





# Preserving the Historic Integrity and Character of the Home Was Imperative

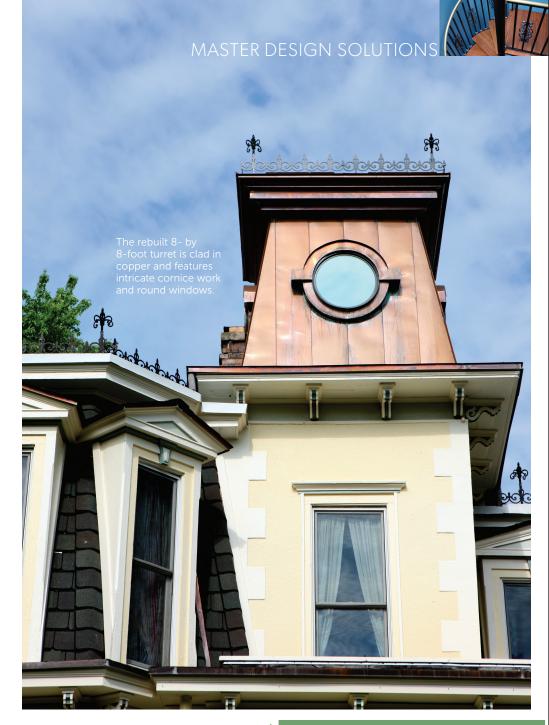
esidents of LaGrange, Ill., recognize that a notable 155-year-old Victorian home underwent significant improvements, but the transitions are so deftly accomplished most can't pinpoint where the 3,750-square-foot vintage house stops and the 1,420-square-foot remodel begins. The owners were

committed to this uniform appearance to preserve the integrity of the home outside and in, for themselves and their architecturally historic neighborhood.

With two teenage daughters and a young son all sharing one small bathroom, the owners realized they needed more functional accommodations for their children. In addition, they were



The owners of a 155-year-old Victorian in LaGrange, Ill., were committed to preserving the uniform appearance of the home.



interested in a new master suite with modern conveniences for themselves. The existing detached garage was in very poor condition, so it made sense to create an attached two-car garage and leverage the space above.

The second story atop the garage includes the new 14- by 20-foot master bedroom with two walk-in closets, a steam shower, whirlpool tub and new cabinetry with an adjacent 11- by 17-foot den/exercise room. The heated garage has an adjacent mudroom with custom cubby shelving and direct access into the pre-existing family room and kitchen. Each level of the addition connects to the existing home, so the floor-to-floor ratios had to exactly match the historic home's 10-foot-plus ceiling heights.

## FAST FACTS ABOUT THIS PROJECT

REMODELER: Normandy Remodeling, Hinsdale, Ill.

LOCATION: LaGrange, Ill.

**SQUARE FOOTAGE BEFORE:** 3,752 **SQUARE FOOTAGE AFTER:** 5,172

According to Troy Pavelka, design manager for Normandy Remodeling in Hinsdale, Ill., working on the house was the opportunity of a lifetime. "The owners were intent on preserving the home's character, and it's rare to see the level of detail found on this home. From replicating the corbels to stone foundation to



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ASTER DESIGN SOLUTION

the wrought-iron cresting and turret detailing on the roof, it's truly a special project."

#### Reclaiming an Era

On the exterior, the trim had rotted and the roof needed replacement. Normandy Remodeling's carpenters matched the rich exterior woodwork. The craftsmen repli-

"When you are working in a house this old, nothing is straightforward, but that's what made it such an extraordinary project."

-Troy Pavelka, design manager, Normandy Remodeling

cated the dormers' keystone detailing, chamfered edge on the corner trim and pediment above the windows. Thirty-six custom wooden corbels were fabricated to simulate the existing corbels. The team used split-faced block to match the foundation stone applied in a 1930s addition, and skilled stucco work concealed the seams between the renovation work, the addition and the existing structure.

In keeping with the existing architecture. 7-foot-tall windows were added in the addition. French doors inside the master suite open onto a small European balcony with an iron railing that overlooks the back yard. The balcony creates a new connection to the outside and filters in daylight.

Armed with a keen love of nostalgia and archives of newspaper articles and historic photos of the house, the owners decided to reclaim an original feature of the home that had been lost during the past century: an elegant turret. Round windows were set into an 8- by 8-foot square turret, which is clad in copper with intricate cornice work. Because the windows were aluminum, Pavelka worked closely with the window supplier to create plastic barriers between the aluminum and copper to ensure the copper would not come in contact with the aluminum and oxidize.

The striking feature is more than a dec-



A spiral staircase in the mudroom rises into the upstairs den. Its wrought-iron railings with brass detailing and oak stair treads are reminiscent of the 1850s

Normandy Remodeling's craftsmen replicated the dormers' keystone detailing, chamfered edge on the corner trim and pediment above the windows

Charles of the party par

orative landmark. Rather than close it off inside, Pavelka wanted to bring the natural light down into the space and allow occupants to see up into the vault. "Opening up the vault from below really created a 'wow' factor on the interior. The family and their guests become cognizant of the turret while inside, so it's more than an exterior detail they see solely upon arriving home," Pavelka says.

#### **Contemporary Feel, Victorian Flair**

To help the new space feel like a historic home, Pavelka designed a spiral staircase in the mudroom that rises into the upstairs den. Its wrought-iron railings with brass detailing



and oak stair treads are reminiscent of the 1850s. With the first-floor ceilings so tall, calculating the vertical measurements between each stair tread and landing the staircase at the exact height of the second floor took careful planning.

The second floor itself also provided challenges, as the owners wanted hot-water radiant heating. The flooring is 3-inch-thick concrete with radiant water tubes running through it. The concrete provides thermal mass, which helps keep the heat in, but this type of system is commonly done on the ground floor slab.

"We did engineering research to figure out how to reinforce the structure, so it could carry the weight of the concrete system," Pavelka notes. "Instead of a traditional 2 by 10 floor joists, we used LVL [laminated veneer lumber] as the floor structure. It's a highstrength engineered wood that makes for more consistent floor beams, so it will be able to carry the weight of concrete plus the structure without sagging or deflection."



A fireplace with a double mantel is the focal point in the new master suite



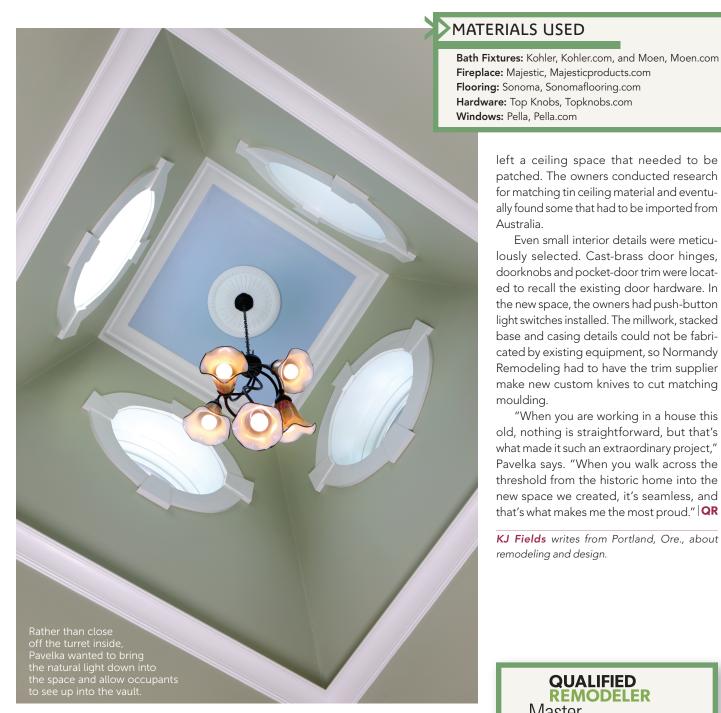
The owners made a fireplace with a double mantel the focal point in their new master suite. The completely custom mantel work is divided into two pieces: a traditional wood mantel surrounding the fireplace itself and another one extending to the ceiling. A flat-panel television sits between the two.

Handmade, hand-glazed

tiles from Sonoma, Calif., grace the top of the mantel. The hearth is a unique marble called Dakota mahogany marble, and the team pulled the fireplace together by using some of this marble for the keystone at the top of the tile surround.

#### **Getting it Right**

Normandy Remodeling did extensive remodeling of the existing areas of the home that tie into the new space. Upstairs,



left a ceiling space that needed to be patched. The owners conducted research for matching tin ceiling material and eventually found some that had to be imported from Australia.

Even small interior details were meticulously selected. Cast-brass door hinges, doorknobs and pocket-door trim were located to recall the existing door hardware. In the new space, the owners had push-button light switches installed. The millwork, stacked base and casing details could not be fabricated by existing equipment, so Normandy Remodeling had to have the trim supplier make new custom knives to cut matching mouldina.

"When you are working in a house this old, nothing is straightforward, but that's what made it such an extraordinary project," Pavelka says. "When you walk across the threshold from the historic home into the new space we created, it's seamless, and that's what makes me the most proud." | QR

KJ Fields writes from Portland, Ore., about remodeling and design.

a partial remodel on the parents' former master bedroom became a hallway to give the teenagers and a newly designated quest room access to the second bathroom. For the owners' convenience, a part of their old master bathroom and walk-in closet became a second-floor laundry room. Along with the new master bath, the renovation required a new sanitary line and new water service upgrades.

The design removed a set of stairs that

led down into a furnished basement from the kitchen and created another set of stairs in the mudroom for basement access. Although it was a standard staircase, to support the new stairs, crews had to reframe some of the floor joists in the existing part of the house that connects inside the garage.

When the team removed the old stairway to the basement, they moved a wall 3 feet to reclaim the space. The kitchen had a beautiful and unique tin ceiling, and the expansion



#### Historic Renovation: Gold

Master Design Award Judge Rich Bubnowski, Assoc. AIA, NKBA, of Richard Bubnowski Design LLC, Point Pleasant Beach, N.J., described the renovation as a "beautiful project with wonderful attention to detail."



### RRP AND REUSE OF BUILDING MATERIALS

The December 2011 issue of Qualified Remodeler featured a story about deconstruction (page 18), which prompted a reader to ask whether the Washington, D.C.-based U.S. Environmental Protection Agency's lead Renovation, Repair and Painting rule impacts the reuse of building materials.

The Chicago-based Building Materials Reuse Association also was concerned about how RRP would affect the deconstruction and salvage industry. In January 2010, BMRA submitted a letter to EPA in which it asked EPA to help interpret the scope of the rule. Bob Falk, Ph.D., P.E., research engineer with the USDA Forest Products Laboratory, Madison, Wis., and BMRA's current president, says the letter specifically asked "Does the RRP rule apply to the salvage and reuse of building materials or components that may contain leadbased paint from target housing?"

The letter asked EPA to comment about BMRA's interpretation of the rule, which is as follows: "While the rule does make reference to 'waste management' and addresses the disposition of 'waste' and 'debris,' we could find no reference to the disposition of salvaged building materials intended for reuse. As the RRP rule does not explicitly address the disposition of nonwaste materials, our interpretation is that the salvage and reuse of building materials that may contain lead-based paint is outside the scope of the RRP rule. We further assume that state regulations will dictate the reuse, resale or disposal of lead-based-paintcoated materials."

EPA formally responded to BMRA's letter and facilitated a session at the association's national conference, DECON '11, to address concerns related to deconstruction and reuse of building materials. "You can salvage these materials for reuse," Falk says. "However, the sale of

salvaged materials coated with lead-based paint is outside the scope of the RRP rule and is dictated by your state law. For example, here in Wisconsin, there is a state statute against selling building materials with lead paint on them."

Falk adds this doesn't imply you don't have to follow the RRP rule when you remove materials. "If a contractor needs to disturb leadbased paint during remodeling, it doesn't matter if the removed materials are for salvage or to be thrown away; the RRP rule still needs to be followed to contain any lead dust or chips. However, any removed component must be cleaned of lead dust or loose paint chips so lead is not spread around."

Because RRP only applies to paid contractors, a homeowner can salvage components from his or her own home that contain lead paint and reuse them in an addition or another part of their own home. However, the homeowner should take the same basic precautions a paid contractor is required to take: Contain the lead and protect themselves, their family and the environment from lead contamination.

State laws vary, so some reuse stores may still accept and sell products that test positive for lead. "Most reuse stores are very conservative, and if an item tests positive for lead they won't deal with it at all," Falk notes. "However, if it's something that has significant

economic or historical value—a really fancy door with a lot of carving on it, for example—it may be worth the trouble of removing the paint. Removing lead-based paint from an item can poison you or the people around you, so extra caution and correct techniques should be used." Falk adds BMRA has spoken with EPA about developing standardized labeling for materials so those that contain lead paint and are being



A reader questioned whether reusing building materials, like these stained-glass windows, is still OK under RRP. Dave Bennink

sold in reuse stores will be clearly identified.

Ultimately, being aware of the risks of lead paint is the responsibility of everyone involved in the deconstruction process: the salvage company, general contractor who hires the salvage company, the reuse store, and the contractor or homeowner buying the salvaged item from the store. Falk recommends calling reuse stores to determine their policy on painted products before bringing materials to a store to sell or donate. He also suggests swab testing materials you plan to buy or sell to determine the presence of lead paint. "Don't just test the surface paint because you may have non-lead-based paint on the top. There could be lead underneath, especially if it's an older item. Cut through the paint layers with a sharp knife and then test," Falk suggests.

Most importantly, Falk says not to be afraid of salvaging and reusing building materials. Lead can be harmful, but only if handled improperly. "I don't think EPA considered people salvaging and reusing materials at all when creating the rule. Their main concern was that the lead chips and dust produced during the remodeling process are properly contained; disposed of; and don't negatively impact the health of the inhabitants, the contractor and workers, or

Read more from EPA's clarification of RRP to BMRA at www. Bmra.org/gov-a-leed-resources/290-bmra.