

Retrofit Breakdown

Turning an inefficient house into a deep-green dream home is a matter of choices—lots of choices. Here's an inside look at how one remodeling team tackled the pros and cons of retrofit options.

If there is one theme that runs through practically every remodel in this country, it is: "We're updating our old home to fit how we live today." Older houses have charm and location, but often they don't quite "live" the way today's buyers require.

But easier said than done when it comes to making product and design selections to create vibrant new spaces while factoring high performance into the equation. After all, when you see a beautifully restored home, you rarely hear about all the design iterations or

the budget-related give and take.

Our ReVISION Orlando show home is an excellent example of how choices made from the onset through the product selection phase are essential to a successful remodel. Check out our behind-the-scenes breakdown of the house on the following pages. We talked to the builder, the architectural designer, and the interior designer to get an inside look on how they transformed an 1,800-square-foot 1950s ranch into a gracious four bedroom, three and a half bath home that works perfectly for today's homeowners.

EXTERIOR BREAKDOWN



“The worst thing you can do is build a home that doesn’t fit with the vibe of the neighborhood. College Park is a very special place. Whatever we did had to fit. Today, people want elegance but not to the point of corny or overdone. We live in homes that work for us, not in Tuscan villas.”—Pat Gaylor, interior designer



The stucco cladding is painted with Sherwin Williams Birdseye Maple (SW 2834). To add punch to the neutral tone, Gaylor selected a teal color for the trim (SW Grand Canal 6488). www.sherwin-williams.com



PGT’s WinGuard Impact-Resistant aluminum-clad windows are a necessary upgrade to help the house achieve its performance goals. (The home started with a HERS rating of 128 and is projected to come in under 50 at final testing.) These custom windows help provide security against intruders, reduce outdoor noise, and filter 99% of UV light. www.pgtindustries.com



Monier Lifetile’s Slate Collection, Buckskin CT blend is a “cool roof,” which has high solar reflectance and thermal emittance. The company also offers more cool roof options. Visit its website for a regional guide to cool roofs. www.monierlifetile.com



To create the warm Napa style of the home, the team spec’d Oldcastle’s Suretouch, a concrete masonry veneer product in Amboise from the Morreny Stone Collection. The product has pre-molded polystyrene panels that provide R-13.5 insulation as well as a “paint-by-numbers” system for placing precut units. The panels also provide acoustic benefits, allow for easy drainage, and are recyclable. www.oldcastle.com



Oldcastle’s Belgard Hardscapes pavers in Harvest Blend Subterra tie in with the color palette of the house, reduce pollution from rainwater runoff, and have a 50-year life cycle. www.belgard.biz



To keep the lighting load low, the team picked Kichler’s Franceasi 49227 LED lighting. The oil-rubbed bronze finish works well with the warm brown and neutral exterior. www.kichler.com



Scan here to learn more about the ReVISION House Orlando, or go to www.greenbuildermag.com and visit the Vision House section.

TIPS FROM THE PROS

- Don’t always go for bigger or elevation-changing remodeling ideas. Architectural designer Ray Rocha could have designed a two-story addition to this house, but instead decided to emphasize its simplicity and in the process added only 600 square feet of space. “With the 4:12 roof pitch, overhangs, lateral appearance of the windows, and shallow height of the house, designing a traditional house would be changing the character of the house.” Instead, he altered the look of the chimney by cladding it in manufactured stone and raised parts of the roofline to add visual interest.
- Consider the context of the neighborhood where you are renovating but tweak it to keep things fresh. “I wanted to stay away from the faux Tuscan and Mediterranean looks for this house,” says interior designer Pat Gaylor. “Instead I went with a cleaner more simple Napa style that has a Mediterranean influence but isn’t so heavy.”
- Choose an exterior feature and tie the other colors and products to it. “I put the stone and the roof material together so they would not fight with each other. The roof is a flat roof—more like slate—not a curved Mediterranean tile look, which would have been too much with the stone,” Gaylor notes.
- Choose a neutral window color that complements the other exterior materials. “We picked the chocolate color, which works well with the oil-rubbed bronze of the lighting fixtures,” says builder Kim Foy. “Then, with the teal color for the trim, we moved away from the really neutral palette that many new homes have today. It is warmer and gives an artistic value to the house instead of boring beige.”

INTERIOR BREAKDOWN

To maintain good air quality in the house, the team put in Panasonic's WhisperGreen Energy Star-rated exhaust fans, which are lead free and mercury free and can run for more than a year using the equivalent energy of a 4W light bulb. These models come with variable two-speed and delay timer controls built in or as a single speed. A motion sensor model is also available. www.panasonic.com/building

The main color used throughout the home is Relaxed Khaki SW 6149 www.sherwin-williams.com. Coordinating Hunter Douglas honeycomb blinds are not only attractive but they also provide insulative value. www.hunterdouglas.com

A combination of Kraftmaid painted (Cherry Peppercorn) and wood (Maple Canvas) cabinets adds interest to the open floor plan. The cabinets are made from environmentally preferable particle board with recycled content. www.kraftmaid.com



"The house has incredible living spaces. The parlor room is open to the family room to allow for large gatherings that can spill

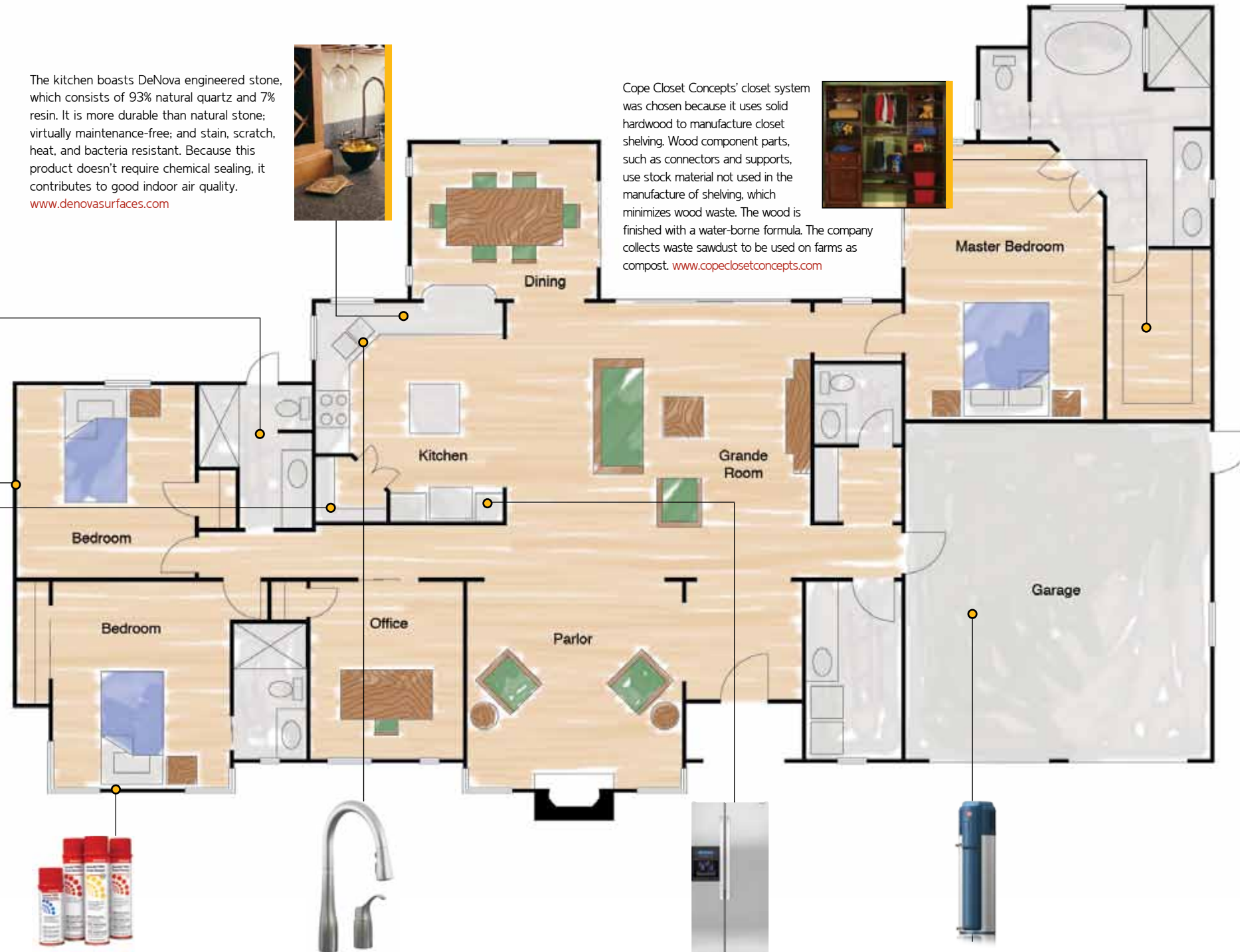
over into the parlor, but the parlor is defined by the fireplace, which makes it seem more formal but not separated."

— Kim Foy, builder, shown here with co-builder Jon Pleveich

The kitchen boasts DeNova engineered stone, which consists of 93% natural quartz and 7% resin. It is more durable than natural stone; virtually maintenance-free; and stain, scratch, heat, and bacteria resistant. Because this product doesn't require chemical sealing, it contributes to good indoor air quality. www.denovasurfaces.com



Cope Closet Concepts' closet system was chosen because it uses solid hardwood to manufacture closet shelving. Wood component parts, such as connectors and supports, use stock material not used in the manufacture of shelving, which minimizes wood waste. The wood is finished with a water-borne formula. The company collects waste sawdust to be used on farms as compost. www.copeclosetconcepts.com



Honeywell's closed-cell spray foam with Enovate HFC-245fa Foam Blowing Agent at R6.2+ per inch saves energy. Its air barrier properties help reduce air leakage, potentially saving 20%-40% on heating and cooling energy. Because it has such a high R value per inch, it can reduce wall thickness by 35%, which saves framing material. The product doesn't have formaldehyde or respirable fibers. www.honeywell.com

Gaylor spec'd Kohler faucets throughout the house because they offer transitional styling and are WaterSense qualified. The faucets' low-flow aerators deliver up to 45% water savings over traditional 2.75 gpm faucets. Shown here is the K-647-VS Kohler Simplice Single Handle Pulldown Kitchen Faucet in Vibrant Stainless Steel. www.kohler.com

The team selected Whirlpool products, including the refrigerator, built-in double microwave/oven, electric range, and high-tier energy-saving dishwasher because 85%-90% of the material in Whirlpool products can be recycled. The refrigerator (GC5HAXVS, shown) uses as much energy as a 60W bulb. www.insideadvantage.com

The team chose Rheem's HP-Series Hybrid Hot Water Heater with an Energy Factor of 2.0, which is twice the efficiency of a standard electric water heater. The unit uses surrounding hot air to heat the water, which makes its location in the garage a logical choice. www.rheem.com



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TIPS FROM THE PROS

- Think water savings first. "Our choice of faucets and toilets was all about water conservation," says Gaylor. "There are so many WaterSense-labeled products to choose from that it's hard to narrow it down." Gaylor notes that even low-flow showerheads are no longer noticeably different from regular-flow products.
- Consider tile. Gaylor and Foy originally pictured the home with wood floors but instead opted for Italian tile because of its durability, easy maintenance, and sustainable manufacture (see "Look Again," page 24).
- Bring in the light. "We decided to use a glass door between the master bath and the master bedroom to allow more light into the bedroom," says Foy. This idea lends itself to the spa look of the bathroom. "We spec'd a beautiful free-standing tub and a walk-in shower that is nice sized but not huge. It's an efficient use of space which is sustainable but also beautiful."
- Use outdoor space. This house has a double lot, but the old plan didn't take advantage of it. Now there are three sets of doors an 11 x 20 outdoor living space that is covered and could be screened.
- Consider varied ceiling heights. "We raised the ceiling height in the kitchen, great room, and master suite to 9'4"," says Rocha. "We didn't want too much discrepancy with the 8' ceilings of the existing house, like the parlor and existing bedrooms and baths." This also helps the parlor feel a little cozier and formal versus the more public, open feeling of the rest of the living spaces.

BEHIND THE SCENES


Real Green Solutions



Because the recession has been so prolonged and severe, consumers have been forced to take stock of their lives, recalibrating their values, expectations, and standards of living. Sustainability has become an essential part of the decision-making process when designing, constructing, and specifying products for homes. Homeowners are embracing the “culture of less,” downsizing and simplifying their lives for financial and emotional reasons. They’re now looking for personalization, quality, and service rather than biggest, fastest, and cheapest.

At Green Builder Media, we recognize that the world around us has indelibly changed. In response, we are providing real, environmentally appropriate, cost effective solutions that help American families understand what it means to build, retrofit, design, and live in a green home. Through the Green Builder VISION House Series—demonstration homes built around the country—we paint a portrait of decisions that builders, architects, interior designers, and homeowners can make today in order to achieve beautiful, high-performance results.

In the VISION (new) and ReVISION (retrofit) House Orlando projects, we’ve combined advanced green technologies with sophisticated sustainable design to create two homes that are truly unforgettable. Not all of the decisions were easy, and sometimes we had to make tradeoffs, but we’re delighted by the end result.

Please share your thoughts with me about how Green Builder magazine can deliver the most useful content about sustainable living at sara@greenbuildermag.com or join me on Twitter at SaraGBM. 



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VISIT THIS HOUSE AT IBS!

Visit the completed ReVISION House Orlando while you are at the International Builders Show. Tours runs January 12-15, and transportation will be provided from the Orange County Convention Center. Stop by the Green Builder Media booth (W4671) or email Heather: heather@greenbuildermag.com.

LOOK AGAIN

As the green building industry evolves, builders learn to differentiate between green-washed products and those that have a positive impact on the environment. Often, trade-offs are made as clients’ wishes or budget constraints impact product choices.

While locally sourced products are ideal in many cases because they reduce the energy used in transportation, they are not always the only or best choices. Case in point: tile. In this house, the team opted for Italian tile. What about the embodied energy in its transport? The combination of its durability, low maintenance, and the fact that Italy (and other countries) have gotten the manufacturing process so “clean” that the case can be made that it cancels out the negatives of transport.

Italian tile is an inert material manufactured from natural raw materials and will break down naturally at the end of its life cycle. The tiles contain no VOCs and will not absorb odors from smoke, paint fumes, or other contaminants, enhancing indoor air quality. In addition, it is a recyclable product through the reuse of the material in the manufacturing process. Some options include tile made from glass from recycled television screens, thin



tiles that can be applied over old tile, and porcelain tile that looks like stone and has 20% recycled content.

Ceramic tiles have a lower impact on the environment than most other finishing materials, according to the Italian tile industry. Over the past 30 years, the Italian ceramic industry has developed innovative technology, plant, and production techniques, significantly contributing to this result. Initially this commitment focused

on policies aimed at “limiting the damage” to the environment; however, in the last ten years the focus has shifted to adopting an integrated and wider approach towards sustainability. The industry pushing for the establishment of an eco-label for hard floor coverings, which will offer consumers a label that clearly shows a tile product is green through its entire life cycle.

As the green industry evolves, you will see many other products emerge that you might not have thought of as sustainable. But remember to consider the entire process of product manufacture as you help your clients navigate through the expanding world of product choices. For more information and to see some of the beautiful tile choices available, visit Ceramic Tiles of Italy. www.laceramicaitaliana.it/en

PROJECT DETAILS

- > **Project:** ReVISION House 2011
- > **Location:** Orlando, Fla.
- > **Builder/Developer:** Kim Foy and Jon Pleveich, Southern Traditions Development www.southerntraditionsfl.com
- > **Architectural Designer:** Ray Rocha
- > **Interior Designer:** Pat Gaylor, Designs by Pat Gaylor www.patriciagaylor.com

STREAMLINE YOUR BUSINESS

Consumers are downsizing and simplifying their home lives—and businesses are, too. Solutions like AT&T’s Xora GPS TimeTrack can help you improve productivity and reduce expenses, such as overtime and fuel costs.

With the 100% Web-based application called GPS TimeTrack, you can track the GPS location and activities of mobile workers, in real time, using AT&T phones. Core functions include GPS tracking, wireless timecards, job tracking, and data capture.

GPS TimeTrack can be integrated with many software applications commonly found in the SMB channel, such as QuickBooks,



Sage Master Builder, ADP, and others. And the company offers free support. The building team on this project used Blackberries and Xora software to improve its processes. www.wireless.att.com/business

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- > **Boral** www.boralna.com
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- > **Honeywell** www.ccfoam.com
- > **Italian tile:**
 - Ceramic Tiles of Italy** www.laceramicaitaliana.it/
 - Italian Trade Commission** www.italtrade.com
 - Italian Ministry of Economic Development**
- > www.sviluppoeconomico.gov.it/
- > **Kohler** www.savewateramerica.com
- > **Kraftmaid by Masco** www.kraftmaid.com
- > **Panasonic** www.panasonic.com/building
- > **PGT** www.pgtindustries.com
- > **Rheem** www.rheem.com
- > **Suretouch by Oldcastle** www.suretouchusa.com
- > **Whirlpool** www.insideadvantage.com



INDOOR AIR QUALITY

The ReVISION team didn’t stop at the energy story or the sustainable products. It continues the education by showing how to live more green in a home. With today’s tight houses, minimiz-



ing the amount of chemicals brought in after the house is complete is important.

Gaylor researched the green furniture options and found some collections from Stanley Furniture that she is particularly excited about: The My Haven and Second Nature Greenguard-certified collections in the Young America Collection. Check out these collections when you are outfitting your model homes or point them out to your new or remodel clients as they plan their furnishings. www.youngamerica.com



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