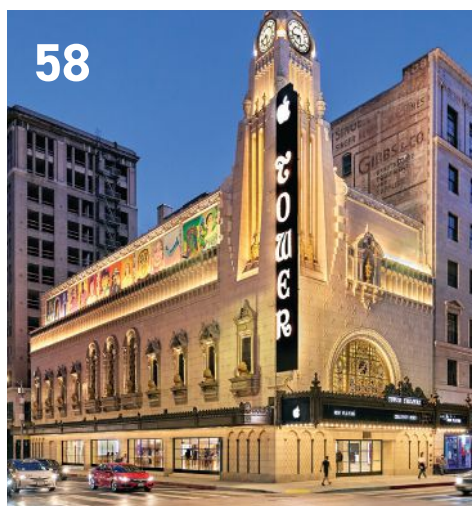
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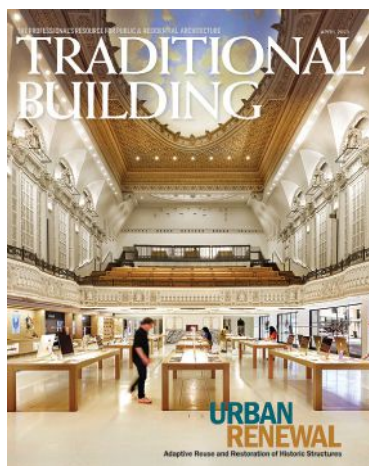
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Photo by Cesar Rubio

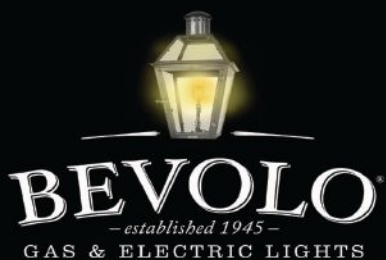
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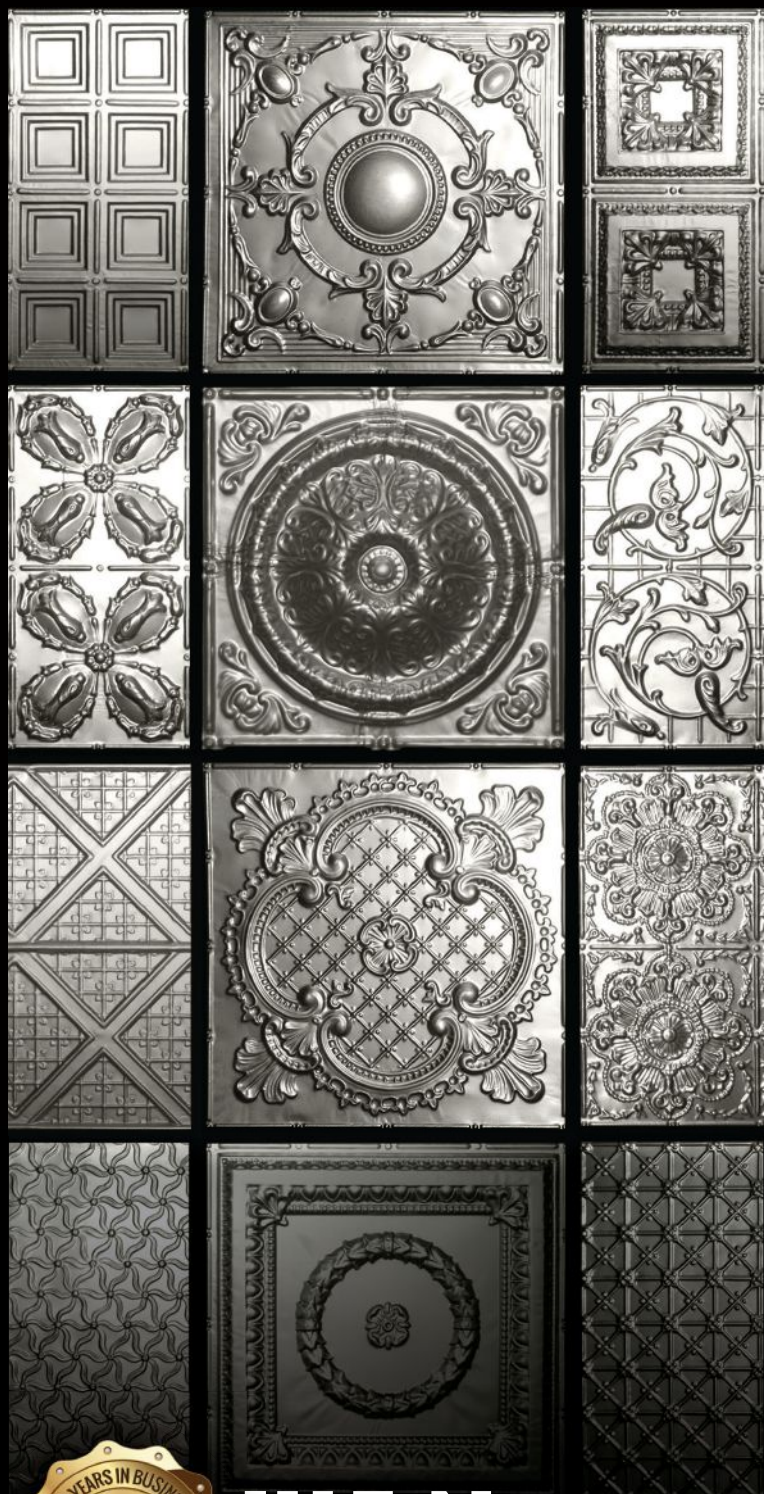
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Traditional Building® (ISSN 2688-1543) (USPS 024-240) is published bimonthly by Active Interest Media Holdco Inc., 2143 Grand Avenue, Des Moines, IA 50312. The known office of publication is 2143 Grand Avenue, Des Moines, IA 50312. Periodicals postage paid at Des Moines, IA and at additional mailing offices. **POSTMASTER:** Send address changes to: Traditional Building, PO Box 3000, Denville, NJ 07835-9965. **COPYRIGHT:** 2023 by Active Interest Media Holdco, Inc., Des Moines, IA. This publication may not be reproduced, either in whole or part, in any form without written permission from the publisher. **PRIVACY STATEMENT:** Active Interest Media Holdco, Inc. is committed to protecting your privacy. For a full copy of our privacy statement, go to aimmedia.com/privacy-policy.

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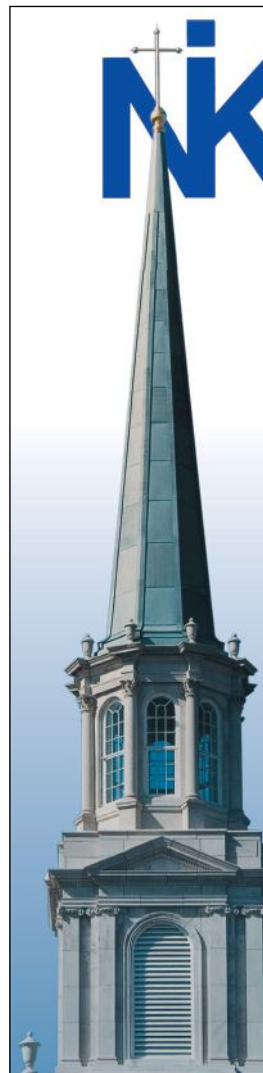


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INDUSTRY NEWS



Lake Forest, Illinois May 10-11, 2023

Our next conference takes place May 10-11, 2023, at the Historic Deer Path Inn in Lake Forest, Illinois. Lake Forest overlooks Lake Michigan thirty miles north of Chicago. Its historic districts feature Gilded Age houses designed by Howard Van Doren Shaw, David Adler, Charles Platt, James Gamble Rogers, and more. Shaw's work from Market Square to Ragdale will be one of our several architectural tours. Architect William C. Jones of Holabird & Root designed our conference venue, the Deer Path Inn, in 1929. Lake Forest College, Crabtree Farms, and the Armor Estate are all nearby. Lake

Forest is a gorgeous showcase for early-20th-century architecture, interiors, and landscape design.

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New leadership at CNU

A conversation with Mallory B.E. Baches, the new president of the Congress for New Urbanism.

When CNU began, virtually no one was using the walkable neighborhood as a model for real estate development.

Mallory B.E. Baches, the newly installed president of the Congress for the New Urbanism, brings a keen interest in the intersection of historic preservation and social sustainability to the role. Accredited with the American Planning Association, the U.S. Green Building Council as well as the Congress, Baches has spent a quarter-century in international work in urban planning and community development.

She shares her views on the visions of the Congress and its role in the future of shaping cityscapes.

This year is a landmark for the Congress for New Urbanism because it's celebrating its 30th anniversary. The ideas of walkable neighborhoods and climate change weren't really on the radar of the general public back then. What was the major issue at that time that prompted the formation of the nonprofit organization?

The preamble to the Charter of the New Urbanism begins,

"The Congress for the New Urbanism views disinvestment in central cities, the spread of placeless sprawl, increasing separation by race and income, environmental deterioration, loss of agricultural lands and wilderness, and the erosion of society's built heritage as one interrelated community-building challenge."

When CNU began, virtually no one was using the walkable neighborhood as a model for real estate development. Our founders recognized that every industry participating in the built environment—finance, codes, design, policy, development, engineering—was biased toward automobile-based outcomes and single-use land patterns. Learning from people like Jane Jacobs, Christopher Alexander, William "Holly" Whyte, Kevin Lynch, and others who had begun to shine a light on the destructive nature of the predominance of suburban sprawl, our founders were ambitious radicals. They not only insisted that there was a better way but wrote a set of 27 principles that could serve as a blueprint for how to build that better way. Thirty years on, we have made extraordinary advances and yet, as you look around any city or town, you can see there is still extraordinary work left to do.

What's the most important issue in the work of the New Urbanist movement today? Was climate change always part of the equation?

In the CNU Strategic Plan, our board set three areas of focus for the organization: legalizing walkable urbanism, supporting complete neighborhoods, and designing for a changing climate. And while each of those is its own problem



Photo by Sally Watts Photography

Mallory Baches, AICP LEED-AP CNU-A President, Congress for the New Urbanism

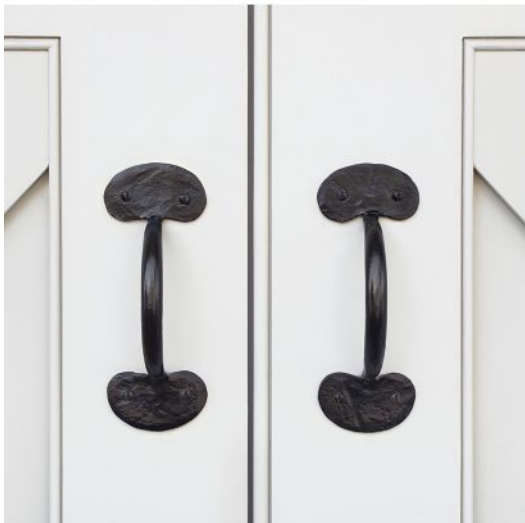
space that our programs are working to address, their intersectionality can't be underestimated. The effects of climate change are disparately impacting those same communities that have not been invested in equitably, where it is often still illegal to provide a more equitable built environment. CNU is committed to bringing urban design principles to these interrelated challenges and doing so in the ways we know best—by convening expertise and collaborating on solutions and communicating that vision.

New Urbanist ideals have always centered on balancing the needs of the urban with the needs of the environment, but as the impacts of climate change push harder and faster on the limits of our built environment, we have to focus our priorities much more intentionally. As a mother, I hear the clock ticking as the climate crisis increases each year. Our work as a movement has to swiftly and seriously respond to that deafening demand. The way we design our cities, towns, and neighborhoods plays a central role in the equity, resiliency, and sustainability of our communities. CNU has a critical voice to share in developing the solutions to the intersecting crises that we face.



CNU Images

This view of Larkin Square in Buffalo, New York, shows how the Larkin District has evolved from an abandoned industrial site into a thriving, mixed-use urban district that is spurring revitalization for blocks in every direction.



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CNU GOALS

The mission of the CNU is to champion walkable urbanism.

AT-A-GLANCE

They provide resources, education, and technical assistance to create socially just, economically robust, environmentally resilient, and people-centered places.



LEFT An example of bungalows that are a key element in the “missing middle” housing type declension that CNU promotes.



RIGHT Located in a part of the city once leveled by harmful urban renewal policies, this street view of the Mercado District in Tucson shows the contribution that vernacular architecture can make in the urban repair of communities with mixed-use, walkable urbanism.

And in what areas do you wish CNU was doing better? What do you see as CNU's role over the next 30 years?

A major focus of this new era of leadership at CNU will be bridging the generations of practitioners that make up the New Urbanist movement. My co-lead, Margaret Gattis, executive director at CNU, and I represent the generation that learned at the feet of CNU's founders and early members. I was privileged to be in the earliest years of my career when I worked at Elizabeth Plater-

that CNU needs to both recognize the extraordinary legacy of our past while also forging an urgent path into the future.

The lesson here is that the New Urbanist movement changes with time. It evolves as the challenges to our shared vision change; when we find ourselves at the top of one peak, we are already looking toward that new one in the distance. Part of being successful for another 30 years requires seeking opportunities to visit the tables of other

we face as a society. So its design plays a crucial role in almost any solution.

What, in your mind, constitutes a perfect example of the principles of New Urbanism? Is there a particular project that you can point to or a series of elements that should be included in a star project?

Of course, there are the early green-field development examples that many people immediately envision when they hear the phrase “New Urbanism.” I lived in one of those—Habersham, outside Beaufort, South Carolina—for over 15 years. It is a community that is walkable, offers a mix of uses and housing types, intentionally conserves the natural environment while providing a variety of levels of urban intensity, and reflects the vernacular of the Lowcountry. It is also a neighborhood that continues to grow, evolve, and adapt. This is something that we shouldn't lose sight of: The initial development of good urbanism is not an end solution. Cities and towns and neighborhoods change with time, and so there can never be some explicit checklist of what makes a “perfect” New Urbanist project.

That being said, CNU's annual Charter Awards program honors projects that best exemplify the principles of the charter and advance the vision it describes. In a wide variety of ways, the projects that have received Charter Awards, since 2001 when they were

The design of the building blocks of communities—neighborhoods, districts, and corridors; blocks, streets, and buildings—has an impact on where and how people live, the places where they work, and the ways that they move throughout their daily life, the economic opportunities that they enjoy and the access they have to resources.

Zyberk and Andrés Duany's practice. They were exploring some of their most innovative ideas and designing some of their most recognized projects back then, ideas like the Transect or municipal Form-Based Codes, and projects like Alys Beach or New Town St. Charles. But like many of my contemporaries in our 40s, I also have a long way to go in my own career and the impact I hope to make with it. And so I am conscious

networks, industries, and fields of study. The design of the building blocks of communities—neighborhoods, districts, and corridors; blocks, streets, and buildings—has an impact on where and how people live, the places where they work, and the ways that they move throughout their daily life, the economic opportunities that they enjoy and the access they have to resources. Urbanism is the context for almost any systemic barrier

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Join us at CNU! The New Urbanists tent is large, and we welcome everyone working toward our shared goal of empowering well-designed cities, towns, neighborhoods, and public places that help create community—healthy places for people and businesses to thrive and prosper.



Photo by Leyland Alliance



Photo by City of Lancaster, California

TOP Storrs Center is an example of a newly developed main street and bustling campus village for the University of Connecticut in Mansfield.

BELOW Lancaster Boulevard in Lancaster, California, seen in before and after photographs of a New Urbanist proposal to convert an auto-oriented arterial into a lively, pedestrian-friendly main street for the community.

introduced, certainly exemplify a broad set of examples of best practices. Whether the work being celebrated is an example of urban design, architecture, transportation, policy reform, community engagement, or any other area of impact on the built environment, Charter Award winners reflect the highest achievements of the work of our movement.

One of the goals of CNU is to unite the New Urbanist movement. How does the network work, and what impact has it had?

From the beginning, CNU has been a convener. As an organization, we have

facilitated the annual Congress for 30 years, gathering a group of multidisciplinary practitioners invested in the goal of creating more walkable, mixed-use urbanism. We call our flagship annual event a congress, rather than a conference, because the goal is to discuss and engage and debate the practice of New Urbanism—really get into what is working, what isn't, and what to do next. The benefit of having professionals with a role in every aspect of the built environment is that the conversations that take place at the Congress are nuanced, and therefore they help reveal the true complexities that must be untangled in order to solve our urban challenges.

CNU31 will take place in Charlotte, North Carolina, May 31 to June 3, and we are incredibly excited about the program we are creating, the tours and experiences that our host city can offer, and the topics that will be engaged. And CNU's chapters are also an invaluable convening resource for our movement. There are CNU chapters in cities and states and even regions across the country where local members gain the opportunity to meet like-minded urbanists in their own area and collaborate on issues affecting their own communities.

What can architects, builders, developers, and interior designers do to help CNU achieve its goals and to create human-scale places that people love to live in?

Join us at CNU! The New Urbanists tent is large, and we welcome everyone working toward our shared goal of empowering well-designed cities, towns, neighborhoods, and public places that help create community—healthy places for people and businesses to thrive and prosper.

Over the past 30 years, the New Urbanist movement has changed the conversation from debating the alternative forms of development to discussing how best to preserve, design, develop, and restore our regions, cities, and neighborhoods. New Urbanists have been responsible for creating and popularizing many now-common development patterns and strategies, including mixed-use development, transit-oriented development, and traditional neighborhood design, integrating design standards into affordable housing and designing complete and beautiful streets. Architects, builders, developers, and interior designers are the folks in the field, directly informing the actual construction of these places and spaces. Their built contributions are a necessary part of successful urbanism.

What are your goals for the future of CNU?

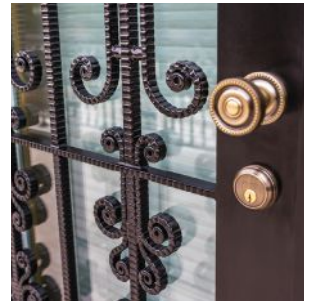
Taking this role at CNU was a return "home" to an organization I have been an active member of throughout my career. I am committed to elevating the stories that need to be told about New Urbanism, whether they are challenging or celebratory.

I also will continue to set a tone of urgency toward achieving our shared mission. Maybe because I am an urban designer by practice, I am incredibly curious about the constantly evolving innovations that our movement is developing.

Our members are leaders in making more equitable, more livable, more durable, and more beautiful communities. It's an incredible honor to lead our organization into the future. **TB**



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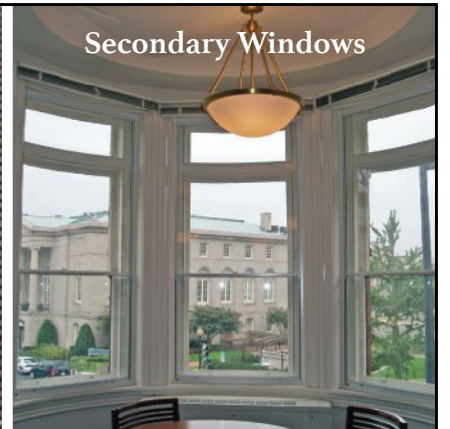
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Restoring Statuary

John Canning & Co. conserves historic statues as well as the historic masonry and finishes at Washington Union Station.

PHOTOS BY **ROBERT BENSON PHOTOGRAPHY**

For over a century, the 46 larger-than-life Legionnaire statues stationed in Washington Union Station have stood sentinel over the national historic landmark a few blocks from the U.S. Capitol, silently marking the passage of time—and of all who pass through the halls of this iconic transportation hub.

The nine-foot-tall shield-bearing soldiers were cast in plaster by Louis Saint-Gaudens, the younger brother of sculptor Augustus Saint-Gaudens, over a period of seven years to complement the Beaux-Arts-style station designed by architect Daniel Burnham, who oversaw the design and construction of the 1893 World's Columbian Exposition in Chicago.

Washington Union Station opened in 1907 and was completed in 1908. The last of the statues were finished in 1913, shortly before Saint-Gaudens' death.

These stoic Roman soldiers have been on duty since then, a Herculean tour that by 2019, when John Canning & Co. was commissioned by the Union Station Redevelopment Corp. to restore 40 of them as well as the historic masonry and finishes in the building's Main and West Halls, had left them in various stages of disrepair.

Connecticut-based Canning & Co., which has won numerous awards for conservation and restoration, has worked on a number of historically significant buildings, including New York City's Grand Central Terminal, the Eisenhower Executive Office Building, and the U.S. Capitol.

The Canning team, led by David Riccio, project executive and company president and a principal; David Gough, project manager; and Rachel Gilberti, lead conservator for the project, assessed and documented the condition of the statues and came up with an individual restoration and conservation treatment plan for each.

"The condition of each statue varied significantly depending on where they were located—to the north, south, east, or west of the station—because they were exposed to different conditions," Riccio says, adding that the main issues included staining and chipping. "And statues in different areas had had different levels of intervention and restoration over the years."



John Canning & Co. cleaned, repaired, and restored the Legionnaire statues in Washington Union Station.



Before and process photos this page: John Canning & Co.



CLEANING AND REPAIR The statues were created by sculptor Louis Saint-Gaudens. It took him seven years to complete all 46 and nearly a year for the Canning team to restore them.

The cast plaster soldiers, which are 9 feet tall, form a protective force around the station.

They were in various states of disrepair, depending on where they were sited in the station.

Saint-Gaudens used seven colors of mica to achieve a stone-like finish. The Canning team used a gentle gel to clean them.



The first order of business was cleaning the statues, which was a three-part process. Each was dry-brushed to remove excess dirt, grime, and biological debris (there was a lot of guano from the station's pigeon inhabitants). Embedded foreign objects were removed with a scalpel, and a conservation cleaning agent was applied with a brush to remove remaining ingrained dirt and grime.

The Canning team tested more than a half-dozen cleaning products to find a gentle solution that would not remove the seven colors of mica that Saint-Gaudens applied to the plaster to mimic natural stone.

"We knew the general direction to go in, so we tried several different materials to see which yielded the best results," Gough says. "The peel-away options were too abrasive—they took away some of the historic fabric."

A softer gel method that was allowed to set before removal with water was selected. "It took a little more elbow grease," Gilberti says, "but there were no losses involved."

The repair and restoration of each statue included infilling cracks with material compatible with the original and inpainting in custom colors that were created and blended to match the original finishes.



The team used scissor lifts to reach the statues, which are 32 feet off the ground.

Some of the statues also required plaster repair, which included creating custom molds and molding plaster to replicate sections; consolidating plaster to strengthen weakened and decaying sections; brushing on isolation coating to obscure exposed wiring; and reinforcing the iconic shields with molding plaster to stabilize movement.

The team used electric illuminated scissor lifts to reach the statues, which are 32 feet off the ground, and rolling scaffolding for sections of them that were reachable from the station's mezzanine.

The work was complicated by the fact that the Canning team, which included up to eight craftsmen, had to work around the train station's schedule and the 20,000 people who use it each day, occasionally even fielding questions about directions from commuters.

"What stands out for me is that we were there during Covid," Gilberti says. "There was a shift from things always being in motion to becoming empty. It was an eerie feeling to see the building in a different way."

The second part of the project was the completion of the historic granite masonry and finishes in the Main and West Halls of the station. The granite surfaces, dirty, heavily stained, and cracked, were cleaned and repaired. The metal doorframes, transom frames, grillwork, decorative

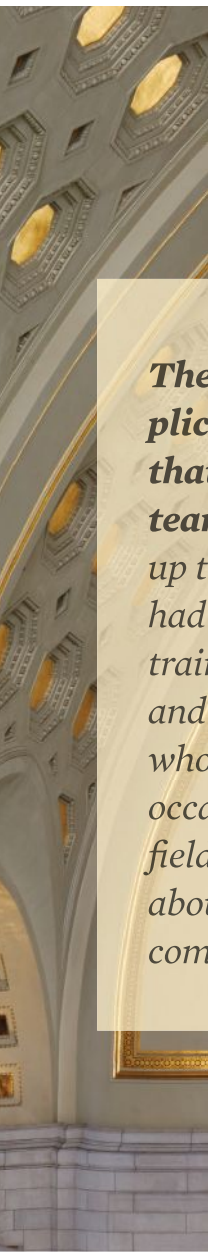
plaques, bronze railings, and other fixtures were cleaned and repainted as necessary.

Riccio, Gough, and Gilberti say it was exciting to be a part of making history come alive. "During the project, the CEO got letters and calls from dignitaries from other countries about the restoration, saying how much they appreciated it," Gough says.

Noting that with Canning & Co.'s recommended maintenance plan, the work will "last quite a long time," Gilberti says that the restoration is important because "the station is the doorway to Washington, D.C., and you want people to be wowed."

Riccio says the project is "a noteworthy example of maintaining historic spaces across the United States. The restoration of historic landmark tourist stops and significant hubs in the transportation industry, such as Union Station, assists in the growth and strength of the community and economy. Taking steps to restore the magnificent historic Legionnaire statues to their former glory to continue to watch over all those who pass through the station helps maintain the lasting symbol of the protective force for travelers and helps preserve the historic fabric and structure of the building for future generations." **TB**





The work was complicated by the fact that the Canning team, which included up to eight craftsmen, had to work around the train station's schedule and the 20,000 people who use it each day, occasionally even fielding questions about directions from commuters.

BELOW The repaired and restored soldiers, an iconic element of Washington Union Station's architecture, now look as they did when they were first placed.



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HISTORIC MATERIALS **GRANITE**

BY SUSAN D. TURNER,
FAIA, PMP, LEED AP

STONE AGE

Abundant granite has been a favorite building material for millenia.

TYPES OF ROCK

There are three types of rock: sedimentary, igneous, and metamorphic. Sedimentary rocks are those which are formed near the surface of the earth by the waterborne deposition of sands and silts that cement together over time, such as sandstone or limestone. Igneous rock forms when magma cools relatively slowly underground, such as diorite and pumice. Metamorphic rocks are those which began as some other type of rock, and by heat and pressure, become metamorphic rock (shale becomes slate, limestone becomes marble).

Granite belongs to the category of igneous rock. It typically consists of the minerals quartz, feldspar, and

mica, which are visible as crystals to the naked eye. Granite is very hard, very strong, relatively impermeable, and therefore durable. Being the most abundant rock in the earth's crust, combined with its variety of colors and textures, it has historically been a popular building material.

Hardness is measured on the Mohs Scale of Mineral Hardness, where 1 is the softest (talc) and 10 is the hardest (diamond). For reference, a human fingernail is ranked 3 and a steel knife is a 7 on the hardness scale, with granite falling in a range of 6 to 8. While compressive strength varies by type, granite ranges between 14,000 and 45,000 PSI, in comparison with

steel at 25,000 to 50,000 PSI.

Granite performs well in freeze-thaw cycles since it is relatively impervious to water absorption. Granite doesn't expand and contract significantly with temperature (as compared to brick or steel).

HOW GRANITE FAILS

There are many failure mechanisms that can damage granite which are not intrinsic to the material. The initial tooling and setting of the stone can cause early problems. When the face of the stone is tooled (or dressed) to provide the final appearance, the pressure of the machinery providing the final surface can sometimes bruise the surface of the stone. This bruising can cause the outermost layer to delaminate from the rest of the stone, resulting in blisters and peeling.

Freeze-thaw, while not as great a threat for granites as for sedimentary stones, can affect stones in extremely exposed locations where there is poor water management. When moisture enters the pores in the rock and temperatures drop to freezing, the water expands as it turns to ice, forcing the pores apart, breaking down the stone surface. If salt is dissolved within the water, it will further aggravate the situation. As the moisture dries out, the salt precipitates out of the water, and recrystallizes in the pores; these crystals exert further pressure on the pores. When the stone surface is already bruised, and it is exposed to saturating moisture, the surface of the stone will blister and flake off. This is a situation for which a repair is not possible, other than to redress the stone by removing the top few millimeters of peeling stone.

While granite doesn't typically have the bedding planes found in sedimentary rock, some constituent platy minerals will align in the cooling process, forming foliations. Stone should always be placed in the wall with the bedding plane horizontal, which makes best use of its compressive strength and minimizes the exposure of the edges of the foliation to weathering. When bedding planes are not horizontal, the exposed edges can take on water, leading to

Being the most abundant rock in the earth's crust, combined with its variety of colors and textures, it has historically been a popular building material.



OPPOSITE PAGE

Complete nose repair by dutchman method.

CLOCKWISE FROM

TOP LEFT Along with color, texture, and grain, it is important the stone face be tooled to match the stone profile.

When using epoxy on a dutchman, it is important to mask the stone adjacent to the joint to prevent stains.

To match existing granite for color, texture, and grain, three granites—Georgia, Kittledge, and Waldo—were sampled.

fracturing of the planes through freeze-thaw action.

Stone is set into the wall using mortar. The mortar must be softer than the substrate (stone) to act sacrificially, as in, break before the stone, because mortar can be repaired repeatedly. If the building moves and the mortar is too strong, the stone could break instead of the mortar. (For further information on point, see *Traditional Building* article traditionalbuilding.com/product-report/mortar-glue-that-binds.)

If there is sufficient differential movement in the building, the stone may crack or spall. The stone could also break with impact damage, such as from a swing stage or a truck.

Lastly, stone can be etched by acid rain or strong acid cleaning. Previous

cleaning campaigns with a strong abrasive method such as sandblasting is frequently the cause of loss of detail in carvings and the sharpness of a stone arris.

REPAIRS

Where differential movements result in a crack through the stone, epoxy repair can be used. Where the crack has not fully split the stone, tiny injection ports can be drilled along the crack, into which the epoxy is placed with a syringe. It is important to use non-staining epoxy, and to mask the face of the stone to prevent the epoxy from being visible.

If a crack has separated the stone into two pieces, it can be removed from the wall for repair. The two pieces can be drilled with matching holes to ac-

commodate stainless steel tie pins that cross the crack to hold the two pieces together mechanically. Combined with the chemical bond of epoxy securing the pins and sealing the face of the crack, the repair will be stronger and more permanent.

Where a piece of stone has been broken off or has eroded away, new material may be cut in with a dutchman repair. The damaged portion must be cut out with straight, smooth sides, and a new piece of stone cut to fit snugly into the hole, to minimize the visual impact of the seam. While the least amount of historic stone should be removed, it may be necessary to extend a cut to the edge of a stone. It is important not to leave small slivers of stone adjacent to the repair where they could break off,

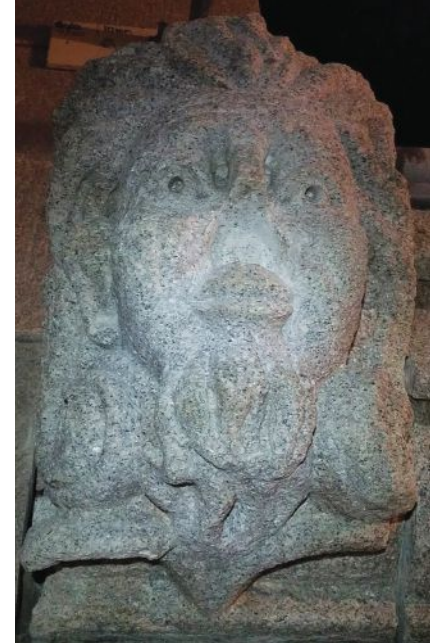
HISTORIC MATERIALS **GRANITE**

RIGHT The nose of this grotesque was broken off by window washing equipment.

Grotesque was prepared to take a new nose. Slight oversize was required to accommodate sculpting.

causing more damage. Once the stone is satisfactorily dry fit, epoxy is applied to the surfaces of the void and the repair piece, stone is placed to let the epoxy set. When the dutchman is in a location where only the chemical bond of the epoxy secures it against gravity, stainless steel pins should be drilled into both pieces of stone, to provide a mechanical bond for life safety.

The most important aspect of a dutchman repair is matching a stone to the substrate in appearance, such as



be performed after all repointing work is completed. Chemicals that enter open joints can dwell internally and damage the stone substrate. If using a detergent, use only a non-ionic type since a

mildest solution that is effective. Any areas of polished granite, of metals, or of glass should be protected from accidental exposure to the acid, which can etch. All runoff from the cleaning operation must be retained and collected for disposal at an appropriate environmental disposal facility.

Granite repairs, while generalized in this article, require individual assessment of the causes of the damage, mitigation of those causes, and development of the treatment of the symptoms, all during the design phase. Adequate time is required to perform pre-construction testing and mock-ups, along with sourcing the stone, so that the design documents will provide accurate and full-fledged information to contractors. A clear scope of work with known successful solutions will provide credible and consistent bidding results and avoid delays during construction. TB

Even with the best craftsmanship on cutting and sculpting the stone, a patch will be glaring in its visibility if the stone doesn't exactly match.

color, grain, unusual features such as veining, and the texture of the face. This may require sourcing several colors or shades, since characteristics may vary from piece to piece. Even with the best craftsmanship on cutting and sculpting the stone, a patch will be glaring in its visibility if the stone doesn't exactly match. The new stone must also match physical characteristics, such as strength, hardness, porosity, and freeze-thaw capabilities.

If there are larger stones that are too damaged to reuse whole, they can be salvaged for use as dutchman repairs. Where exactly matching stone is not found, sometimes a full, sound stone in an inconspicuous location on the building can be removed for repairs, and replaced with new imperfectly matching stone where it won't be noticed. This effort provides material for excellent matches of new stone dutchman.

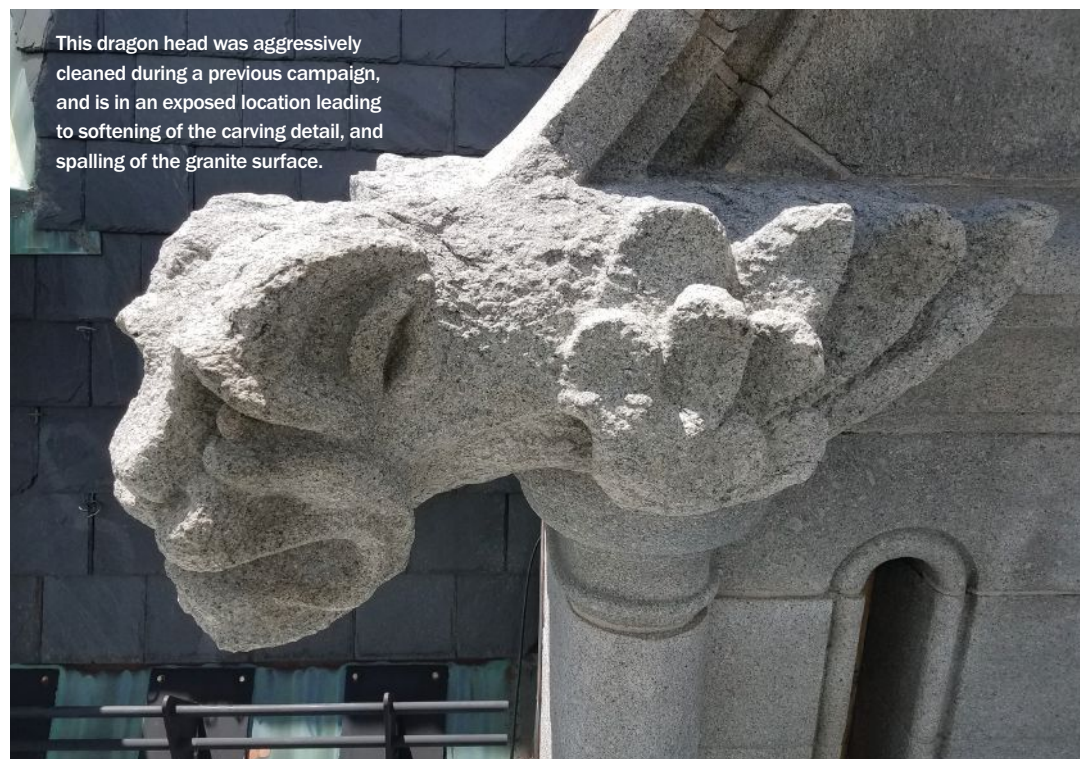
While it is possible to repair granite with patching material, the patching material itself will not provide the durability of granite, and the relative imperviousness of granite does not lend itself to a strong bond with patching materials.

At the completion of a repair project, the client will frequently want cleaning to provide an overall completed appearance. A plan to clean should be prefaced by many cleaning mock-ups and testing. Just because granite is non-porous doesn't mean chemicals won't damage it. Further, cleaning should only

granite's reaction to ionic detergents is efflorescence. Abrasively cleaning granite can soften crisp arisses or the granite detail. Further, abrasives can cause the constituent quartz in granite to break down, releasing silica as airborne dust, which is known for causing silicosis of the lung.

Typically, acidic cleaning will be the most successful approach. The solution should be applied with a non-metal brush and agitated midway through the dwell time of the chemical, using the

This dragon head was aggressively cleaned during a previous campaign, and is in an exposed location leading to softening of the carving detail, and spalling of the granite surface.

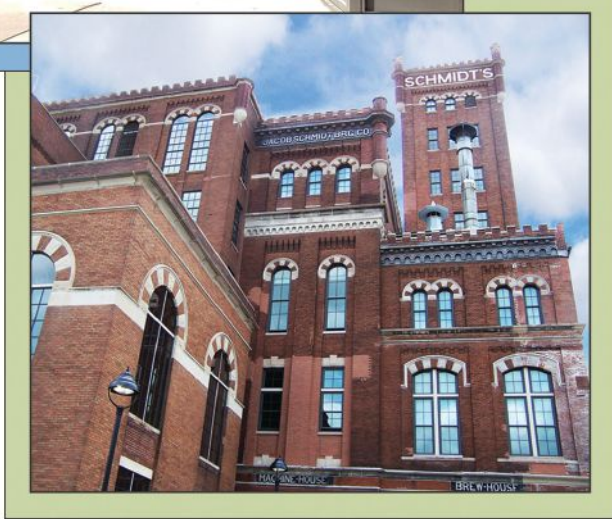
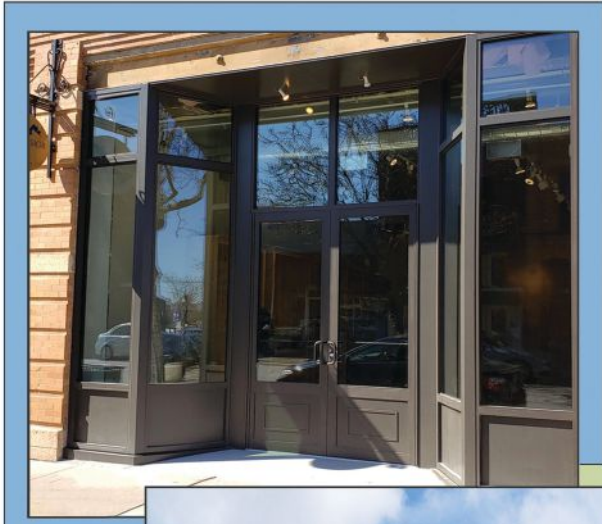


Susan D. Turner FAIA is a Canadian architect recognized by the AIA for her contributions to historic preservation of national registered buildings. She is the Senior Technical Architect for Johnson Lasky Kindelin Architects, a woman-owned business specializing in restoration of historic buildings. She can be reached at sturner@jlkarch.com



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The Tribune Tower stands tall and takes its rightful place in Chicago's architectural legacy. Designed in response to an international design competition held in 1922 that attracted 264 entries, the Tribune Tower was the home of the *Chicago Tribune* and in subsequent additions, related media, until 2018.

Raymond Hood and John Mead Howells created the winning design in that competition. And the competition was stiff, with Eliel Saarinen winning second prize and Walter Gropius in the mix. Howells and Hood created a neo-Gothic, 36-story tower with a steel frame clad in Indiana limestone. According to the *AIA Guide to Chicago*, 90 percent of the entries were based on historical precedent and most were either inspired by the Beaux-Arts style or were neo-Gothic. At the time, Cass Gilbert's neo-Gothic Woolworth building built in 1913 was the tallest skyscraper in the world. New York had its "Cathedral of Commerce," but the Second City would have a tower aspiring to the heights of journalistic truth. While historical precedent won this round, the competition inspired great debate about the design and function of skyscrapers in America for decades to come.

After the *Tribune* moved out, developers Golub and Company



and CIM Group decided to adaptively reuse the tower for luxury condominiums. Solomon Cordwell Buenz was the architect of record for the project, and they retained Klein and Hoffman to undertake a façade assessment. Klein and Hoffman, under the direction of Todd Gorrell, principal, and Michael Naponelli, senior associate, oversaw the assessment, project design, and rehabilitation of the façade from late 2017 until the project was completed in the spring of 2021.

Gorrell and Naponelli explain that the entire project combined traditional building restoration practice and innovative technology from start to finish. The initial review of the project revealed that the steel frame was generally in good condition, with some corrosion. The portion of the building that had suffered the most was the area around the flying buttresses on the 25th floor. The decay was not a surprise given the degree of exposure for the ornamental buttresses at that elevation. They



CLOCKWISE FROM ABOVE The Tribune Tower was designed in 1922 by Raymond Hood and John Mead Howells.

The investigation team from Vertical Access rappelled from the building to examine the deterioration of the stone.

The building's flying buttresses on the 25th floor suffered the most damage.

Scaffolding was constructed to make the necessary repairs.



comprise an ornamental sculpture collection, nearly 300 feet in the air, subjected to Chicago's harsh climate. Swing-stage scaffolding at that height was a costly investment to use during the investigation phase, so the investigation team from Vertical Access rappelled from the building with industrial rope.

Michael Naponelli explains that this process allowed for a very thorough review of the stone and steel deterioration. Targeted solutions could be developed since they were able to examine and photograph each problem and develop very specific recommendations for each repair. This careful attention to detail resulted in fewer unknown variables and better cost control. Removing and resetting all of the buttress stones to access the steel frame was going to be extremely costly, but they determined that the corrosion was not as severe as initially thought, and the team from Klein and Hoffman worked with ECHEM Consultants to develop a strategy for impressed current cathodic protection (ICCP).

Todd Gorrell says that, essentially, cathodic protection uses a low voltage electrical direct current (DC) to interrupt the electrochemical reactions at the steel surface that causes corrosion and the subsequent accumulation of rust which will crack and displace masonry. At any height, but especially at

this height, preventing falling architectural elements over a busy sidewalk is a paramount concern. This system allowed the historic masonry and ornamentation to remain in place, while mitigating corrosion and providing substantial cost savings over a traditional repair. MMO Sintered expanded mesh titanium probe anodes, with a ballast resistor, were selected as the most suitable anodes for historic masonry structures. The DC current

MATERIALS & METHODS



Gorrell and Naponelli praised the team of developers, architects, contractors, masons, subcontractors, and sculptors on this project. To learn more about them, visit their websites.

Klein and Hoffman
kleinandhoffman.com

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Galloy & Van Etten
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CLOCKWISE FROM TOP LEFT Another area of significant decay was found at the street level. The tower has been a major part of Chicago's cityscape for 100 years. Today it has been transformed into luxury residential living. A decorative element is found on the flying buttress.

is passed from the anodes as ionic current through the masonry to the steel, which receives the electrons and thus no longer self-consumes in the corrosion process. ECHEM Consultants, the designers of the system, continue to monitor conditions on a regular basis at the tower.

The façade assessment included mortar analysis from multiple locations on the project. Testing in a laboratory revealed an existing mortar similar to a Type O mortar was used throughout most of the buildings. Central Building and Preservation served as the masonry contractor on the project.

The Tribune Tower was built with random placement of multiple types and grades of Indiana limestone. So, when new stone was integrated into the historic building, multiple types could be used throughout, and the character and appearance of the building was maintained.

Another area of significant decay was found at the street level. Salt was particularly destructive to the limestone cornerstones. The original cornerstones had lost most of their detail, and recognition of the original builder and others involved in the construction of this landmark building was in danger of being lost forever. The team conducted research at the Chicago Public Library and was able to accurately reconstruct the names on the cornerstone. Carbon paper copying of the stones supported the sculptors from Galloy & Van Etten and Gary Galassi, who worked by hand to create exact replicas.

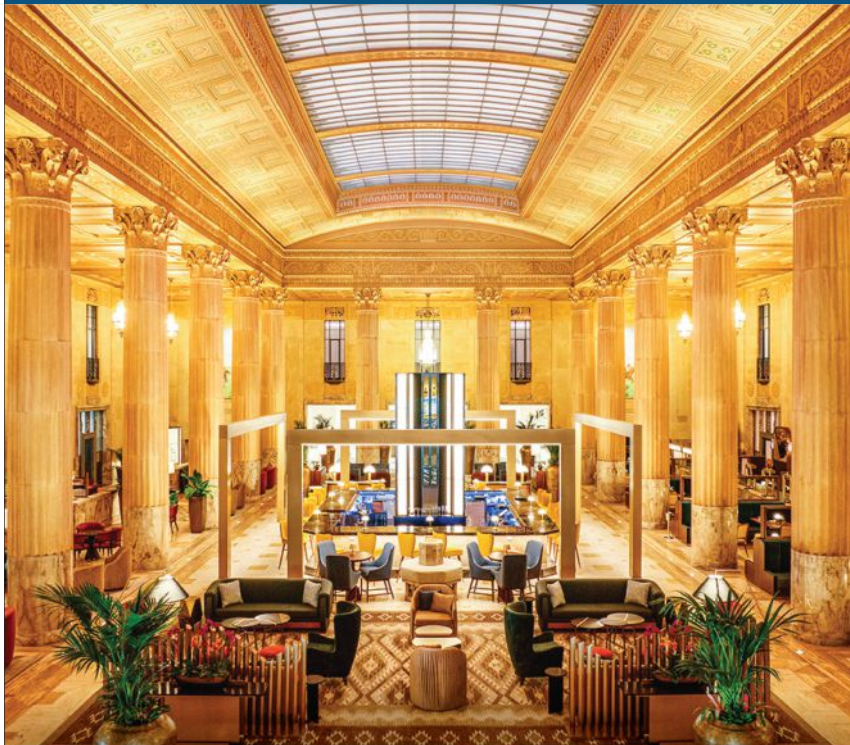
Both Gorrell and Naponelli noted that the extant historic drawings of the building were a big help for much of the project, but they noted that when the decision was made to adapt the street level of the building into retail spaces with 18-foot glass storefronts, the conditions were very different from those depicted on the historic drawings. They had to work with the design team to adjust the structural needs based on the actual conditions found. It was a temporary setback, but one that surprised them, as they have frequently found architectural drawings of the early 20th century to be reliable.

The façade rehabilitation was only one aspect of this multi-year adaptive reuse. The tower has been an important part of the Chicago streetscape for 100 years and this project has given the tower and related buildings the best chance for another 100 years. To get a glimpse of the Tribune Tower's new life as a luxury residential building, visit tribunetower.com. **TB**

Judy L. Hayward is executive director of Historic Windsor, Inc., and the Preservation Education Institute, Windsor, VT. She serves as education director for the Traditional Building Conference Series and Online Education Program. She blogs and writes a column regularly for *Traditional Building*. Hayward specializes in the development of educational programs for builders, architects, and tradespeople. She can be reached at peihwi@gmail.com.

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Photo by Rugo Stone

Set in Stone

Today, there are a variety of stone choices, that are cost-effective and durable enough to last.

From classic capitals and columns to beautiful balustrades, traditional architecture is anchored by stone accoutrements. Today, there are a variety of choices, ranging from natural stone to cast stone, that are cost-effective and durable enough to last.

Here are select specialist suppliers whose products grace historical, commercial, and residential structures around the country.

CLASSIC CAST STONE OF DALLAS, classiccaststone.com

A producer of quality cast stone since 1983, Classic Cast Stone of Dallas specializes in architectural details for exteriors and fireplace surrounds and mantels.

The company's limestone-simulating Classic Cast Stone is a proprietary mix of graded aggregates, Portland cement, and additives that uses a Vibra-tamp process to produce a smooth finish. Replicas are copied from photos or molded from original pieces.

"Historic design with cast stone has a special quality that survives changing trends," says President Art Allen, a former board member of the Cast Stone Institute who has more than 40 years of experience in architecture, construction, and concrete products. "The proportions and how they create the final piece are essential. Quality in design and manufacturing creates a product that stands the test of time."

HADDONSTONE, haddonstone.com

Established over a half-century ago, Haddonstone is an international market leader specializing in bespoke cast-stone and historic replicas. The family-owned and -managed company, which has factories in the United States and the United Kingdom, offers three material types.

Haddonstone is a semi-dry-cast textured limestone that is similar in feel and strength to Portland or natural limestone.

TecStone, a wet-cast limestone, has a smooth, dense surface



CLASSIC CAST STONE produced the cast-stone exterior trim for this private home in Dallas. They also produce cast-stone fireplace surrounds and mantels. Photos by Classic Cast Stone of Dallas

and typically is used for flooring, fireplaces, complex statuary, and larger architectural projects that require a surface finish that is easy to clean and does not weather quickly.

TecLite is a fiber-reinforced cement-based material that resembles cast stone but is lighter in weight, making it ideal for new-builds, retro-fits, and timber-frame structures.

Haddonstone, whose 1,000-plus collection of garden ornaments includes the National Trust for Scotland's House of Dun Urn and the Eton College Fountain from the cloister court of the school in Windsor, England, uses 3D technology and more traditional techniques to create replicas.

The company has done work for a number of high-profile clients, including Winterthur Museum, Garden & Library and the Omni Shoreham Hotel in Washington, D.C.

"Every single item is made to order and handcrafted by our highly skilled and vastly experienced team," says Dave West, president of Haddonstone USA. "And we offer a color and matching service, ensuring that we can meet our clients' exact specifications."

ROYAL CORINTHIAN, royalcorinthian.com

A specialist in the manufacture of man-made stone, Royal Corinthian fabricates columns, balustrades, cornices, pergolas, fireplace surrounds, door and window headers, statues, and virtually every architectural facade element at a fraction of the cost and weight of natural stone.

The products of the family-owned company, which is based in West Chicago, Illinois, are made from cast fiberglass, lightweight fiberglass, synthetic stone, PVC, high-density polyurethane, GFRC, and lightweight EPS-backed cast stone.

"Our passion is to emulate historic architectural products but from composite materials that last a lifetime," says General Manager Andy Savenok. "We believe that what we do is art. Sure, it's not paintbrush and canvas, but our business is helping people make buildings beautiful."

He notes that, of late, square columns on Craftsman-style homes have been trending. There also is much demand for Greek Doric columns and pergolas as well as Chippendale-panel balustrade systems.

Regardless of the style selected, Savenok says that to achieve the proper period-style look, every component should be made of the same material. "This is important for paint adhesion," he says. "Since all products expand and contract at different rates and accept paint and primer differently, why mix them?"

Historic replicas and restorations and custom projects are Royal Corinthian's forte; the company has even recreated architectural elements from period photographs. The accuracy lies in the details. Royal Corinthian's columns, for instance, feature molded instead of routed flutes, a distinction that Savenok says elevates them from ordinary to artistic.

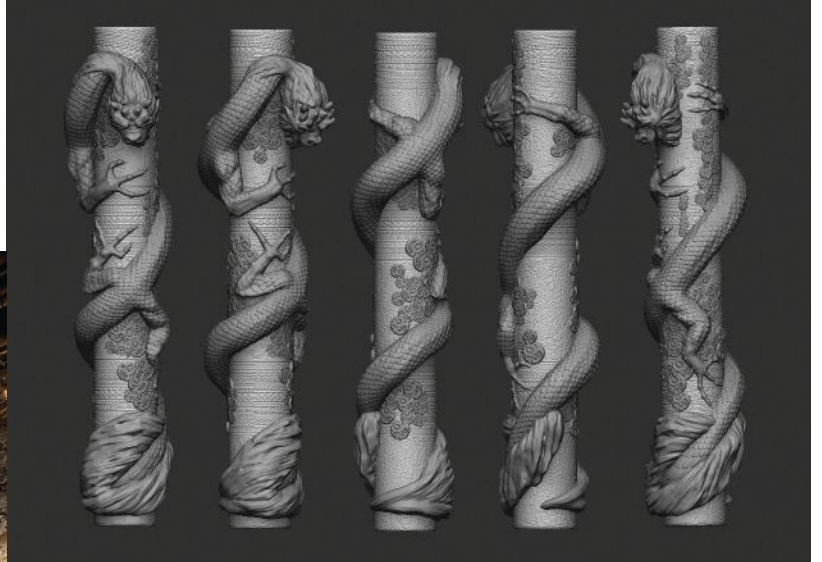
Royal Corinthian, which has been in business for nearly three decades, has such a large catalog of products, ranging from the price-sensitive to the premium, that "no other manufacturer offers so many different materials under one roof," Savenok says. "Our balustrade systems, which range from 4-inch-wide to 22-inch-wide rails, have thousands of possible variations, so it's very possible to create a balustrade system from our standard products that no one else in the industry has."



HADDONSTONE created the cast-stone pillars and balustrades for this private residence.

Photo by Haddonstone

THE TRADES STONE



ROYAL CORINTHIAN For RUKA, a restaurant in Boston, Royal Corinthian designed and created dragon columns made from GFRC. Shown are the installation and a 3D rendering. From the rendering, a positive was made from polyurethane and a CNC machine. A mold using the polyurethane piece was used to cast the dragons from GFRC. Photos by Royal Corinthian



RUGO STONE, ABOVE Lacking any complete capitals, detailed photos, or original drawings, the Rugo team developed clay as well as plaster models based on remaining fragments of the old capitals, used 3D scanning, CNC machining, and hand carving to recreate the originals design.

Photo by Rugo Stone

STONE LEGENDS OF TEXAS, RIGHT provided cast stone for the entries and other surrounds, and fountains for several buildings at the Fairmont Grand Del Mar hotel in San Diego.

Photo by Stone Legends of Texas

RUGO STONE, rugostone.com

One of the few companies still training and supporting master stoneworkers, Rugo Stone designs, fabricates, and installs natural stone, mosaic, and other significant stonework products in projects throughout the nation.

“We believe that historic preservation is important to communicate to future generations the designs, the capabilities, the art, and the passion of our predecessors in creating successful, long-lasting projects that have withstood the test of time,” says President/Owner Brett Rugo, who is the grandson of an Italian stone carver.

The award-winning company, established in 1996, uses 3D scanning and CNC machining technologies to accurately recreate marble elements in historical projects. Modern technologies, Rugo says, make replicating stone elements easier, faster and more cost efficient.

“Our senior staff has over 400 years of collective stone trade experience, and most of our technical team has engineering or architectural backgrounds,” he says. “From historically accurate restorations to major stone installations, we have the comprehensive knowledge and capabilities to help our clients to realize their visions and achieve their goals—on time and on budget.”

STONE LEGENDS OF TEXAS, stonelegends.com

A manufacturer of cast stone for all uses, Stone Legends of Texas offers standard as well as custom cast-stone work, including historical replications.

The company, which is a producer member of the Cast Stone Institute with exemplary status, has three divisions: Stone Legends (residential), Cast Stone Commercial Services, and Stone Magic (fireplaces and interior uses).

“Our expertise is in designing and developing the stone parts so that installation goes smoothly, with everything fitting well and minimal cutting on site,” says General Manager Richard Carey. “Each stone is carefully detailed in the shop drawing phase then produced to the highest standard of quality with the best mix design available. This is important because what is inside the stone that doesn’t show dictates the overall value.”

Assembly is like putting together a jigsaw puzzle: CAD and 3D modeling are used to develop each stone, which has a unique mark that shows where it fits into the overall picture.

Although cast stone is common in traditional designs, recently architects have been incorporating it into modern, minimal projects, Carey says. “They are beginning to experiment with shape like Frank Lloyd Wright did,” he says. “We should see a wave of innovations, especially with the ability to 3D model in CAD.” TB





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Redeveloping Charleston

RAMSA REIMAGINES THIS HISTORIC SOUTHERN CITY FOR THE FUTURE.

BY **NANCY A. RUHLING** | RENDERINGS BY **MICHAEL MCCANN**

IT ISN'T OFTEN that a single architectural firm is given the opportunity to design significant sections of the same city, creating a new urban environment that reflects—and makes—history.

Over the past decade, Robert A.M. Stern Architects has designed five transformational redevelopment projects in historic Charleston that enhance the charm of its cobblestone streets and antebellum residences. The residential and mixed-use projects, under four different developers and the purview of the Charleston Board of Architectural Review, are clustered

in a six-block historic area of the city and in an adjacent historic neighborhood.

In all the projects, the RAMSA team used the historic character of the city, a pioneer in preservation, as inspiration.

“Charleston isn’t a city of big buildings,” says RAMSA partner/project designer Gary L. Brewer. “Our projects are large, but we broke down the massing and scale so they fit in with the existing historic architecture. In each case, we took a substantial footprint and made it look like four to five buildings side by side, each with multiple expressions, using different building styles, exterior materials, and placement of elements.”

The projects are part of a major citywide redevelopment that includes adding large apartment buildings in what is, essentially, a single-family-home city.

Brewer sees RAMSA’s projects, one under construction and three still in the design phase, as a model for developers to

It is a “civic responsibility” to “make the community better” by designing buildings that are “part of the historic fabric.”

NORTH MARKET HOTEL A new building with a garden courtyard takes its inspiration from Charleston single houses and the residential neighborhood it fronts.





Photos by Peter Aaron/OTTO

COURIER SQUARE PHASE 1 Left, a view of the new office building on Meeting Street carries on the tradition of Charleston’s historic civic buildings. Right, a view of The Guild, a new apartment building that takes its inspiration from the historic industrial train line it faces.

emulate. He notes that it is “a civic responsibility” to “make the community better” by designing buildings that “are part of the historic fabric.”

And he’s delighted that RAMSA’s projects are so in sync with the city that people often mistake them for historic buildings. “That’s the ultimate compliment,” he says.

COURIER SQUARE

The firm’s first Charleston redevelopment, on Upper King Street, is composed of two distinct side-by-side buildings that reflect the architecture of the streets they are on: an office building on Meeting Street and a residential building on Columbus Street that are wrapped around an elevated garage that’s topped with a roof terrace that has a swimming pool and lounge area.

The 70,000-square-foot five-story office building, which has a signature tower and Greek Revival details, continues Charleston’s classical tradition of 19th-century commercial architecture. While the upper floors are stucco with Ionic columns, the ground-floor shopfronts are set into rustic façades to activate the pedestrian experience on Meeting Street.

The eight-story loft-style red-brick apartment building, which faces an old industrial train line that’s being converted into a park, is an ode to the city’s industrial past and a nod to the popularity of converted warehouses as residences among a younger generation of renters.

RESIDENTIAL DEVELOPMENT ON LINE STREET

Just north of the Courier Square project, Line Street is a mixed-use development under construction that preserves a set of historic houses and a historic train shed that’s to be repurposed as a restaurant and apartments.

“It’s a much more complicated site than Courier Square,” Brewer says, adding that he collaborated with Kevin M. Smith, co-partner on the project’s design.

The apartment house, a nine-story gateway building clad in buff brick with special details, is, like a number of the city’s historic buildings, Art Deco in style. “We wanted a different look from the buildings we designed for Courier Square that also interprets Charleston’s history,” Brewer says.

It features a seven-story red-brick-clad annex that has a more industrial look. Four-story and six-story buildings clad in limestone, brick, and stucco, with porches on multiple levels, are to be sited adjacent to and behind the saved historic houses,

LIFESTYLE COMMUNITIES

Below, new buildings complete historic Line Street and form an urban plaza with the historic train shed.



“The new series of smaller buildings in Courier Square that fit into the cityscape creates a variety of pedestrian experiences in a very walkable city.”



LIBERTY SENIOR LIVING Above, the design includes a garden motor court with a tower to terminate the view from Columbus Street. Below, senior living facing a historic residential neighborhood. The new buildings' scale and materials work to be compatible with its context.

and a six-story red-brick-clad block will face Line Street.

Shops and restaurants will wrap around the ground level of the gateway building. A new landscaped mid-block pedestrian alley whose centerpiece is a historic smokestack will connect to a proposed network of parks and will be flanked by two new five-story red-brick warehouse-type buildings.

LIBERTY SENIOR LIVING

Set on 2.4 acres bounded by King, Columbus, Spring, and St. Philip Streets, Liberty Senior Living provides a logical scale transition between an adjacent single-family neighborhood and a new development.

The project has a central monumental tower that terminates the Columbus Street axis and that is flanked by two four-story buildings. “We were told that the design looks similar to a historic orphanage in the city that sadly had been demolished,” Brewer says. “We were pleased that we channeled, unknowingly, a bit of old Charleston.”

While the lower floors are dedicated to senior-living rental residences and amenities, the top three floors are for sale, a rarity in a city that has few condos. “The idea was to create a space for seniors that’s not suburban and doesn’t require a car,” Brewer



A new small apartment building in a residential neighborhood takes its architectural cues from the wood houses with porches.



says. “Charleston’s a very walkable city, and the design provides a motor court for easy drop-off and pick-up.”

The project, which is in design, also calls for an interior courtyard and a new pedestrian garden alley.

GREYSTAR 3 SMALL APARTMENT BUILDINGS

Greystar, which developed Courier Square and has its headquarters in that office building, commissioned RAMSA to design a trio of boutique apartment buildings near Liberty Senior Living.

Brewer notes that in Charleston, where apartment buildings tend to have 200 or so units, Greystar’s boutique buildings are unusual. “Each building will have its own look,” he says. “One will be clad in red brick, and two will be in wood. Our designs draw upon the historic character of the city and fit into the residential neighborhood of two- and three-story single-family houses.

“The new series of smaller buildings in Courier Square that fit into the cityscape creates a variety of pedestrian experiences in a very walkable city,” Brewer says.

The three-phase project is ongoing; the first phase opened five years ago.

NORTH MARKET STREET MIXED-USE PROJECT

Another development that’s in the design phase, the North Market Street Mixed-Use Project, is in the heart of Charleston’s historic district where the Ansonborough neighborhood meets the French Quarter.

Its character, Brewer says, is defined by the fact that it’s in one of the city’s most dense historic districts, a favorite of tourists. It’s next to the Charleston City Market, which was established in the 1790s and is anchored by the landmarked Market Hall four blocks away.

About a half mile from RAMSA’s other projects, the North Market Street Mixed-Use Project will combine private branded residences and a five-star hotel above street-level shops. The



site, which currently is devoted to surface parking, will feature a hotel and condo building that will have seven different architectural expressions.

“The scale of the buildings will be low—the same size and height as the buildings across the street,” Brewer says.

Brewer and RAMSA co-partner Daniel Lobitz envision a first-story brick and masonry hotel on Market Street and an additional hotel building fronting Church and Anson Streets.

Three-story maisonettes with a residential courtyard are

GREYSTAR A new boutique apartment building on King Street facing a corner uses a brick palette and tower in the design.



NORTH MARKET HOTEL Above, a new building and pocket park terminate the view down historic Haynes Street. Right, the new hotel entry is scaled to fit in on North Market Street. ICAA will hold its inaugural conference in Charleston this fall.

designed to recall the traditional Charleston “single-house” with their use of brick, painted clapboard, and porches running perpendicular to the street. Plans also include a pedestrian passageway lined with shops that offers access to the center of the site, which will be anchored by a large plaza on the west and a smaller garden along the east.

“Designing a new building in Charleston requires careful collaboration, beyond working with our developers, our associate architects, and our landscape architect,” Brewer says. “We met with local groups to develop the designs.”

Noting that “architecture is storytelling,” he adds that RAMSA was able to seamlessly add new chapters to Charleston’s storied past with these five individual projects because “our office doesn’t have a signature style”—the buildings fit into the historic urban environment. **TB**





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Photo courtesy of Deer Park Inn

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City Reimagined

REBUILDING HARTFORD'S INFRASTRUCTURE COULD INVOKE
AMERICAN ROMANTICISM AND THE CITY BEAUTIFUL MOVEMENT.

BY **MICHAEL J. TYRRELL** | PHOTOS/GRAPHICS BY **SUISMAN URBAN DESIGN**

iQuilt Partner's Hartford 400 plan, as it is known, would liberate hundreds of acres of under-utilized, inaccessible, or environmentally compromised land.

Today many motorists speed through Hartford, Connecticut, unaware of the capital city's fine legacy of human-scaled architecture, where historic urban traditions once thrived. Now, as city, state, and federal transportation officials plan to rebuild Interstate Highways 91 and 84 through Hartford, and with public consensus overwhelmingly in support of repairing the mistakes both expressways imposed on the city's physical, social, and cultural fabric, a rare opportunity is emerging to restore Hartford's character by considering ways to revive and reinterpret the city's geneses: American Romanticism and the City Beautiful Movement.

Led by Hartford Congressman John B. Larson in partnership with the City of Hartford, business leaders, and the non-profit iQuilt, a consortium of key cultural institutions (the latter initiated by the Bushnell Center for the

Performing Arts and the Wadsworth Atheneum, America's oldest art museum), an ambitious public works project called Hartford 400 is underway. The projected completion date, 2035, will mark the city's quadricentennial. Applying past successes at Trinity College and the Hartford Public Schools, iQuilt members are determined to reverse the city's decades-long endurance of crumbling dikes, obsolete road decks, and a disjointed cityscape held hostage by the automobile.

iQuilt's Hartford 400 plan, as it is known, would liberate hundreds of acres of under-utilized, inaccessible, or environmentally compromised land from excess private motoring in exchange for a more human, pedestrian-scaled landscape worthy of investment, and where mixed-use development can thrive. Prepared under the direction of Santa Monica, California-based urban designer Doug Suisman, FAIA, the Hartford 400 plan envisions a vastly transformed capital city able to compete with the region's



overcrowded and climate change-vulnerable giants of Boston and New York. Suisman, a Hartford native, intends to liberate downtown Hartford and much of East Hartford, just across the river, by relocating major highway interchanges in or adjacent to the cores of both municipalities and by modernizing and resituating their flood-control infrastructure. Endorsed by Connecticut's congressional delegation, including Governor Ned Lamont, and Hartford Mayor Luke Bronin, Hartford 400 emphasizes major new amenities including extensively landscaped open spaces and riverfront access. Placing people over cars and trucks is the prevailing theme.

HISTORY

Before the Civil War and into the early twentieth century, both American Romanticism and the City Beautiful Movement grew from literature, painting, sculpture, and music, guiding man's quest to know the wilderness, and in architecture, civil engineering, and public art, reflecting his desire to control nature. As an outcome of progressive social reforms in North America, both movements were cloaked in allusions to traditional classical, medieval, and renaissance precedents, awakening America's sense of place, so architects, engineers, artists, and journeymen builders could craft a better civilization. New York City's Central Park, whose design balanced the then-burgeoning metropolis' growth with verdant, accessible open space, is perhaps the nation's highest example. Hartford's experience was no exception.

BUSHNELL PARK AND THE MACHINE IN THE GARDEN

Eager to tame its flood-prone rivers, Hartford's advocates and engineers created Bushnell Park and its Civil War Soldiers and Sailors Memorial Arch and Bridge (1886). Their designs presented an unabashed Norman-Gothic monument with stone embankments and carriageways over a formerly polluted Park River, where tanneries and slaugh-



terhouses once stood. The improvement was framed by Richard Upjohn Jr.'s new State Capitol (1879) and the gracious Corning Fountain (1899), an ensemble that remains resolute and picturesque to this day. Likewise, Hartford's vast Romanesque Revival railroad station edifice (1889) and robustly corbeled Hartford Public High School—demolished in 1963 to make way for Interstate Highway 84—complemented the scene. All stood as strong precursors to the City Beautiful Movement that would soon follow.

Originating with architect Daniel Burnham's plan for the 1893 World's Columbian Exposition in Chicago, the City Beautiful Movement used the engineered landscape to leverage significant civic spaces and public buildings to recall the grandeur of Classical Europe that for many Americans symbolized the virtues of Western progress. The movement influenced emerging urban centers including Cleveland,

BEFORE AND AFTER, CLOCKWISE FROM TOP LEFT The planned interchange relocations and highway cappings provide direct access to the river, restoring its central place in the life of the city. Green spaces, as well as walking and bike trails would take the place of highways.



An early promoter of the City Beautiful, Hartford-bred founder of American landscape architecture Frederick Law Olmsted believed that blending and composing natural and manmade aesthetics —what some historians have referred to as the “technological sublime”—could compel order amid what was then perceived as the Young Republic’s physical and socio-economic chaos.

Detroit, Kansas City, and most famously, Washington D.C., by adapting a tradition-based architecture using modern industrial methods and means. An early promoter of the City Beautiful, Hartford-bred founder of American landscape architecture Frederick Law Olmsted believed that blending and composing natural and manmade aesthetics —what some historians have referred to as the “technological sublime”—could compel order amid what was then perceived as the Young Republic’s physical and socio-economic chaos. Strong examples of Hartford’s City Beautiful engineering and architecture include Hartford City Hall, the State Library, the Bulkeley Bridge (1905), and Travelers Tower (1919). Spanning the Connecticut River when completed, the bridge was among the longest segmental stone arch bridges in North America. It was designed by a civic leadership determined to build “an ornament to the city which should endure forever.” Travelers Tower, the seventh tallest building in the world when completed, stands as a posthumous monument to the insurance giant’s Egyptologist founder, James G. Batterson.

Sadly, Hartford’s early progress toward civic beauty was short-lived after the hurricanes of 1936 and 1938 flooded the Connecticut and Park River basins, devastating

downtown businesses, and compelling state contracts to entomb the Park River and wall off the Connecticut River frontage from which the colonial-era city was born. By the late 1950s, Interstate Highway 91 would be added between the river dikes and downtown where a boulevard and walkable open space once stood, and where, no less, the venerable Bulkeley Bridge would be compromised by a widening program (encouraged by then-consultant, Robert Moses) to accommodate Interstate Highway I-84. Flush with funds, state and city engineers used these catastrophes to mummify the city. Not until the late 1980s would the non-profit Riverfront Recapture organization, with public, and private donations, succeed in mitigating the obstructions caused by these onerous expressways. Access to the area’s natural and manmade attractions has improved, but more can be done to reconnect the city to its riverfront.

HARTFORD 400: EXPANDING ON THE CITY’S BRAND

An award-winning city-building proposal, Hartford 400’s potential sweeping makeover is a vote of confidence in the future of Connecticut’s state capital, however, in projecting its future, city and state planners must remain vigilant to ensure the plan’s outcomes transcend public works. Beyond the new open spaces and landscape-capped roadways, the plan’s renderings may imply a concept program only as powerful as the square-footage development envelope it can sponsor. Amid the impressive renderings and demographically sensitive program, does one detect a reluctance to specify an agenda for civic beauty? Will Hartford’s movers and shakers distinguish their future public realm from most other cities across North America? These questions must be mulled carefully for Hartford to reign competitive. A City Beautiful-inspired revival leveraged by the Suisman schematic could offer a successful path toward Hartford 400’s goals.

SUCCESS IS IN THE DETAILS

Hartford planners have the agency to include traditional precedents in their design guidelines. However, oftentimes private developers, have a preponderance to dismiss such methods as too costly, foregoing the style and scale characteristics so popular among city-dwellers and tourists by favoring profit-driven “systems” of machine-manufactured, product-driven construction. Alas, although new buildings can apply traditional methods literally, much can be done strategically to deploy traditional language, satisfy public demand, and meet challenging budgets to guard against expedient cliché outcomes. Boston’s Seaport District, where exterior metal panels, glass curtainwall, and “rain-screen” facades present pedestrians with a non-variegated, minimalist atmosphere, offers a cautionary tale. Developed after the completion of Boston’s Central Artery Tunnel



MARFUGGI WALK The new 1.5 mile trail will activate 100 acres of parkland along the river.



HARTLINE BEFORE AND AFTER The 7-mile urban greenway would include bike path and community parks and link to the river and regional trail system.



SUSTAINABILITY OVERVIEW

The plans would call for sustainable measures on development and infrastructure.

Michael J. Tyrrell, a native of Fairfield, Connecticut, is a former Hartford resident and University of Hartford Adjunct Faculty member. A Boston-based Consultant in Architecture and Urban Design, he serves on the board of the New England Chapter of the Institute of Classical Architecture and Art. Michael may be reached at Onetyrrellplaza@gmail.com.

Project, the area is largely leased, but its architecture—its public face—has been roundly panned as cold, repetitive, “expedient,” and undistinguished.

Hartford 400’s local, regional, and statewide stakeholders—its planners, engineers, and architects—can help cultivate an architecture that re-engages the public’s imagination by encouraging a reintroduction of traditional design and construction methods. Where there is no appeal, business goes elsewhere, so from a civic design perspective, what can be done to attract investment? Let us consider, in part, the following:

1. Reassert a ban on parking garages exposed to key pedestrian street edges as outlined in the city’s Greenberg plan of 1998. These edges destroy urban intimacy, reduce livability, and depress property values. The city should go as far as marking some garages for elimination.

2. Establish a Civic Design Commission to shepherd policies that firmly encourage developers to reference and/or reinterpret traditional design solutions of the past, particularly composed using brick and masonry cladding, limestone lintels and cornices, slate and copper work, architectural carpentry, true divided light windows, wrought-iron fixtures such as balconies and lighting, and rooftop articulations such as dormers, chimneys, and finials, as well as promoting the construction and maintenance trades behind them. Encourage scrutiny of facades proposed in prominent locations using sheet-metal or fiber-board panels. Push developers to convey durability as a discernable priority in their projects.

3. Assert a moratorium on the demolition of buildings in the city possessing the qualities listed above; Hartford has lost enough of its traditional and intimate urban fabric already. Don’t wait on the formalities of historic landmarking. Work with area NGOs and NRZs to identify architectural assets in all neighborhoods, and of all scales.

4. Encourage a critical-regionalist, craft-vernacular

assimilating the million and a half of people who are here now but who were not here fifteen years ago.” In that spirit, and with the Federal Highway Administration acting as a catalyst, the Hartford 400 Plan can grow the city by reuniting Greater Hartfordians at its core. How ironic then, given the city’s historic, highway-driven dispersal, that were it not for the need to replace these roadways, less attention would be paid to Hartford’s city-building mission to reverse decades of anti-urban planning and development. What goes around comes around; drawing back Hartford’s suburban ex-pats is an equally noble goal.

By embracing Daniel Burnham’s “Make no small plans” edict, Hartford leaders can articulate Representative Larson’s ambitions by extending them toward a civic design agenda appropriate to locale. Addressing this challenge need not be overly prescriptive or slavish to facsimile but built upon the city’s lost and remaining Classical and Romantic antecedents in architecture and the arts, generally. Indeed, use this opportunity, for example, to embrace the legacy of Hartford native Frederick Law Olmsted by naming whatever major riverfront boulevard the project yields in his honor. Likewise, capture the story of screen legend Katharine Houghton Hepburn, whose oft-stated pride and pleasure in having grown up in Hartford—her family’s progressivism and commitment to equal rights—elevates her legacy to a status equivalent to another famous Hartfordian, Samuel Langhorne Clemens, aka Mark Twain. A recreational greenway or garden in Hepburn’s honor, with pavilions apropos, would be admired if not beloved.

It’s an exciting time to envision Hartford’s rebirth, but much of the plan hinges on state officials as a city-building initiative. Daniel Burnham’s belief that “a noble, logical diagram once recorded will never die” is only as good as the underwriting it commands, and the livelihood its fabric can generate. Whether Hartford 400’s users love it enough to see it recorded for posterity, only time will reveal. **TB**

tradition through what New Haven architect and University of Hartford Professor Duo Dickinson, FAIA, describes as Invocative Design: “We forget that history has gravity—constant, immutable, and undeniable. Architects either pretend there is no history or, alternatively, that only history is legitimate. Humanity simultaneously loves the past and the thrill of freedom. Invocative architecture embodies both without the pandering or posturing.”

DIVERSITY MATTERS: THE CITY BEAUTIFUL

A quick summation of Hartford’s demographics reveals a primarily African and Hispanic community undergoing further diversification. Burnham had confidence that Chicago planning “would be taking a long step toward cementing together the heterogeneous elements of our population, and toward

Informed
BY THE PAST

BY **NANCY A. RUHLING** | PHOTOS BY **ART ARCHITECTS**

**A NEW LUXURY WATERFRONT CONDOMINIUM
DESIGN TAKES CUES FROM ITS TOWN'S HISTORY.**

The ART team envisioned the building as a Greek temple with a top floor featuring a full classic entablature.

Brio, a new luxury waterfront condominium development in Hingham, Massachusetts, is a transformational project that serves as an aspirational architectural tribute to the small town's rather large role in 20th-century history. Designed by Boston-based ART Architects and developed by A.W. Perry and Boston Andes Capital, the five-story complex, which has 77 one- and two-bedroom units, is on the site of the old Hingham Shipyard, which was opened in World War II and became a major builder of destroyers from 1941 to 1945.

The Greater Boston-area shipyard, which won rare awards from the U.S. Navy for stellar production, is long gone—for decades, the parcel had been nothing more than an empty lot that was used for restoring boats.

Brio, a 12,000-square-foot mixed-use complex completed in 2019, is a key component of a larger plan to reimagine the entire industrial area.

To understand the significance of the shipyard to the South Shore town and the war effort, it's imperative to do some time traveling. The shipyard was erected, almost overnight, after the U.S. Navy designed a new wartime vessel called the destroyer escort. Because the population of Hingham was only 8,000, Bethlehem Steel, which was in charge of the ship building and setting up the shipyard, initially had to import 400 employees just to staff it.

As the operation swung into full gear, some 23,500 men and women—which is slightly less than the current population of the town—were employed by the shipyard, and in only three and a half years, they launched 227 ships, a significant contribution to the war effort.

The condo building, a 2022 Bulfinch Award winner designed by ART Architects Founding Partner John B. Tittmann, AIA, and Partner J.B. Clancy, AIA, is a key element of the revitalization.

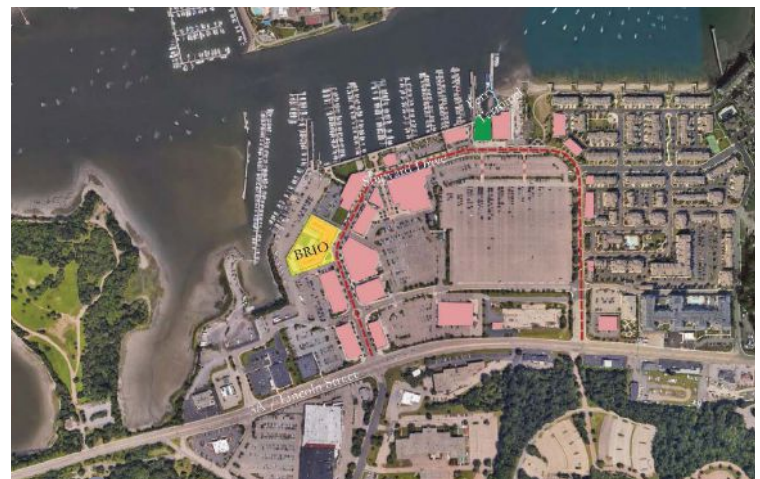
Minutes from the commuter ferry to Boston, it is at the elbow of a new-urbanist shop-lined street that serves as the main entry and exit artery for the industrial park. “Our goal was to define and shape that street,” says Tittmann. “We also wanted to honor the site’s history because the shipyard is a great point of pride for Hingham.”

- 1** The new condo complex is on the site of a historic shipbuilding yard that played a significant role in World War II.
- 2** Existing Site Conditions: The proposed site location is highlighted in yellow. Shipyard Drive, the main street on which the project is located, is outlined in red.
- 3** The site plan shows how the massing of the building completes and defines the bend in the new road, Shipyard Drive.
- 4** Street Level Plan: On the street-level ground floor, small units and storage spaces separate the parking lot from the street.
- 5** Upper Level Plan: The U-shaped plan of the apartment block creates a clear street wall on the outside and a sheltered courtyard over the covered parking on the interior.

Photos 2-5 by ART Architects



Photo by Hingham Historical Society





TOP LEFT The porticoes on the first floor bring a human scale to the project.

BELOW LEFT The bronze colored spandrels feature rivet-like exposed fasteners, a nod to the site's shipbuilding past. Juliette balconies give a bit of outdoor space.

The U-shaped plan of the building embraces a central courtyard that faces the water. The building is articulated with a major order of a grandly scaled classically proportioned colonnade. "We wanted to compose it as a unified whole that would not be overwhelming on the street," Tittmann says.

To that end, the ART team envisioned a classical temple over an industrial frame. The panels on the facade, which alternate between light gray and bronze colors, "feel solid and legible and bring structural consistency," Tittmann says.

The columns, which are in a light gray color, are articulated with block-like shapes that resemble limestone. They, in turn, support the top story of the building, painted white and reading like the building's entablature—architrave, frieze, and cornice.

"The spaces between the columns on the facade that contain the windows are like the shadows between columns on a temple," Tittmann says.

The windows, painted bronze, are separated by bronze spandrels subtly punctuated with exposed fasteners that resemble the rivets of a battleship, a discrete yet distinct acknowledgement of the site's past.

At the street level, a series of ground-floor porticoes scales the building to pedestrians on the sidewalk. The primary portico indicates the main entrance. Its Classical components and multi-paned windows scale the entry lobby and render it like a comfortable living room.

Alternating the colors of the porticoes, between light and dark, integrates them into the major order of the larger scaled columns. "They are emblematic of the population of the building," Tittmann says. "The garden spaces they front give the street life and make it nice to walk along, and the residents on those floors can enter and exit from them."

A small fenced park at the main street intersection is another green space that provides definition to the sidewalks and accentuates the street trees.

The units live up to contemporary expectations: They have open floor plans, high ceilings, oversize windows, and private terraces as well as Juliette balconies that allow the residents to open the large windows and take in the views of the harbor unimpeded.

Parking, which is vital for 21st-century developments, is tucked into the mass of the building behind a liner of the ground-floor apartments in an unobtrusive manner. And the roof of the ground-floor garage serves as a communal terrace, complete with barbecue grills, for the exclusive use of the residents. Its balustrade, whose bracing is virtually invisible, is designed to exploit the views.

Brio, set amidst a new neighborhood with restaurants, boutiques, grocery stores, a movie theater, and many services, was an instant success: The units sold out swiftly.

"We're proud that we were able to design a solid Classical building with a very tight budget," Tittmann says. "That was the most challenging aspect of the task." **TB**



The units live up to contemporary expectations: They have open floor plans, high ceilings, oversize windows, and private terraces as well as Juliette balconies that allow the residents to **open the large windows and take in the views of the harbor unimpeded.**

The top floor of the parking lot addition at the back of the building doubles as a common roof-top terrace for residents.



KEY RESOURCES

ARCHITECT ART Architects

ARCHITECT OF RECORD:
Bargmann Hendrie + Archetype

DEVELOPERS: A.W. Perry and
Boston Andes Capital

GENERAL CONTRACTOR:
Callahan Construction Managers

LANDSCAPE DESIGN: Brown,
Richardson + Rowe

RIGHT The garage interior is hidden from view as the building facade wraps around side streets.





Among the highlights of the dome's sunburst ceiling are 360 carved leaf details, each marking a degree of the compass. **OPPOSITE** The renovation returned the Chamber to the crème/tan/putty colors of 1897.



PARLIAMENTARY

Perfection

RENOVATION OF THE MASSACHUSETTS SENATE CHAMBER UPDATES A CHARLES BULFINCH MASTERWORK.

BY **GORDON H. BOCK** | PHOTOS BY **ANTON GRASSI**

No matter how eternal the architecture, historic buildings of a certain age must periodically move with the times, either to stay on top of maintenance cycles or simply keep pace with ever-evolving comfort and communications systems. The renovation of the Senate Chamber at the Massachusetts State House in Boston is just such a project. “The chamber has undergone three or four renovations since the State House was built in 1798,” explains John Hobson, senior project manager at Colantonio Inc. of Holliston, Massachusetts, general contractor for the work, “and years of alterations had left it in rough shape.”



BEFORE, CLOCKWISE FROM ABOVE Craftspeople worked from an immense scaffold to restore the plaster dome ceiling as well as access 36 round interior windows for replication.

Each of the 1544 rusticated wood panels lining the chamber were carefully removed, stripped of earlier blue paint, and then restored and replaced in their historical locations.

Aging environmental systems lead to cracked cornices.



Photo by Bruce DiLoreto



Designed by Charles Bulfinch, America's first professional architect, and directly below the illustrious golden dome, the Federal-style space was inspired by the Great Room of James Wyatt's 1770 Pantheon in London, and originally home to the House of Representatives. In 1898 it was repurposed as the Senate's meeting place, but has had only sporadic attention since then. Says Amy Fahey, director of marketing for the company, "We had to restore the architectural woodwork, plasterwork, stained glass, and the giant chandelier, but also address ADA accessibility and upgrades of the HVAC system, acoustics, and lighting system." In fact, the entire project encompassed spaces on six different levels. However, the highlights of the Senate Chamber sketch the most dramatic overview of the extensive work.

As conspicuous as they are numerous, the rusticated wood panels that surround the chamber became an obvious focus. "They're all cut at angles, and very hard to match," explains Hobson, referring to the rich, Classical surface made by beveling back unit edges to exaggerate joints, "so we had to label, number, and remove each of 1544 wood panels, then send them out to historic carpentry specialists M&A Architectural Preservation to be restored." Each panel was photographed before removal, then stripped of some 20 coats of paint. After repairing cracks and breaks,

the panels were repainted and reinstalled in their original locations, thereby saving 98 percent of the historic panels.

New paint colors added a curatorial dimension to the project. Paint analysis in 1997 by SPNEA (now Historic New England) documented four historical eras: Bulfinch/1798, Washburn/1867, Brigham/1897, and a mid-1970s refurbishment. Based on this research, it was decided to return the room to the 1897 era, when the Senate initially occupied the room, and a color scheme of crème/tan/putty.

A critical balancing act was improving the chamber for ADA accessibility with minimal intrusion on the historic character. For example, adding a wheelchair lift behind the president's rostrum made it ADA compliant without impacting the historic frontpiece. To adapt the 40 large, ca. 1897 Senators' desks, first the six sections of two huge, semicircular desks were each wrapped and carefully hand-carried out of the building for refinishing. Then, feet were added under the desks to raise them to ADA height requirements for wheelchairs while still blending in with the surrounding historic fabric.

An even slipperier sleight-of-hand was reconfiguring and upgrading the HVAC systems hidden within the restored dome. "What people don't realize is that it's a double dome," says Hobson, "and what they see inside isn't what's

THE ENTIRE PROJECT WAS COMPLETED UNDER A TIGHT TIMELINE OF 18 MONTHS, TAKING CARE NOT TO DISRUPT SENATE OR GOVERNOR MEETINGS. “IT WAS TRICKY TO DO,” RECALLS FAHEY. “YOU HAD TO BE QUIET, NO MOVING MATERIALS DOWN HALLS DURING WORK HOURS.”

on the outside.” Between the exterior dome and the interior dome is an attic, he explains, and all the mechanicals. This space is so tight that removing the outdated equipment meant disassembling it into pieces small enough to be carried down a narrow staircase. To make room for the new air handler and ductwork, the company had to remove an existing walkway and, once the new ductwork was in place, build a fresh walkway up and on top of the new ductwork for access. “We hoisted the new equipment onto the front portico, and used a trolley system to lower it inside the dome for assembly.” From here they brought the new heating, air conditioning, and lighting mechanicals down into the walls of the hall, and replicated the 19th-century, snowflake-pattern wood grilles in the chamber ceiling.

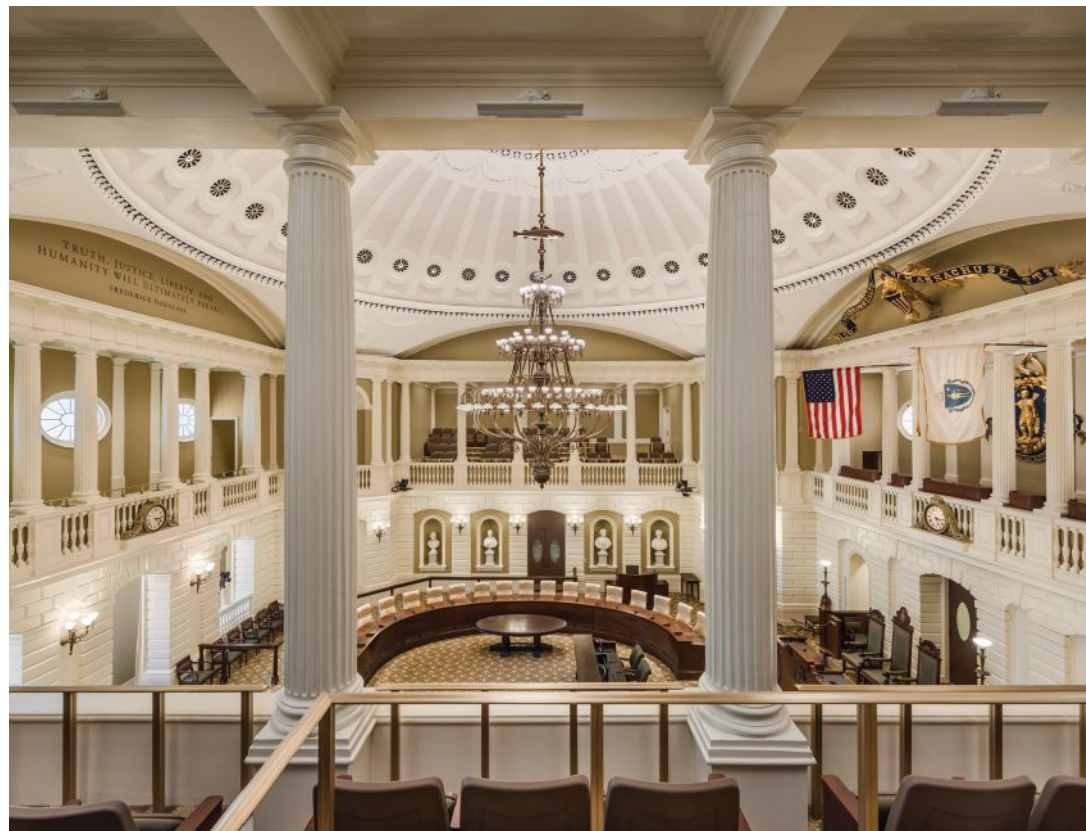
Though ample in workspace, refinishing the underside of the enormous dome presented its own issues. To reach the ceiling, the team erected a vast scaffold or “dance floor” from which to restore the relief plaster decorations, such as the rope swags that encircle the chamber. “I had to find some old-time plasterers who could replace the broken knots and ropes,” says Hobson, “and they glued up actual hemp rope, then plastered it over, to have the same look.” Further up the dome, 36 round, wood windows and decorative wood grilles were failing beyond repair and had to be replaced, replicating the grilles in laser-cut aluminum. Beautiful as it is, the concave dome created reverberation and sound-focusing problems, so engineers from Acentech unobtrusively nested acoustical panels between the ribs of the dome to reduce echo.

The architectural centerpiece of the dome, however, is the majestic, 30-foot-tall chandelier suspended from the crown. Long ready for its own upgrade, the 1,850-pound fixture was lowered to the chamber floor so that lighting specialists Grand Light could disassemble its multi-tier brass arms into 110 pieces and transport them off-site for refurbishing. In addition to cleaning, the chandelier was equipped with energy conserving LED GU10 spotlight-design lamps in the original lamp locations, along with adjustable uplights to showcase the chamber dome.

The entire project was completed under a tight timeline of 18 months, taking care not to disrupt Senate or Governor meetings. “It was tricky to do,” recalls Fahey. “You had to be quiet, no moving materials down halls during work hours.” Hobson adds it was stressful for legislators too, “but once they saw all the work that was done, they were quite happy with it.” **TB**

TOP RIGHT Once lowered to the floor, the 1,850-pound wrought-iron chandelier was disassembled, restored, and upgraded.

RIGHT Viewing the restored chamber from the gallery shows the circular desks and rich classical detailing of Bulfinch’s Federal design.







KEEPING TIME

*Apple renovates L.A.'s 1927 Tower Theatre for its flagship store—
and restarts the clock atop.*

BY **J. MICHAEL WELTON** | PHOTOS BY **CESAR RUBIO + APPLE**

On June 24, 2021, Apple's newest store in Los Angeles premiered inside a renovated 1927-era theater. It's a building that boasts a superb Hollywood cast—and script.

S. Charles Lee designed the Tower Theatre in 1926 as the first in town to be built for talking pictures. It was sited on a lot just 50 feet by 153 feet, so the architect designed his first-of-many movie houses to soar straight up—by adding a 150-foot-tall clock tower.

He announced his new building in the October 9, 1926, edition of the *L.A. Times*: “The new theater will be of Class A construction,” he declared. “It will seat 900 persons ... the architectural design will follow a modernized French motif.”

Actually, Lee designed his downtown theater on the southeast corner of Broadway and Eighth in the Renaissance Revival style, with French, Italian, and Moorish terra-cotta flourishes outside. Inside, the Palais Garnier in Paris, or Paris Opera House, offered French inspiration. It was innovative not just because of the sound provided by Vitaphone's

“pictures with a voice,” but also because it was one of the first theaters with air conditioning. “Leave your fan at home,” urged an opening-day *Carrier* ad in the *Times*.

It was designed also for mixed use, with an upscale retail component. “The Broadway side of the building will be constructed to accommodate high-class specialty shops,” Lee's announcement added.

Construction began on March 26, 1927; the theater opened on October 12. Its first film was a silent—*The Gingham Girl*—but a legendary talkie, *The Jazz Singer* with Al Jolson, wasn't far behind.

A building review in the *Times* was favorable, but noted the small, seven-foot-deep stage that eliminated vaudeville acts: “With its decorative motif carried out in the spirit of the French Renaissance, the new Tower Theatre... will be one of the loveliest of the small picture houses,” according to the *Times*. “Although it lifts its spire in the heart of the business section ... it has a seating capacity of less than 1000 and will cater to those who like their movies straight, minus all vaudevillian extras.”

By the end of World War II, attendance was



Photo: Apple

OPPOSITE PAGE The Apple Tower Theatre. Photo: Cesar Rubio **ABOVE** The Tower Theatre was the first theatre in Los Angeles wired for films with sound.



CLOCKWISE FROM LEFT The exquisite detailing of the interior has been painstakingly restored.

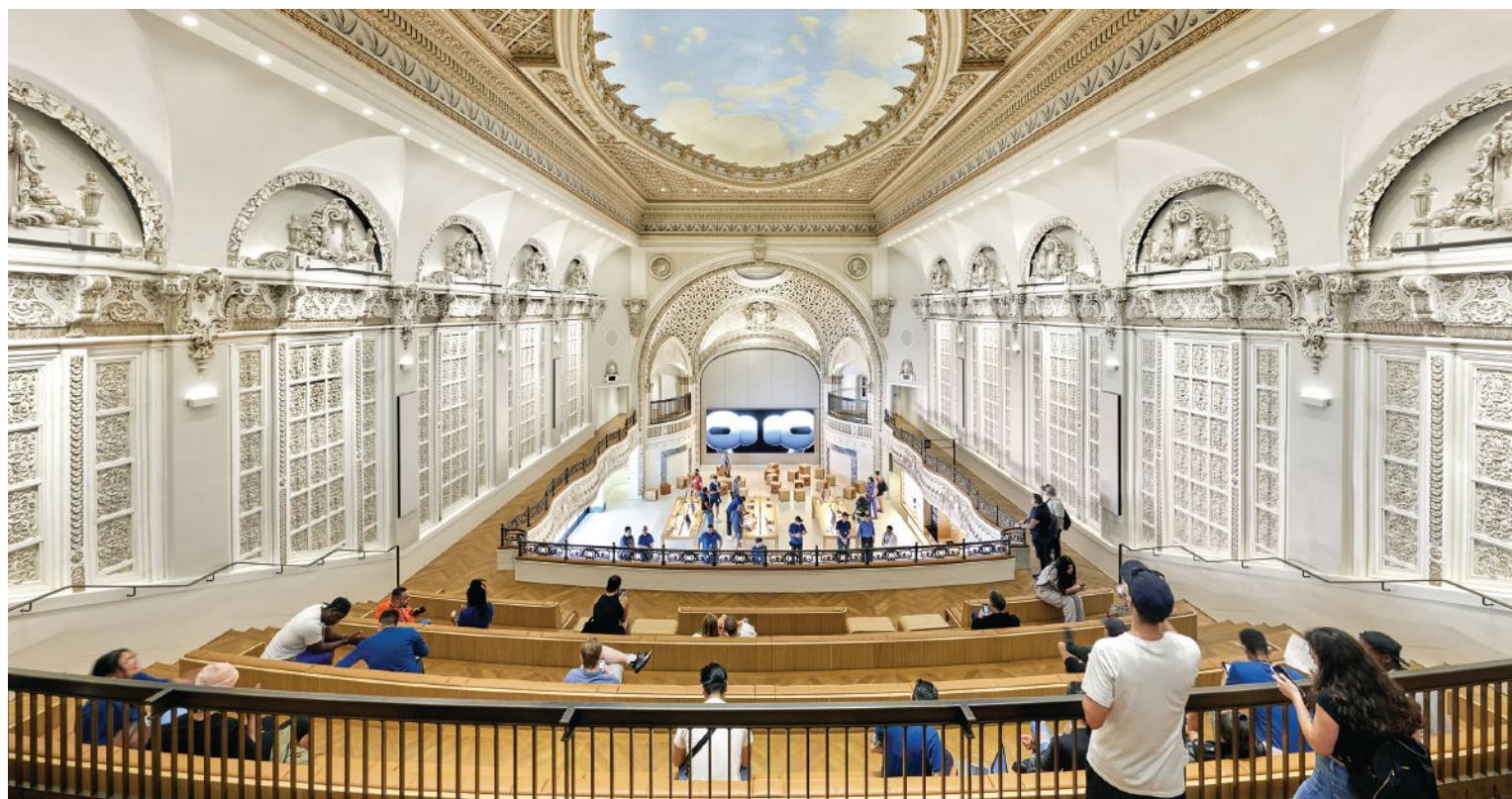
The theatre's lot is 50 by 153 feet.

The Genius Level on the balcony offers a complete snapshot of the theatre in all its restored glory. Photos this page: Cesar Rubio



“Apple brings with it prestige, brand, and identity, and it anchors downtown—especially the Broadway district.”

—Tiffany Nitsche





ABOVE Intricate historic plaster detailing on the walls and ceiling has been carefully restored and enhanced.

BELOW The main level of the theatre has been transformed into a majestic display area.

Photos this page: Cesar Rubio

in decline. In 1946, Metropolitan Theatres subleased the building, renamed it the Music Hall, and began booking films there with other Music Halls in Beverly Hills and Hollywood.

In 1950 the theater was running only newsreels, with the imaginative new moniker of the Newsreel Theater. It later served as a general-run theater called Music Hall Downtown. A 1965 renovation ushered in a new marquee and vertical signage. Auditorium murals were removed, but new carpets, seats, paint, and sound system were added. Its center box office was taken out, and replaced with one on the south side near a new entrance.

Alas, in 1988 it closed its doors to regular showings and fell into disrepair, its clock hands destined to freeze in place. Still, it found new life as a backdrop for a number of well-known films, including *The Mango Kings* (1992), *Fight Club* (1999), *Coyote Ugly* (2000), and *Mulholland Drive* (2001).

A NEW LEASE ON LIFE

In 2018, Apple announced a plan to lease, renovate, and convert the Tower into its flagship store for L.A. Its design team worked closely with London-based Foster + Partners to preserve and restore it—and give it a new purpose. Gruen

Associates served as local associate architect, with partner Deborah Gerod leading the charge.

It made a statement. “Apple brings with it prestige, brand, and identity, and it anchors downtown—especially the Broadway district,” says Tiffany Nitsche, president of the Los Angeles Historic Theatre Foundation.

The design plan was comprehensive, with seismic strengthening, replacement of a tower cap removed after a 1971 earthquake, a newly ticking clock, and restoration of all interior marble, plaster, and paintings. Gallery space along the stairway to the basement now offers an educational experience, with historic photos and elements from the architects’ restoration.

“It was very sensitive—EverGreene Architectural Arts from Washington, D.C., worked on restoring the paintings,” she says. “One thing that was brilliant with Apple was that they were able to recreate works from plaster molds.”

The designers restored the exterior terra cotta and improved the marquees and Broadway Street elevation. They upgraded the theater’s accessibility, to assure the building will survive and serve the community into the future. “It could go back to being a theater,” she says. “And it allows us the opportunity to show city council and developers that we don’t have to demolish a building to bring in something new.”

The street-level lobby greets visitors on entry, and opens up to a soaring volume at the main theater level, now a product display area. The auditorium is surrounded by arched bays and restored bronze, and features an array of Apple offerings. A renovated grand staircase leads to the upper levels, and two new elevators have been installed.

Those stairs and elevators deliver visitors to the balcony level, with the best seats in the house reserved for viewing Lee’s auditorium. At the top of the balcony is The Genius Level, just below the theater projectionist’s window. Seats outside are leather and theater-style, with integrated electrical and data points—a comfortable, tech-savvy space for relaxing while waiting for a Genius Bar support appointment. “What a great place to go when your product needs work,” Nitsche says. “And you can go in, plug in, and sit there all day to work if you want.”

The architects reinterpreted the dome of the theater’s ceiling with a fresco of California sunshine. Below it, the Forum space reinstates the theater’s screen under its proscenium arch. The Forum is home to “Today at Apple,” where free daily sessions led by Apple team members and local creatives provide inspiration and teach practical skills.

“Meet me in the Tower Lounge,” a buoyant 1927 ad once read for the then-new Tower Theatre.

It’s an apt new slogan for L.A.’s Apple flagship today—in a building where a near-century-old tower clock is keeping time once more. **TB**



J. Michael Welton is the author of *Drawing from Practice: Architects and the Meaning of Freehand* (Routledge: 2015). His articles have appeared in *The New York Times*, *The Washington Post*, *Metropolis*, *Dwell* and *The News & Observer* in Raleigh. He is editor and publisher of the digital design magazine—architectsandartisans.com.

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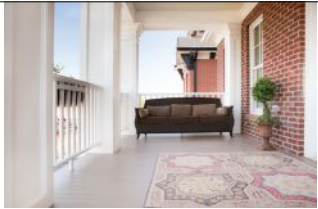
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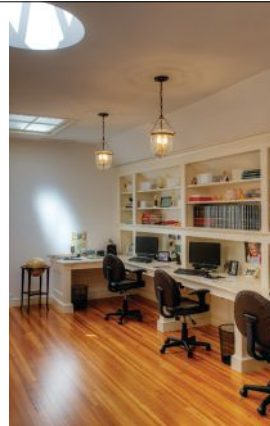
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ALLEN ARCHITECTURAL METALS, INC

800-204-3858; Fax: 256-761-1967

www.allenmetals.com

Talladega, AL 35161

Manufacturer of ornamental metal: casting & metal fabrication; street amenities, signage, lighting, columns, building components, doors, cupolas, finials, cresting, architectural elements, canopies, bollards, railings & grilles; variety of alloys & finishes.

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CHADSWORTH COLUMNS

910-763-7600; Fax: 910-763-3191

www.columns.com

Wilmington, NC 28412

Manufacturer of authentically correct architectural columns: complete line of columns, piers, pilasters & posts for interior & exterior use; variety of sizes, styles & materials, including wood; more than 30 years.

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EVERGREENE ARCHITECTURAL ARTS, INC.

212-244-2800; Fax: 212-244-6204

www.evergreene.com

Brooklyn, NY 11232

Since 1978, EverGreene Architectural Arts has provided award-winning design and fabrication, conservation and restoration services for many for the world's most significant buildings and objects. Expertise includes: murals, decorative painting, gilding, plaster, wood, metal, stone, mosaics, new design, conservation, restoration, ecclesiastical, institutional, public, commercial projects; offices in Brooklyn, Chicago, Washington DC & Los Angeles.

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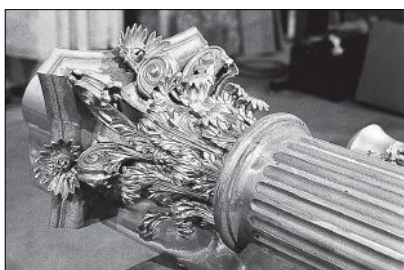
719-948-4554; Fax: 719-948-4285

www.haddonstone.com

Pueblo, CO 81001

Manufacturer of classical & contemporary cast limestone: columns, balustrades, benches, planters, pavers, fountains, gazebos, interior ornament, mantels, statuary & more; 500+ designs; custom designs.

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HISTORICAL ARTS & CASTING, INC.

800-225-1414; Fax: 801-280-2493

www.historicalarts.com

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Designer & custom fabricator of ornamental metalwork: doors, windows, hardware, stairs, balustrades, registers, fences, lighting, gutters, columns, weathervanes, snow guards, cupolas, planters, fireplace tools & more; iron, bronze, aluminum & steel; restoration services.

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ROBINSON IRON CORP.

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www.robinsoniron.com

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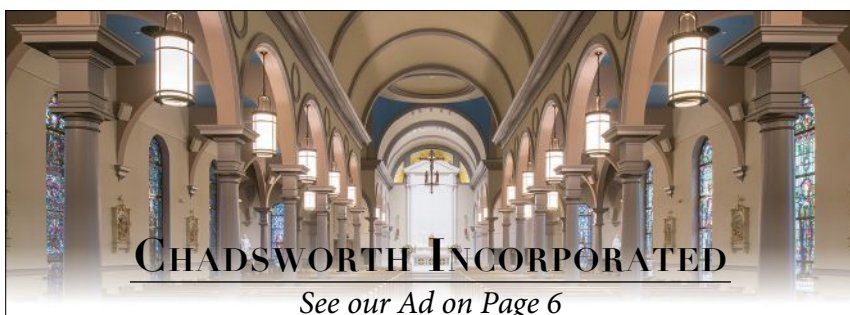
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Designer, fabricator, finisher & installer of fine quality custom ornamental metalwork: railings, fences, gates, custom, hot-rolled steel doors & windows, lighting, grilles, bronze & aluminum entry doors; all cast- & wrought-metal alloys, finishes & architectural styles; since 1940.

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COOPER HISTORICAL WINDOWS

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www.thecoopergroupct.com
North Stonington, CT 06359

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810-798-2817; Fax: 810-798-2809
www.grabillwindow.com
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HEARTWOOD FINE WINDOWS & DOORS

585-340-9085; Fax: 585-254-1760
heartwoodwindowsanddoors.com
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Manufacturer of custom architectural wood windows & doors: Honduras mahogany & other species; traditional mortise-&tenon construction; standard & decorative glazing; related window & door hardware; 68-year-old company.



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www.hopeswindows.com
Jamestown, NY 14702

Manufacturer of custom-designed windows & doors: handcrafted, hot-rolled, solid-steel & solid-bronze window & door systems.

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817-332-1495; Fax: 817-332-1496
www.hullworks.com
Fort Worth, TX 76104

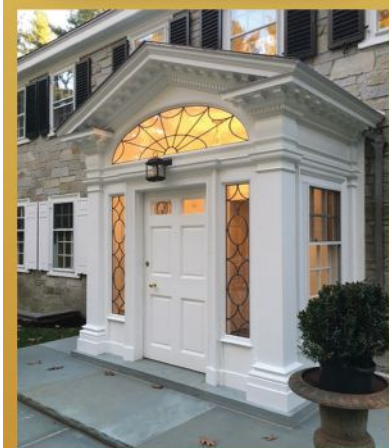
Custom fabricator & installer of historical millwork: casing/moldings, built-in furniture, paneling, paneled & carved doors & complete entryways; historically accurate wood windows.



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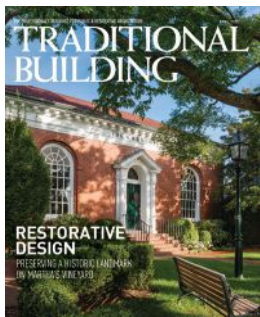
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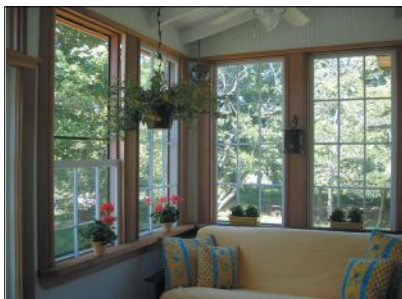


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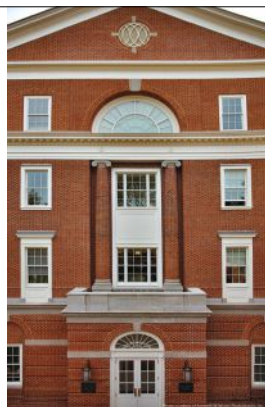
315-232-3433

www.jimillingworthmillwork.com

Adams, NY 13605

Manufacturer of custom wood windows, doors & moldings; for homes & historic buildings; matches any existing wood windows, doors, moldings; custom millwork.

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KOLBE WINDOWS & DOORS

800-955-8177; Fax: 715-845-8270

www.kolbewindows.com

Wausau, WI 54401

Manufacturer of windows & doors: traditional details; extruded aluminum-clad, roll-formed aluminum-clad, wood & vinyl energy-efficient windows & doors; fiberglass doors.



MARVIN WINDOWS

888-537-7828; Fax: 651-452-3074

www.marvin.com

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Manufacturer of wood, aluminum clad and fiberglass windows and doors; all products made-to-order; offer specialty and custom sizes; expertise in historic replication. Provide residential, replacement, coastal and commercial window and door solutions.

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Manufacturer of custom windows: steel & steel/wood windows; contemporary to historical profiles; restoration & replacement of wood windows; upper-end residential, commercial & institutional installations.



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www.stcloudwindow.com

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TRIMLINE WINDOWS INC.

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215-674-9324

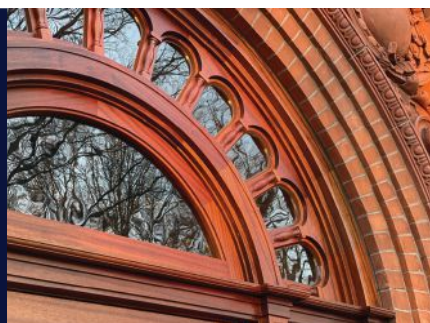
www.trimlinewindows.com

Ivyland, PA 18974

Manufacturer of wood windows: custom colors in all-wood or aluminum-clad exteriors; interior hardwoods in oak, cherry, mahogany & pine; simulated divided-lite profiles; standard or custom architectural shapes.

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www.vintagehardware.com
Port Townsend, WA 98368

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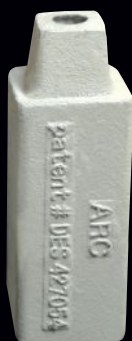
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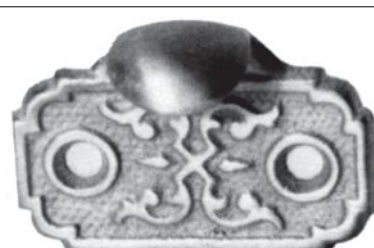


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www.brasswindowhardware.com
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Supplier of historically styled hardware: sash pulleys, lifts & locks, sash chain & rope; weather stripping; patented sash weights.

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www.ballandball.com
Exton, PA 19341

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www.gabys.com
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www.peguerin.com
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www.jwright.com
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Hailey, ID 83333

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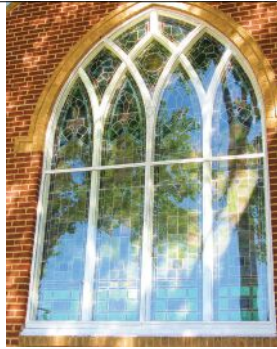
Manufacturer & distributor of traditional hardware: for wood windows; full line from weights to pulleys, lifts & locks.



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Chaska, MN 55318

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www.coppawoodworking.com
San Pedro, CA 90731

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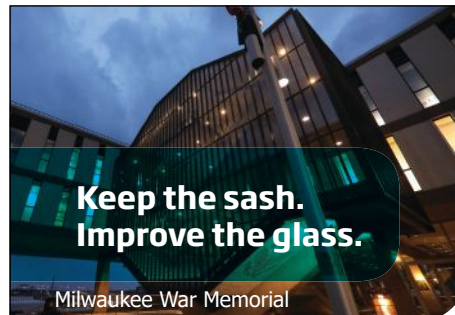
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www.stormwindows.com
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Fax: 419-247-4517
www.pilkington.com
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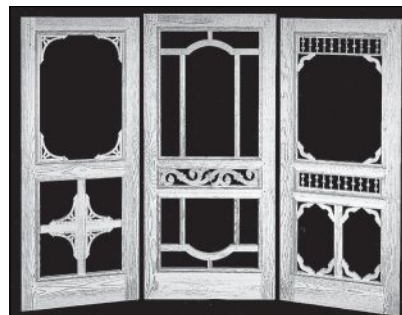


VINTAGE DOORS

800-787-2001; Fax: 315-324-6531

www.vintagedoors.com
Hammond, NY 13646

Manufacturer of custom exterior & interior wood doors: door hardware, screen doors & storm doors; traditional, porch enclosures, Craftsman & Victorian Styles; solid wood & glass panels available.



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www.vintagewoodworks.com
Quinlan, TX 75474

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www.woodwindowworkshop.com
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HISTORICAL ARTS & CASTING, INC.

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www.historicalarts.com
West Jordan, UT 84081

Designer & custom fabricator of ornamental metalwork: doors, windows, hardware, stairs, balustrades, registers, fences, lighting, gutters, columns, weathervanes, snow guards, cupolas, planters, fireplace tools & more; iron, bronze, aluminum & steel; restoration services.

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www.kepcoplus.com
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www.kopelovcutstone.com
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Manufacturer of metalwork: entryways, storefronts, grilles, railings, ornament, balustrades, stairs & more.



NIKO CONTRACTING CO.
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www.nikocontracting.com
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RUGO STONE, LLC
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Features
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The winners have been announced for The Institute of Classical Architecture & Art (ICAA)'s 2018 Stanford White Awards.

Merritt, International Interior Solutions Firm, Acquires Renowned Agrell Architectural Carving

Acquisition showcases Merritt's continued company expansion and commitment to excellence.

CLASSICAL CAMPUS DESIGN

Features
Traditional Building Turns 30!
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Book Review: Robert Venturi's Rome

A book review on Robert Venturi's Rome by Frederick Fisher and Stephen Harby.

Buckland, VA: A Labor of Love

The community in Buckland, Virginia, has a deep commitment to historic preservation.

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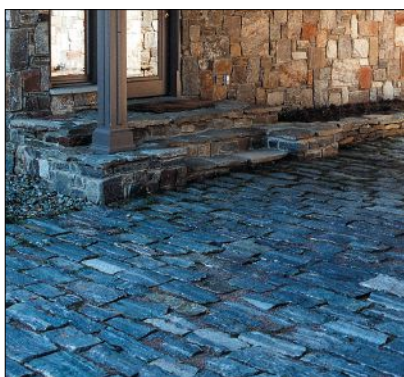
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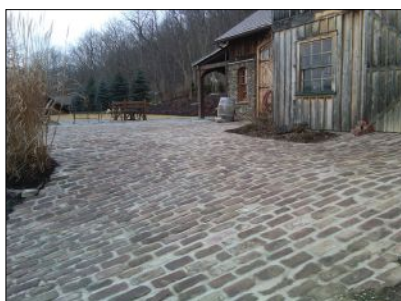
30 years experience as an architectural cut stone fabrication mill and quarry of cream and shell and lueders limestone. We specializing in custom cut limestone elements, quarried dimensional building and landscape products.



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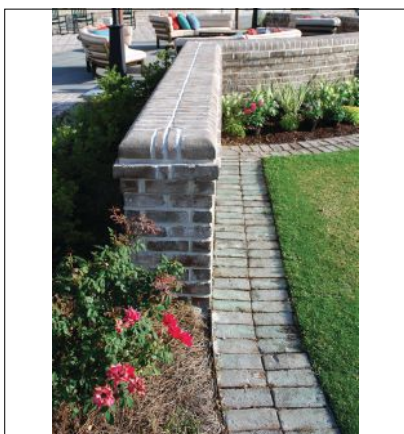
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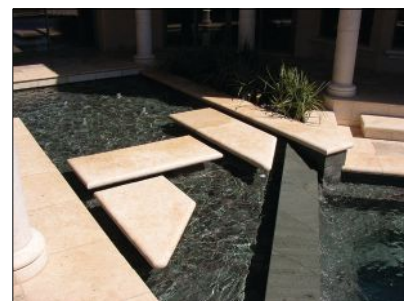


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Manufacturer of handmade architectural & landscape elements in cast stone: columns, signage, niches, pool coping, pavers, caps & finials for piers & walls, planters, fountains, gazebos, statuary, benches, mantels & more; restoration.



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CHADSWORTH COLUMNS

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800-225-1414; Fax: 801-280-2493

www.historicalarts.com

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www.robinsoniron.com

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SCHWARTZ'S FORGE & METALWORKS, INC.

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www.schwartzsforge.com

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New Orleans, LA 70130

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CHARLESTON LIGHTING & MFG., INC.

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Mobile, AL 36617

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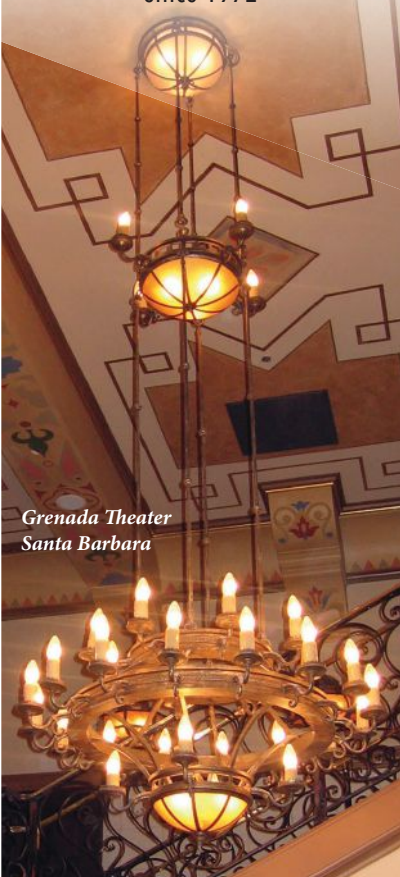
877-778-4042; Fax: 410-778-4070
www.deeplandingworkshop.com
Chestertown, MD 21620

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www.robinsoniron.com

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STEVEN HANDELMAN STUDIOS

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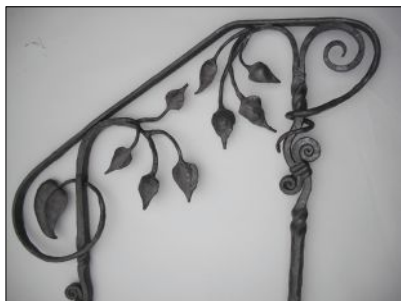
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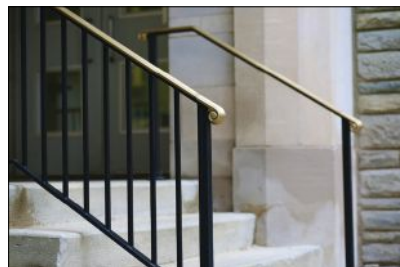
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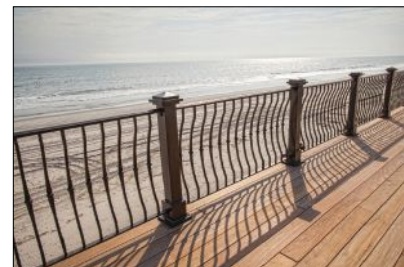
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www.allenmetals.com
Talladega, AL 35161
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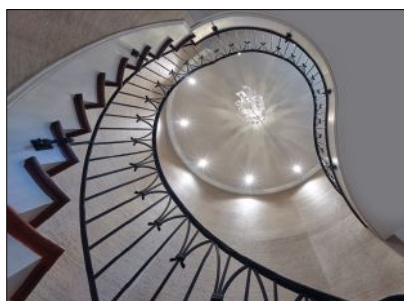
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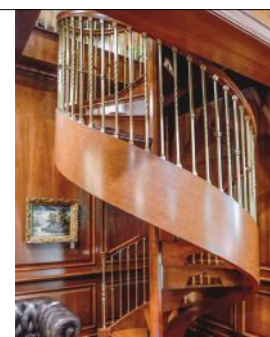


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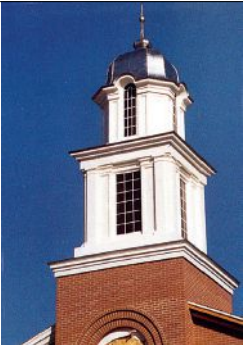
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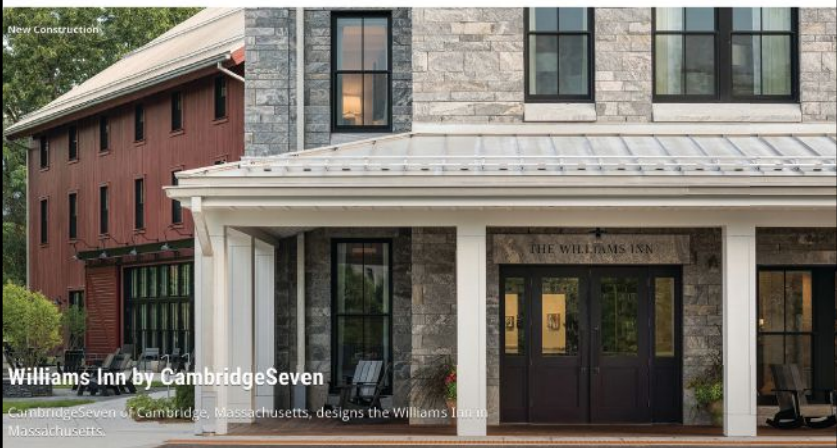
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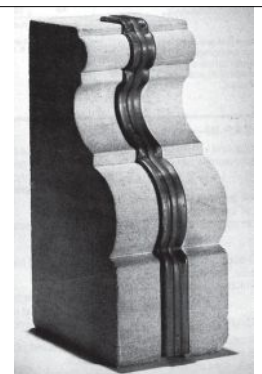
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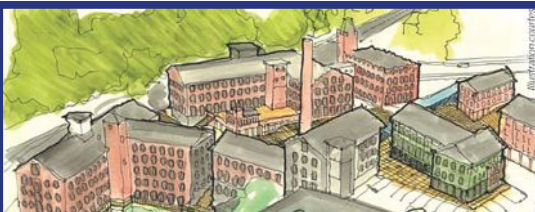
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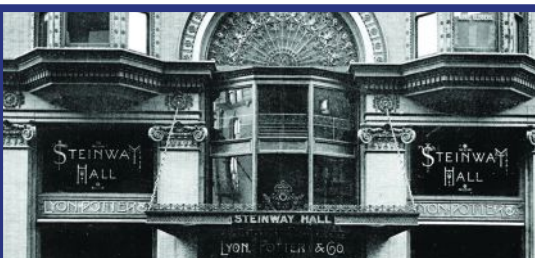


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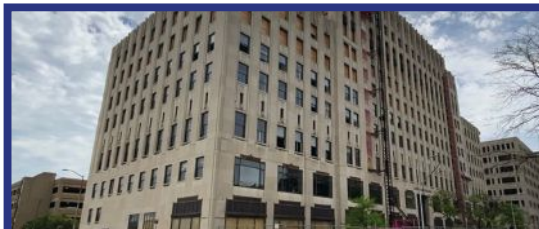


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History Reinterpreted: The Myles Standish Hotel

AUTHOR: PATRICK AHEARN FAIA PUBLISHED BY ORO EDITIONS 2023 | 82 PAGES; COLOR

Built in 1871 in Duxbury, Massachusetts, on Boston's South Shore, The Myles Standish Hotel began as a sprawling, boxy wood-frame seaside summer resort typical of the time and area.



We've all heard of private residences that get repurposed into hotels: think countless B&Bs or even the now-infamous Mar-A-Lago. But what are we to make of a hotel adapted into a house? That's the arc of the Cinderella story behind *History Reinterpreted: The Myles Standish Hotel* by author and architect Patrick Ahearn, FAIA,

are closer to home.

High on his list is to tease out the story of the house in order to pursue what he calls a "narrative-driven approach." Here, his goal is to "capture the history of the place" for "authentic feeling design choices" so as to create a "plausible architectural execution" from some time in the past. Where no such source material exists, as in the case of a commission on vacant land, Ahearn doesn't balk at spinning a fresh story out

of whole cloth for "new builds with imagined histories." Fortunately, the Myles Standish offered more than a blank slate with which to work.

Built in 1871 in Duxbury, Massachusetts, on Boston's South Shore, The Myles Standish Hotel began as a sprawling, boxy wood-frame seaside summer resort typical of the time and area. A broad, bay-facing porch fronted two stories of beadboard-swathed rooms surrounding a three-story, Mansard-roofed center. Though recasting such a pile into a home may sound like a

reach, the scale becomes less daunting when we learn that, after a 1908 fire gutted outbuildings, the Mansard section was razed to leave just two wings—one later relocated—thereby reducing the Myles Standish to a half-hotel.

Armed with this background, Ahearn's script for the property imagined a new carriage house and boat house, along with a new porch and details, to conjure up an inn, added onto over time, that survived to this day. Integrating regional materials, such as clapboards, fieldstone, and cedar shin-

gles, and drawing on existing roof and window details, are other tactics that help put the conceit over. Even so, half a hotel is not a house and Ahearn and his clients get a pass for not attempting a literal rehabilitation of a structure originally commercial and now largely gone.

It's a tricky balancing act to pull off. On the one hand, historical purists have long sniffed at restoring or backdating with details that never existed. For example, in the 1980s, the practice of decking out a plain-Jane building with Victorian gingerbread was often derided as "tarting up." On the other hand, today, most acknowledge that lack of any documentation for what, say, a kitchen or addition once looked like does provide some license for a historically sensitive version of what could have been there. (My own preference is to let history be a guide. Especially for additions, traditional patterns are not only time-tested for practicality but also look more like they've always been there.)

Were this a more in-depth volume than a slim, graphically driven monograph stressing concepts like "reinvention," "reinterpretation," and "reimagining," it would have been interesting to learn a bit about solutions Ahearn devised for practical issues like windows, roofing, and adding mechanicals. The section on moving the wing to rebuild its foundation is just this kind of thing. As it is, *History Reinterpreted* is an insightful lesson in the skilled, complex design choices that brought new purpose to a historic relic—something we could use more of in our day of overnight, extreme makeovers. **TB**

Gordon Bock is the co-author with Mark Alan Hewitt of *The Vintage House: A Guide to Successful Renovations and Additions*.

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