

ADAPTIVE REUSE

what's old is new again

Regardless of the project's scale, Memphis firm John Pruet Architects specializes in green repurposing of existing structures

by Russ Kleitke

They didn't set out to be recognized for effectively and efficiently repurposing existing buildings, says John Pruet, who leads an eponymous architecture firm out of Memphis, Tennessee. Yet the firm has established a name for itself in this area, facing down challenges that are just as big as the opportunities. "Adaptive reuse is in increasing demand by owners and developers," Pruet says. "Particularly in this economic environment."

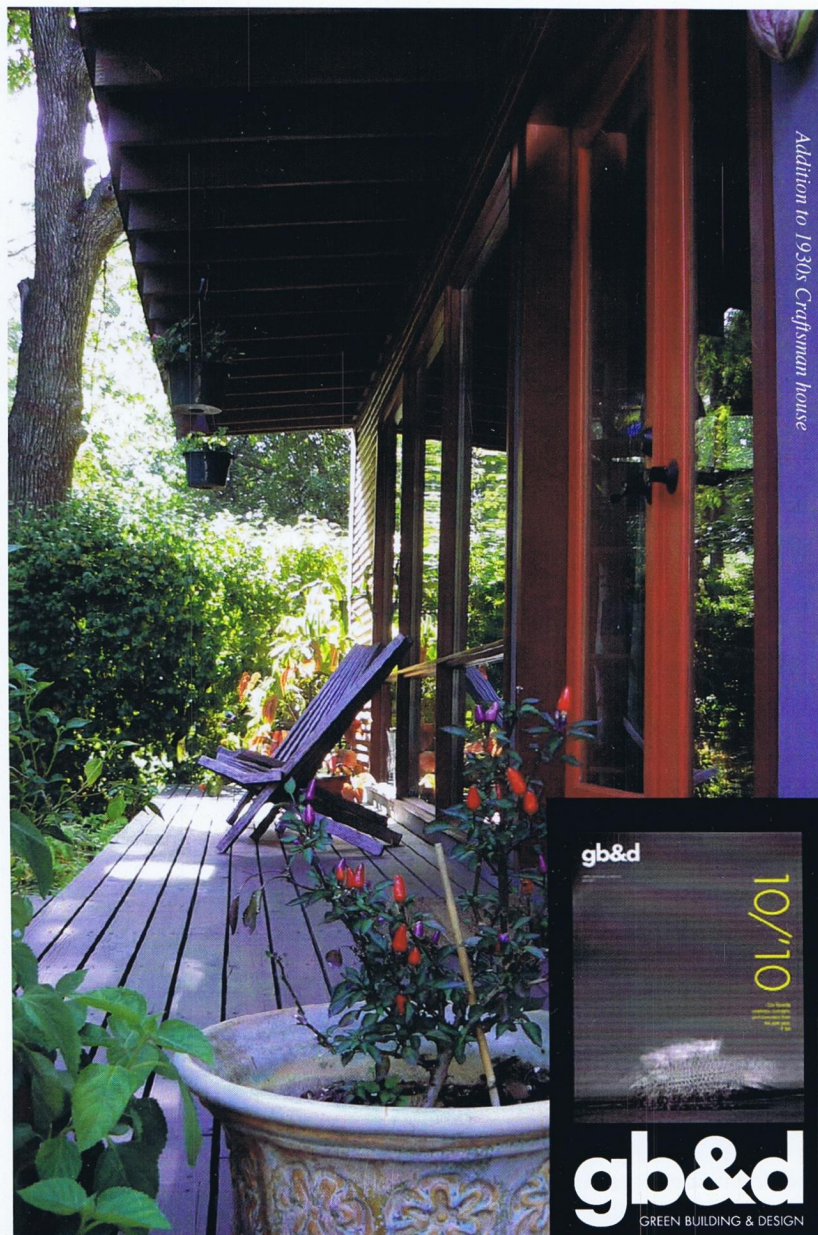
But the firm more than just responds to difficult economics. It renovates existing buildings to achieve energy efficiencies with an aesthetic that appears fresh and contextual. The firm rethinks space entirely even while preserving some of the beautiful concepts of the past. And when new buildings are what the owner wants, John Pruet Architects wins awards for making modern structures fit beautifully into their historical context.

Pruett's own 1930s Craftsman-style house is a good example. Situated in the Evergreen Historic District of Memphis, there were restrictions as to what could be done to the building's exterior. With a north-facing living room and main entrance, the original layout failed to make the best use of rooms with a southern exposure. "We built out a family room facing south to take advantage of the natural light, while preserving the architectural character of what was already there:" The expansion features open interior space planning, large expanses of glass with views to the garden, and exterior flourishes that recall the original architecture, such as exposed rafter tails and open soffits. The new footprint consumes about a third of the original backyard (the remainder of which was turned into a garden). Large overhangs shade the windows from summer sun.

On a much grander scale, the firm has been commissioned with the revitalization of the Memphis Place Hotel in the city's medical district. The developer is focused on achieving LEED certification upon completion. With 164 existing rooms plus 35,000 square feet of conference and commercial space, the 1960s-era concrete

structure reflects a brutal aesthetic that likewise doomed energy efficiency.

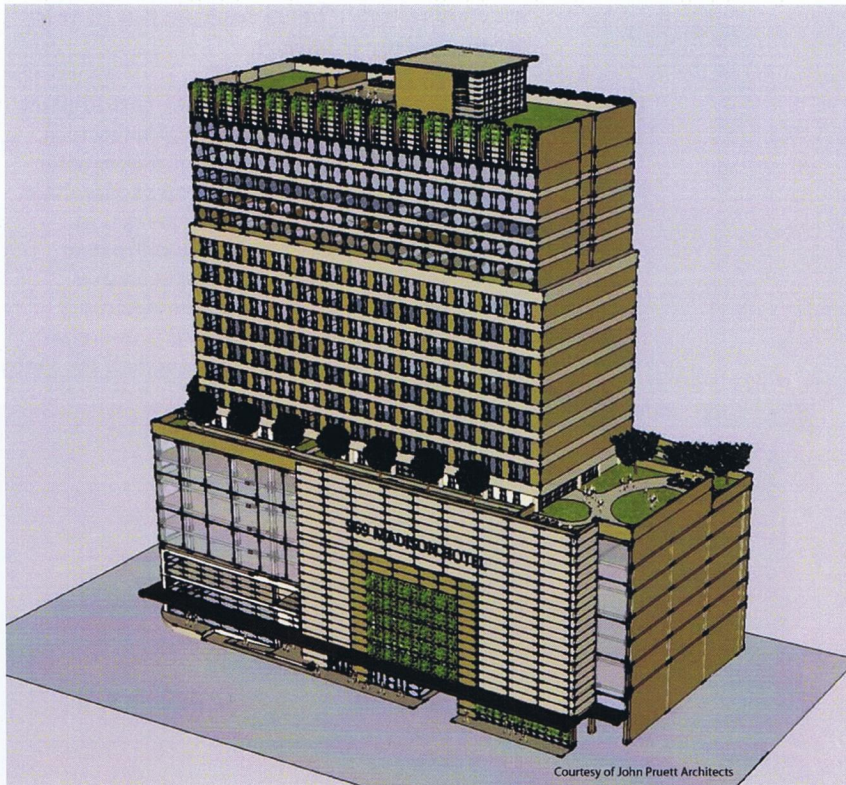
So Pruet and his team overlaid the cast-in-place, exterior concrete façade with metal rainscreen panels and perforated screens that reduce solar heat absorption. They used rooftop photovoltaic cells to heat between 75 and 100 percent of the building's hot water and the rooftop pool, and they employed innovative regenerative-drive technology, which generates electricity from descending elevators. Low-E tinted-glass windows also reflect solar heat, and half the lobby



john pruet
ARCHITECTS

1869 MADISON AVENUE
MEMPHIS, TN 38104-2621
(901) 721-9062

WWW.PRUETTARCHITECTS.COM



Courtesy of John Pruet Architects

When called upon to create new structures, the firm is more than capable of doing so. Its Memphis Regional Gamma Knife Center outpatient facility, part of the Memphis University Hospital, is a thoroughly modern building. John Pruet Architects were also design consultants for the 200,000-square-foot, three-story library on the University of Memphis campus. And the firm has won awards for four new residences built in the city's Evergreen Historic District.

In Collierville, Tennessee, a relative's historic farmhouse reflects the 19th-century character of the National Register of Historic Places-designated town square. Pruet designed a guesthouse that sits adjacent to the existing structure. It has a rural, outbuilding feel but includes 1,200 square feet of loft-like space and numerous green components that make it a modern, sustainable home: passive solar, indigenous materials, and second floor clerestory windows provide natural ventilation.

Regardless the scale or age of the building, John Pruet Architects always discovers opportunities to make the structure friendly to people and the environment.

LEFT: A drawing of Pruet's adaptive reuse hotel project, featuring a rain screen on its façade

"Adaptive reuse is in increasing demand by owners and developers."

—John Pruet, Principal, JPA Memphis

is a greenhouse, irrigated by stormwater captured on site.

Although conditions were favorable to convert the building into an international brand name hotel "not all older structures can be," Pruet explains. "Building codes favor new over old, in part because they focus more on safety issues. Sometimes there are asbestos and lead-removal issues. And it's often challenging to meet the letter of the law to satisfy ADA requirements.

Of course, reusing an existing structure is considered a plus by LEED standards, but the additional challenge is that the building's site is clearly established, which could defy optimal sun orientation.

The Pruet firm doesn't allow parameters to become barriers. Other buildings in Memphis they've revitalized include a school and a working fire station, both from the 1930s. Each has large windows that allow good natural daylight. Both were updated with window glazing or low-E replacements, new insulation, energy efficient heating and cooling systems, heat-reflective roofing materials, and low-water-use plumbing. The school's original transom windows even bring natural light to corridors.



john pruet
ARCHITECTS

1869 MADISON AVENUE
MEMPHIS, TN 38104-2621
(901) 721-9062
WWW.PRUETTARCHITECTS.COM