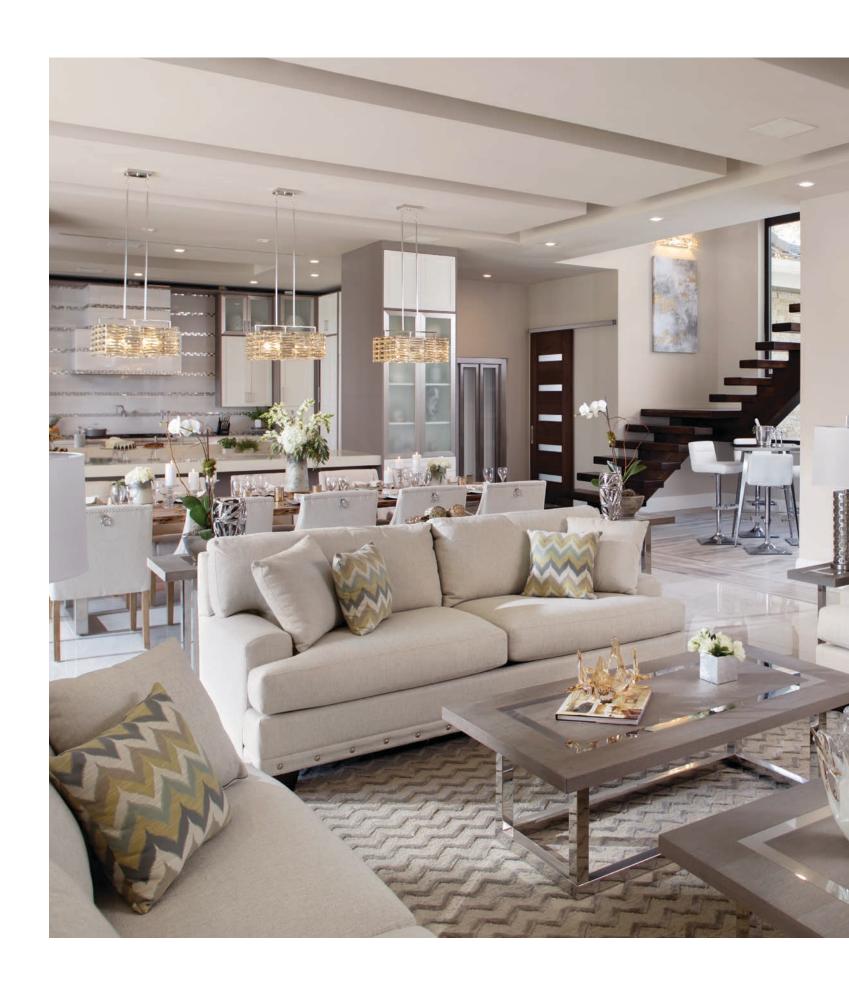


TRANSITIONAL STYLE MEETS STATE-OF-THE-ART
CONSTRUCTION SMARTS IN A MODERN TUSCAN SHOWPIECE

BY CHERYL WEBER; PHOTOGRAPHS BY JEFFREY A. DAVIS







Central Florida's upscale Bella Collina new-home enclave is known for its spectacular natural scenery and beautiful buildings that evoke a sense of history. The community's Tuscan-leaning architectural guidelines take their cues from the rolling land, a rarity in this part of the state. Its homes and community spaces share a mellow, Mediterraneaninspired language of honey-colored stone and creamy stucco, low-pitched terra-cotta tile roofs, broad columns, and the occasional bell tower. But with a mandate to showcase A-list design ideas and building technologies that easily translate across the spectrum of style, size, and region of the country, The New American Home 2018 is different in both subtle and obvious ways.

John Kolb, EVP of Legacy Custom Built Homes, in Winter Park, Fla., intended the home to be clean and refreshing, but not so far-out modern that people can't envision themselves living there. "We feel like show homes can get to the point where you're building a house to show off but not necessarily to live in," he says. "We wanted a house with the technology of tomorrow that people could feel comfortable in today."

A comfortable home also means being the right size for its occupants. The 6,533-square-foot interior floor plan is designed so that whole sections can expand or shrink without losing the plan's integrity. "Not everyone needs a 35-by-24-foot main living room," adds the architect, Greg Hyatt, principal of Hyatt Design, in Orlando. "We did it to let people see that this is a home they could adapt."

#### **MEDITERRANEAN MODERN**

Built on a high point of land with views of a lake, the roughly H-shaped floor plan keeps the outdoors front and center—something everyone seems to want these days. Multiple porches, courtyards, balconies, and walls of glass open to a terraced backyard outfitted with a sprawling pool, spa, and fire pit. At the home's core are an open kitchen and great room with accessory rooms orbiting around it: home office, powder room, laundry, mudroom, guest suite, game room, and a master suite with its own covered porch. The gracious kitchen has an eat-in peninsula that's part of the main island

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and is fully open to the dining room and great room but also serves the outdoor pool through folding glass doors. There's even a large walk-in pantry adjacent to the game room. "It's a party house, a big social house," Hyatt says.

The second floor is equally inviting, with three en suite bedrooms plus a kids' loft with kitchenette, a powder room, a second laundry, and a sitting area, not to mention a large, well-appointed balcony in back and a smaller balcony accessed from the front bedroom. In guest bedrooms, salvage cladding by Synergy Wood Products adds warm texture.

"There are multiple views out of all the rooms because the house is on a lake," Hyatt says. "You can walk from one side of the house to the other inside without compromising your view to the rear."

Despite the decidedly Mediterranean 4:12-pitch roof, deep overhangs, flat-concrete roof tile, and a stone-and-stucco façade, the home's generous use of glass tips it modern, as







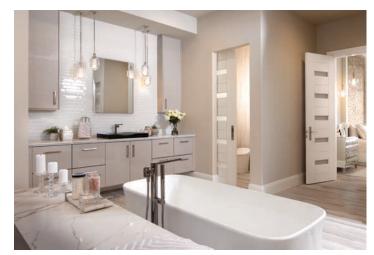
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do the long-span porch columns and horizontal stone datum lines, which give the house a linear appearance from the street. A gigantic bank of two-story windows shows off the entryway's staircase.

#### **SMART BUILDING SYSTEMS**

Last year's New American Home set the bar for improving the overall performance of this year's home. That included bumping down construction costs. One area where this was achieved was the CertainTeed drywall finishing system, an application equivalent to a Level 5 finish, but which takes far less time. The drywall is mudded and sanded once, then sprayed with the product. "You don't have to sand or prime it, and it's a sealer, so it helps with weather-tightening," says executive director Tucker Bernard, who oversees The New American Home project for the NAHB. It goes on in a day and a half on a house this size, he says, saving at least three weeks' time and reducing the number of subcontractors on site jostling for elbow room. After drywall went in, an application of AeroBarrier sealant reduced the home's leakage by 63 percent.



Textured cladding covers the master bedroom's headboard wall. A fireplace lends ambience, and a morning kitchen, with Thermador appliances, lets the first cup of the day be close at hand. All the home's baths are outfitted by Kohler, with ventilation by Panasonic. The master suite includes dual walkin closets and a concealed washer and dryer.

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With Hurricane Maria's destruction fresh in everyone's minds, it's worth noting that the large openings in the cement-block first floor are covered with hefty concrete tie beams with a steel core. Hurricane code also mandated impact-rated windows and hurricane straps. Zip System roof sheathing by Huber Engineered Woods with double-membrane water protection—exterior sheathing combined with a water and air barrier—was installed for good measure. And if the power grid fails, a 60 kilowatt standby generator by Eaton can handle the home's entire electrical load.

### HIGH FUNCTION, LOW ENERGY

It's hard to imagine that such a large home can have a small carbon footprint. Yet the home will have a projected HERS Index of 46 and is expected to be 36 percent more efficient than the average new code-built home, with more than \$1,300 in annual energy savings anticipated. The Mitsubishi ducted mini-split system, unique to this year's home, plays a big part. Instead of installing several large air-handling units in closets and running ductwork throughout the house, each living and sleeping area has a mini-cassette installed between



Above, sliders by TruStile open to a media room with water views and a ceiling fixture by Progress Lighting. Lower right, paints and finishes in the study and throughout the home are by Sherwin-Williams.









Clockwise from upper left, adjacent to the garage is a side entry leading to the mudroom, offering a drop zone and quiet place to pay bills or do homework just off the kitchen. The laundry room has handy storage, as well as a spacious farmhouse sink by Kohler. Off the main hallway, next to the home office, is a powder room.

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the trusses. This is not only super energy efficient but also allows for very short duct runs and a high degree of zoning. The two variable-speed condensing units outside also run the energy recovery ventilator (ERV) with MERV-13 filtration that supplies fresh air.

The HVAC system is seen as a game changer, especially for large homes. "It will change the way builders look at mechanical systems," says Drew Smith, president and COO of Parrish, Fla.-based Two Trails Sustainable Building Consultants, the home's third-party certifier. "A whole-house ducted system would have required five condensing units and 16-inch ductwork. Now we can have smaller ducts because the unit is pushing the air right at the area of delivery, and return air happens very close to the unit. It saved hundreds of feet of ductwork."

Of course, energy efficiency starts with a super-tight building envelope. The R-16.2 block walls are triple-insulated with Core-Fill 500 injected foam, ¾-inch Kingspan GreenGuard extruded polystyrene board, and a radiant Fi-Foil M-Shield barrier. The second story's wood frame walls also use Zip System sheathing.

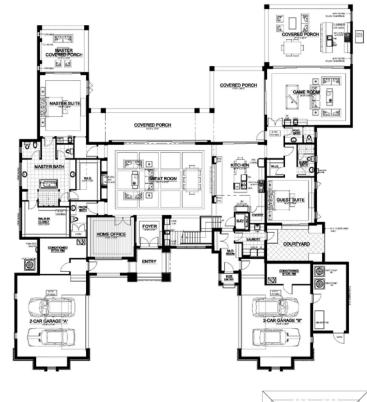
The unvented attic is air sealed with R-21 Demilec opencell foam on the underside of the roof deck. The crew also sprayed the foam on the rim joists between floors and on exterior frame walls, allowing the envelope to breathe. "In Florida, we don't want to trap moisture between the insulation and drywall," Smith says. "Open-cell foam, when positively pressurized with an ERV, allows moisture to wick to the outside." Windows from Panda Windows & Doors are double pane and thermally broken to stop heat transfer.

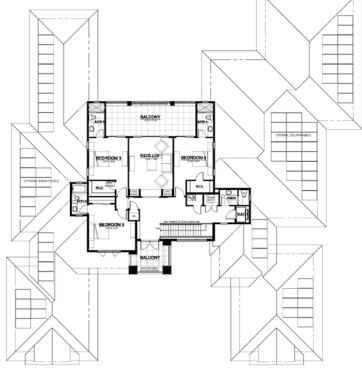
#### WATER, LIGHT, AIR

With an impressive anticipated HERS Index and energy savings, the team is aiming for multiple certifications, including National Green Building Standard (NGBS) Emerald, Environmental Protection Agency (EPA) Energy Star, EPA Indoor airPLUS, and U.S. Department of Energy Zero Energy Ready Home.

Natural gas tankless water heaters and recirculating pumps on motion sensors will reduce energy and water use. The pumps can sense when someone is in the bathroom and start circulating the hot water at the tap, eliminating the need to let cold water run. Low-flow bathroom faucets and toilets by Kohler are installed throughout the home, as are LED fixtures by Progress Lighting. The lighting is connected to a home automation system that also controls indoor temperatures. Each room has its own thermostat. Lighting and temperature also can be managed remotely via a smartphone or tablet.

Phantom Screens installed on the patios' outside columns aren't just for insect control—they also help to manage indoor temperatures. Pulling down the screens in the heat of the day can lower the temperature by almost 10 degrees,





Smith says. And in winter, when nighttime temperatures can dip into the 30s and 40s, closing the screens and adding a patio heater allows the space to be used year-round. **PB** 

Cheryl Weber, a freelance writer, covers architecture and design.