

**EXCLUSIVE!** The Quality 55 Leaders – page 22

# QUALIFIED Remodeler

BEST PRACTICES, PROJECTS & DESIGN IDEAS  
MAY 2010 [www.qualifiedremodeler.com](http://www.qualifiedremodeler.com)

**MASTER DESIGN SOLUTION:**

## A Connected Conservatory

Addition contributes to the language and legacy of historic Tennessee home

– page 36



**EXTERIOR  
Contractor**

**Social  
Media  
Comes  
of Age**

– page 79

**Product  
Trends:  
Roofing  
Systems**

– page 44

**BONUS!**

**Outdoor Living**

page 61

# A Connected Conservatory

An elegant conservatory contributes to the language and legacy of a historic Tennessee home

By Kenneth W. Betz

**T**oo often adding square footage to a home for casual living or as a transition between more established parts of the home has been an inelegant undertaking. It's as though the informal nature of the space unintentionally is mirrored in the design and construction process, sometimes with second-rate results.

A remodeling project done

by a previous owner of an early 1900s Georgian Colonial home in Belle Meade, Tenn., suffered just such a fate.

"During the past century, several families have owned the home and have made additions or modifications. The fingerprints of the various families did not interfere with the classical architecture that the house embodies — with the exception

of a glass conservatory, or Florida room, that connected the main house to the library at the rear. The cheap addition cut off the language of the great architecture the home was built upon," says Craig Huseby of Huseby Homes in Nashville, Tenn.

It was Huseby's task to implement the plans of architect Eric Stengel, of Eric Stengel Architecture LLC in Nashville and replace the addition with a larger, better functioning room. The project was the gold award winner in *Qualified Remodeler's* conservatory/sunroom category in the 2009 Master Design Awards.

"This was a new purchase, and they had some things they wanted to work out of the house and make it function for their family," Huseby says. Upgrades were also done in the master bedroom, library and kitchen.

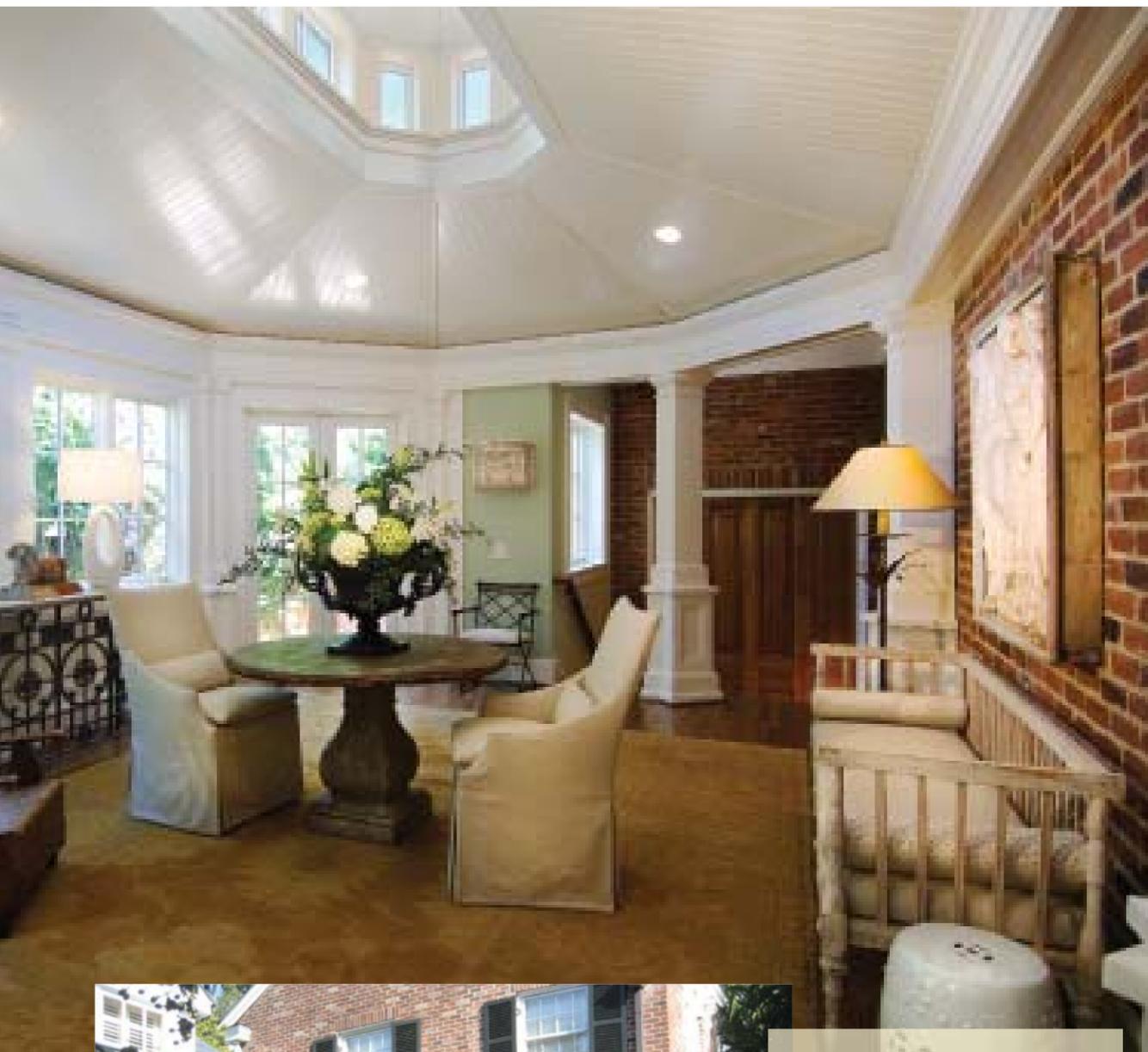
Just off the kitchen, the conservatory serves as the family room the home never had and has become one of the owners' favorite rooms.

Photos: Jerry Arnip Photography



The new octagon-shaped conservatory, however, is the focal point. It provides a connection between the kitchen and the library, itself an addition constructed at some point in the home's history. The clerestory affords ample daylight from above without the disadvantages of the glass roof of the room that it replaces.

Just as important, the conservatory creates an informal living space that can be used year-round. The Georgian Colonial, typical of its era, incorporates a formal living room and dining room at the front of the house but lacks the sort of family room



The conservatory's clerestory affords ample daylight without the disadvantages of the glass and aluminum room that it replaces.

A glass and aluminum Florida room (bottom, left) installed by a previous owner had a laundry list of problems. Water leaked in at several locations and it wasted large amounts of energy.

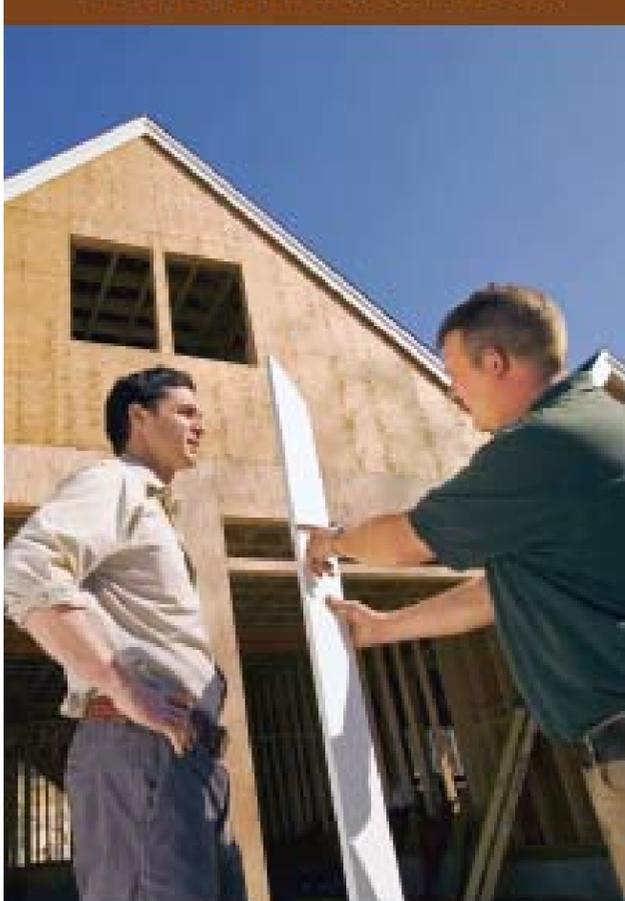
found in many newer homes. The new conservatory is located a few steps down from the kitchen, a central gathering place for many present-day families, and

has become one of the owners' favorite rooms in which to relax, Huseby relates, serving much the function of a contemporary family room.

The existing "Florida room" dated to the 1970s and had been added to an existing patio. The original intent was to enclose the patio to provide



**BUILDING RELATIONSHIPS.**



There's a reason we know the lumber business so well. We're in the lumber business. And whether we're forging partnerships with our dealers, or helping them make lifelong commitments to their customers, we stand by our word because our word is our bond.



For more information circle 83



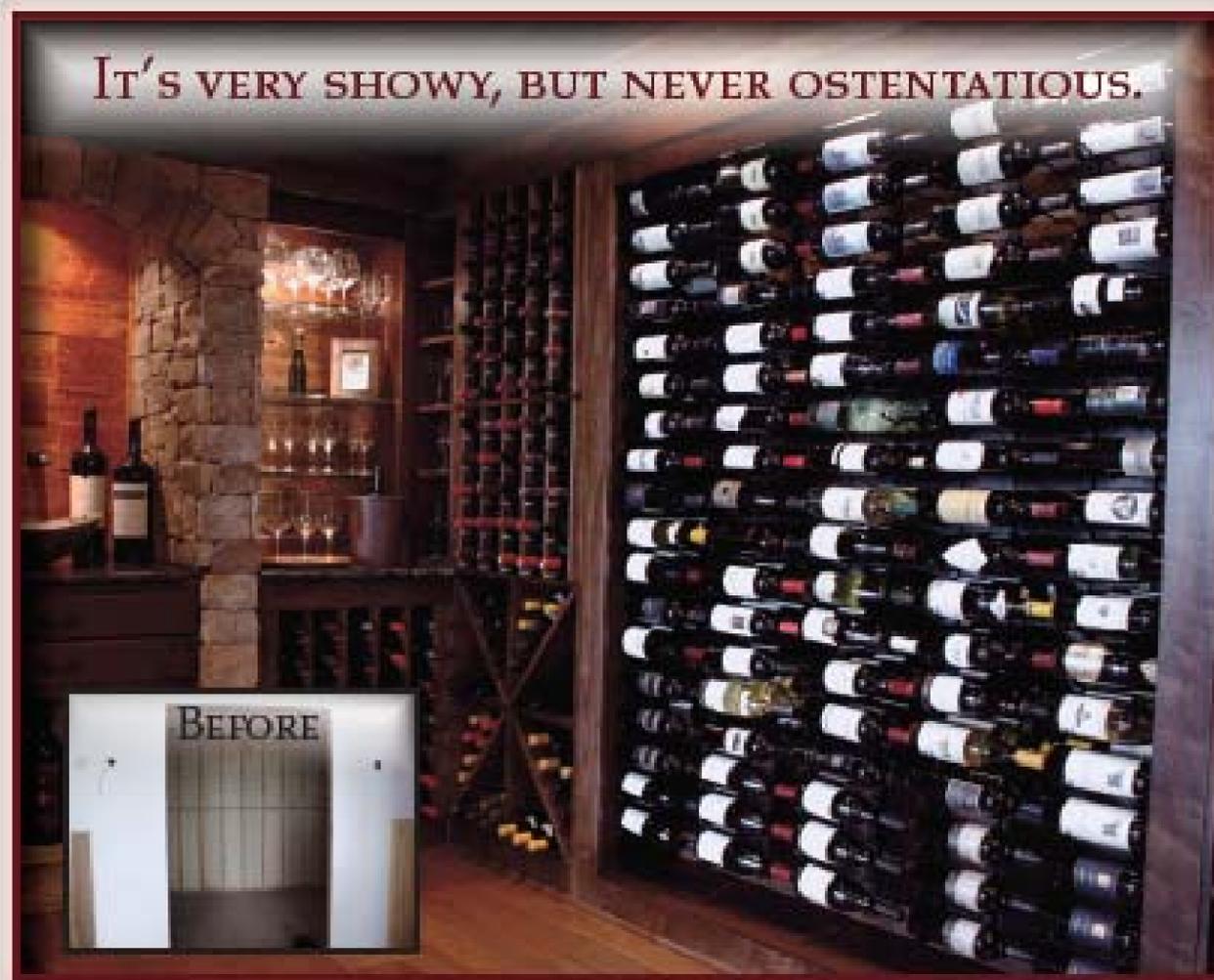
The kitchen, immediately adjacent to the new conservatory, received some cosmetic upgrades as well as new windows and a new ceiling.

extra living space and to provide access to a paneled library.

**Popular but flawed**

A popular 1970s concept, the Florida room had a number of flaws in general and particularly in its execution at the Belle Meade home. First, the room faced south and had a glass ceiling. "The room would alternate between punishing heat and frigid cold," says Stengel.

"In terms of 'greenness,' it was one of the worst performing rooms ever seen. The HVAC ran in overdrive at all times trying to



IT'S VERY SHOWY, BUT NEVER OSTENTATIOUS.

**VintageView**  
WINE STORAGE SYSTEM

VINTAGE VIEW® Wine Storage System proudly displays the labels of your wine collection while keeping itself unnoticed.



- Complimentary Design Service
- Easy Installation
- Flexible Configurations

1.866.650.1500  
WWW.VINTAGEVIEW.COM

For more information circle 84



The library, itself a previous addition, is several steps down from the conservatory. Finishes and paint in the room were upgraded as part of the renovation.

compete with the climate's four seasons," he added.

The room leaked water at the ground level sill and at the roof flashing against the brick wall of the garage — which formed the room's rear wall. It was too narrow to properly furnish and too

Removing the Florida room was complicated by the tight location at the rear of the main house between a detached garage and a small courtyard area adjacent to the property line, which is defined by a brick wall. There was no room for even a mini-

“The intent of the conservatory was to continue the simple and logical organization of the existing home's detailing.”

wide to be just a hall or passage to the library.

Worse, “the modernity of the smoked and curved glass and extruded aluminum robbed the home of charm,” says Stengel. “The room did nothing for the simple expression of the home's classical language architecture. At best it was a jarring visual mixture, and at worst, a huge energy drain on the home.”

excavator, Huseby recounts, and work had to be done carefully by hand. Making that work somewhat easier was the construction of a ramp that allowed workers to travel less than 20 ft. to the back of a dump truck rather than cart the demolition debris around the rear of the house.

“The ramp, built with safety rails and secured with lag bolts, not only cut down costs, but

protected the brick columns of the rear patio. Throughout the process, the rear gardens were roped off and remained in pristine condition,” he notes.

#### Attention to detail

Replacing the failed addition was a process characterized by the same care and attention to detail. It began with the architectural design of the conservatory, a procedure informed by Stengel's adherence to what he terms the classical language of architecture.

Part of the elegance of that language, he says, “is its ability to accommodate constant cultural change. My houses must function for the modern family first; otherwise, there is no utility to the building.

“The intent of the conservatory was to continue the simple and logical organization of the existing home's detailing,” Stengel says. “While conservatories are typically a different vocabulary than the main house, they still need to harmonize with the existing home's level of detailing. In so doing, the two speak to each other and belong.”

**KLEER**

**BUILDING BETTER PRODUCTS.**

From the very beginning, we've pledged to deliver high quality products at competitive prices. Consistency and innovation are our hallmarks. And neither we, nor our customers, will accept anything less. If it says Kleer, you know you're getting the very best.

**KLEER**

For more information circle 85



Because most steel fabricators are used to working on commercial jobs with less exacting tolerances, the steel fabrication was monitored closely.

**Steel for rigidity**

The conservatory is somewhat unusual in its use of steel framing. “When I make this kind of room, I like to use a steel moment frame for rigidity and the clean span capabilities,”

Stengel recounts.

“Doing this makes a very rigid structure so that the creep and differential movement that may occur in a wholly wood building is not likely to happen. The operable doors and windows

are less likely to pinch and bind over time. While this adds to some costs, it makes the other materials perform better over the lifetime of the building — ultimately saving money on things that would typically fail if [steel] were not used,” he explains.

Because the home is in a century-old neighborhood, Stengel relates, getting approval for changes was difficult. “Adding anything required the expensive and time-consuming process of making documents for the zoning board to review,” he notes.

After getting approval for the

design changes, other challenges remained. “The area of construction is isolated and difficult to access,” Stengel says. “Some things had to be lifted over the house with a crane. The contractor [Huseby] had to make a lot of ramps and protective encasement to the existing brick walls and piers so they would not be damaged during the construction process.”

Although the addition was only 350 sq. ft., it required an abundance of labor and materials, Huseby says. The steel component was more than \$45,000; the trim materials were approximately \$38,000 — quoted by several suppliers for more than \$50,000. The trim labor required three artisans to work for 14 weeks (\$50,000). The finish carpenters applied dead wood to the steel

# Go Tankless!

With Quietside's **ODW** Tankless Water Heater



For more information, please visit [www.qualside.com](http://www.qualside.com)

For more information circle 86

as part of their scope of work to ensure the proper foundation to trim out the columns, entablature and ceiling.

### Construction challenges

The roof of the conservatory had to be built to properly shed water not only from the new structure but from the roof of the existing two-car garage that has a living space above it with two

steel price to compensate for extra carpentry labor to make corrections,” Huseby explains.

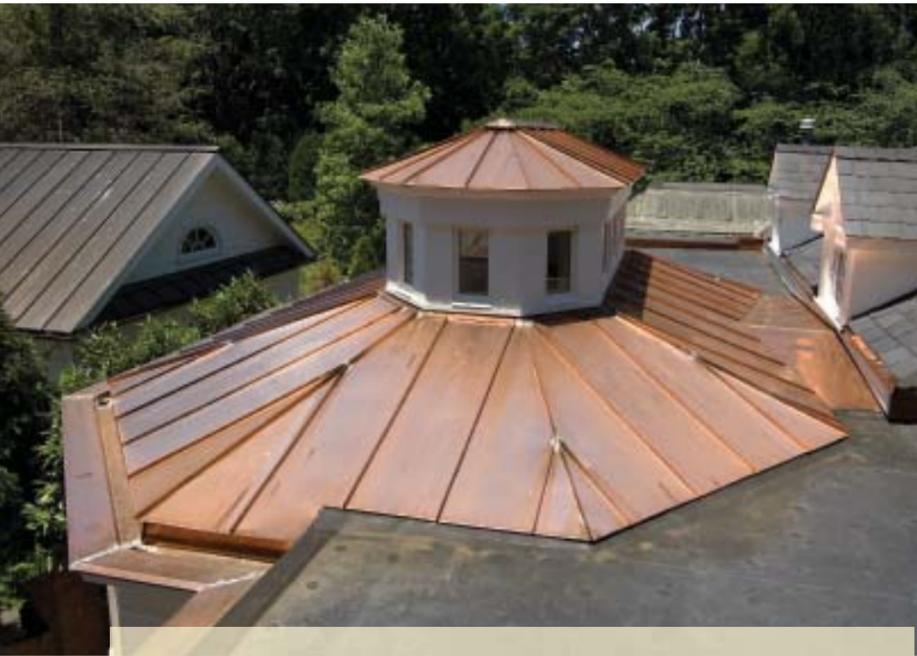
Most steel companies are more accustomed to commercial projects that have greater tolerances, he comments.

Because of the estimating challenges presented by the intricate nature of the architecture and assembly, most builders would have priced the project

monthly basis. For this project we created invoices on a weekly basis and reviewed the project vs. actual cost every Thursday. We then issued a statement to be paid by the owner once a month,” Huseby recalls. The system allowed him to manage labor and costs before there were large discrepancies between actual costs and projections.

During the first half of the project, Huseby found ways to create cost underages that allowed him to meet budget. “One example is that we hired a smaller trim supplier with less overhead to provide our trim. We had a clear contract with him outlining the requirements, and he was able to meet with our construction coordinator on a weekly basis to review what was needed in the next several weeks. This approach was better than trying to run it all at once with the risk of making errors in the millwork,” he says.

The end product of Huseby’s and Stengel’s collaboration is a conservatory which successfully integrates parts of the existing home while serving an important function of its own. Just as important, it contributes to the language and legacy of a classic structure. | QR



The roof of the conservatory had to be built to properly shed water not only from the new structure but from the roof of the existing two-car garage.

gable dormers. The drainage had to be effective without diminishing the original appearance of the architecture, which uses in-bound gutters, Huseby says.

Working with steel was a challenge. “To manage the steel quality, we monitored the installation and recorded any irregular workmanship in writing as steel erection was being executed. The information was shared with the building team, consisting of the architect, structural engineer, owner and the steel contractor. This allowed us to reduce many of the intolerances and request deductions from the proposed

using a cost-plus model, Huseby says, meaning that the budget is basically open. “Our building team committed to deliver the project for the same price as the original estimate, excluding owner-approved increases in expenditures.”

“At the end of the project, we were 1.4 percent under our original projections, and the owner was very happy,” he adds.

Achieving that goal was no small feat. Managing costs is difficult, particularly when the trim carpentry and other trade work are complex, he continues. “We normally bill on a biweekly or

### SPECIFIED PRODUCTS

**Specified products**  
**Exterior doors:** Marvin  
**Windows, skylights:** Marvin  
**Wood flooring:** Jeffco Flooring, white oak  
**Paints/stains:** Sherwin Williams  
**Roofing:** Rubber membrane and copper

## BUILDING FOR THE FUTURE.

You can't talk the talk if you don't walk the walk. We set out to make a difference, and now our products contain certified recycled content. Not because we had to. Because we wanted to. How many other PVC trim manufacturers can say that?

Learn more about our entire line of PVC trim products today at [kleerlumber.com](http://kleerlumber.com)

For more information circle 87