

DESIGNSOLUTIONS

Journal of the Architectural Woodwork Institute

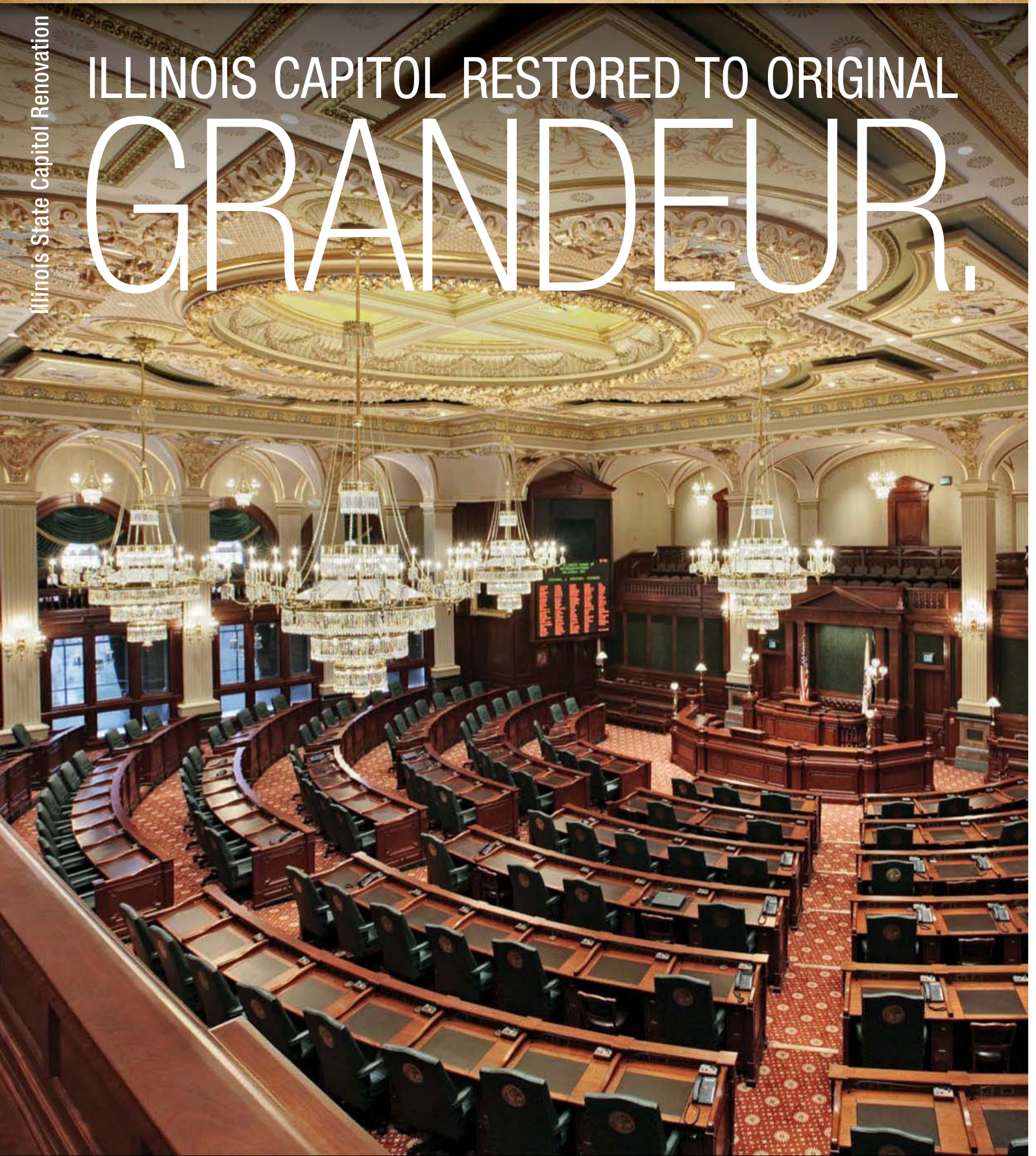
State Capitol
Conference Center
Corporate Offices



AWI

ARCHITECTURAL
WOODWORK
INSTITUTE

ILLINOIS CAPITOL RESTORED TO ORIGINAL GRANDEUR.





A The original Illinois State Capitol building, designed by French architect Alfred Piquenard, was constructed in 1870. It was renovated in 1930 and again in 1970. The renovation in 1970 modernized the aesthetics of the chambers and, in doing so, many of the historical details were obscured or lost.



CRAFTSMEN LITERALLY DISMANTLED the woodwork in House and Senate chambers down to the bare structure.

AT A GLANCE:

AWI MANUFACTURING MEMBER: Imperial Woodworking Company

LOCATION: Palatine, Illinois

FOUNDED: 1963

FACILITY: 225,000 square feet of state-of-the-art equipment

SPECIALTY: 16,000 square foot finishing facility designed and built by German engineers

"Imperial specializes in getting involved in the early design stages of a project by producing shop drawings from architects' renderings and preliminary information, thereby creating a document for field coordination and cost development. This fast-track approach gets us into fabrication, delivery and installation months ahead of traditional methods."

-Frank Huschitt III, President

State leadership had a vision to restore the grandeur of the original design and did so by seeking out the talented architectural firm of Vinci Hamp Architects, Chicago, to make this vision a reality. AWI member firm Imperial Woodworking Company, Palatine, was added to the team to execute the reconstruction endeavor.

Imperial Woodworking mobilized a team of artisans and craftsmen to the House and Senate chambers to literally dismantle the woodwork down to the bare structure. The woodwork was then repaired by stripping and sanding the many layers of old stains and varnishes all the way to the bare wood.

Cracked and deteriorated pieces of wood were carefully replaced and many new elements were seamlessly coped, mitred and fitted into the existing woodwork. Then all woodwork was hand finished on site to match precisely the new woodwork that was shop fabricated.

MEMBER DESKS

Central to the project was the design of new, period-appropriate member desks and leadership rostrums, reports David Hrabal, AIA. In both chambers the new desks represent the fifth generation of legislative desks

since the original trestle tables. The House chamber has 138 hinged-top desks while the smaller Senate chamber features 69 roll-top desks, based on a design from the turn of the 20th century.

"The desks are complex assemblies that are individual pieces yet joined together and fit into rows that form the whole assembly," he explains. The Senate desks include a roll-top feature so they can be secured when not in use. House desks have a sloped work surface with a flip top with a leather

writing surface controlled by a gas cartridge for smooth quiet operation.

Members' laptops are concealed when the desk tops are secured. Each desk also accommodates an electronic voting console and microphones, along with drawers and pull-out trays for the convenience of the user.

"Imperial used laser technology to capture the existing desk locations and platforms before they were removed," notes President Frank Huschitt, III. "We then generated three-dimensional drawings for all the new platforms. This allowed for preparation work by other trades to precede the arrival of the newly built desks."

BEAUTIFUL ELEMENTS

Another important focus of the chambers was the rostrums. The Senate President's was reconstructed around salvaged fragments from the original. The House Speaker's rostrum was entirely reconstructed from historic photos. Both rostrums were enlarged to accommodate the greater number of personnel.

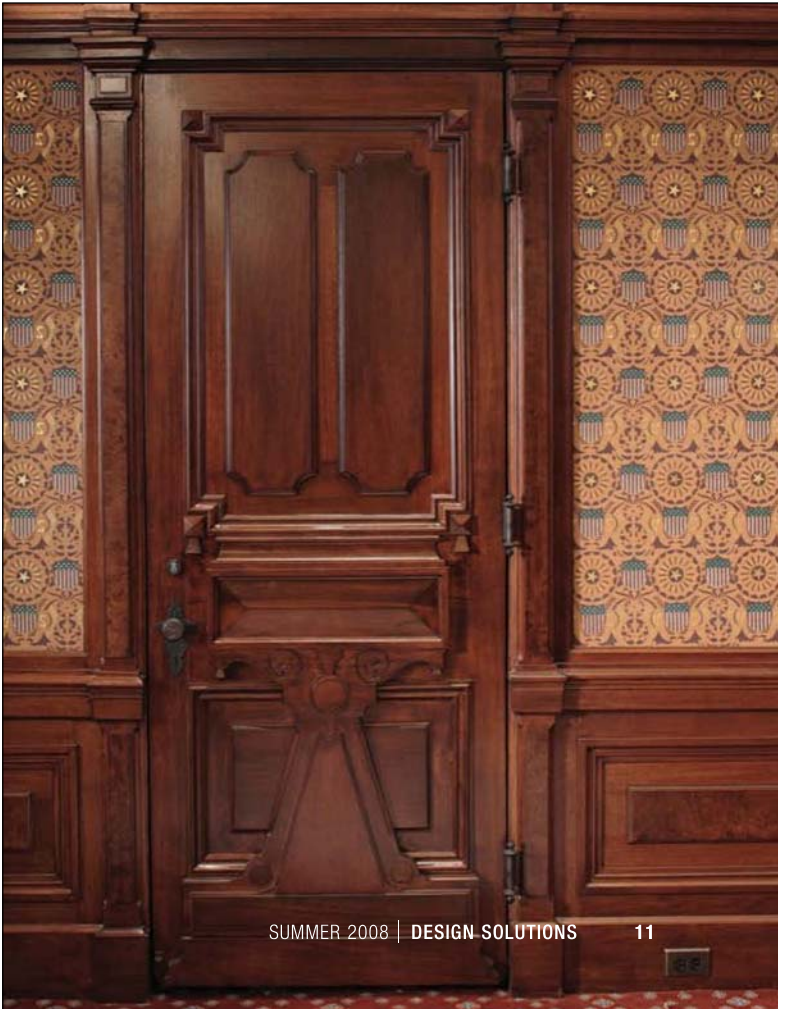
On each side of the rostrums elaborate wood bases were constructed to accommodate decorative lightoliers.



▲ THE HOUSE CHAMBER has 138 hinged-top desks while the smaller Senate chamber features 69 roll-top desks.



▲ AT THE ENTRY PORTAL, original hand-carved decorative panels were refinished and reinstalled in new wood surrounds based on photographs of the original work. ▼ Elaborate wood bases were constructed to accommodate decorative lights, below.

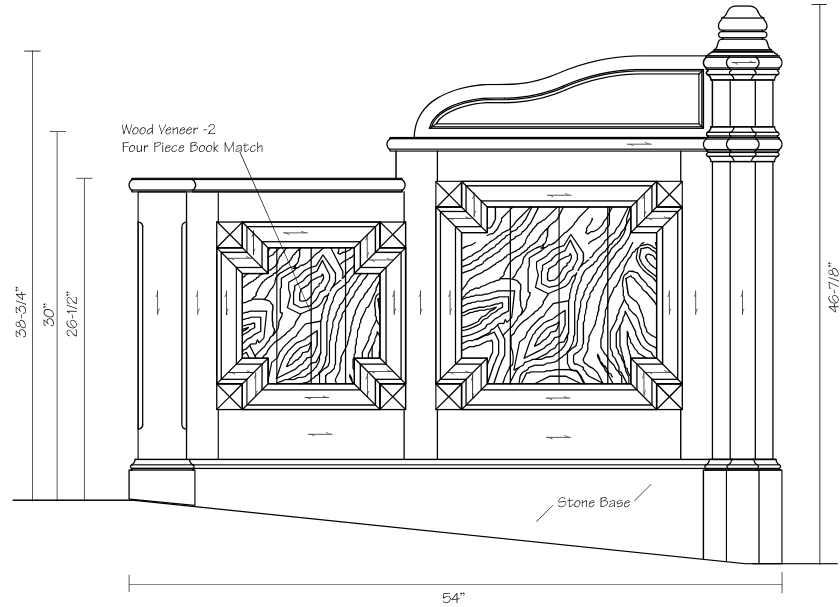




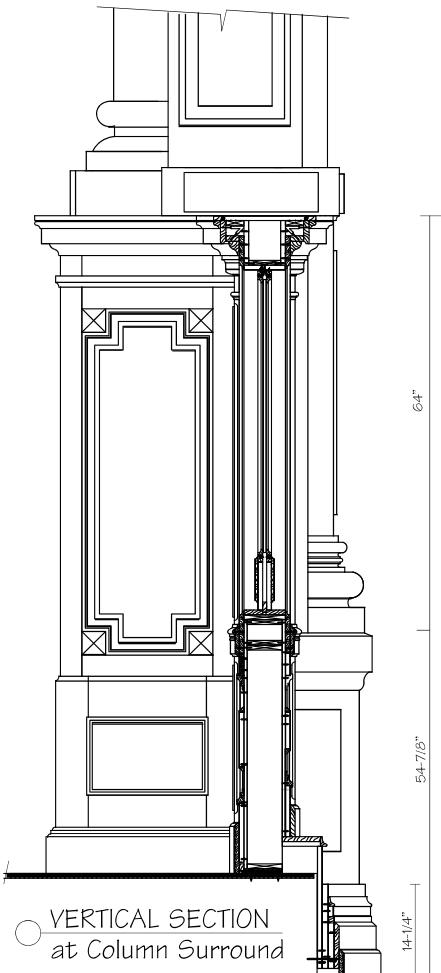
The rich wood faces of the rostrums conceal staff work surfaces and electronic equipment.

At the House chamber's entry portal, original hand-carved decorative panels were refinished and reinstalled in new wood surrounds based on photographs of the original work. The large brackets that frame the entry were also recreated. These curved brackets contain a hand-carved panel surrounded by a curved stile and rail frame with a knob finial at the bottom.

In addition, massive wood railings were created in the House chamber entry and gallery. These railings include large turned wood spindles in the lower portion with a segmented arch supporting the cap assembly.



○ SIDE ELEVATION
at Senate Desk



○ VERTICAL SECTION
at Column Surround

BEAUTIFUL WOOD

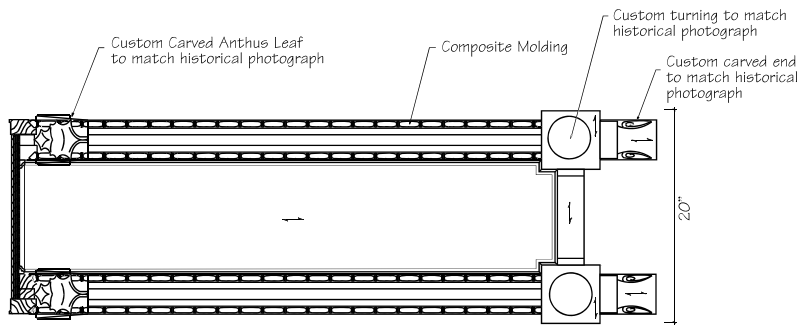
Hrabal notes that it was originally thought that the chambers' woodwork was fabricated from American Walnut. "The existing wood has been bleached, glazed, re-stained and was, as a result, difficult to identify. Therefore the wood was sent to a laboratory for identification.

The wood was classified as Sindora and identified as Sepetir (also called Supa) and probably originally sold as Honduras Mahogany. Sindora and Mahogany are not in the same family although look very similar. "With this new information," continues Hrabal, "the primary wood used throughout the renovation was changed to African Mahogany. This matched exactly the original Sindora."

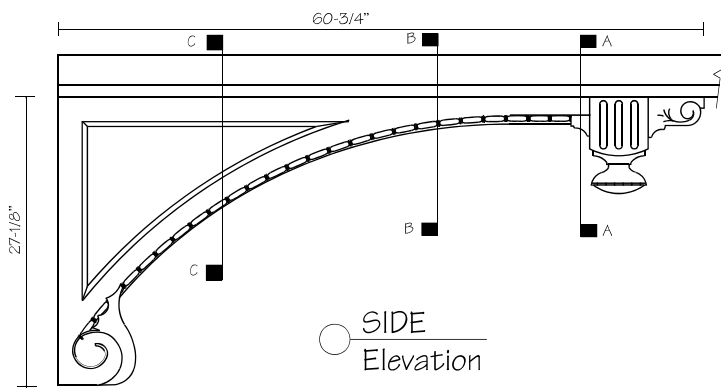
In the Senate European Walnut burl veneers were used on most raised panels, and in the House were used on the raised panels on the rostrum, press boxes and in other select locations. "The new woodwork blends in with the refurbished 136-year-old woodwork so perfectly and seamlessly that it is indistinguishable," adds Huschitt.



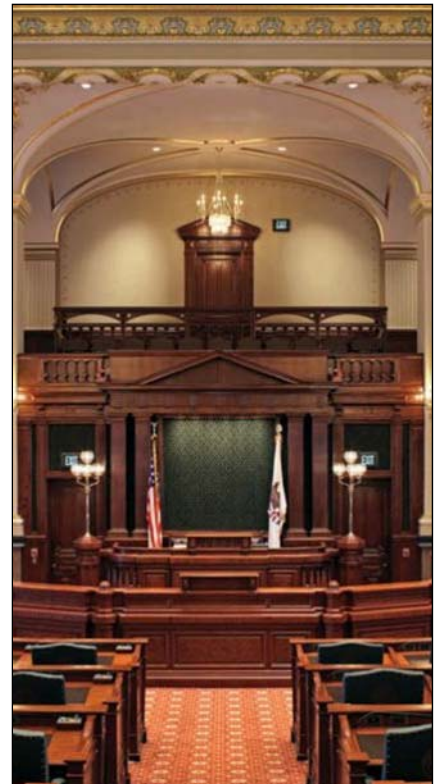
▲ MATCHING AND INSTALLING the new wood surrounds.



REFLECTED CEILING PLAN
at Bracket



SIDE
Elevation



▲ ELEGANCE IN MAHOGANY is evident in the beautifully restored chamber rostrums.

INTERESTING CHALLENGES

The scope and importance of the project presented many challenges to the design and construction teams. For instance, says Hrabal, reworking the entry doors to both chambers. Each leaf of these massive double doors is four feet wide and almost 12 feet high. “They had loose joints, many split mouldings and veneers, and badly patched holes where hardware modifications had been made. Imperial disassembled the doors and remade many

of the components including ornaments and damaged veneers.”

The schedule was also very challenging. The entire project, from notification to proceed to occupancy, was accomplished in less than nine months.

“To complete a project of this scale and complexity required a firm that could produce the highest quality work in large quantities and to meet varied design requirements,” says Hrabal. “Imperial Woodworking has the reputation for the highest quality

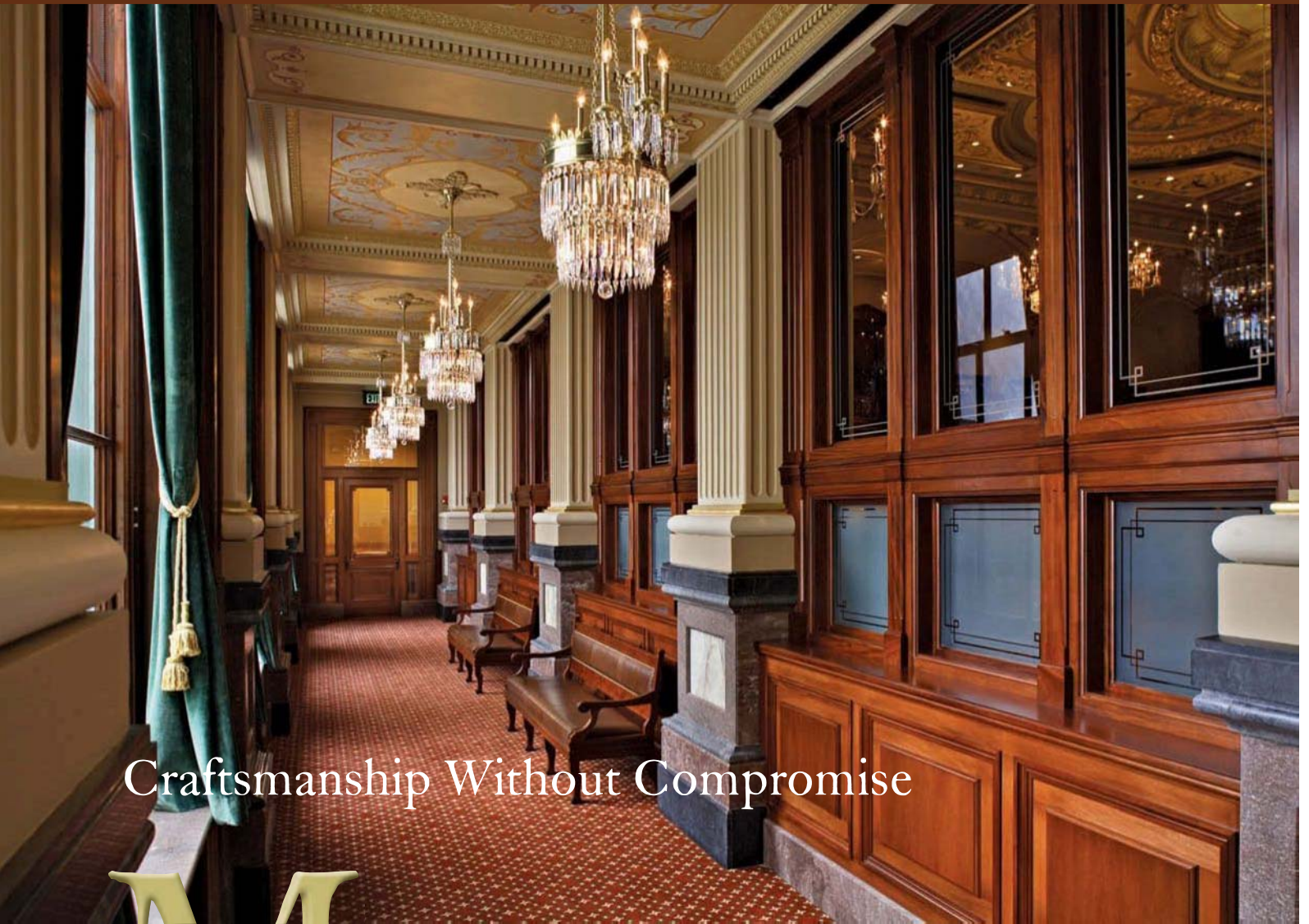
and for incorporating technology into the work. Frank Huschitt and his team brought to the table extensive experience and an ability to creatively solve countless design and fabrication problems.”

“The Illinois State Capitol renovation holds special project status for our company,” summarizes Huschitt. “The entire team at Imperial was focused and proud to be part of our state’s history. It is special to all of us to be able to tell our children and grandchildren that we were par of this chapter of our state’s history.”

Project:	Illinois State Capitol Renovation	Springfield, IL
Project Owner:	Illinois State Capitol Development Board	Springfield, IL
Woodworker:	Imperial Woodworking Company	Palatine, IL
Architect:	Vinci-Hamp Architects, Inc.	Chicago, IL
General Contractor:	CORE Construction	Morton, IL
Photographers:	Eric Hausman	Chicago, IL
	Seth Gaines	Rockville, IL



IMPERIAL WOODWORKING CO.



Craftsmanship Without Compromise

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Meticulous attention to every detail, from selecting and matching the finest veneer and hardwoods to hand finishing each piece to render it a work of art, is the hallmark of Imperial Woodworking Company.

The Illinois State Capitol renovation holds special project status for our company. Our entire team is proud to have been chosen for this project, and even prouder to be able to tell our children and grandchildren that we were part of our state's history.