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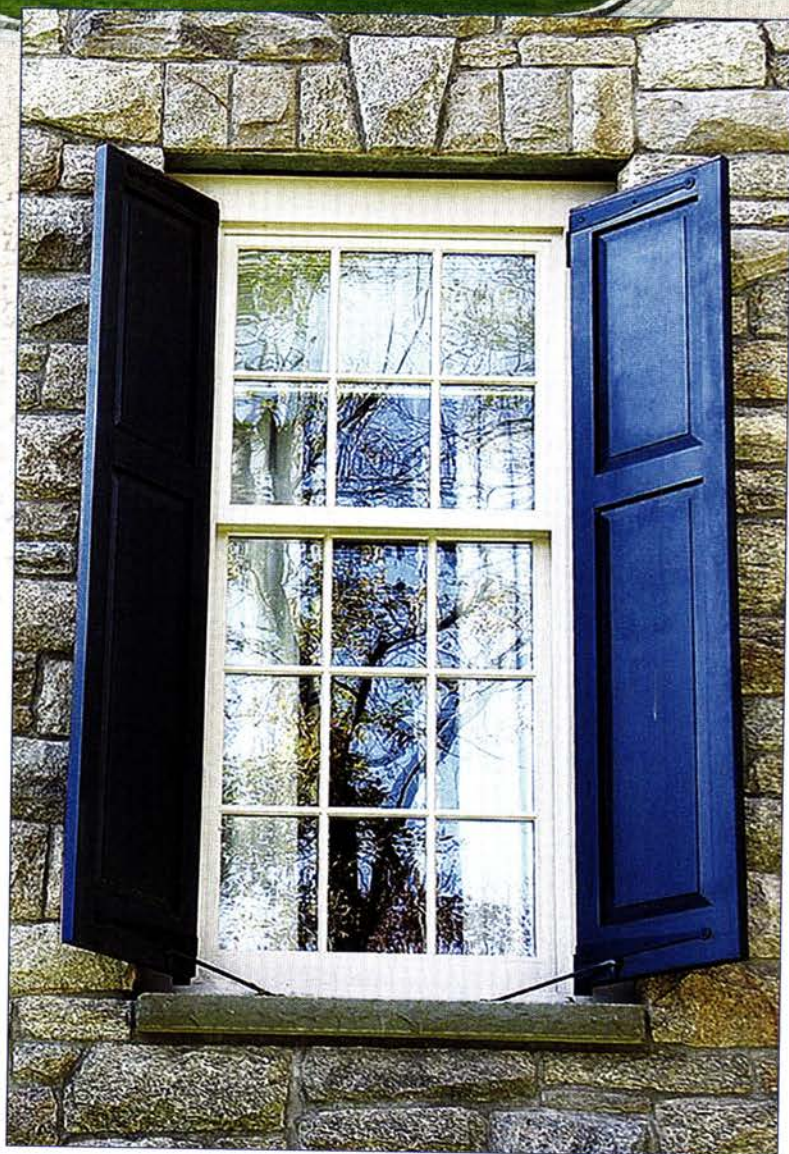
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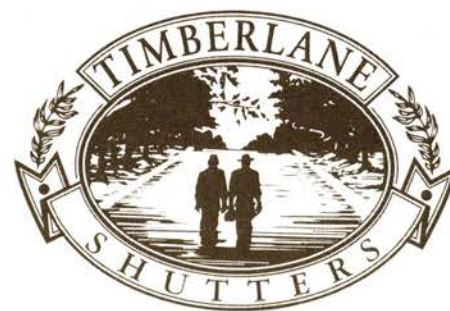
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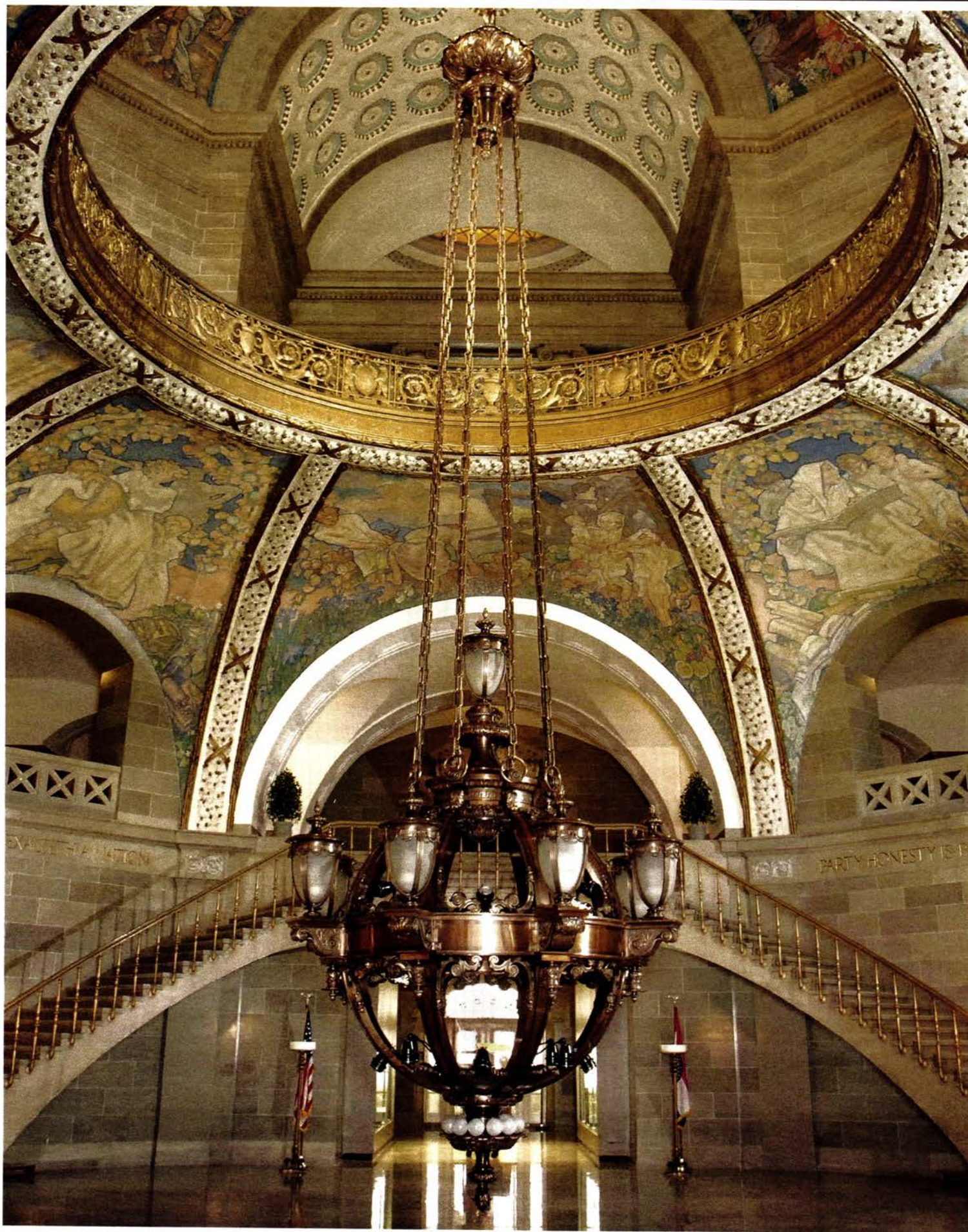
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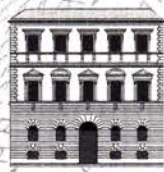
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WOOD WINDOWS



This typical original wood-frame window was found in the Watervliet Arsenal, Building No. 110, in Watervliet, Albany County, NY. Founded in 1813 to support the War of 1812, the building was designated a National Historic Landmark in 1966. Photo: courtesy of Historical American Buildings Survey

What Shall We Do with Our Windows?

While not quite as dire as Hamlet's lament, the question of whether to repair or replace historic windows is nearly as complex as "To be or not to be?"

Windows shoulder a hefty responsibility in traditional buildings. Not only do they make important contributions to historic character, increasingly they are at the center of economic and energy debates

about building rehabilitation. Put in elementary terms (and the parlance of the Internet era) the discussion is often reduced to the "binary" choice of repair or replace?

No surprise, the answer is not so simple. Not only is every project different, it turns out

that the process of choosing the best approach for dealing with old windows looks less like a flow chart of decisions than a spectrum of many options. While it's impossible to cover every scenario in the space of an article, some insights from experts in the field on just the



mechanics of repairs and replacement of wood sash windows offers some perspectives worth considering.

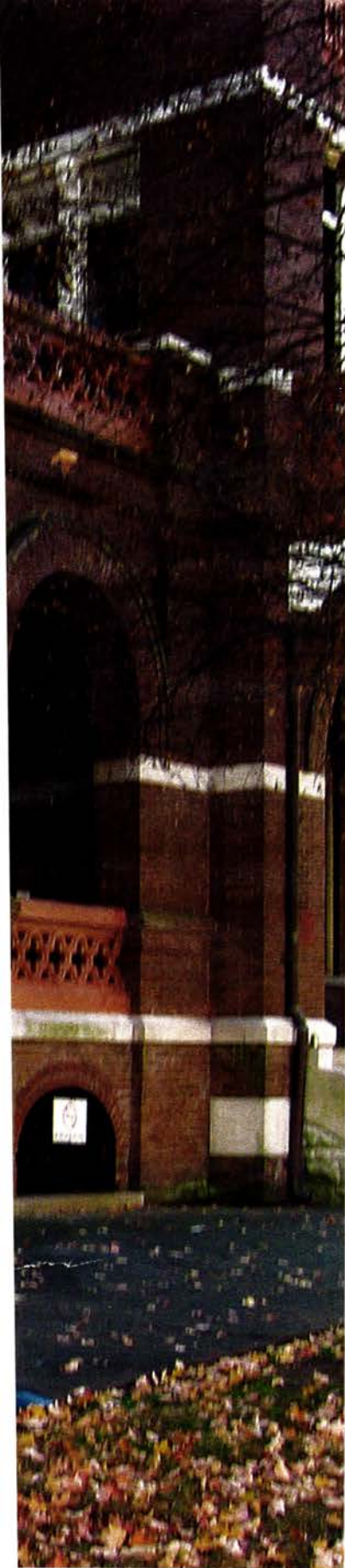
In the view of many historically minded people, the repair/replace spectrum starts at one end with windows that are so significant they are worth retaining at nearly any cost. Windows in this category might be very early, examples of unique craftsmanship or design, or connected to history in a special way, "Say, if George Washington scratched his name in one," offers John Leeke, preservation consultant in Portland, ME, with only slight exaggeration.

In fact, Brooks Gentleman of Re-View in Kansas City, KS, reports that the Virginia State Capitol was just about such a project. Since the building was designed by Thomas Jefferson, "They wanted a museum-level restoration of the windows, which means you pretty much save everything you possibly can, all the original fabric. You don't have the liberty to just replace a sash because it's the cheaper choice."

John Sandor, Architectural Historian at the National Park Service, reminds us that the Secretary of the Interior's Standard #6 says, "Deteriorated historic features shall be repaired rather than replaced." He adds, "It's a

rare project where the windows are not a significant part of the character and historic fabric of the building." In fact, there are instances where the significance of windows is almost boundless. "In some buildings – especially certain industrial buildings – they're all windows, almost like greenhouses in terms of their character, so to lose the windows is to lose the building."

Gentleman makes the practical point that at times existing historic windows do not make sense to replace because their design, construction or materials are so complex. "Some historic windows can even be too large for



Re-View restored 340 wood windows, including 126 curved units, for the Knox County Courthouse in Knoxville, TN. The windows are wood with aluminum storms on the exterior. In some cases where the original windows had been replaced in the past, the replicas were built to match the originals. Photos: courtesy of Re-View

rience. It can all be repaired, or it can all be replaced. Finding the optimum balance for an individual part, or for a whole project, has to be based upon the criteria and guidance that the project planners set up.”

What is Replacement?

In fact, today craftspeople and manufacturers have developed so many options for the rehabilitation of windows that it’s often hard to say where repair ends and replacement begins. “When I talk about windows, I suggest that it’s not a black or white thing in terms of repair versus replacements,” says Sandor. The first, best step of course is to see if minor repairs will do the job. “Then, you can look at replacing pieces of the window – a sill, for instance, or a sash.”

An interesting example of how this idea can be put into practice is a commercial bank project in Lowell, MA, that Leeke describes. “They didn’t want to fuss with doing wood repairs – say, re-creating a mortise-and-tenon joint by splicing in new pieces of wood on the rail and stile – but they didn’t mind replacing individual parts, such as the whole stile and whole rail. So we showed them how sash can be taken apart and they took the approach of saving what’s good down to just the individual component level.”

Gentleman also concurs that parts replacement can be effective. “We’ve found that disassembling is the best way to restore sash. We used to leave the sash together but, oftentimes the tenons aren’t in great shape, or the intersection of the stiles and rails isn’t real clean, and if you’ve got stripping compound in that mortise-and-tenon joint, you want to make sure that it’s all neutralized.”

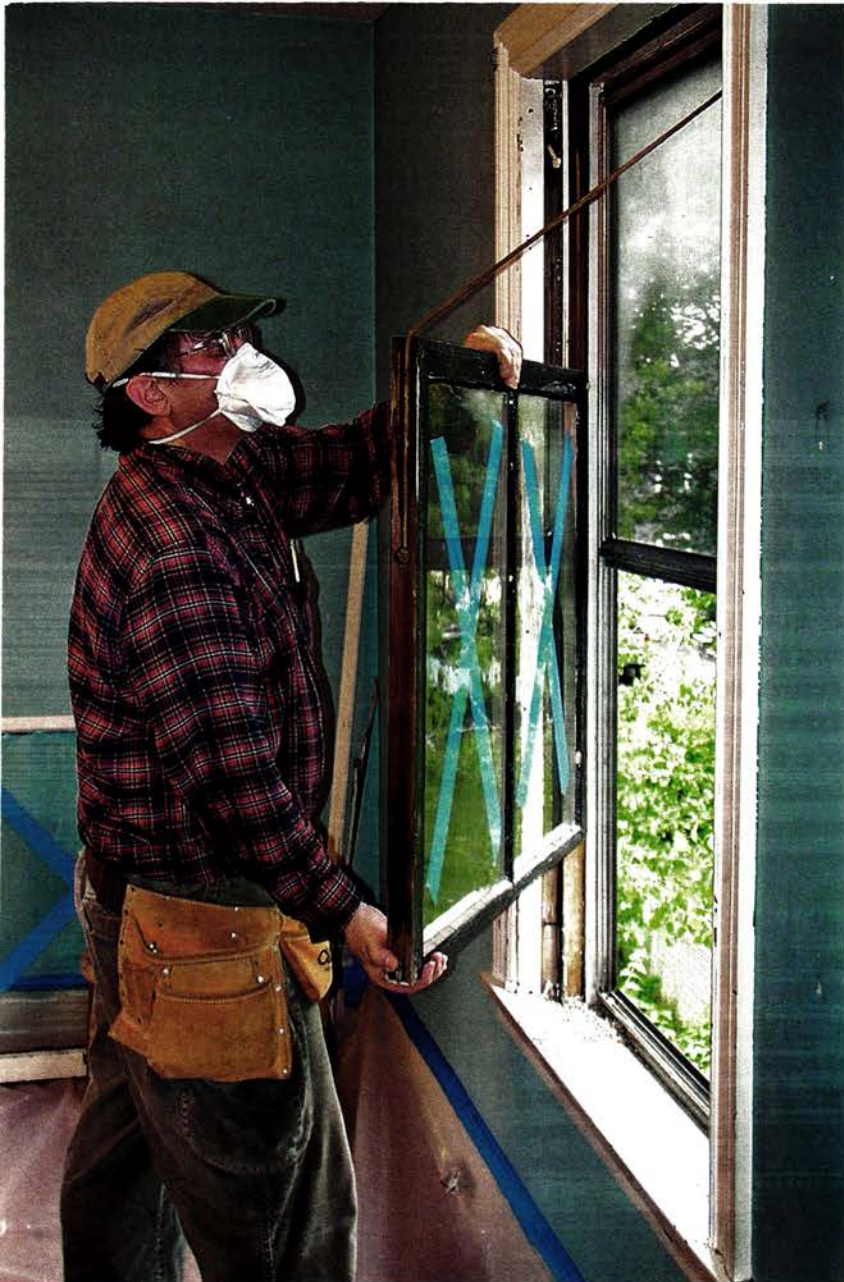
He says his company likes to save as much original wood as they can – “because it’s better than pretty much anything on the market today” – but it has got to be pragmatic. “If you’re going to spend three hours trying to save a rail, and it only takes a half-hour to manufacture a replica, then we’ll manufacture a replica.”

Sandor agrees that whether or not to repair or replace individual parts has its own tipping points. “Usually, if you have a piece that’s rotted, the whole window is going to be on the rough side, and it’s not a single little piece that’s bad. By the time you get around to replacing small pieces of an assembly – after taking it apart – it may not be reasonable.” Plus it opens up a philosophical question. “If you have to use enough chemicals – epoxy and everything else – to consolidate, fill, build up and add on, are you really left with an authentic piece of material?”

the manufacturing constraints of conventional replacements,” he says.

However, just because a window is outside the retain-at-any-cost category, does not mean it must cascade quickly to the opposite end of the spectrum. Gentleman finds misconceptions are part of the issue. “When people see an old window that has been painted shut or has flaking paint, they often jump to the conclusion that it needs to be replaced. They fail to understand that the window can be restored to its original state and last another 100 years.”

Leeke agrees. When asked if there is a limit to the rehabilitation of windows, he responds, “There is no point of no return, in my expe-



LEFT: John Leeke removing the sash of an historic wood window for repair.
Photos: courtesy of John Leeke

BELOW: John Leeke was able to rehabilitate this wood window, and return it to its original size.



Indeed the level of deterioration is often a Rubicon where tax incentives are involved. "You have to start from the point of view of deterioration," says Sandor. "If you can't make a case – even a feeble one – for deterioration as the justification for replacing a whole window, then the project may not be able to meet the Standards."

Leeke points out that there's more than one way to apply the concept of partial replacement. "All the windows in a building don't have to be treated in the same manner. Instead, each window can get individual consideration according to a window conditions survey."

Unfortunately, he says this approach is not common, especially on institutional or large buildings, because it requires phasing the work out and someone to make specific decisions about each window. "It seems like it's easier to say 'OK, let's do XYZ to everything,' but if you break the work down to each window getting just what it needs, then the project often ends up coming in at a lower cost, with a bigger bang for the buck."

Gentleman calls this a hybrid project and cites the soon-to-be-repurposed Old Post Office in Washington, DC, as a textbook example. "Of the 1,128 windows in the building, some are in very, very good shape, some are in moderate condition, some are in very poor condition, and a few have been replaced by louvers, so they need to go all the way back to being a window. So this project is going to

have a mixture of 1) restore everything and bring it back to what it once was, as well as 2) replicate parts and pieces, sash or complete units when needed, and match exactly what was there."

This issue includes reviews of two important books on windows: (1) *Window Preservation Standards, A collaborative work by members of the Window Preservation Standards Collaborative. Edited by John Leeke;* and (2) *Save America's Windows, by John Leeke of Historic HomeWorks, Portland, ME. See page 62.*

What's New is Old Again

Moving further across the spectrum, Sandor describes two more common situations. "So if you can't fix a sash with really minor repairs, maybe you can just replace the sash. This keeps the historic weights and pulleys in place (a very renewable, repairable system) and doesn't need to change the appearance of the window at all." Whether such a half-new, half-old approach is window replacement, though, can be an open question.

"The next step up in terms of replacement," Sandor explains, "might be one of these prod-

ucts where you use new sash that has insulated glass and spring-loaded tracks that allow you to deal with the weight pockets (which can be a real pathway for infiltration in some buildings)." He adds that there are limitations to such systems, one being their ability to match the size of monumental windows, "but they can be viewed as, perhaps, the next level of intrusiveness before you end up tearing out the whole window."

Ultimately, there are many cases where the whole window does need to be replaced. "The thing that we all need to remember," says Sandor, "is that there is no perfect manufactured product. Unless you take the historic window to a shop specializing in one-by-one craft construction and say 'Here, make me one exactly like this,' there is going to be some difference in the appearance of the window."

He adds that the tradeoff with an individually shop-built window is that you lose all the cost-effectiveness of mass-production. Also important to remember is that introducing insulated glass – often a main driver behind window replacement – requires altering the dimensions of muntins, rails and other parts from historic proportions in order to accommodate both the extra depth and weight of the glass units, changes necessary even in custom-crafted windows.

In fact, he says that, in his view, a substantial percentage of the problems with window replacements are in their installation. "You can

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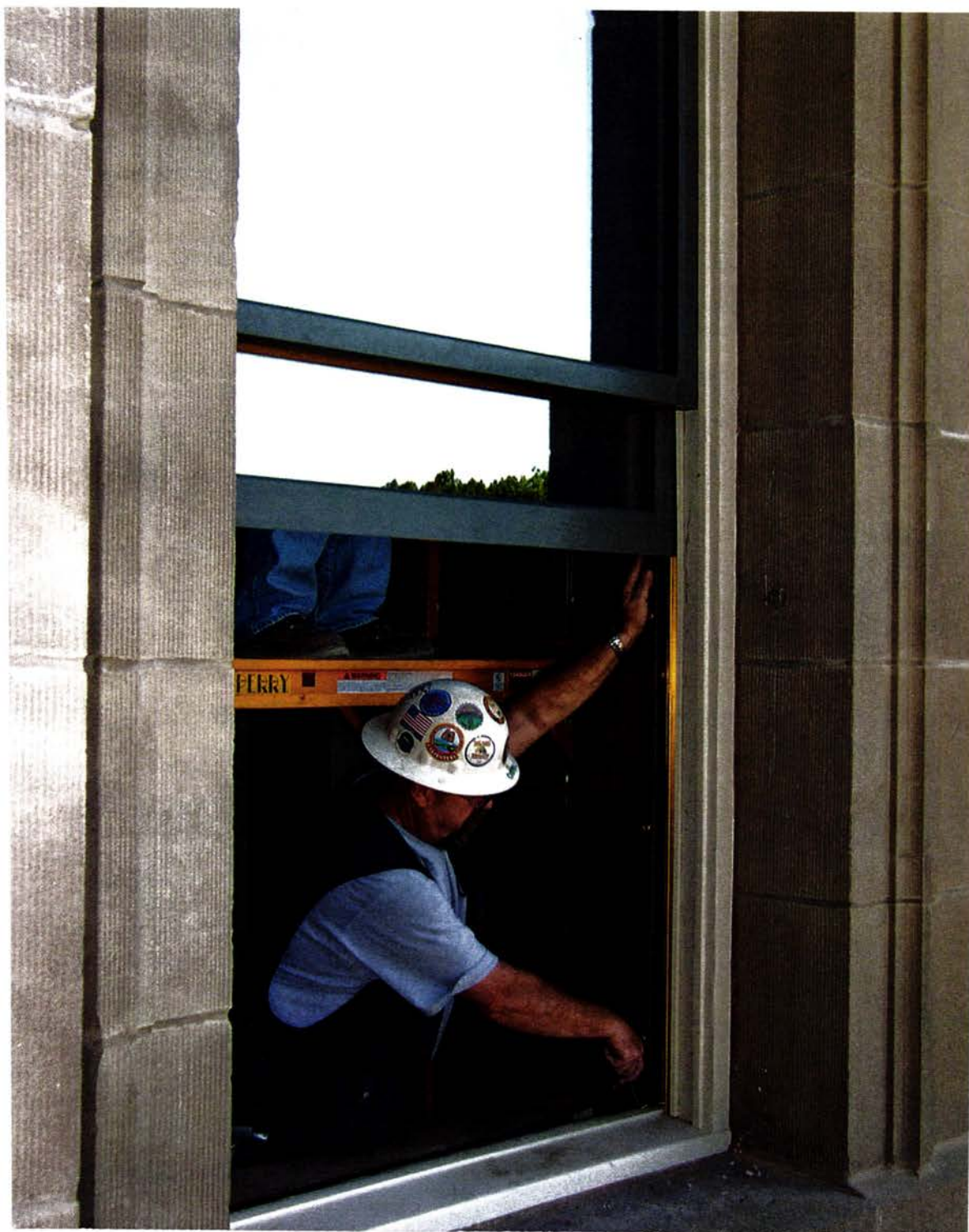
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www.woodwindowworkshop.com

The Woodstone Co.

Westminster, VT
www.woodstone.com

Zeluck Windows and Doors

Brooklyn, NY
www.zeluck.com



Re-View restored the frames and manufactured replica sash with insulated glass for the wood windows at the Idaho State Capitol. This photo shows the workman installing the repaired windows in the original historic frame. Photo: courtesy of Re-View

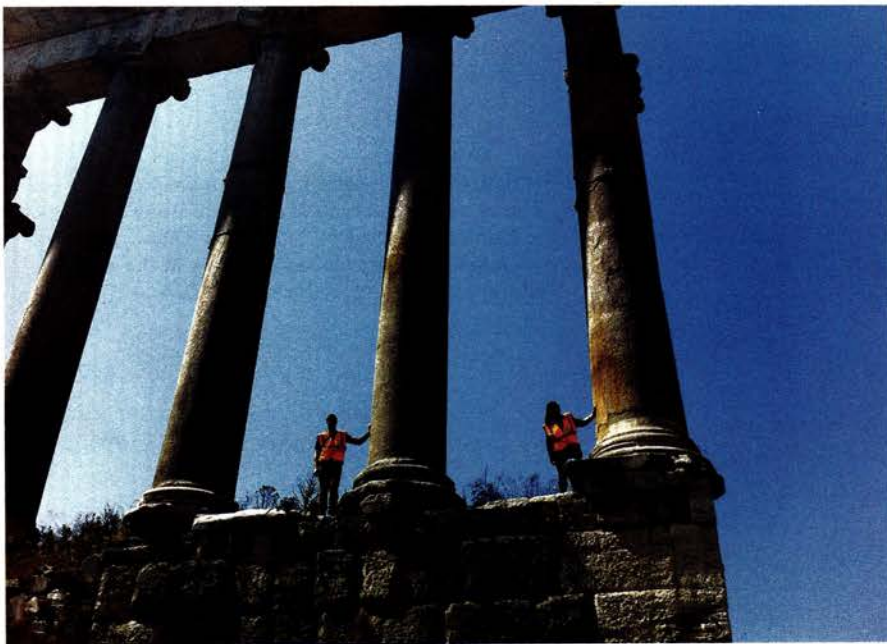
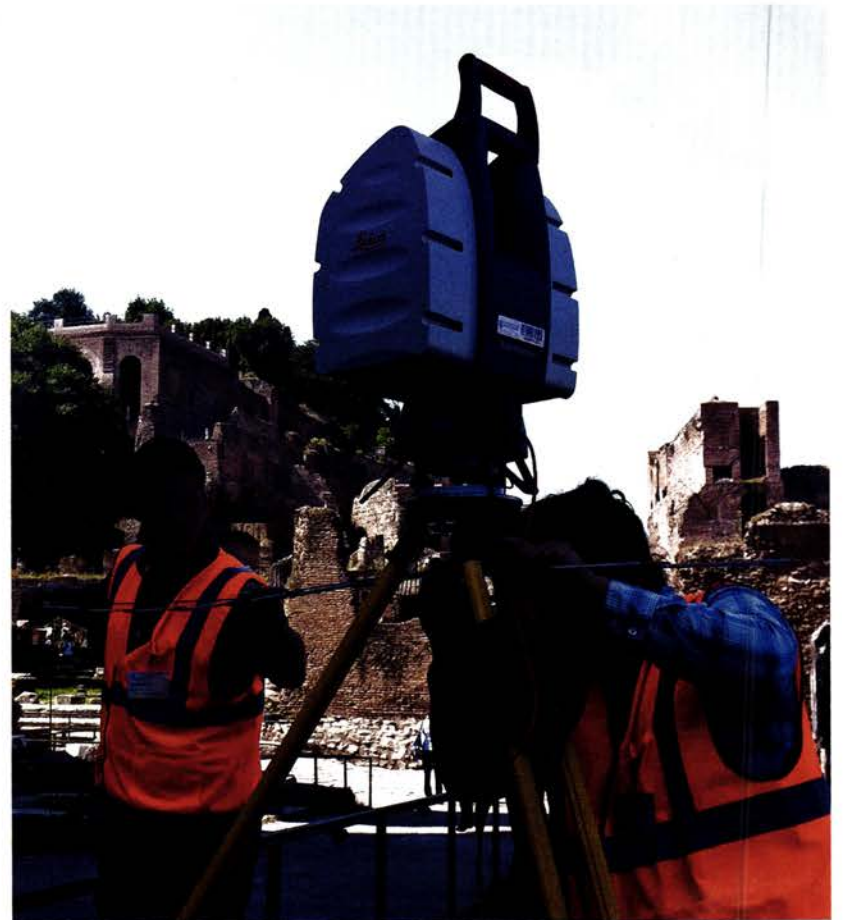
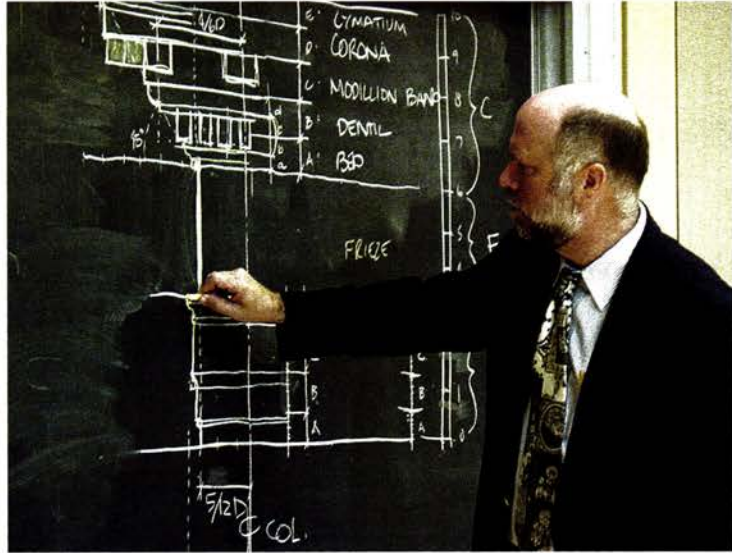
take a perfectly good new window that could be a good replacement for a historic window, and produce a very poor match if you install it incorrectly."

Replacement then is typically a matter of some level of compromise, of managing details so that the noticeable change is as little as possible. "Every application has different criteria for making that selection," Sandor says. "What might work in one project may be less important on another, based upon the way it's installed in the opening, and how you see the window."

Gordon Bock lists his 2014 seminars, keynote lectures and workshops at www.gordonbock.com, including the upcoming seminar on The Vintage House at ArchitectureBoston Expo in October (www.abexpo.com). For more information on historic wood windows, see Gordon Bock's story "Changing Styles," in the June, 2012, issue of Traditional Building magazine. www.traditional-building.com/Previous-Product-Reports/3-woodwindows-June2012.htm.



For additional photos and other content, see the web version of this article by visiting "The Magazine" on Traditional Building's home page – www.traditional-building.com.



CLOCKWISE FROM TOP LEFT: Steven Semes lectures on the Classical orders, preparing the students to understand and design in the formal language of Classicism in order to become both designers and preservationists of traditional architecture. All photos: courtesy of University of Notre Dame School of Architecture

DHARMA (Digital Heritage Architectural Research and Material Analysis) Lab students use high-tech three-dimensional scanning equipment to make super-accurate records of this most important historic site. Student work was included in an April 2014 exhibition at the Roman Curia (former Senate House) co-sponsored by the Italian government.

Students participating in the DHARMA Lab make detailed studies of the monuments in the Roman Forum, including the Temple of Saturn. Their investigations have assisted in better understanding the history of these ancient structures, including the results of earlier restorations.

“What’s an Architrave?”

Notre Dame announces graduate degree in historic preservation. **BY STEVEN W. SEMES**

“IT’S A NO-BRAINER,” SEEMS TO BE THE MOST COMMON RESPONSE, followed by “It’s about time!” These are frequent reactions to the news that the School of Architecture at the University of Notre Dame is launching a graduate degree program in historic preservation. Since the early 1990s, the School has established an international reputation as a unique university curriculum founded on Classical architecture and traditional urbanism for both undergraduate and graduate students. Since 2007, the undergraduate curriculum (a five-year course leading to the Bachelor of Architecture professional degree) has offered an

optional concentration in Historic Preservation.

Now the graduate programs (leading to either a professional Master of Architecture or a non-professional/post-professional Master of Architectural Design and Urbanism in either two or three years) will be joined by a new two-year degree, the Master of Science in Historic Preservation. The new course will be open to students holding a previous degree in architecture (professional or non-professional) and is conceived as a specialization for those young architects already on the path to professional careers in architecture, urban design, public service, real estate development, construction or preservation advocacy.

The reason for the common reaction is simple: The extension of the existing curriculum into historic preservation brings to that discipline the unique skills and outlook that a foundation in Classical architecture and traditional urbanism offers. In other words, it will train designers to be preservationists. The new program will likely be the only university program in the world where the students will first learn how to design the kind of architecture they are being asked to preserve, giving them an understanding of our built heritage “from the inside,” and fostering the respect for historic places that should be the starting point for preservation policies and treatments.

Students make field trips outside of Italy, including this visit to Athens, where they met the restoration team for the Parthenon and observed the crafting of new replacement elements (such as column capitals) carved from the same Pentelikon marble used two and a half millennia ago.



Just as importantly, the new program will train preservationists to be designers. Those responsible for the care of our historic resources will be equipped to design additions to structures or infill projects in historic districts and landscapes that sustain a continuity between historic and contemporary practices of architecture and urbanism. The curriculum seeks to re-establish the connection between preservation and design long broken by the modernist antagonism between new and old, so that architecture, urbanism and historic preservation can once again be a single discipline united by a common conservation ethic.

People outside the field are largely unaware that few preservation professionals are trained in the design traditions they are asked to preserve. Most have studied traditional styles as “history,” but not as “design.” This absence of training in the Classical was brought home to me years ago when I worked in a leading preservation firm in San Francisco, where one of the partners had been dubbed “Mister Preservation” by a local newspaper. One day, when a current project was pinned up on the wall and the whole office was invited to offer a critique, I raised my hand and noted the odd proportions of the architrave on the building. Mister Preservation responded by asking, “What’s an architrave?” My thought then was: how can you restore an architrave if you don’t know what it is? Would you trust a dentist who gave you a blank stare when you asked him about your molars?

The new Notre Dame program aims to send into the field architects who know what an architrave is, not only because they have read about them in books, but because they have designed them – maybe even made one by hand – and understand well their profiles, proportions, use and role in the larger compositions of which they are a part. Students will learn to draw the Classical orders and design with them, as well as mastering all the other parts of traditional buildings. They will learn how traditional towns and cities are laid out, what makes their streets and squares lively, how buildings and spaces work together to create beautiful and sustainable places, and how conservation efforts can help keep historic cities alive. Above all, students learn what preservation is for: it is not simply maintaining documents of past times, but caring for a living heritage that is the valued setting for a meaningful community life into the future.

We have an outstanding faculty. Joining me on campus will be John Stamper for the history of American architecture, Philip Bess will offer urban design studio, Alan Defrees will teach materials and methods of traditional construction and conservation, and Todd Zeiger will lead classes in documentation and research as well as preservation practice. In Rome, Krupali Krusche will direct a design studio; she and

Selena Anders will lead a hands-on class in site documentation and fieldwork, and Alessandro Pierattini will organize an international conservation laboratory course. These Rome classes will actively draw upon the unparalleled international expertise available in Rome and the strong connections that the University has fostered with local institutions.

The new course of study comprises four academic semesters, plus two summers, the first of which is a month-long preliminary course required of all entering graduate students. This emphasizes the formal language of Classicism for students already trained in the basic skills of drawing and design, and reviews such techniques as perspective drawing, casting shades and shadows, and watercolor rendering. The first semester introduces the classical language of architecture, the principles of traditional urbanism, research methods and documentation, and an elective. The second semester offers a studio in traditional urban design, as well as courses in the history and theory of preservation, historical building materials and methods, and the history of American architecture.

An intermediate summer internship is intended to offer students opportunities for hands-on experience in conservation, either at home or abroad. Here, the program will capitalize on Notre Dame’s network of contacts with international institutions to provide unique opportunities for our students. The third semester is spent at our facility in Rome, where students will not only study the magnificent architecture and urbanism of the Eternal City, but will learn from international experts in research and documentation, conservation, restoration, archeology, cultural resource management and allied fields.

A special feature of the Rome experience is student participation in the DHARMA program (Digital Heritage Architectural Research and Material Analysis) led by Professors Krusche and Anders, a high-tech digital documentation project founded in 2007 that focuses on scanning historic sites such as the Roman Forum. The final semester, back on campus, includes a thesis project, a course

in professional practice and additional electives. Students will be encouraged to pursue elective classes in a range of other disciplines, such as materials science, art history and law.

The historic preservation field is currently experiencing long overdue debate about theory and practice, and the new Notre Dame graduate program is set to play a leadership role in shaping this debate in the years ahead. An important goal is to recover the comprehensive, multi-disciplinary approach that prevailed in the field until recent decades. As Professor Krusche notes, “Urbanism, architecture and preservation are three fields that work hand-in-hand. One has to learn the other two to do a good job in any one of them. Notre Dame will offer students the opportunity to be equally adept at all three.”

The program will also bring together related interests that currently tend to work in isolation: sustainability, New Urbanism, grassroots preservation, construction crafts and traditional architecture. The aim is to prepare professionals with a comprehensive view of the built environment and ready to assume their responsibilities for making our cities more beautiful, sustainable and just.

We look forward to welcoming our first entering class in the fall of 2015. The illustrations accompanying this article show recent students, both graduate and undergraduate, in related existing programs here at Notre Dame. Readers interested in learning more about the program, or who know someone who might be, are invited to visit our website at architecture.nd.edu/historicpreservation.

Steven W. Semes is director of the Graduate Program in Historic Preservation at the Notre Dame School of Architecture. He is the editor of The Classicist and the author of The Future of the Past: A Conservation Ethic for Architecture, Urbanism, and Historic Preservation (W.W. Norton & Co., 2009) and a frequent contributor to Traditional Building. He received the Clem Labine Award in 2010 and writes a blog, “The View from Rome” at traditional-building.com/Steve_Semes.



Pages from a Sketchbook: A Model Street for Cities

BY ERIC Osth, AIA

IN 1924, THE POET PABLO NERUDA WROTE, “forgetting is so long.” He meant that, compared to life and love (which are too short), forgetting has the great danger of becoming permanent and we can lose so many things we value. We cannot afford to forget that great streets can serve as centers of urban life, creating character and regeneration. Sadly, we have rarely tried to understand the power of streets and how they can transform our cities and neighborhoods.

In recent decades, street design has become an awkward byproduct of a number of factors: lack of coordination between design and engineering professionals, and a subscription to the unwelcome belief that streets are only to serve cars and for nothing else. Now, more than ever, it is critical to use streets to comprehensively coordinate the competing technical and qualitative interests of business

owners, residents, pedestrians, cyclists, utilities, storm-water and vehicles that comprise street environments. Our focus at Urban Design Associates (UDA) has always been to re-imagine streets as the center of urban life, providing function and livability. We have seen that great streets drive the success of urban revitalization and regeneration.

The first major effort to truly separate cars and pedestrians was within Radburn, NJ, a 1929 planning experiment in a superblock development that changed the paradigm of urban design and planning. The Radburn model was a reaction to the negative safety and technical impacts of automobile culture on our cities and towns. This effort, and others like it, had the unintended effect of privileging automobile traffic over pedestrian movement and gave large parts of our urban space over to the rule of cars. Thus, we forgot to think about streets

as an integral part of comprehensive public space design. The quality of our cities has suffered for it.

We should create high-quality streets because, as central aspects of our culture, they connect us to one another on many levels. American city streets occupy between 25–35% of urban developed land. We cannot let this extraordinary amount of space fall victim to the same lack of imagination and uniformity of experience that produced repetitious and uninspired suburban streets.

Fortunately, much has been written about streets and public space lately, including *The Boulevard Book* by Jacobs, MacDonald, and Rofe; *The Language of Towns & Cities: A Visual Dictionary* by Dhru Thadani, and *Street Design: The Secret to Great Cities and Towns* by Victor Dover and John Massengale. These inspired works remind us of what we have forgotten. Urban designers have

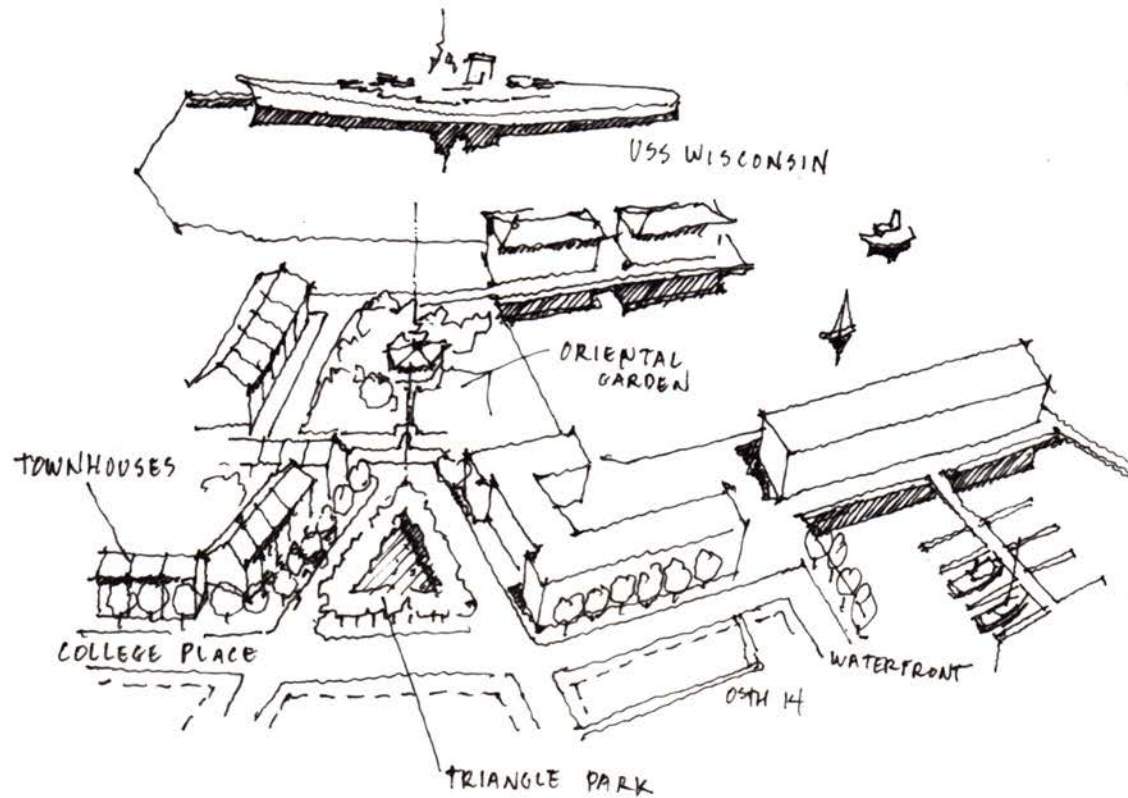
ABOVE: This watercolor drawing by Urban Design Associates, shows downtown Norfolk in 2010, after revitalization. The catalytic work of the city leadership with the UDA team has created a fully developed, 24/7 downtown for living, working, learning and entertainment. Photo: David Csont, Urban Design Associates

INSET: College Place, a picturesque street in Norfolk, VA, and a model street for cities, joins the Freemason Neighborhood and the downtown. It is a center of urban life for the west side of downtown, bringing together residential, commercial and institutional uses on one memorable street.

RIGHT: This aerial sketch of Triangle Park, named for its obvious shape, encloses a small residential park in the context of the city. The three points of the park carry energy to the waterfront into the neighborhood. Just beyond Triangle Park are two contrasting public Norfolk landmarks – the peaceful Oriental Garden and an antique weapon of war, the World War II Battleship USS Wisconsin, now a museum. All drawings: Ink on vellum, by Eric Osth, AIA, unless otherwise specified

BELOW: At a dimension of approximately 60 ft. (building to building) and with a paved width of approximately 30 ft., College Place has a very intimate feel that is reminiscent of Norfolk's historic streets. In 2012, the Freemason neighborhood, which includes College Place and historic streets to the north, was selected as one of the 10 best neighborhoods in America. Photo: Eric Osth

BELOW, RIGHT: The townhouses of College Place vary in character and design. Those fronting Triangle Park are of the highest quality of design and implementation.



Boush St. was restored to a mixed-use boulevard and Duke St. became a neighborhood street, connecting pedestrians and cyclists to downtown once again. In 2012, the American Planning Association named the Freemason Neighborhood one of the ten best neighborhoods in the United States.

A second key initiative of the Downtown Update was to create a 3,000-student downtown campus for Tidewater Community College (TCC), adjacent to the Freemason Neighborhood. The area, originally a forgotten corner, now makes use of existing buildings and new construction around a center quad that serves as an open space for the campus.

UDA provided architectural design for the renovation of TCC's library and a new Mason Andrews Science Building. These projects, as well as the newly established residential and student populations in the area, contributed to the successful revitalization of Granby St., Norfolk's 'Main Street' of shops, cafes and restaurants that runs through the campus itself.

In all of its Norfolk efforts, UDA works with city leadership and stakeholders to develop a collaborative vision for the design and to build public and private support. The Freemason and TCC initiatives were prototypes, followed by continuous incremental revitalization to transform the city into a vibrant, walkable urban center.

A Walk on College Place

The revitalization of Norfolk is one of UDA's proudest achievements in our 50 years in practice. As a relative newcomer to practice in Norfolk, I have the opportunity to observe the city today, without any preconceived notions of what might have been and any knowledge of the years of collaborative effort and investment to reach implementation. In particular, I was delighted to discover College Place, a street that joins the Freemason Neighborhood and TCC. It is representative of a street that has healed and embodies our goals of urban life with a variety of experience.

Although the planning in this area has been aggressive in its call for rebirth, College Place has

worked with this issue of streets to great success, balancing modes of pedestrian, cyclist and vehicle transportation to create beautiful, functional and highly livable cities. These are well-documented stories of the catalytic power of urban revitalization through the use of infrastructure and public space.

At one time, Norfolk, VA, like so many other cities, was a place that had forgotten the value of streets. The story of its revitalization reveals the opportunities streets provide. College Place in particular, embodies the important lessons of comprehensive street design and capitalizes on its ability to revitalize and enhance urban life. I spent an afternoon sketching along College Place, giving me the opportunity to rediscover the street and consider its relationship to the adjacent neighborhoods. I recorded details that I might have otherwise overlooked and experienced the day in the life of a great urban street.

UDA in Norfolk

In 1989, downtown Norfolk was a city ripe for revitalization. UDA and my partner, Ray Gindroz, FAIA, began working with the mayor, the Redevelopment Authority, and City Planning leadership in a remarkable effort to rebuild a downtown core and its contributing urban neighborhoods. We reconsidered the character and function of streets and public spaces in order to create

vibrant, resilient and highly desirable urban places.

The work was extraordinary in that it changed policy, broke down institutional silos of the city government, and thus brought departments together with a core vision for revitalization. Norfolk has been fortunate in its political and administrative leadership. Through the terms of three mayors and city managers, the process continues to this day. Design of public space, something that had been lost, became the primary focus of discussion. This was a crucial move at a critical time for Norfolk.

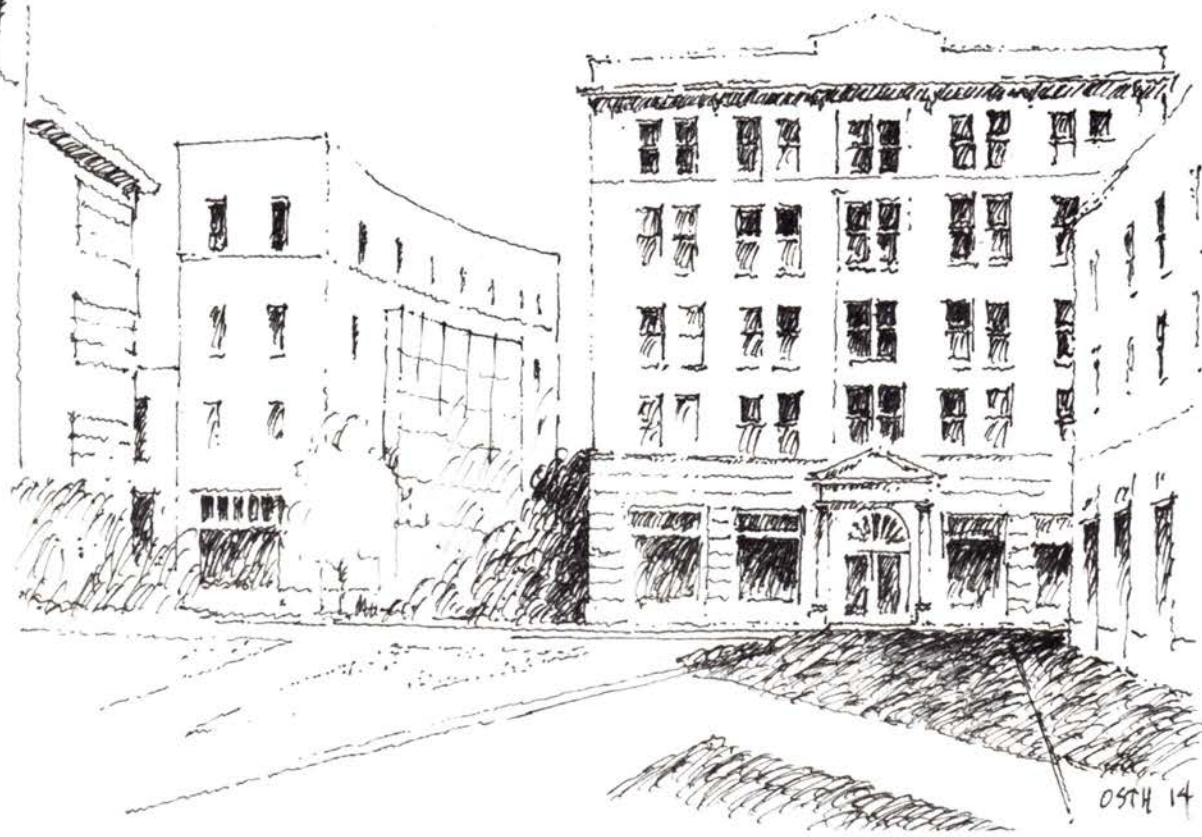
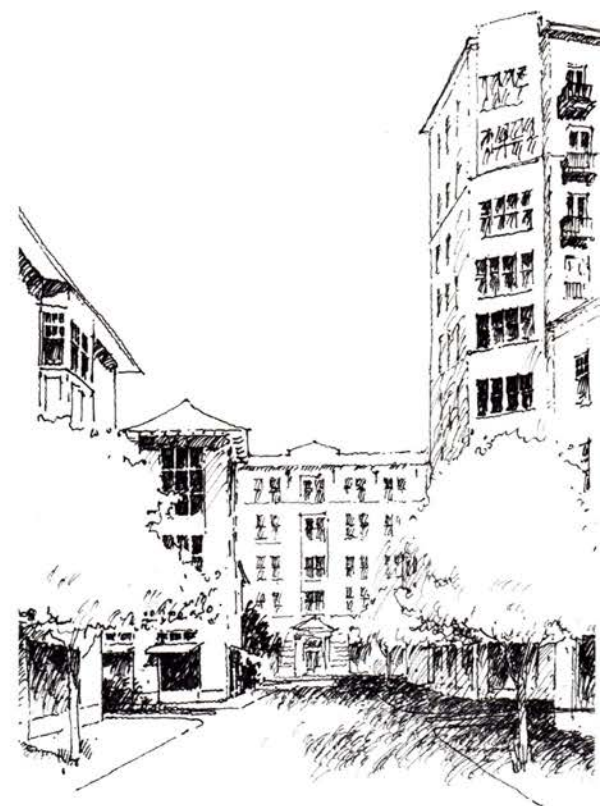
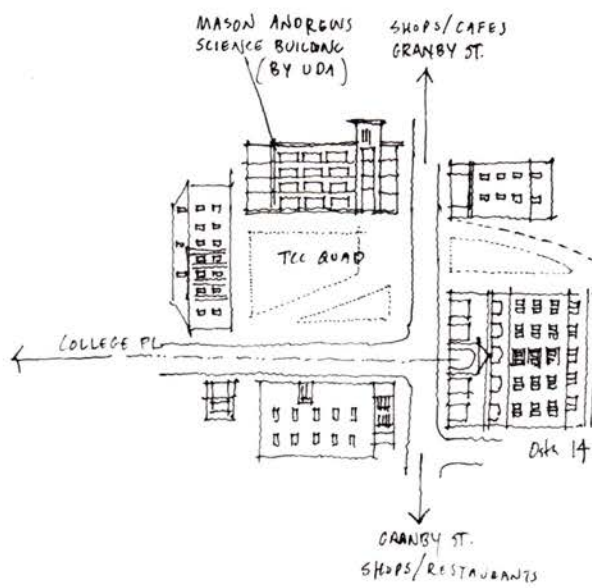
The Downtown Norfolk 2000 Update to the city's Master Plan included several initiatives to revive and reconnect city neighborhoods to downtown. The Freemason Neighborhood arose as a critical effort to provide high-quality urban housing immediately adjacent to and connected with downtown. The area was a mix of historic housing and industrial properties serving Norfolk's working waterfront. In the 1960s, it was cut off from downtown when Boush and Duke Streets were converted into high-speed one-way roads designed to quickly move cars in and out of Norfolk. Between the roads, parking lots were constructed to make way for a freeway that was never built.

The Freemason planning process was an exercise in healing the downtown. This single effort balanced the quality of urban life and the downtown experience with the needs of commuters.

RIGHT: The quad of Tidewater Community College was master planned by UDA. It is a combination of existing buildings and new construction. The Mason Andrews Science Building, designed by UDA, anchors the north side of the quad.

FAR RIGHT: This field sketch toward Boush St. and Tidewater Community College shows the variation of scales of buildings along College Place. Once a barrier, busy one-way street, Boush St. is now a boulevard of trees and mixed-use buildings of retail and residential. The Library of TCC, on axis with College Place, serves as pleasing vista termini.

BELOW: This field sketch of the Tidewater Community College Quad, illustrates an urban academic space that is thoughtfully stitched together with new and existing buildings. The energy of TCC has been catalytic and a key contributor to the revitalization of Granby Street, the "Main Street" of downtown Norfolk.



new construction. Of the new buildings, the most prominent is the Mason Andrews Science Building designed by UDA. In the tradition of great public spaces, the building's circulation faces the quad, stimulating it with visible activity.

As an architect and urban designer, I found that learning about College Place was a truly enjoyable experience. Drawing it took my understanding to a deeper level – the intricacies of how it works, its truly powerful shapes, and the diverse architecture. College Place hosts a collection of uses and spaces that includes pedestrians, bicycles, cars and public transit. It addresses the need for great streets as models for livable cities, and to correct long-standing urban design ills.

More and more, cities need streets that create beautiful experiences and handle various competing interests in a comprehensive manner, without privileging one over the other. These cities will work for today's lifestyle of healthy urban living – connecting work, learning and play. Streets must be walkable, and they must create small, intimate urban spaces, transforming cities as a whole into more livable entities.

Perhaps by living and working on streets like College Place, we can remember our best, most aesthetically pleasing and useful city spaces. By re-envisioning College Place, making it part of Norfolk's revitalization, and presenting it as a model for revitalizing cities, we can add more emotional depth and significance to urban living. Maybe we can reverse the permanence of forgetting how urban life can be valued.

Eric Osth, AIA, is a Managing Principal at Urban Design Associates in Pittsburgh, PA. Like cities and their design of public space, he had once forgotten his love of drawing. He now carries pen and paper with him at all times.



For additional photos and other content, see the web version of this article by visiting "The Magazine" on Traditional Building's home page – www.traditional-building.com.

always had energy. There were developers bold enough to build for "urban pioneers," people with an appetite for water views and interested in city life. These new residents, and these two Master Plan Update Initiatives created the catalytic energy that shaped College Place as the heart of a neighborhood with emotional, social and financial value to the city.

The street harmoniously incorporates a waterfront, townhouses, apartments, condominiums, offices, shops, institutional buildings and parks. It is a street that is not a prototypical "American" street, but at the same time, it is very Norfolk. Amazingly, all of this can be seen in just a few short blocks – a perfect place to spend an afternoon with a sketchbook.

Like so many cities with a beautiful shoreline, the waterfront at the end of College Place was the first area of development. It is an intimate cove set within Norfolk's busy working city waterfronts, home to boats of all shapes and sizes. The architecture here, from the 1970s and '80s, shows the typical shyness for a robust expression of outdoor porch, balcony and terrace elements, that are now standard in modern city and neighborhood design.

Only one block inland is Triangle Park, an energetic green space that is lively and well used. The

park's dynamic shape creates outstanding views from within. The activity of this park is in sharp contrast to the two adjacent Norfolk landmarks to the south. Beyond a portal, is the quiet and serene Pagoda & Oriental Garden. Looming beyond the Oriental Garden is the World War II-era battleship, the USS Wisconsin, a once-ominous weapon of war, reminding us of Norfolk's history on the world stage.

One block east of Triangle Park is a small "parklet" in the middle of College Place, an island that is as much a gateway as it is a traffic-calming device. It provides a symbolic transition from the residential neighborhood to the mixed-uses of downtown. Standing here, you can see it all: to the west, the edge of Triangle Park; to the east, busy Boush St. and TCC.

Walking east takes us to Tidewater Community College, an urban college campus at the intersection with Granby St., the 'Main Street' of downtown Norfolk, a street of retail, restaurants, coffee shops and music venues that activate it at all hours. College Place terminates at a former department store that now serves as a library and has become the heart of the campus.

The college quad is a harmonious public space composed of historic buildings and complementary



PROJECT

Lincoln Hall, University of Illinois at Urbana-Champaign, Champaign, IL

PROJECT ARCHITECT

CannonDesign, New York, NY

ASSOCIATE ARCHITECT

Bailey Edward, Chicago, IL; Robin Edward Whitehurst, AIA, LEED AP, principal-in-charge; Susan Turner, AIA, LEED AP, PMP, historic preservation leader and project manager

GENERAL CONTRACTOR

Williams Brothers Construction Co., Inc., Houston, TX

LEED

Platinum

Lincoln Hall, a century-old icon located on University of Illinois Urbana-Champaign's main quad, has recently undergone a \$40-million restoration and rehabilitation led by New York, NY-based CannonDesign with Chicago, IL-based Bailey Edward serving as the associate architect. Photo: Photography by © WayneCable.com

Preservation and Sustainability in Harmony

WHILE MOST STUDENTS AT THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN (UIUC) will eventually attend a class in Lincoln Hall, home to the College of Liberal Arts and Sciences, few would have stopped to admire the artistic and historic details on the building, until now. The 100-year-old, four-story structure has recently undergone a \$40-million rehabilitation and restoration lead by CannonDesign of New York, NY, with Bailey Edward of Chicago, IL, acting as associate architect. Project goals included the restoration of historic spaces, complete rehabilitation of the building interior to provide 21st-century education environments, additions to accommodate the school's growing programs and mechanical systems upgrades that

didn't interfere with the building's historic fabric, and all while aiming to achieve LEED gold status.

"As associate architect, our primary task was the historic preservation elements," says Robin Whitehurst, principal-in-charge at Bailey Edward. "That includes the building exterior, significant interior spaces that were historic as well as working very closely with the entire design team with integrating infrastructure systems in an appropriate way that would meet the Secretary of Interior's Standards for Rehabilitation."

Lincoln Hall was built in 1912 to commemorate President Abraham Lincoln. An example of Neoclassical architecture, the building also features Prairie style influence with its large 5-ft. bracketed



LEFT: An in-depth study was conducted to examine the comparative efficacy of whether to restore or replace existing windows. As maintenance cost was the primary driver, UIUC elected to replace windows with wood-clad aluminum windows. Photo: Dave Burk at Hedrich Blessing

Rather than replace missing portions of the terra-cotta elements and plaques on the exterior, an art conservation approach was used to preserve them. Photo: Photography by © WayneCable.com



copper overhang, terra-cotta bas-relief plaques along the east and south elevations that depict scenes from President Lincoln's life and a limestone watercourse. In 1927, an addition was built on the rear to create what Whitehurst describes as a square "doughnut" shape with an auditorium at the very center that allowed for two courtyards, one on either side.

"When they built the addition, the design tried to match the original building as closely as possible in terms of material and detailing on the exterior," says Whitehurst. "In the interior, the design went a different direction. The designer at the time was exploring new materials for the addition. That's why the spaces weren't restored to one time period but rather to their original respective dates. We were consulting with the Illinois Historic Preservation Agency and Melvyn Skavarla, the campus preservation officer, throughout the project to ensure accuracy."

A comprehensive feasibility study was conducted and from an historic preservation standpoint that meant thoroughly understanding the history of the building, the materials used and its present conditions, and to research the appropriate methodology to restore them. Among other things, the study found that the brick exterior required repointing. "We discovered that the college had done a 'Mass Grouting' campaign in the 1970s where they treated the brick repointing as if it was a tile project," says Whitehurst. "They taped the face of the brick and smeared mortar into the joints. We found pieces of tape still embedded in the mortar, which was how we unraveled what they had done. Unfortunately, a very high Portland content mortar was used and the removal of that material became very difficult."

To ensure that the brick repointing would appear uniform, Whitehurst and Susan Turner, historic preservation leader and project manager at Bailey Edward, specified that all of the masons at Mid-Continental Restoration Co. of Fort Scott, KS, the firm responsible for masonry restoration, as well as the Bailey Edward team, attend a two-week class on how to correctly repoint historic masonry. After the repointing was completed, the bricks were cleaned with Vana Trol, manufactured by Prosoco of Lawrence, KS. "Our staff took the course so that we could evaluate if the masons' techniques were appropriate to achieve the results that we needed," says Whitehurst. Karla Smalley, AIA, LEED AP of Bailey Edward, served

as the project's on-site architect and construction observer. She was available to review each of the eight contractors' work and provide design direction when required.

The study also found that the terra-cotta bas-relief panels were in poor condition. There was crazing in the glaze and some portions had fallen off. However, rather than replacing damaged pieces, the team took an art conservation approach to preserve them. Edison Coatings of Plainville, CT, manufactured the coating that was applied to all of the terra-cotta elements on the exterior.

To determine the best sustainable approach for the windows, Bailey Edward conducted an in-depth study to examine the comparative efficacy of whether to restore or replace existing windows. "We did four physical mock-ups of these very large double-hung wood windows," says Turner. "We used an exterior storm window, a brand-new wood-clad aluminum window that looked like the original, a restored window upgraded with thermal glazing and tested them against an existing window to determine the capital cost, operational cost and maintenance cost."

"We found that the restored window worked well for historic appearances," continues Turner. "If capital cost is the main concern then the exterior storm window performed very well from a thermal viewpoint and lifecycle costs because initial costs were very expensive, but it performed poorly in terms of maintenance. Interestingly, we found that the restored window outperformed in R-value to the new window but it didn't outperform relative to air infiltration. In the end, as maintenance cost was the primary driver, UIUC elected to replace the windows with wood-clad aluminum ones [manufactured by Parrett Windows and Doors of Dorchester, WI]."

Inside, the original polychromatic paint scheme in the lobby at the quad entrance, auditorium and corridors were all covered with an institutional green. Anthony Kartsonas, principal of Chicago, IL-based Historic Services conducted a paint analysis to determine the original colors in the historic spaces, in all there were 28 paint colors and 5 different metal leafing. Based upon drawings and specifications completed by Bailey Edward, Koch Brothers Decorating of St. Louis, MO, reinstated the original polychromatic paint scheme, stenciling and leafing throughout. The firm also cleaned and restored the marble columns,

wall panels and floor tile in the lobby. A new sprinkler system was installed in the lobby's barrel vault ceiling; the sprinkler heads were painted to match the polychrome ceiling.

"There are a lot of beautiful historic custom-made light fixtures in this building and each of them had their own challenges because we wanted to restore the original fixtures while providing flexible yet low-energy fixtures," says Turner. "We worked very closely with the lighting restoration company [Lumenelle of Union, IL] to match existing fixtures in the lobby so that we could get the light levels that are required for an exit space and also to restore and retrofit the existing ones for energy efficiency."

For the auditorium, Turner was able to find the original glass segments for the basket light fixtures. "Due to seismic concerns, all of the beveled curved glass segments were removed and replaced with translucent plastic, which dramatically altered the light quality" she says. "By venturing into the attic spaces above to see if we had enough height to retrofit a wall, I located the glass segments. We retrofitted the fixtures with clips for the glass and that resolved the seismic concerns. The fixtures are back to their original appearance."

The auditorium's new function is now a lecture hall as the college was able to designate other areas on campus for theater performances. As a result, the theater's large cyclorama, a large plaster feature, was documented according to HABS standards and removed for programming space; an asbestos fire curtain painted with a Greek elegy was also documented and removed. New auditorium seating replaced the old ones and the decorative end panels were all cleaned, restored and reinstalled. While the bas-relief plaster medallions on the auditorium walls were never painted over, two of them were missing.

"In the 1920s, composite ornaments came from two locations, Jacobson & Company of New York City and Decorators Supply Corp of Chicago," says Turner. "The latter actually worked on the project when the auditorium was built. They based the medallions on a Jacobson catalog number so it wasn't



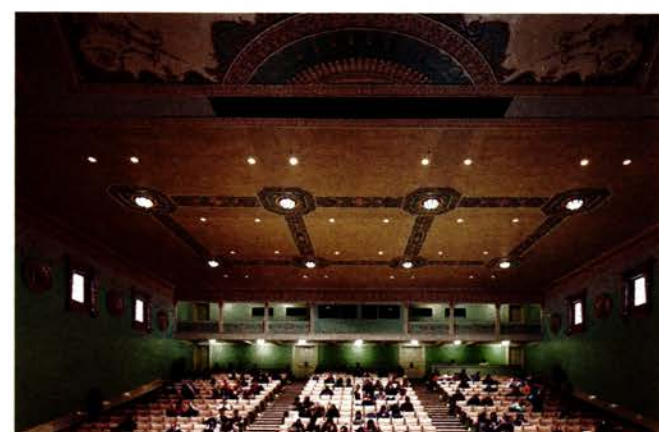
CLOCKWISE FROM TOP LEFT: The historic custom-made light fixtures in the lobby were retrofitted for energy efficiency and new lighting matched existing ones to increase light levels for the exit space. Photo: Photography by © WayneCable.com

A paint-analysis found that the historic interior was comprised of 28 paint colors and 5 different metal leafing. Photo: Photography by © WayneCable.com

As the auditorium's new function is now a lecture hall, an existing cyclorama, a large plaster feature, and an asbestos fire curtain painted with a Greek elegy were documented according to HABS standards and removed for programming space. Photo: Photography by © WayneCable.com

The auditorium's polychrome paint and historic light fixtures have been restored; its existing decorative end panels were restored and reinstalled on new seating. Photo: Dave Burk at Hedrich Blessing

The polychrome paint schemes in the historic spaces including the corridors have all been reinstated. Photo: Dave Burk at Hedrich Blessing



Jacobson products that were installed but copies." Since replacements are no longer available, Turner and Whitehurst worked with the plaster restoration contractor and Koch Brothers to sculpt and paint new medallions based on historic photographs and the colors used in the extant medallions.

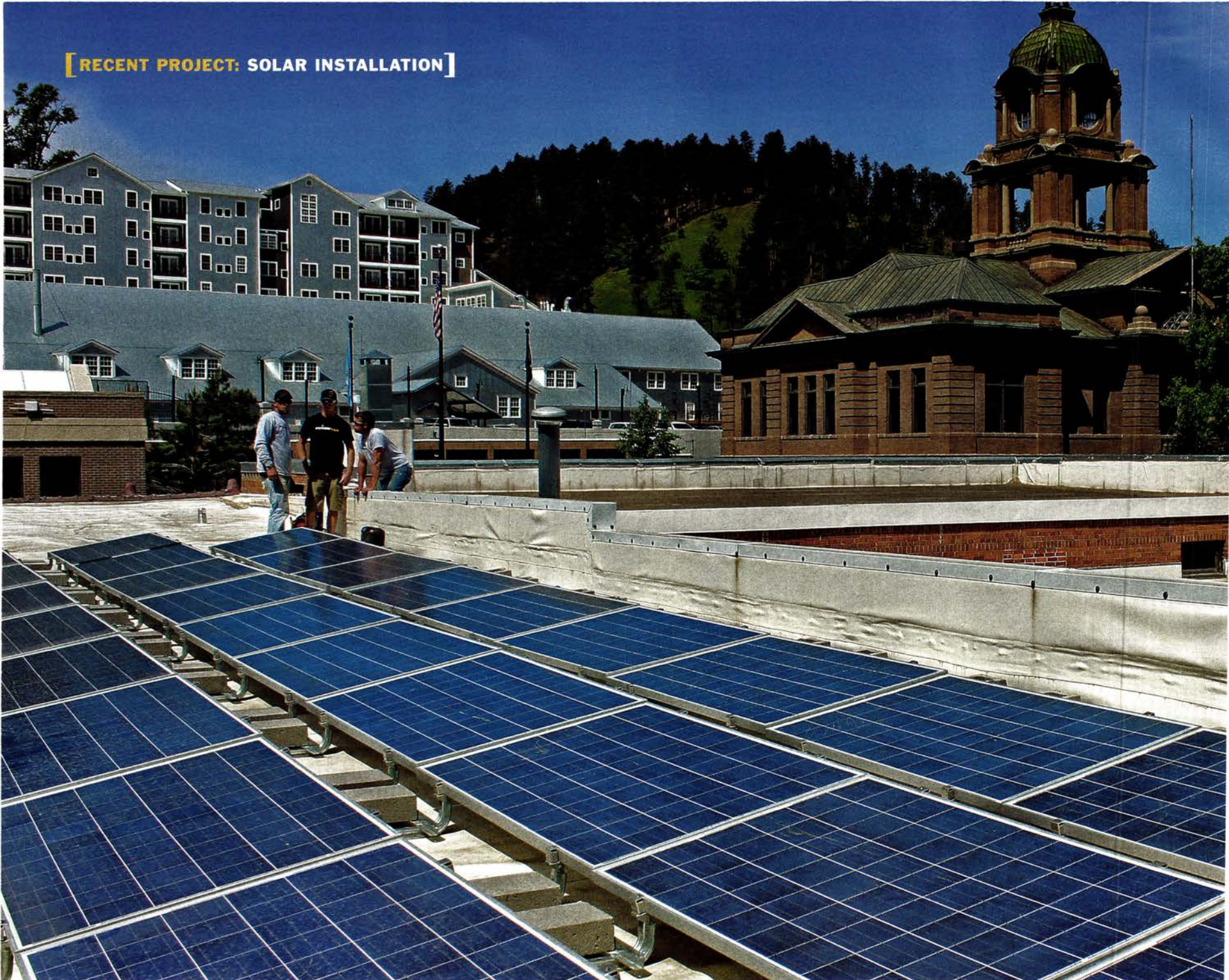
In addition to restoring the historic spaces, the Bailey Edward team worked closely with CannonDesign and the MEP engineer firm KJWW Engineering Consultants of Quad Cities, IL, in implementing new climate control systems, determining the soft spots for ramps and lifts for accessibility and mechanical upgrades for 21st-century classrooms and office spaces. The building envelope was also upgraded with Icynene spray foam insulation. During installation, all of the existing wood trim in the classrooms were removed and reinstalled

afterward. "We felt it was inappropriate to upgrade the lobby and auditorium because we'd lose the walls with stenciling, polychromatic paint and three-dimensional plaster," says Turner. "However, we conducted an energy model to prove that we've upgraded the building thermally sufficient so it wasn't necessary to intervene with the very historic spaces."

The near-decade-long design and construction process has resulted in the successful restoration and rehabilitation of UIUC's Lincoln Hall. The project has not only met LEED Gold status but has accrued enough points for LEED Platinum certification. "Where Bailey Edward differentiates itself from other historic preservation firms is that we look at a historic building as if we're part of the continuity of that building," says Turner.

"To do this, we work to fully understand how new

building codes and standards will impact the building and to fully understand the difference between preservation and sustainability," she explains. "That means to understand the building envelope design and how to weave sustainability through the design so that they're not at odds with each other and all the while tailoring the clients' needs to that balance. One of our pride points is that when we're finished with preservation, observers don't know that we were there; it looked as if the building was like that all its life." — Annabel Hsin



ABOVE: GenPro technicians Joey Davis, Bob Lavoie and Nick Licht take one last look at the recently completed solar panel installation at TDG Communications in Deadwood. The historic Lawrence County Courthouse is across the street.

Photo: GenPro Energy Solutions

OPPOSITE: The Tudor façade on the storefront at 93 Sherman St. in Deadwood, SD, reflects its longtime role as a neighborhood grocery store. Today, it's the solar-powered home of TDG Communications.

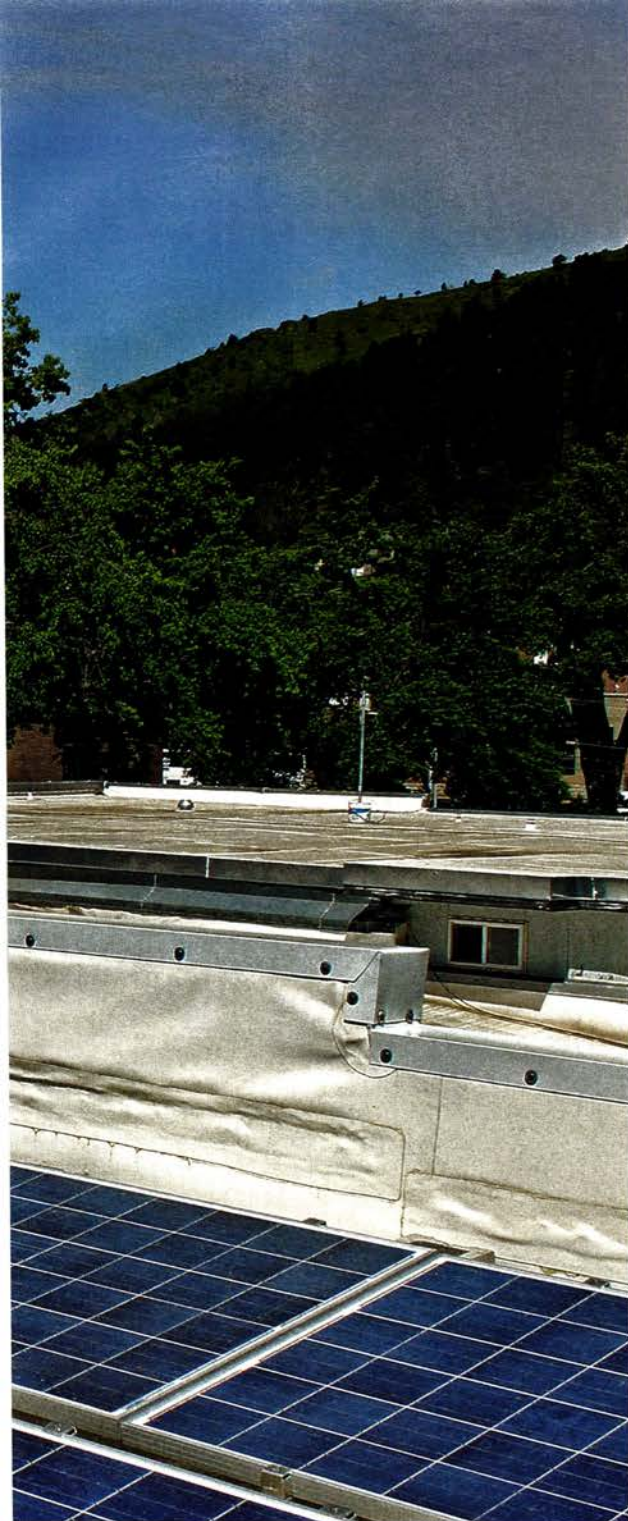
Photo: TDG Communications

Historic Building Meets Sun Power

THE TOWN OF DEADWOOD, SD, HAS A LONG AND COLORFUL HISTORY IN THE AMERICAN WEST. It all started in 1874 when General George Armstrong Custer led an expedition to the Black Hills territory owned by the Lakota and discovered gold. This led to the founding of Deadwood in 1876 and within six months the population reached approximately 4,800. It soon became known as a lawless mining town. Many years later, in 1961, the entire city of Deadwood was named a National Historic Landmark District,

citing it as "one of the most significant collections of historic structures in South Dakota."

Today the population of Deadwood is less than 1,300 and the town is known for its casinos. And, a new chapter has arrived. The TDG Communications building has become the first structure in the historic center to add solar panels. The installation was heartily supported by the town's Historic Preservation Commission, and the entire process was completed in a very short time, without the supervision of an architect.



Built in 1880, the two-story building at 93 Sherman St. was originally a dentist office and millinery store. It became a hotel for a while, and then in the 1920s, it was remodeled by Frank Merritt into a grocery store. TDG Communications acquired it in 2002.

An advertising agency, web design, public relations and marketing firm, TDG is owned and run by Dustin Floyd and Monte Amende. "I take historic preservation seriously, yet I'm a big supporter of alternative energy," says Dustin Floyd, agency manager and partner at TDG. (He also goes by the title of Benevolent Overlord and he drives a Chevy Volt.) "We weren't sure we could do this, but working with GenPro and the Deadwood Historic Preservation Office, it became clear that historic preservation and solar technology can be compatible.

The project was launched when a former TDG employee went to work for Piedmont, SD-based GenPro. The two companies decided to work out a trade arrangement: TDG got solar panels and GenPro got advertising and promotion services. "My business partner and I were thrilled with the

idea," says Floyd. "We really wanted to get involved in alternative energy, even if it wasn't a trade-out.

"People are a bit distrustful of alternative energy," he adds. "This is coal country, but renewable is starting to make inroads." GenPro originally sold wind installations, but switched to solar. The firm does a lot of rural installations, such as solar for water pumps for livestock and crops.

"The entire city is a landmark," says Floyd. "Everyone is proud of it. So we had to go through the Historic Preservation Commission. They were very supportive. The panels have a low profile so you can't see them from the street. We also showed them what it would look like from above, but the preservation officer wasn't concerned; there are huge AC units on roofs of other buildings."

Thirty solar panels cover approximately half of the roof, and they are not attached to the building. Instead, they float on cinder blocks. "We decided that we wouldn't bolt the support structure directly into the building," Floyd notes. "This keeps the roof intact. It was a simple process. Installation only took about 2½ days to get it up and running."

"Once the sun creates the DC energy, panels are strung together to create the desired DC voltage for the inverter. The inverter takes the DC voltages and converts it to alternating current energy that matches the grid power from the utility company," Tim Tesslink from GenPro Energy Solutions explains, noting that each panel is 235 watts in rated peak power.

What this all means is that the solar panels will supply about three-quarters of the electric power needed to operate the historic building on an annual basis. "This isn't a big system," says Floyd. "We are a small office, about 4,000 sq.ft., with 12 people in the building. It's a long narrow building, 100 ft. long 25 ft. wide."

Up and running since June, the system draws from the grid for air conditioning needs, but during the rest of the year, TDG expects to feed extra power back into the grid.

"I hope others will follow," says Floyd. "There is a lot of potential in historic districts where you have a lot of flat-roof historic buildings." — Martha McDonald



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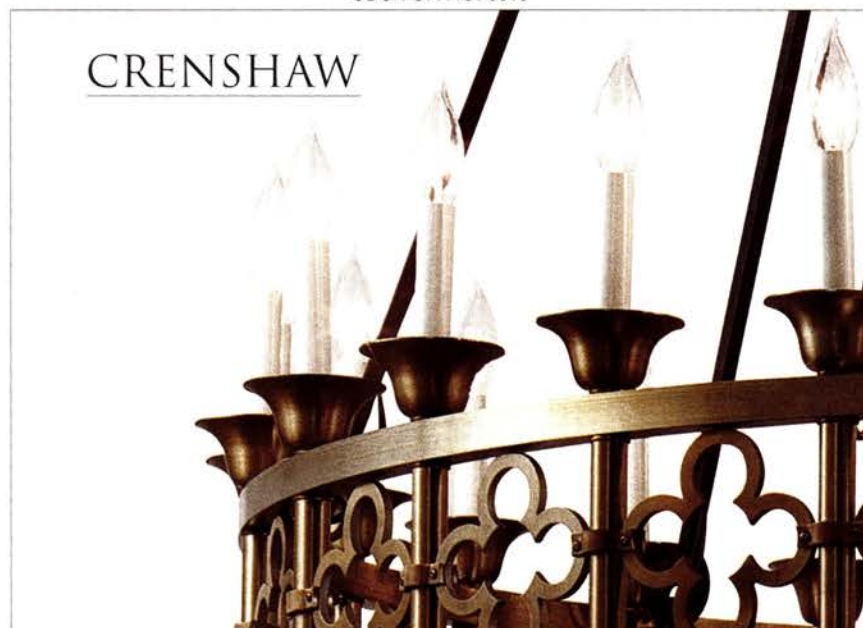
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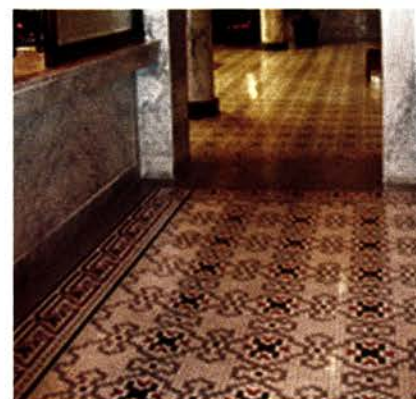
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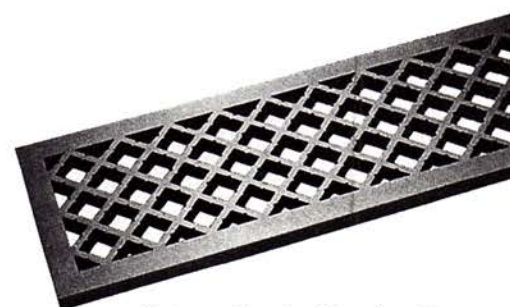
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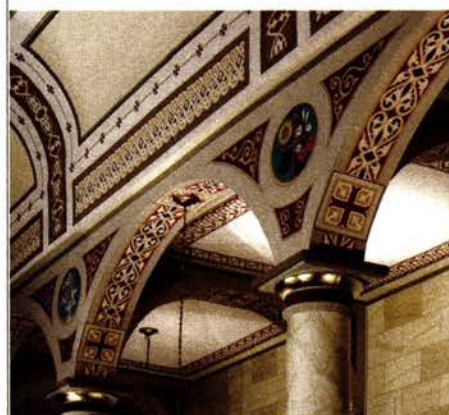
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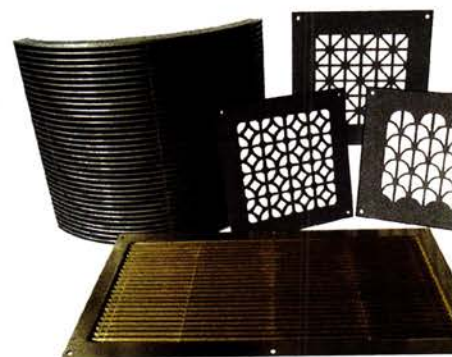
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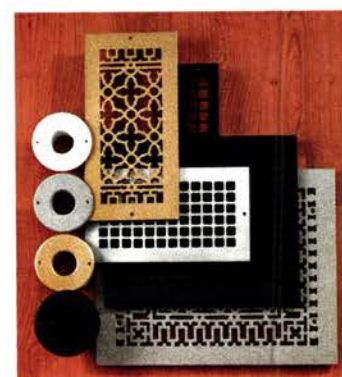
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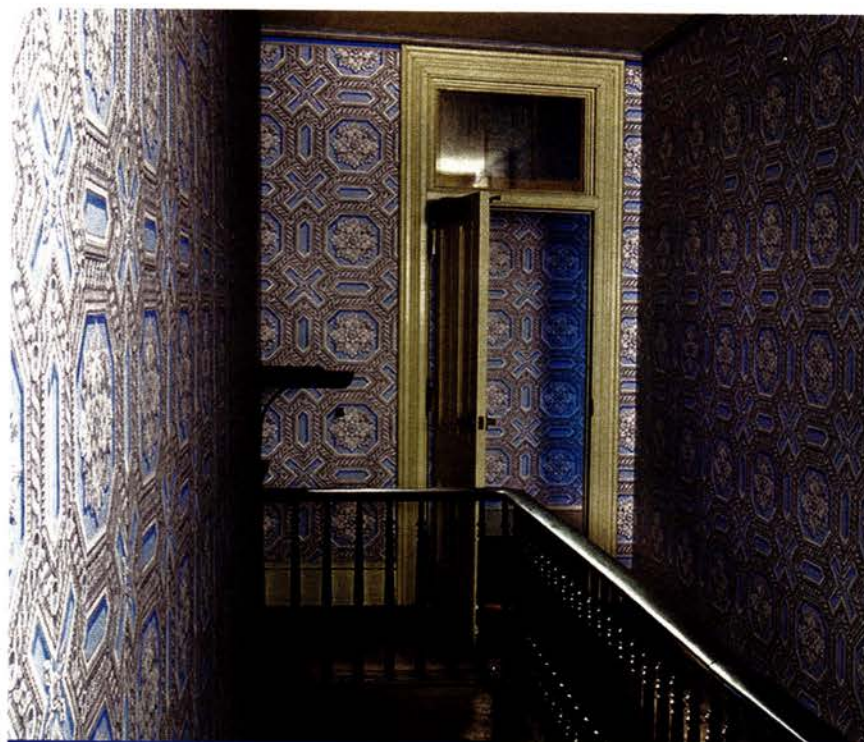


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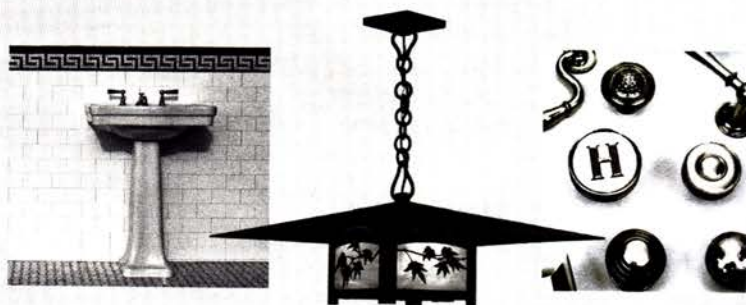
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CLICK ON NO. 2034

Doors & Entryways [continued]



The round-top C416RT entrance door with matching "Manhattan" screen and storm door was fabricated in solid mahogany by Vintage Doors.

^ 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, Craftsman & Victorian Styles; solid wood & glass panels available.

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Wiemann Metalcraft

918-592-1700; Fax: 918-592-2385
www.wmcraft.com
Tulsa, OK 74107

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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Wood Window Workshop

800-724-3081; Fax: 315-733-0933
www.woodwindowworkshop.com
Utica, NY 13501

Custom fabricator of wood windows, doors, storms & screens: any size, shape & species; full mortise-&-tenon construction, true-divided lite, hard-to-find hardware & restoration & insulated glass; factory finishes; millwork; reproductions; for storefronts.

Click on no. 9640

Hardware



Architectural Components restored the windows, doors and reproduction 18th-century hardware for the Jacob Whittemore House at the Minute Man National Historic Park in Lexington, MA.

^ Architectural Components, Inc.

413-367-9441; Fax: 413-367-9461
www.architecturalcomponentsinc.com
Montague, MA 01351

Manufacturer of reproduction & custom wood windows & doors: true-divided lites with insulated glass; wood-framed storm sash & screens; renovation & restoration projects & new construction; paneled walls & storefronts; catalog \$5.

Call for more information.

Architectural Resource Center >

800-370-8808;
Fax: 603-942-7465
www.aresource.com
Northwood, NH 03261

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

Click on no. 1670



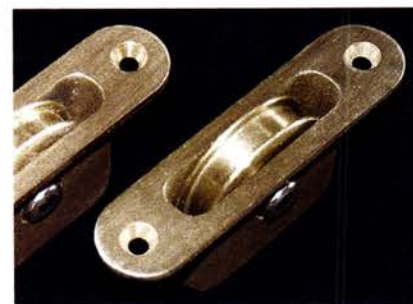
Ball & Ball fabricates and casts custom door hardware.

^ Ball & Ball Hardware

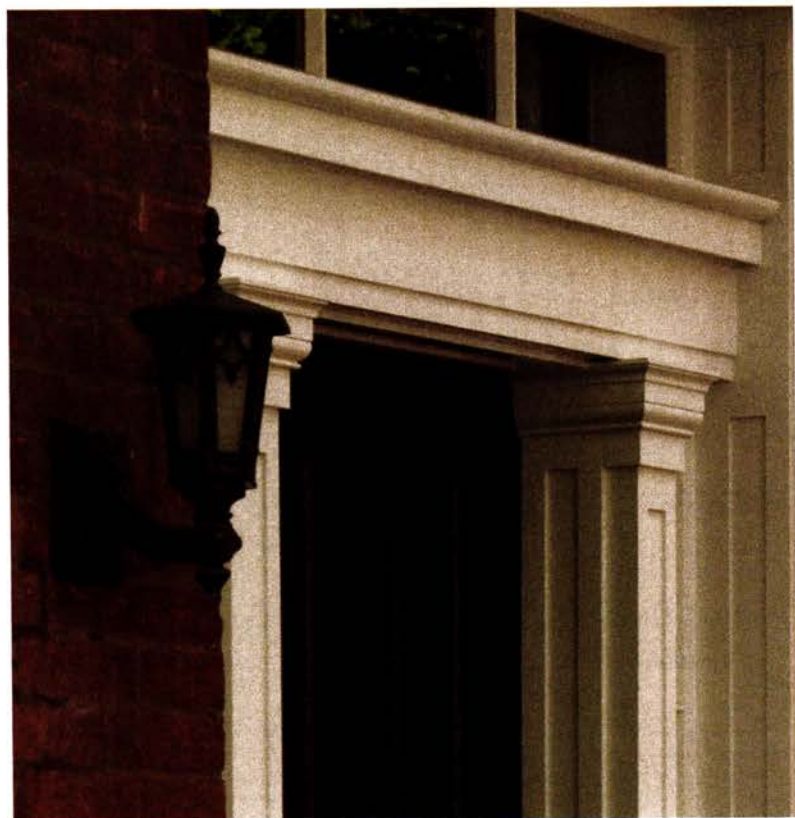
610-363-7330; Fax: 610-363-7639
www.ballandball.com
Exton, PA 19341

Custom manufacturer & supplier of ornamental metalwork & hardware: door, window, shutter, gate & furniture hardware; fireplace tools; wrought iron, steel, aluminum, bronze, brass, copper & cast iron; custom reproductions.

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Sash pulleys from Architectural Resource Center are available in cast brass or bronze in a range of sizes and finishes.



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E.R. Butler custom fabricates door and window hardware in numerous metals, including brass, bronze, nickel, stainless steel and wrought iron.

^ E.R. Butler & Co.

212-925-3565; Fax: 212-925-3305
www.erbutler.com
New York, NY 10012

Manufacturer of historically accurate, premium-quality hardware for doors, windows & furniture: brass, bronze, nickel, silver & wrought iron; complete design selections of Early American period hardware; many finishes.

Click on no. 2260



Hand-forged wrought-iron drapery hardware from Gaby's Shoppe is offered in many styles.

^ Gaby's Shoppe

800-299-4229; Fax: 214-748-7701
www.gabys.com
Dallas, TX 75207

Manufacturer of handcrafted decorative iron drapery hardware: for curved & angled bay windows & arches; 30 standard finishes; more than 100 finial options.

Click on no. 2520

HeartWood Fine Windows & Doors

585-340-9085; Fax: 585-254-1760
www.heartwoodwindowsanddoors.com
Rochester, NY 14606

Manufacturer of custom architectural wood windows & doors: Honduras mahogany & other species; traditional mortise-&-tenon construction; standard & decorative glazing; related window & door hardware; 64-year-old company.

Click on no. 1911

Historical Arts & Casting

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

Click on no. 1210

Hardware [continued]



◀ House of Antique Hardware

888-223-2545; Fax: 503-233-1312

www.hoah.us

Portland, OR 97232

Manufacturer & supplier of vintage reproduction door, window, shutter, cabinet & furniture hardware & accessories: Federal, Victorian, Colonial Revival, Craftsman & Deco styles; lighting fixtures, push-button switches & plates; bathroom accessories; registers & grilles.

Click on no. 1096

House of Antique Hardware offers a wide selection of antique-reproduction entry hardware, as well as hardware for interior doors, cabinets, furniture and windows.

Marvin Windows and Doors

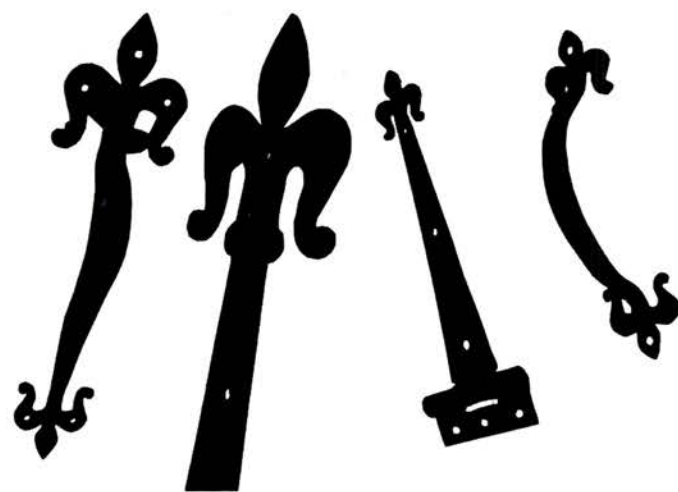
888-537-7828; Fax: 651-452-3074

www.marvin.com

Warroad, MN 56763

Manufacturer of wood windows & doors: clad & clad-wood; special shapes; custom sizes & more than 11,000 standard sizes; historical replicas; interior & exterior storm windows.

Click on no. 1907 for doors; 1263 for windows



This fleur de lis set was designed and fabricated by Kayne & Son.

^ Kayne & Son Custom Hardware

828-667-8868; Fax: 828-665-8303

www.customforgedhardware.com

Candler, NC 28715

Manufacturer of forged- & cast-metal hardware: strap, H, HL, butterfly & butt hinges; thumb-latch locksets, gate hardware, shutter dogs & more; fireplace tools; grilles; bathroom accessories & kitchen equipment; restoration; catalog \$5.

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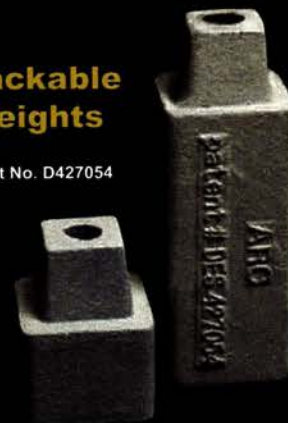


Locks



Stackable
Weights

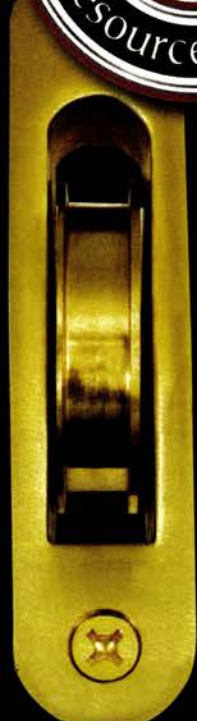
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The model SCL82 screen door latch set is manufactured by Phelps Company from solid-brass forgings; it is available from stock in five finishes.

^ Phelps Company

603-336-6213; Fax: 603-336-6085

www.phelpscompany.com

Hinsdale, NH 03451

Manufacturer of traditional hot-forged solid-brass window hardware: sash pulleys, weights, chains, lifts & locks; stop-bead adjusters, spring bolts, window ventilation locks, push-out casement hardware, storm/screen-door latch sets & more.

Click on no. 6001

Schiff Architectural Detail

617-887-0202; Fax: 617-887-0127

www.schiffarchitecturaldetail.com

Chelsea, MA 02150

Custom fabricator of metalwork: exterior lamps, lampposts, plaques, fences, fountains, sculpture, gazebos, planters, interior & exterior railings & grilles, domes, finials; non-ferrous forged work; machine-shop service; rubber molding & pattern work; capitals; windows, doors & door hardware; mantels, fans, fireplace tools; historical restoration.

Click on no. 7730

Timberlane, Inc.

215-616-0600; Fax: 215-616-0749

www.timberlane.com

Montgomeryville, PA 18936

Custom fabricator of exterior shutters: more than 25 historically accurate styles & designs; available in traditional woods or maintenance-free Endurian; large selection of period shutter hardware.

Click on no. 1056; 1925 for Endurian

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www.vintagedoors.com

Hammond, NY 13646

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

Click on no. 2034

Wood Window Workshop

800-724-3081; Fax: 315-733-0933

www.woodwindowworkshop.com

Utica, NY 13501

Custom fabricator of wood windows, doors, storms & screens: any size, shape & species; full mortise-&-tenon construction, true-divided lite, hard-to-find hardware & restoration & insulated glass; factory finishes; millwork; reproductions; for storefronts.

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Shutters



Chadsworth's custom exterior Bahama-style shutters, made from pultruded fiberglass, are installed on an Olive Garden restaurant in Orlando, FL.

Chadsworth Columns

800-486-2118; Fax: 919-778-5177
www.chadsworth.com
 Wilmington, NC 28401

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 20 years.

Click on no. 1580 for PolyStone;
 180 for wood



Vixen Hill's traditional arch-top, paneled and lowered shutter has cast stainless-steel hardware and hurricane panels.

Doors & Shutters by Vixen Hill

800-423-2766; Fax: 610-286-2099
www.vixenhill.com
 Elverson, PA 19520

Custom fabricator of wooden cedar doors & shutters: design, size & price online then print quote; select appropriate hardware from the company's extensive inventory; free catalog.

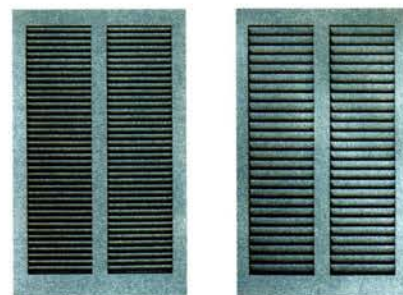


Traditional wood shutters are available from Shuttercraft in many styles, shapes and colors.

Shuttercraft, Inc.

203-245-2608; Fax: 203-245-5969
www.shuttercraft.com
 Madison, CT 06443

Manufacturer of authentic mortise-&-tenon wood shutters: cedar & mahogany, exterior movable & fixed louver, board & batten & raised panel; cutouts, capping, arches & more; hinges & holdbacks; interior louvers, Colonial panels & open frame; painting services; made in USA; family-owned company since 1986; ships nationwide.



These Bermuda shutters from Timberlane, Inc., available in any lower size with the option of large or small tilt-rods, are designed for sun screening and moderate storm protection.

Timberlane, Inc.

215-616-0600; Fax: 215-616-0749
www.timberlane.com
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Click on no. 1056; 1925 for Endurian



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 on the Inside Front Cover

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Abatron, Inc.

800-445-1754; Fax: 262-653-2000
www.abatron.com
 Kenosha, WI 53144

Manufacturer of products for restoration & repair: wood consolidation & repair, window & door restoration, concrete patching & resurfacing, metal restoration, moldmaking & casting, structural adhesives, protective coatings, strippers & related products.

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www.architecturalcomponentsinc.com



Allegheny Restoration restored and renovated the millwork, windows and entrance of the Dering Building in the historic city of Morgantown, WV.

Allegheny Restoration

304-594-2570; Fax: 304-594-2810
www.alleghenyrestoration.com
 Morgantown, WV 26507

Manufacturer of reproduction & custom wood doors & windows: window replication, restoration & repair; hardware replacement; storefronts & ecclesiastical projects; 15 years experience; nationwide.

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 Toll Free: 877-390-2392
 8-10 Wardwell St. · Adams, NY 13605
 Website: www.jimillingworthmillwork.com
www.illingworthmillwork.com

CLICK ON NO. 1696

www.traditional-building.com



The United Methodist Church in Knightstown, IN, installed Allied One Lite (AOL) storm windows from Allied Window.

^ Allied Window, Inc.

800-445-5411; Fax: 513-559-1883

www.alliedwindow.com

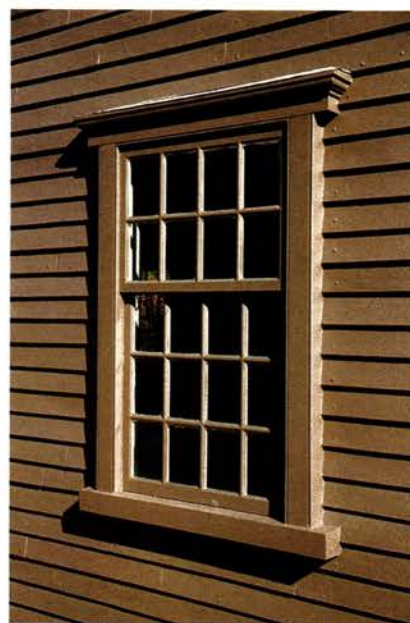
Cincinnati, OH 45241

Manufacturer & installer of "invisible" storm windows: custom colors, shapes & glazing materials; aluminum; sound-reduction protection from UV & vandalism; interior & exterior; commercial & residential applications.

Click on no. 690



Historic Doors created this window crown with a 3 1/2-in. projection.



Architectural Components restored the windows for the Jacob Whittemore House at the Minuteman National Historic Park in Lexington, MA.

^ Architectural Components, Inc.

413-367-9441; Fax: 413-367-9461

www.architecturalcomponentsinc.com

Montague, MA 01351

Manufacturer of reproduction & custom wood windows & doors: true-divided lites with insulated glass; wood-framed storm sash & screens; renovation & restoration projects & new construction; paneled walls & storefronts; catalog \$5.

Call for more information.

< Historic Doors

610-756-6187; Fax: 610-756-6171

www.historicdoors.com

Kempton, PA 19529

Custom fabricator of wood windows & doors: casing; circular & crown moldings; complete entryways; wood storefronts; restoration & period-style construction.

Click on no. 3570



This custom interior insulating window system was fabricated by Cityproof.

^ Cityproof Windows

718-786-1600; Fax: 718-786-2713

www.cityproof.com

Long Island City, NY 11101

Manufacturer & installer of custom-made interior window systems: aluminum, storm/screen combo, arched & custom shapes; mechanical fastenings; acrylic, lexan, UV-resistant, standard, low-E, tempered, laminated & etched-glass glazing.

Click on no. 2390

Historical Arts & Casting >

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

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.

Click on no. 1210



HeartWood supplied the replacement windows for this 100-year-old gatehouse in Rochester, NY; they are made of quarter-sawn white oak and bent glass.

^ HeartWood Fine Windows & Doors

585-340-9085; Fax: 585-254-1760

www.heartwoodwindowsanddoors.com

Rochester, NY 14606

Manufacturer of custom architectural wood windows & doors: Honduras mahogany & other species; traditional mortise-&-tenon construction; standard & decorative glazing; related window & door hardware; 64-year-old company.

Click on no. 1911



A craftsman assembles a 3x5-ft. bronze window in the Historical Arts & Casting studio.

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Windows & Window Restoration [continued]



These custom windows were fabricated by Jim Illingworth Millwork.

^ Illingworth Millwork, LLC

315-232-3433; Fax: 315-232-3645
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.

Click on no. 1696



^ Innerglass Window Systems

800-743-6207; Fax: 860-651-4789
www.stormwindows.com
 Simsbury, CT 06070

Manufacturer of custom glass interior storm windows for energy conservation & soundproofing; out performs almost any replacement; automatically conforms to the opening, compensating for out-of-square conditions; no sub-frame needed; all glazing options available; easy do-it-yourself installation.

Click on no. 909

Interior glass storm windows from Innerglass Window Systems were used throughout this historic building.



Arched-top double-hung windows from Kolbe & Kolbe can be installed without removing existing trim and framework.

^ Kolbe & Kolbe Millwork Co.

800-955-8177; Fax: 715-845-8270
www.kolbe-kolbe.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.

Click on no. 1541

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 Warroad, MN 56763

Manufacturer of wood windows & doors: clad & clad-wood; special shapes; custom sizes & more than 11,000 standard sizes; historical replicas; interior & exterior storm windows.

Click on no. 1263

Marvin supplied the historically styled doors and windows for the 1936 Lauderdale County Courthouse in Ripley, TN.

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 FAX (304) 594-2810

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Windows & Window Restoration [continued]



Parrett Windows & Doors offers a wide selection of historical windows and screens.

◀ Parrett Windows & Doors

800-541-9527; Fax: 877-238-2452
www.parrettwindows.com
Dorchester, WI 54425

Manufacturer of custom wood & aluminum-clad windows: any geometric shape, numerous wood species & complete finishing capabilities; historical replications; custom wood doors in numerous species, finishing options; screen doors, casings & moldings.

Click on no. 3003



◀ Wood Window Workshop

800-724-3081; Fax: 315-733-0933
www.woodwindowworkshop.com
Utica, NY 13501

Custom fabricator of wood windows, doors, storms & screens: any size, shape & species; full mortise-&-tenon construction, true-divided lite, hard-to-find hardware & restoration & insulated glass; factory finishes; millwork; reproductions; for storefronts.

Click on no. 9640

This arched-casement Honduras mahogany window was manufactured by Wood Window Workshop.



Traditional joinery and period accurate detail.

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CLICK ON NO. 1911

www.traditional-building.com

Exterior Lighting



This traditionally styled light fixture is one of many available from Authentic Designs.

^ Authentic Designs

800-844-9416; Fax: 802-394-2422
www.authenticdesigns.com
West Rupert, VT 05776

Manufacturer of historical lighting fixtures & specialty metal products: chandeliers, lanterns, sconces & table lamps crafted in brass, copper, terne metal & Vermont maple; Early American & Colonial; CUL/UL listed for wet & damp locations; library binder \$30.

Click on no. 60



The Kylemore Ring chandelier from Crenshaw, shown here in medium bronze tinted lacquer on aluminum, is available in 50- and 62-in. diameters.

^ Crenshaw Lighting

540-745-3900; Fax: 540-745-3911
www.crenshawlighting.com
Floyd, VA 24091

Manufacturer of decorative lighting fixtures: period & custom designs; historical restoration & reproduction; lighting for worship.

Click on no. 313



This electrically powered hanging lantern is model #432-001 from Ball & Ball Lighting.

^ Ball & Ball Lighting

610-363-7330;
Fax: 610-363-7639
www.ballandball.com
Exton, PA 19341

Fabricator of historical lighting: chandeliers, sconces, pendants, lanterns & table lamps; Early American & Turn of the Century styles; antique & salvaged originals, new designs, custom work & reproductions; stair handrails; restoration services.

Click on no. 7660



Deep Landing Workshop's model L-CLD0203B is shown here with the LB-20 bracket; the lantern is 32-in. tall by 13 1/4-in. wide.

^ Deep Landing Workshop

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

Manufacturer of custom lighting fixtures: chandeliers, sconces, pendants & lanterns; new designs, historic reproductions & custom work; handcrafted in wood, tin, brass or copper; glass, mica or alabaster shades.

Click on no. 809

Design Associates, Inc.

203-407-8913; Fax: 203-407-8915

60 Connolly Parkway,

Bldg. 2C, Ste. 208B

Hamden, CT 06514

Custom fabricator of automated gates; automation, communication, video & control systems; mahogany & forged steel; custom pier lights & fences; state-of-the-art technology.

Click on no. 8240



Fine Architectural Metalsmiths custom fabricates chandeliers, sconces and lanterns.

^ Fine Architectural Metalsmiths

845-651-7550; Fax: 845-651-7857

www.iceforge.com

Chester, NY 10918

Designer & custom fabricator of ornamental metalwork: period-appropriate motifs; custom lighting; curved, straight & monumental stairs; driveway & garden gates; grilles; hand-forged & wrought iron, bronze & aluminum.

Click on no. 2640

Exterior Lighting

[continued]



Grand Light restored this historic lighting fixture.

^ Grand Light

800-922-1469; Fax: 203-785-1184

www.lightrestoration.com

Seymour, CT 06483

Restorer of historic lighting fixtures & manufacturer of custom lighting fixtures: metal fabrication, glass fabrication, metal finishing, polishing, painting, welding, abrasive blasting; replication.



The Sylvania street lamp from Herwig Lighting can be obtained with a 10- or 12-ft.-tall post and single, twin or quad-arm units.

^ Herwig Lighting

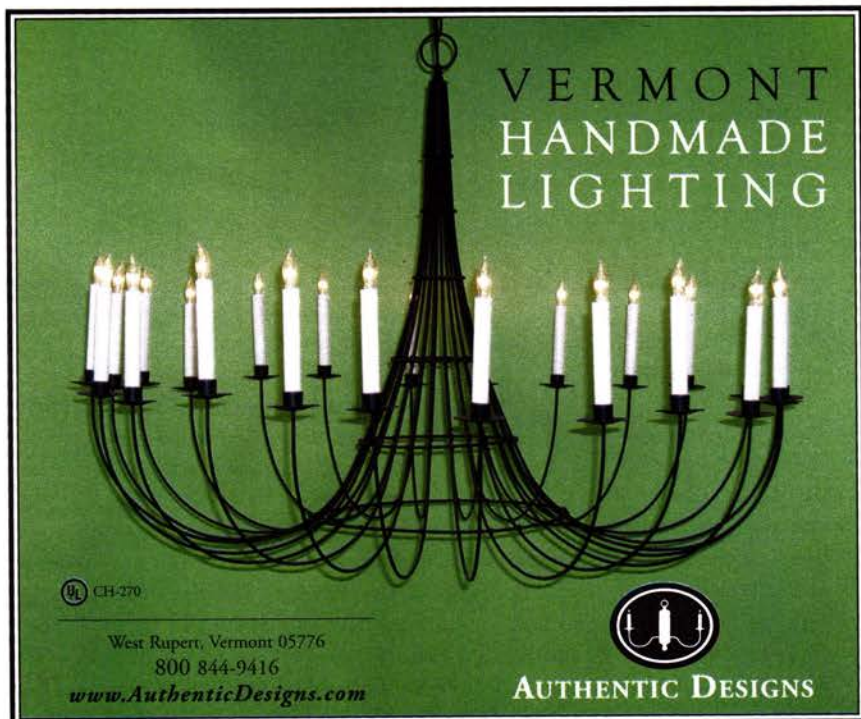
800-643-9523; Fax: 479-968-6422

www.herwig.com

Russellville, AR 72811

Designer & manufacturer of handcrafted cast metalwork: period-design lanterns, street lighting, posts, custom outdoor lighting, street clocks, benches, bollards, custom plaques, signs & more; aluminum & bronze; since 1908.

Click on no. 9130



CLICK ON NO. 60



< Historical Arts & Casting

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

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.

Click on no. 1210

This ornate gas light, fabricated by Historical Arts & Casting for the Ohio State Capitol building, features an electric-ignition and flame-sensing system.

Lake Shore Industries, Inc.

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www.LSISIGNS.com

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ater School of Business at Christopher Newport University, Newport News, VA
ustom lighting, monumental lantern pendant

Project architect: Glavé & Holmes Architecture

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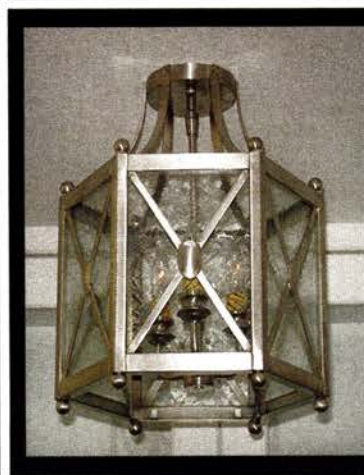
WWW.CRENSHAWLIGHTING.COM

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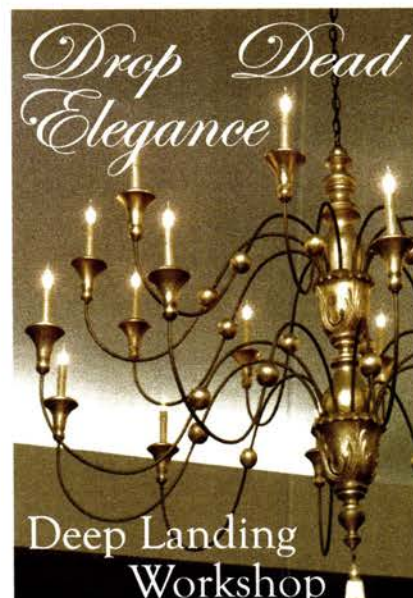
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Exterior Lighting

[continued]



This large exterior sconce, the Empire Torch, was fabricated by Lantern Masters.

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818-706-1990; Fax: 818-706-1988
www.lanternmasters.com
Westlake Village, CA 91362
Custom designer & manufacturer of lighting: interior chandeliers, pendants, ceiling flushes & sconces & exterior lanterns including wall, flush wall, pendant, post & pilaster; many architectural periods; historical reproductions.
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These ca. 1920-1930 bronze sconces were refurbished by Schiff Architectural Detail; they are 60-in. tall x 24-in. deep.

^ **Schiff Architectural Detail, LLC**

617-887-0202; Fax: 617-887-0127
www.schiffarchitecturaldetail.com
Chelsea, MA 02150

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St. Louis Antique Lighting Co. supplied this historic exterior light fixture for the University of Chicago.

^ **St. Louis Antique Lighting Co.**

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www.slalco.com
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This exterior fixture from Ball & Ball Lighting is a reproduction of an 18th-century Philadelphia street lantern.

Gas Lighting [continued]

Crenshaw Lighting

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Lantern Masters designs and manufactures electric and gas lighting for residential and commercial applications.

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www.lanternmasters.com
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This lantern at Yale University's Silliman College was restored by Grand Light.

^ Grand Light

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www.lightrestoration.com
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Campbellsville Industries fabricated the clock tower, clock, decorative cornice, modillions, paneled railing and corner pediments for the restoration project at Montgomery County Courthouse in Clarksville, TN.

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www.cvilleindustries.com
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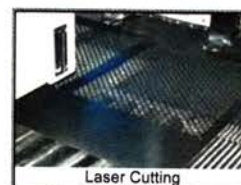
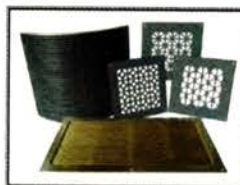
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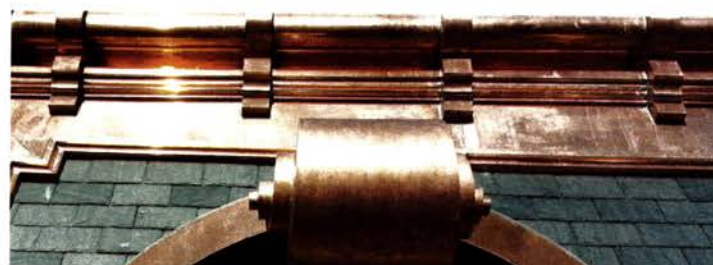
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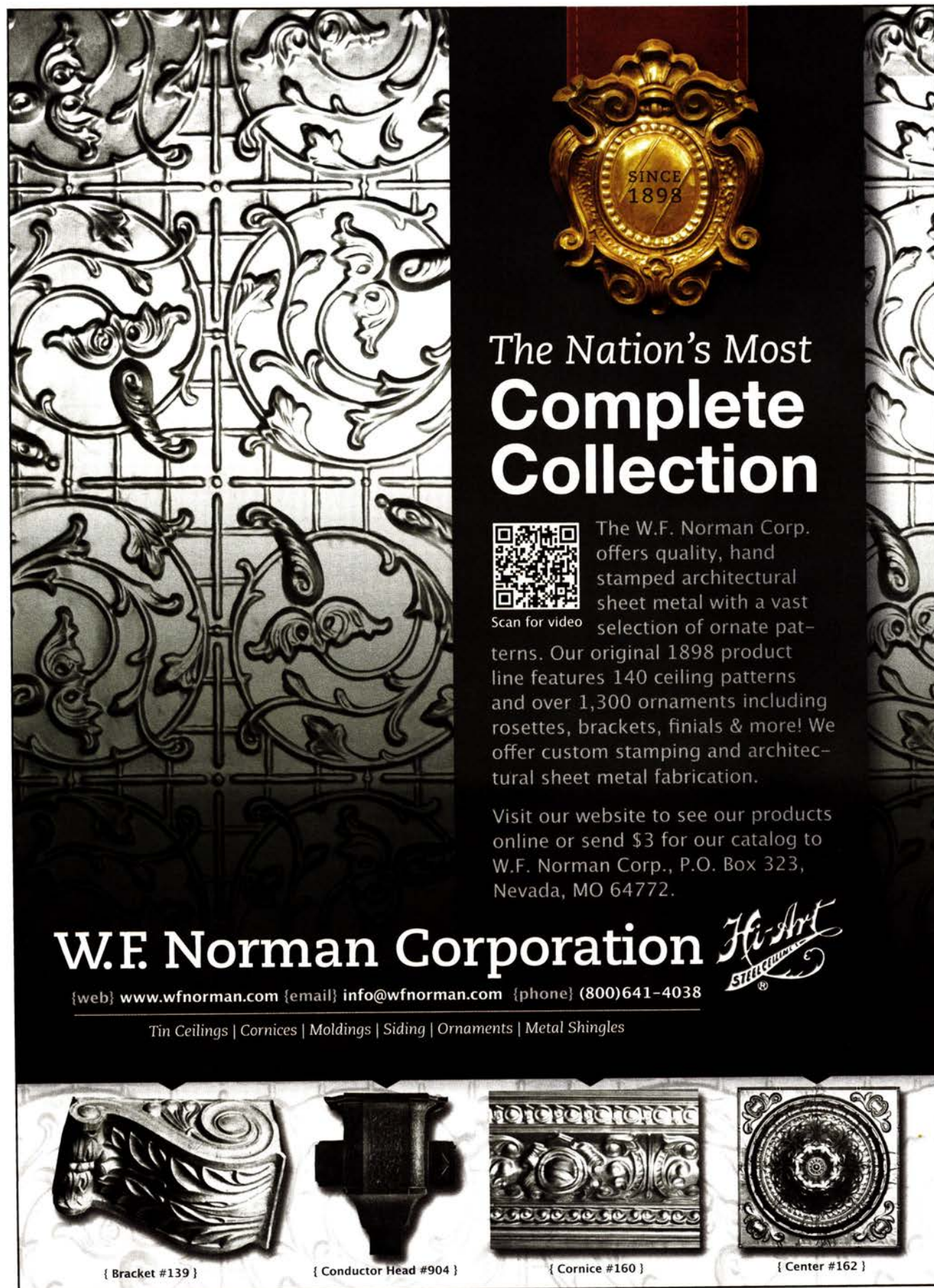
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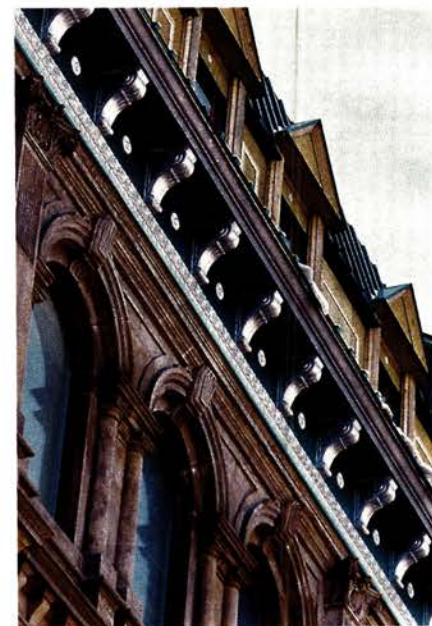
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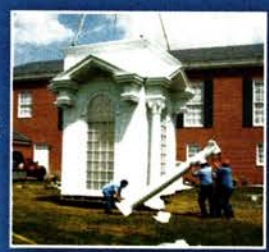


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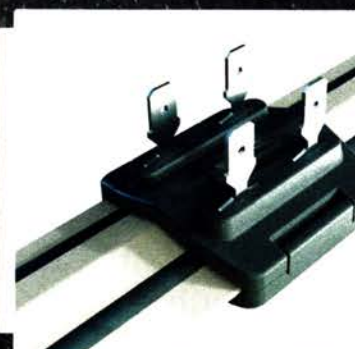
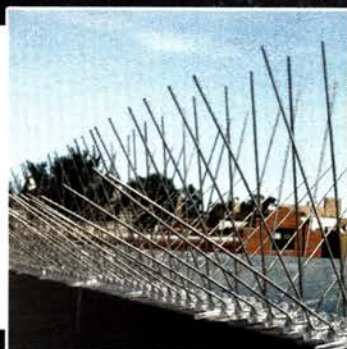
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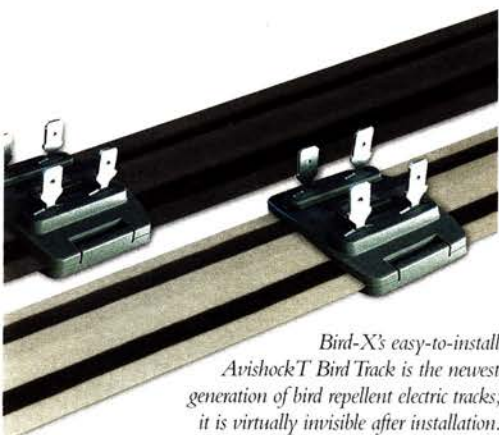
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Bird Control [continued]



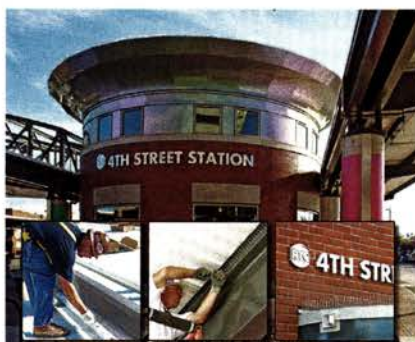
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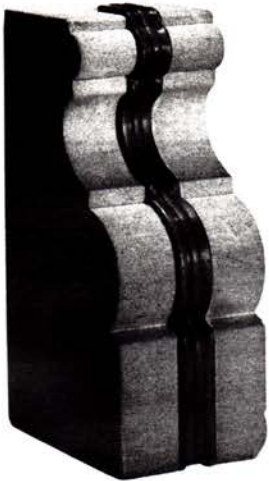
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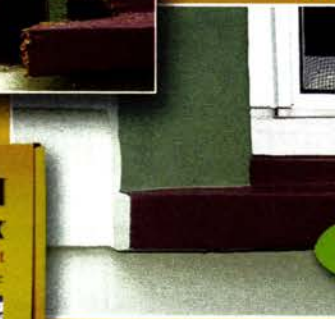
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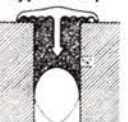
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Public Sculpture



Commissioned portraits of hockey players for Toronto's Air Canada Centre were cast in bronze and installed by Erik Blome's Figurative Art Studio near Chicago, IL.

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www.figurativeartstudio.com
Martinez, CA 94553

Art studio: commissioned bronze sculpture; monumental historical pieces, children, birds, portraits & more.

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This monumental statue of Jesus is the work of Stonesculpt.

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www.sewardjohnson.com
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Sculptor: J. Seward Johnson, Jr.; realistic, life-size bronze exterior & garden sculpture.

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Sculptor Seward Johnson's 26-ft.-tall "Forever Marilyn," made of stainless steel and aluminum, debuted in downtown Chicago at Pioneer Court; it is owned by The Sculpture Foundation. Photo: Phillip R. Pasit



Erik Blome

Sculptor



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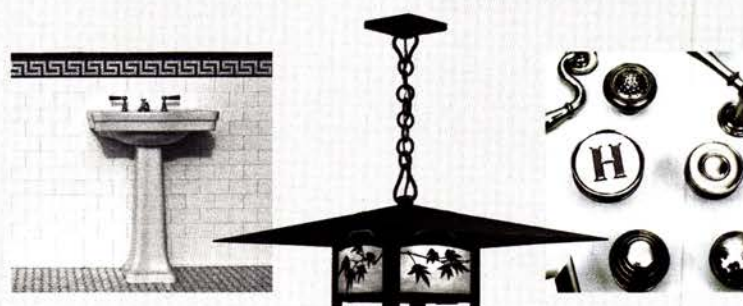
Large-scale commissioned sculpture works have been permanently installed in major cities like Chicago, Los Angeles, Washington DC, Dallas, Milwaukee, Alexandria VA, Montgomery AL, and Dayton OH.

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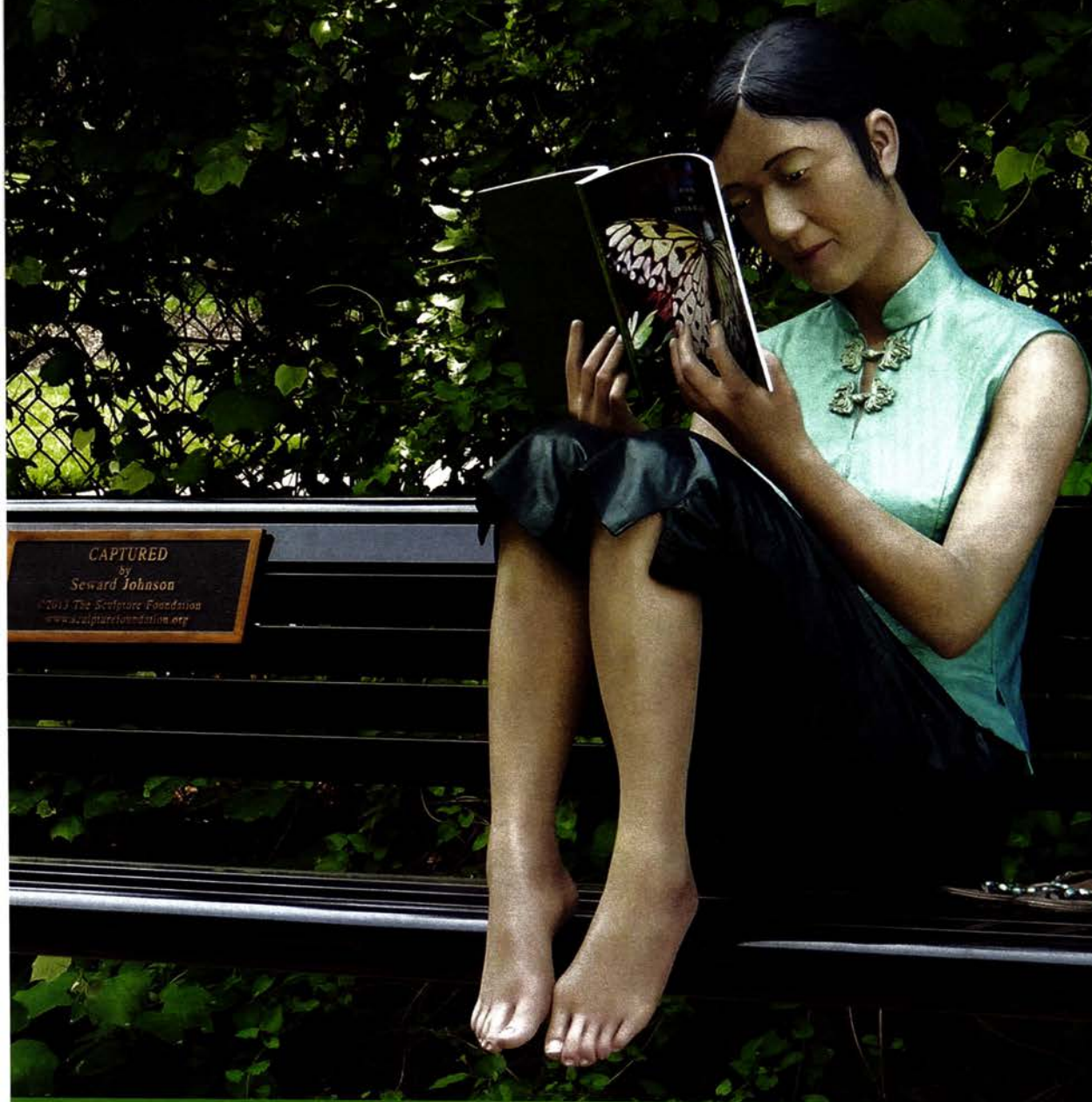
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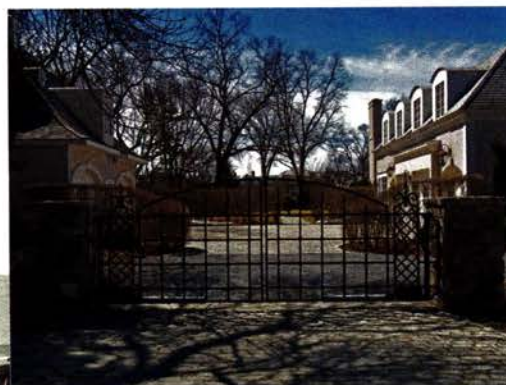
Compass Ironworks created this wrought-iron railing.

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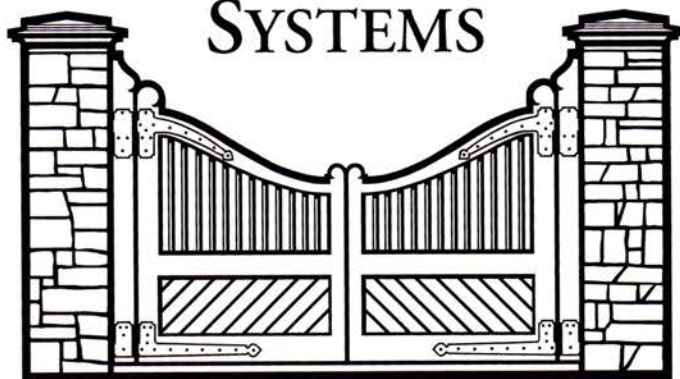
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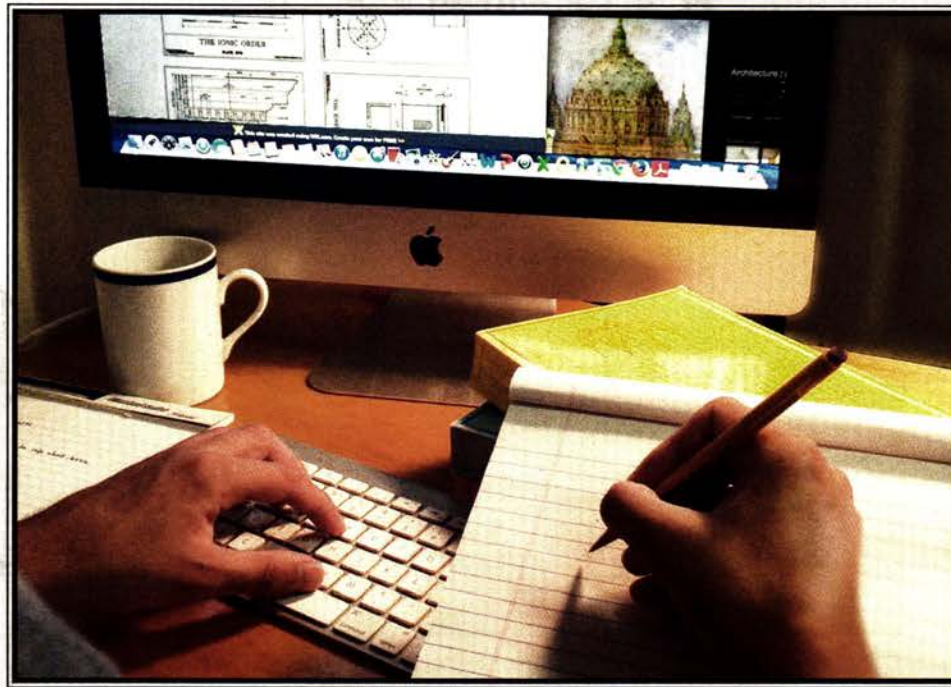
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This aluminum and bronze fountain by Historical Arts & Casting stands 12 ft. 3 in. tall with a bowl diameter of 19 ft. 2 in. at Transit Plaza, Kansas City, KS.

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This water nymph fountain from Haddonstone measures 39 in. tall and weighs just under 300 lbs.

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Schiff Architectural Detail created the Frank McKinney Memorial Fountain for the University of Indiana.

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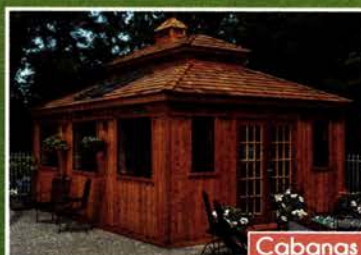
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This cast-aluminum double-face "Forrest Circle" street sign from Lake Shore Industries measures 24x7 in.; it features a steel arm and cast finial caps.



These ornamental grates were cast by Schiff Architectural Detail for a large public fountain project.

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Wiemann Metalcraft fabricated these modular, cast-iron railings for the Walnut Grove development in Lake Charles, LA.

Pavers



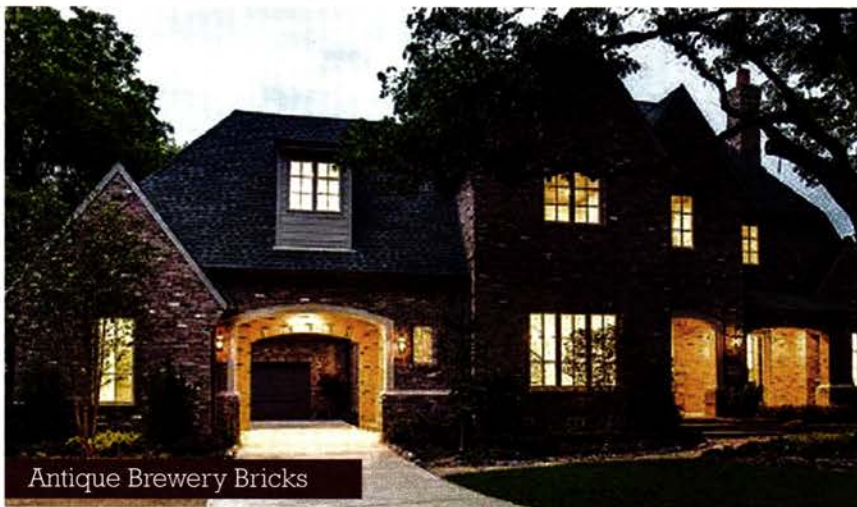
Reclaimed bricks from Gavin Historical Bricks Inc. were used in this driveway near Chicago, IL.

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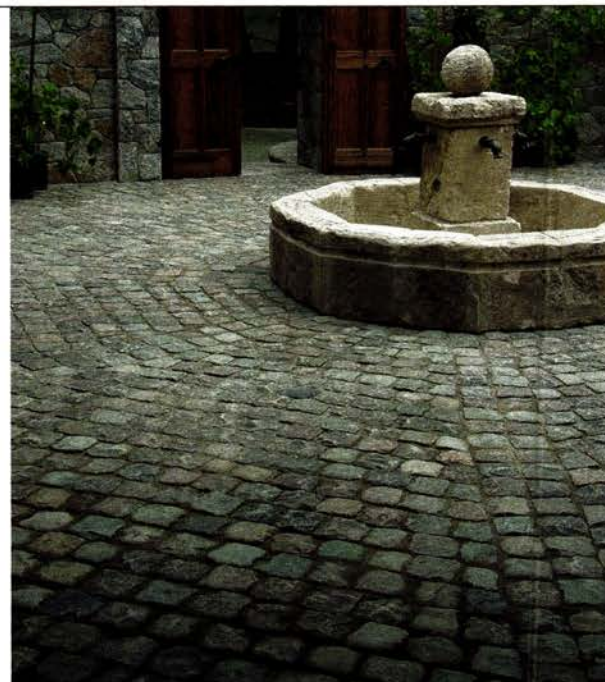
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Reclaimed European antique granite cobblestone from Monarch Stone International was used for this 22,000-sq.ft. driveway; it is made of Historic European Cobblestone, using a combination of 5x5-in. and 5x8-in. stones.



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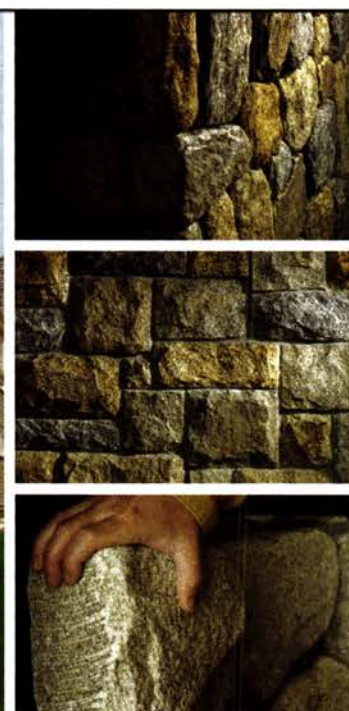
King of Prussia, PA 19406

Supplier of natural stone: matches historic stone; mantels; photographs of existing stonework, extracts pattern & delivers complete hand-chiseled job.

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Architect: Patrick Ahern, AIA
Builder: Denali Construction



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Frank Lloyd Wright designed this bronze urn ca. 1898 and placed it in several of his buildings; Historical Arts & Casting now reproduces it in two sizes.

^ Historical Arts & Casting, Inc.

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

www.historicalarts.com

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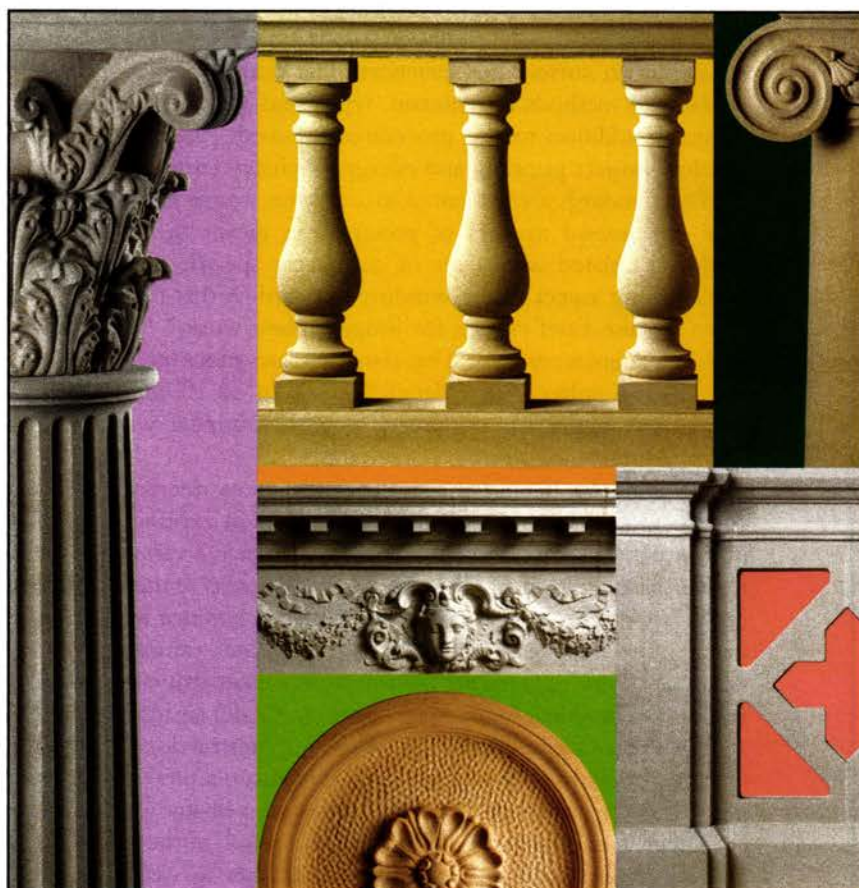
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Reviewed by Clem Labine

New Life for Old Windows

Window Preservation Standards

A collaborative work by members of the Window Preservation Standards Collaborative. edited by John Leeke

Published by the Window Preservation Standards Collaborative • 107 pp; softcover; 49 b&w illustrations; \$29.50 • ISBN: 978-1- 4910-1540-7

Save America's Windows

by John Leeke

Historic HomeWorks, Portland, ME • 177 pp; softcover; 257 b&w illustrations; \$35 • ISBN: 978-1- 4662-8644-3

Two new books recently received in our offices show that the current mania for replacing old wood windows is inflicting needless costs – both economic (on building owners) and environmental (on the rest of us). The first new volume is *Window Preservation Standards*, published by the non-profit Window Preservation Standards Collaborative (WPSC) windowstandards.org. The WPSC is a consortium of over 150 window preservation and energy-efficiency professionals who pooled their expertise to arrive at an industry consensus on current best practices. The resulting book summarizes 34 field-tested methods to maintain, repair and weatherize old wood windows. In addition to the procedural standards, there are protocols for window project planning and energy-efficiency testing.

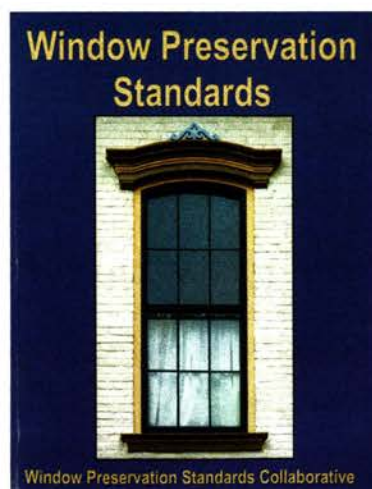
The standards are presented in a concise, consistent itemized format. The compressed manner of presentation means the standards can be readily translated into a set of contractor specifications. One helpful spec-writing aspect of the window standards is that for each procedure there are also brief criteria for judging “best work,” “adequate work,” and “inadequate work.” The standards are more of a “what to do” compilation rather than a detailed “how to do it” manual. It assumes you or the contractor are already generally familiar with the materials and procedures involved.

Of particular interest is the section about weatherization and energy conservation. Using a set of old windows in an existing school building in Kentucky, members of the collaborative tested a variety of methods to reduce air infiltration and heat loss. Detailed results of the testing are given in the book. The most astonishing conclusion was that installing a simple, inexpensive field-constructed interior air panel (similar to an interior storm window) reduced air leakage to an extent that surpassed the 2012 IECC (International Energy Conservation Code) air infiltration standard.

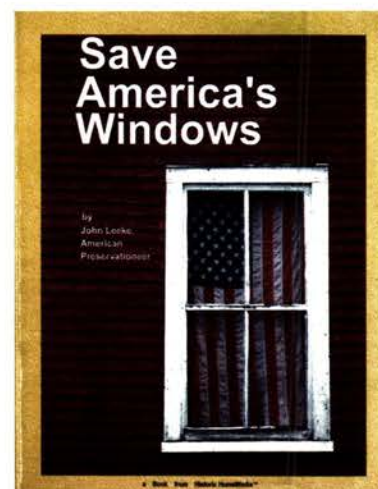
For a set of more detailed “how to do it” instructions, there’s the new expanded edition of John Leeke’s (www.historichomeworks.com/hhw/index.htm) *Save America's Windows*. Leeke is a well-known preservationist, consultant and educator – and is also the editor of the WPSC standards manual discussed above. He not only describes in well-illustrated detail 15 step-by-step treatments to repair weathered sills and deteriorating sash, but also includes a lot of background information on construction of historical wood windows gleaned from 19th- and early 20th-century trade manuals. The handbook also provides lots of practical tips on glazing and puttying.

Leeke assumes no prior knowledge, so the book can be used both by ambitious do-it-yourselfers and professionals who need to get up to speed on historic wood windows. For example, Leeke lists many of his favorite materials by brand name, which can be a great help to someone actually doing the work. By contrast, in order to preserve its impartiality, the WPSC book avoids using brand names, referring only to generic material types. The desire to avoid the appearance of commercial taint can be admirable in theory, while at the same time frustrating to someone new to the field.

A couple of limitations: Leeke’s manual focuses solely on the wood repair aspect of historic windows. It doesn’t cover repair and replacement of window balance systems nor any other aspects of window hardware. Nor does Leeke get into weatherization and energy conservation issues.



LEFT: Standards in the WPSC manual provide a concise overview of current best practice in wood window restoration and weatherization. Among other things, the book is of great help in writing specs for window upgrades.



RIGHT: John Leeke covers both traditional and high-tech materials and methods for restoring historic wood windows. Clear instructions accompanied by helpful illustrations guide both the do-it-yourselfer and the building professional.

They Work Well Together

Because they come at the topic of wood window preservation from different perspectives, the books complement each other. The sections on window sills provide an example of how the two books differ. In the WPSC manual, there are two pages devoted to “Fill Sill Weather Checks,” with an outline of procedures and materials to be used, along with a description of “Best Work” and “Inadequate Work.” By contrast, Leeke’s book provides 11 pages of detailed instructions on sill restoration and replacement.

Neither volume has an index, which can be a little frustrating. However, both works have detailed tables of contents, which enable users to find information fairly readily.

Together, the two volumes show that when repair vs. replace seems an economic toss-up, “repair” should be the default option because it’s more earth-friendly. Replacement windows generally have life-span of 15-40 years (depending on material) and their lack of reparability consigns them to landfills when worn out. By contrast, old windows are made of tight-grained first-growth lumber, which is much more rot-resistant than today’s fast-growth wood. And the simple construction of old windows means they can be repaired indefinitely. Case in point: the original wood windows in my 1883 brownstone have received periodic maintenance and repair – and I estimate that with similar care they are good for at least another 100 years.

The WPSC standards (\$29.50) can be ordered online www.createspace.com/4364852 directly from the collaborative. John Leeke’s handbook (\$35 + shipping) can be ordered through his website: www.historichomeworks.com/hhw/reports/reports.htm#Windows. In addition, when both books are purchased together, Steven Schuyler Bookseller www.rarebookstore.net/cgi-bin/schuyler/index.html has a discounted package (\$59 – including shipping & handling; credit cards accepted).

Reviewed by Alvin Holm

Read. Learn. Teach.

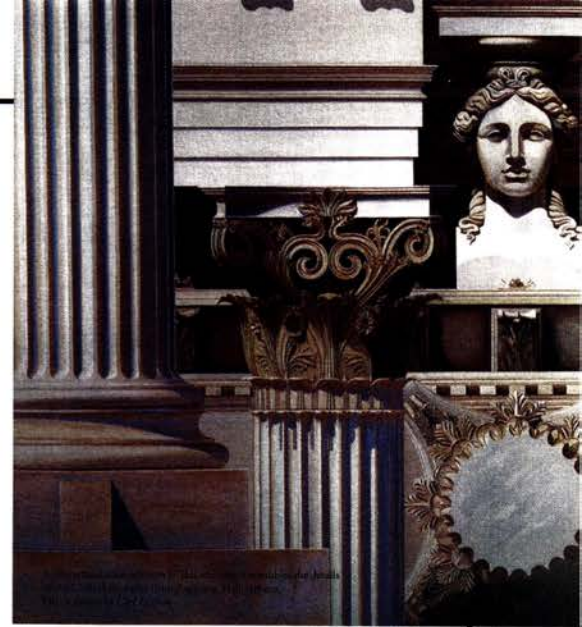
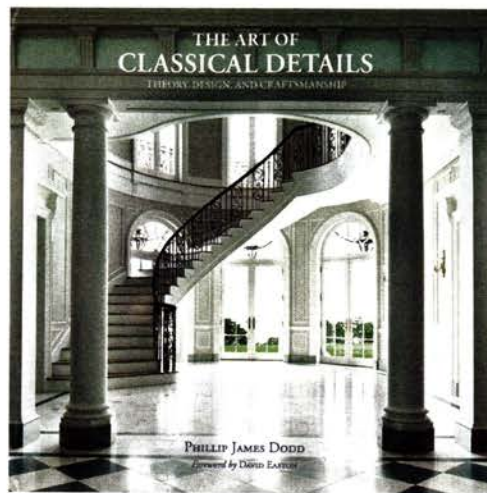
The Art of Classical Details: History, Design, and Craftsmanship

by Phillip James Dodd; Forward by David Easton

The Images Publishing Group, Australia; 2013

256 pp; 200 color illustrations; Hardcover; \$70

ISBN: 978-1864702033



The very plain title of *The Art of Classical Details* belies an elaborate treasure. Fortunately, the front cover photo is beguiling and beautiful, a welcoming stairwell by Wadia Associates. This excellent new book by Phillip James Dodd offers satisfaction in a greater variety of ways than most works on architectural design would attempt, let alone achieve. It is both lovely to look at and rewarding to read. It is a pleasure to pick up and quickly browse; it is also worthwhile to study.

A variety of organizational strategies makes it possible for this to serve as an attractive coffee table book as well as a serious course in design. First, throughout most of the book, a page of handsome illustration alternates with a page of explanatory text. This rhythmic pattern is refreshing for both viewer and reader, right-brain and left.

A second prudent strategy was to divide the book into two distinct halves, the first devoted to theory and the second to practice – essays and projects. The first half is divided into contrasting parts; first, from writers and scholars, then architects, craftsmen and artisans. The result is a wonderful variety of viewpoints, all personal, thoughtful, and all contributing to a comprehensive Classical outlook. Reading through this unusual procession of personal expressions from well-known authorities on a single theme is a delight. And all of us can learn from it.

Halfway through the book we shift from theory to practice, and a long series of beautiful projects are presented with commentary by the designers. This is an excellent opportunity for the readers to draw their own conclusions about how the points of view expressed in the first half of the book are exhibited in contemporary Classical design.

Among the many outstanding essays in the first half, all of which are worth contemplation, the richest surprise for this reader was an extensive discussion of how “architecture is frozen music.” This axiom came to my attention early in my own life, and ever since then I have sought to understand the comparison, attributed then to Goethe but also to many others all the way back to Pythagoras. David Watkins summarizes this foundational concept admirably, as it has existed throughout history.

Though modest in this erudite company, the contribution of my own mentor, Henry Hope

Reed, was a delightful surprise. He died just last year after a lifetime of inspiring activity urging the onset of a New American Renaissance. Dodd described him as “the foremost spokesman for the classical tradition in architecture and its allied arts. In 1968, he co-founded Classical America, the pioneering organization that promoted the current resurgence in classical and tradition design.” I am grateful to Dodd for including Reed in this compendium, thereby expanding his already considerable legacy.

To mention only some of the highlights in this vast collection of excellent essays (50 or so) is a disservice to the rest of them, but I feel I must make note of a few that spoke most clearly to me. The first, appropriately, is the Foreword by David Easton who writes “with a nod to our past and a keen eye to our future” and deftly summarizes how this book on Classical detail relates to “the broad view of the homes we live in” and the changing culture at large.

Easton’s experience, like many of our own, ranges from a Bauhaus background, tempered by the enchantments of travel, arriving happily at a career focusing on the Classical tradition. One wistful note is inserted, “the hand and eye have a special place in this innate understanding of how to lay down detail.” He wonders if we might be losing this with CAD. I worry as well, but the Foreword ends by affirming “at least for this moment, we can all marvel at the beauty of classical detailing and be glad that it has been kept alive and well.”

After a masterful introduction by Dodd himself, which is itself a mini-course in Classical architecture, the opening essay by Jeremy Musson makes a daring leap from the vast vision of an ancient Arcadia to any of the Classical interiors of today. He illustrates how the ideal of a harmonious, ordered and beautiful world as exemplified by Arcadia is fully expressed in the detail of a dining room fireplace by Allan Greenberg, as well as in a graceful entry hall staircase by Gil Schafer, or in a serene and simple landscape view of a contemporary Georgian home by Francis Johnson.

Midway through the book, Richard Cameron picks up the theme of the primacy of drawing, which is echoed in other essays. He makes a very persuasive argument for the merits of the Beaux Arts system of education to which he attributes much of the wonderful architecture in the early years of the 20th century in America. As a prime

example, he offers the New York Public Library by Carrère and Hastings, both of whom were products of the Paris École.

A very succinct summary of the basic literature of Classical Theory is contributed by Robert Chitham from a larger work of his called “On Proportion.” The ordering principles, beginning in simplicity and zooming into splendid complexity are dramatically illustrated by a photo of the gorgeous staircase under the dome of Julian Bicknell’s well-known Henbury Hall, a project more fully detailed in several other parts of the book. An essay from Bicknell himself on the “Craft of Classical Details” enthusiastically describes the pleasures of working with skilled and knowledgeable craftsmen who happily team up to create the unified goal they all desire.

It is especially satisfying to read the many eloquent answers to so many of the accusations employed by modernists to discredit the movement toward a New American Renaissance. Hugh Petter, for instance, takes on the familiar “...of course you could not do that nowadays...” and provides ample evidence that of course we can.

Elsewhere, in rebuttal to admonition that “we must not copy,” Foster Reeve affirms that “copying from great work is probably one of the most valuable activities in developing original art.” And in a stirring conclusion to his own essay, which could serve as both introduction and finale to this whole book, Petter announces “it is time for optimism and for careful action too, to ensure that the green shoots which are emerging are carefully nurtured so that they mature into strong plants which can, in turn, embellish both current and future generations of new classical buildings with fine innovation and vigorous details of the highest quality.”

And I would add: Take this book. Read. Learn. Teach.

Alvin Holm, AIA, is an early advocate of traditional design, in private practice since 1976, and winner of the first annual Clem Labine Award. He has lectured and taught widely, having initiated a course in Design with the Classical Orders in the National Academy of Design in 1981 and subsequently at many other institutions. He has been an ardent member of ICAA since its inception and prior to that an officer in Classical America.

Henry Hope Reed in Philadelphia

After attending the Henry Hope Reed Legacy Symposium, “The Future of the Golden City,” sponsored by the Philadelphia chapter of the Institute of Classical Architecture & Art (ICAA), I stepped out into the City of Brotherly Love. Philly, more than New York City, perhaps as much as Washington, DC, may come as close as any American city to Henry Reed’s vision of classical civitas. I walked from City Hall all the way to the Philadelphia Museum of Art. Strolling through the former, designed by John MacArthur Jr. and built between 1871 and 1901, then through the new and execrable Love Park – it’s for children (bless their hearts), not lovers – and down Benjamin Franklin Parkway to the art museum, one is literally surrounded by buildings, including the Cathedral Basilica of Saints Peter and Paul, the Free Library, the Family Court Building, the Franklin Institute, the Rodin Museum and other Classical monuments, with enough statuary groupings to gratify a dozen Henry Reeds.

Not that one needn’t blink away much of what passes for architecture along the way. Still, in its buildings, in their relation as an ensemble, in the grandeur of their symmetry and its closure by the Museum of Art, this promenade has the bones of Reed’s paradise, as outlined in *The Golden City* (1959), which is one of my bibles. I hope others at the symposium were able to walk this walk. And the day was as beautiful as could be.

In fact, the day was as beautiful as the life of Henry Reed, which ended in 2013 at the age of 97. Reed may be said to have been the founder of the Classical revival in America, and it was he who led the formation of Classical America, the forefather of the ICAA.

But let’s step back to City Hall. It was overtaken as the world’s tallest building during its long construction, first by the Washington Monument and then by the Eiffel Tower. It is the largest municipal building in the country. It has been the tallest masonry building in the world since 1953. But that’s Wikipedia talking. What would Henry Reed say about its French Second Empire design?

He comments on it in a passage from *The Golden City*, which also cites one of my favorite buildings, the “old State, War-Navy Building” in Washington, DC, (now called the Eisenhower Building): “[I]n both, order is piled on order, ascending to a high mansard roof.” You’d think he was praising it. Well, order piled upon order is all well and good in Reed’s view, but the mansard roof thing has got to go. French Second Empire, along with Gothic, Romanesque and other mixtures of Classical with other styles, all watered down the perfectionist Reed’s idea of the Classical.

And if Classical was indeed a prime example of earthly perfection, any building that retreated from the purity of Classicism undermined the possibility of building the Golden City, the city of grandeur, conceived as a laying on of architecture, rising from modest classical background buildings with little grandiosity, devoted to trade and habitation, to academic halls, institutional buildings and churches on up to civic buildings featuring the highest level of nobility in massing and

ornamentation, groupings that Reed wanted to see placed at the conclusion of grand boulevards, viewed through triumphal arches entering the apotheosis of classical civitas.

The attitude of looking down one’s nose at, say, the Gothic, from the exalted reaches of the Classical might once have been defensible. The American Renaissance and the City Beautiful movement, sparked by the World’s Columbian Exposition in 1893 stretched basically from 1880 to 1930. Most of the great Classical temples of Philadelphia were erected toward the end of this fecund period, especially along Franklin Parkway. I’m sure Reed must have strolled here, goggle-eyed, long before most of the mishmash Modernism perched along the route today, pecking at its grandeur, had come home to roost.

The attitude is no longer defensible. Before the “era” of Modernism (which according to the modernists we are destined to inhabit forever), the hatred felt by, say, the mystery writer H.P. Lovecraft for the post-colonial styles that were eroding his beloved Yankee patrimony in Providence, RI, was at least plausible. Today, with “the Modern” having carried out a successful revolution against tradition itself, such antagonism is downright absurd if not perverse. The Classical remains under house arrest, with the Modernists still trying to lose the keys. If traditional styles don’t hang together, they will hang separately.

The critic Catesby Leigh, in remarks at the Reed symposium, imagined the young Henry in Rome “ogling the Venuses.” But today, facing the need to combat what the erudite Leigh described as the “many-headed Hydra of Modernism,” Reed would, I think, feel a greater need to shed some of the weight of his perfectionism. Leigh and others at the symposium may debate this notion, but as was pointed out often from the speakers’ dais, conversation among classicists is inevitable, and conversation is good.

Speakers and members of the audience disagreed over many things, from the validity of our hero’s negative attitude toward supposedly sub-Classical traditions, to the definition of beauty, to the need for a definition of beauty, to whether Henry Reed’s Golden City will arise more through a vigorous battle of styles or a vigorous education of the young about Classicism, or (perish the thought!) a compromise with Modernism, which could be hard to distinguish from a surrender to it. But all agreed that the Classical revival has advanced on many fronts – in the knowledge and production of Classical and traditional art and architecture – and that this progress would not have occurred had not the ramparts been manned, from the start and virtually up to this very day, by Henry Hope Reed.

David Brussat won the ICAA’s 2002 Arthur Ross Award for his architecture criticism in The Providence Journal.

If you would like to submit a Forum or have an idea for one, please contact editor Martha McDonald at mmcdonald@aimmedia.com.

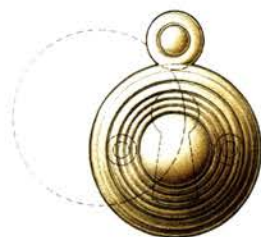
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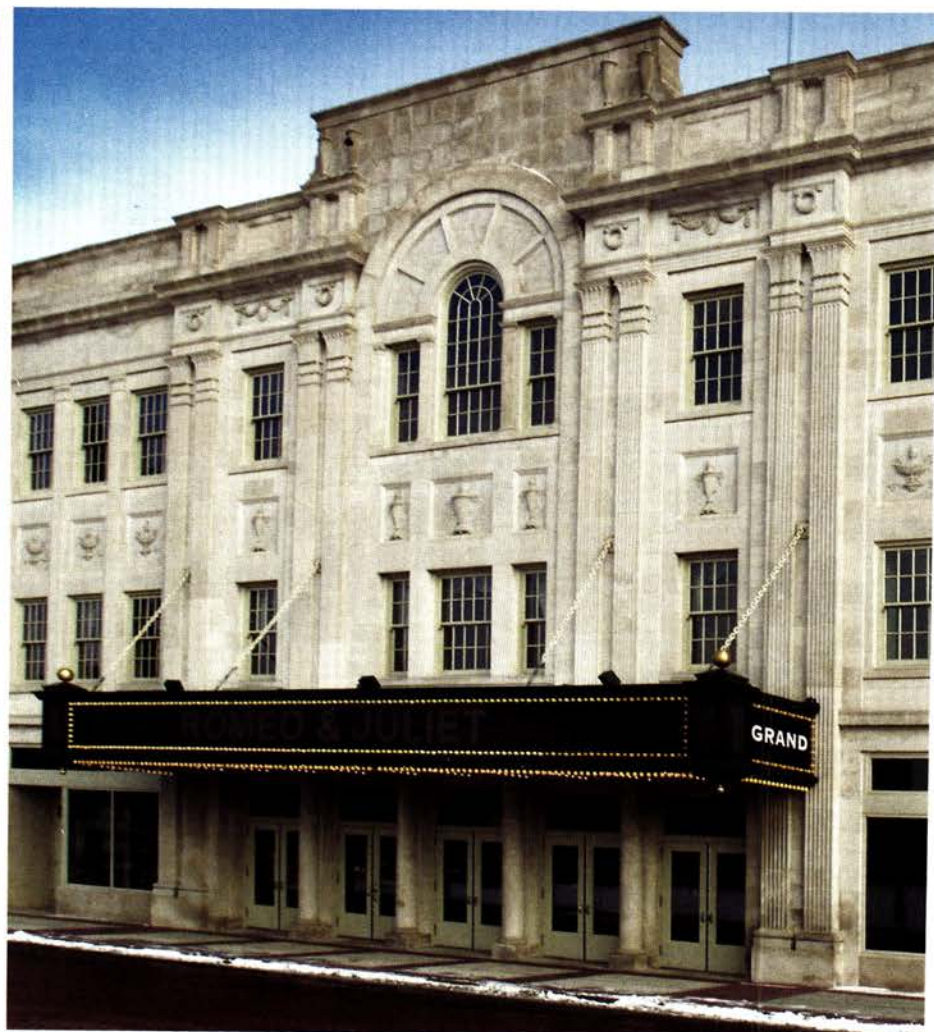
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