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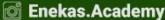
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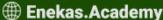
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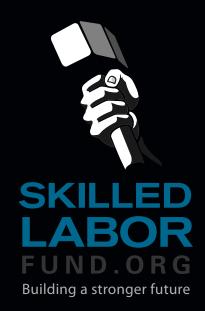
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january

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The 34th edition of The New American Home in Lake Nona, Fla., designed and built by Phil Kean Design Group, is a resort-style retreat with a HERS Index score of 0.

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Looking Ahead

was an eventful year for home 2016 building. Falling unemployment, rising wages, and still-low mortgage interest rates created more opportunities for homebuyers than we've seen in some time. Data available in December had new-home sales leaping nearly 18 percent year-over-year in October. Sales of existing homes have risen, as well, reaching numbers not seen since 2007. These statistics led Fortune magazine to assert that the housing recovery "looks like it has finally begun in earnest."

Sounds good—but what does that mean for the year ahead?

I gathered the 2017 forecasts from the usual suspects (Bloomberg, CoreLogic, Fannie and Freddie, NAHB and NAR, Zillow, and others, depending on the metric) and came up with these projections:

- Average annual new-home sales (single-family): 632.000
- Average total starts (single-family and multifamily): 1,254,000
- Average home price increase: 4.1 percent

Based on data available in mid-December, single-family sales for 2016 will come in at around 565,000 and total starts will end up somewhere between 1 and 1.1 million.

So it looks as if we are on track to continue to see the slow and steady increases of the past few years. Which, honestly, to my way of thinking, will stand the overall industry in good stead going forward. As painful as land and labor shortages have been for builders, they have kept some parts of the market from moving into bubble territory.

As usual, there will be bumps in the road. Mortgage rates will almost certainly keep going up, but most forecasters are predicting they will remain in the low-to-mid 4 percent range. There seems to be another assault on the mortgage interest deduction brewing, but other changes to the tax code may dull the effect that the loss of the MID might otherwise have.

New-home inventory will undoubtedly remain

tight. Lack of inventory was a big factor in the more than 6 percent increase in home prices last year, but it looks as if price jumps might slow in 2017. Recent price increases have added more than \$11,000 in home equity to the average homeowner's wealth, though, and may possibly lead more of them to trade up to bigger or more expen-

2017 may also be the year the dam starts to break on Millennial homebuying. Rents are leveling offthey are predicted to grow less than 2 percent this year—but high rental costs will still be a big reason to buy. And, according to the Mortgage Credit Availability Index from the Mortgage Bankers Association, it's easier to get a mortgage now than it has been at any time during the last eight years.

In fact, a number of big builders are betting on Millennials moving out of their parents' homes and

their apartments and becoming buyers. Since D.R. Horton first started catering to entry-level buyers with its Express brand, Taylor Morrison and Meritage have jumped into the fray with

smaller and less-expensive choices. Meritage's Live. Now. Homes will range from 1,800 to 2,500 square feet, with prices starting in the low \$200s.

Even luxury home builder Toll Brothers thinks the demographics are finally shifting toward the younger homebuyer. The company has been providing options for Millennials for some time with urban condos and rental apartments. Its new line of homes, T|Select, will offer lower prices, fewer options, and faster delivery times in an effort to attract young families.

As always, unforeseen events in the coming year could render all of these projections moot. But there is one thing I can guarantee about 2017: It will be interesting.

Denise Dersin, Editorial Director ddersin@sgcmail.com



One thing I can guarantee: 2017

will be nothing if not interesting







Professional

VOL. 82 NO. 1



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Trust, Teamwork, Partnership

uilding a large, luxury home is not for the faint of heart. Less so is building one firmly rooted in the midcentury modernist style, where axes precisely align for best sightlines and breezes, where junctures between planes and transitions between materials are resolved with grace and seamlessness, and where there's essentially no place to hide, design-wise.

Even less for the faint of heart is building—on a compressed schedule—a show home whose reason for being is as lab of innovation and showcase of cutting-edge design, filled with products that you've never used before, often because the products themselves are new and being used for the first time in the show home.

Though trained as an architect, Phil Kean, principal of Phil Kean Design Group and designer/builder of The New American Home 2017, first ran a successful craft and stationery business with his partner, Brad Grosberg. "My dad was a builder, and when I was 7, I told my family that I was going to be an architect," Kean recalls. He and Grosberg were making a good living with their business, and yet, "I had gone to school to be an architect but wasn't doing architecture," Kean says. It was 9/11 that prompted a reevaluation: "I was sitting on the I-4 here in Orlando, driving to work, and listening to it on the radio, and in that moment I thought, 'You have to

go for your dream." Kean and Grosberg set up shop, and in the past 15 years, their firm has grown to more than 35 employees.

When asked about his success, Kean is quick to acknowledge that while the company bears his name and his vision, the team makes it happen. "You can't

do this without great relationships, without trust and teamwork and partnership," he says, nodding toward unflappable project manager Jim Kaiser, interior design president Rob Turner, and assistant designer Alyssa Smith. Kean calls his team superstars, as he does his subs.

"You take all of these amazing craftsmen and trades—people I've known for years—and you realize that they're taking care of us," he continues, motioning to the stone installers, tile setters, painters, electricians, glaziers, HVAC crews, and landscapers that seem to be everywhere at once on the jobsite, working amazingly quietly and at an accelerated pace to ready the house for the photo shoot scheduled to happen in a few days. There was plenty left to do that day, and in the coming days. But it all got done. "I call it 'show house magic," Kean says. Come see for yourself. Tickets and shuttle bus information will be available at the International Builders' Show in the Hall C lobby, from Tuesday, Jan. 10 through Thursday, Jan. 12.

Amy Albert, Editor-in-Chief aalbert@sgcmail.com @ProBuilderMag



Homes get built, in large part, because of great relationships





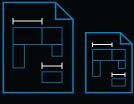


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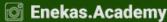
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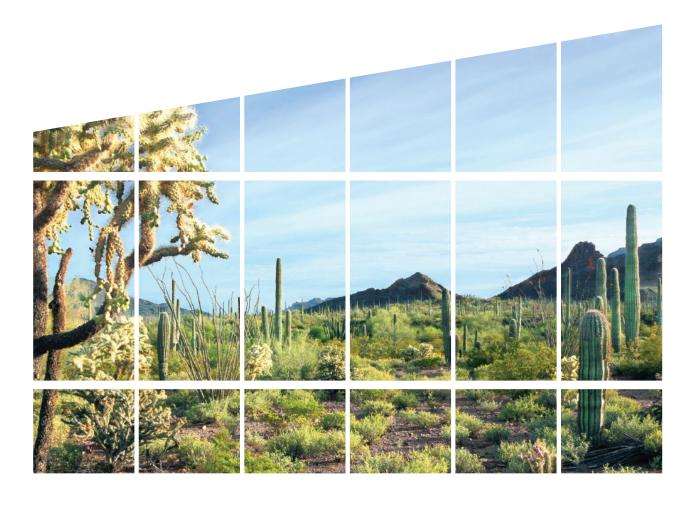
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By Michael Chamernik, Associate Editor

PAINT TRENDS

PAINT COMPANIES ANNOUNCE TOP COLORS FOR 2017

Consider this a primer for all the paint companies that named a Color of the Year for 2017. The hues ranged across the spectrum, but soft, cool colors earned the most recognition.

After a year of research, which included trade show visits and input from experts in home furnishing, architecture, and fashion, Benjamin Moore selected Shadow as its color of the year. The royal amethyst is similar to lilac, and the manufacturer says it adds energy and sophistication to a room. The color headlines Benjamin Moore's Color Trends 2017 palette, which features 23 hues including Grandfather Clock Brown, Pink Bliss, and Dark Burgundy.

"I think that Shadow does everything," Lita Dirks, interior designer and president of Lita Dirks & Co., in Greenwood Village, Colo., told *Professional Builder*. "It's a beautiful neutral, and it's a beautiful accent at the same time. It can capture such amazing character and feeling in a room."

Poised Taupe from Sherwin-Williams is a neutral gray with a touch of brown mixed in. The result is a warmer, cozier tone, a departure from monochrome grays. The manufacturer recommends Poised Taupe as a backdrop that pairs well with 40 other colors in its 2017 Colormix forecast, including Stardew, a faded indigo; Marea Baja, a deep teal; or Rave Red, which has the appearance of red-stained bedrock

PPG and several of its brands all chose shades of violet for their Colors of the Year. PPG, which introduced four new palettes, opted for Violet Verbena. The gray-purple hue is meant to evoke a bohemian, "gypset" (gypsy + jet set) lifestyle, blending the masculine and the feminine, the mystic and the modern, the company says. PPG said it sequestered 20 color experts for three days to determine the top choice.

PPG's Olympic brand selected Cloudberry, a soft violet that, as the manufacturer put it, is meant to blend in. It's serene and free of noise, limiting distractions. PPG's Glidden went with Byzantine Blue (not shown), a peaceful, versatile purple. The hue, which borrows characteristics of blue and gray, appears bluish-purple when paired with whites, but looks gray when partnered with neutrals.

Dutch Boy recognized two willow-green shades, In The Brush and Thunder Storm. The gray-greens give a room a pop of color. The manufacturer says that the colors are great for open floor plans, giving a space an inviting, social atmosphere.



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MARKET UPDATE

Pratt & Lambert also selected a green, albeit a darker one. The company says the viridian Leafy Bower offers intimacy to smaller rooms and brings a sense of luxury to a kitchen.

The gray Kettleman, from Kelly-Moore Paints, is a go-to neutral for both interior and exterior spaces that pairs well with wood tones, warm neutrals, whites, and

other bolder accent colors. Kelly-Moore determined its Color of the Year by sending out surveys to 15,000 interior design experts.

The companies are in lockstep with their more subdued colors. "It's a bit of a softening, and paint manufacturers are capturing that," Dirks says. "Color is taking on the feeling of a cloud—a bit softer, a little more dramatic, a little more moody."

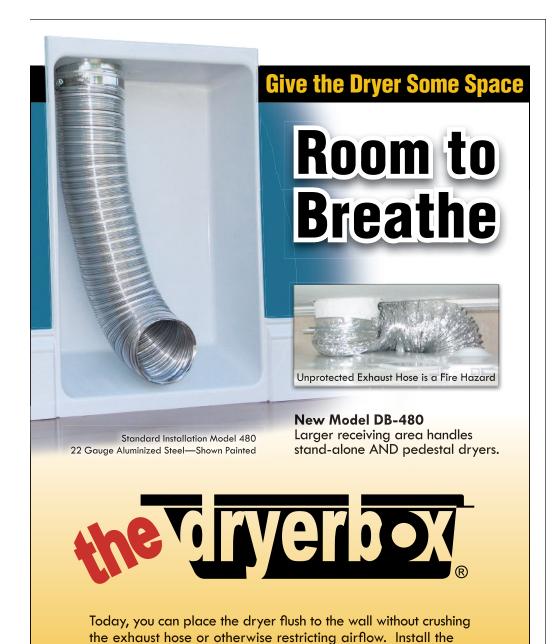
Dirks says that the lighter shades of gray, blue, green, and violet that dominate the Colors of the Year represent the homeowners' psyche: After working their way out of the recession, and in the age of constant tech engagement, people want to take a deep breath.

Compared with more vibrant Colors of the Year in the past, "These are far more soothing," Dirks says. "They capture the essence of people's desire to find some calm in their lives"

There are still some options for those who want to spice it up. Honey Glow, from Dunn-Edwards, is golden yellow with orange undertones, meant to infuse energy into a room. The company says the vibrant hue can match with everything from earthy, neutral palettes to colors such as brown, red, gray, green, and orange.

Pantone, the provider of professional color standards for the design industries, opted for a change of pace with its color of 2017. Last year, the company chose Serenity and Rose Quartz, a muted blue and a soft pink, respectively, to represent the need for harmony. This year's pick, Greenery, is a sharp lime yellow-green shade meant to resemble the lushness of nature. Pantone said it evokes rejuvenation and revitalization.

A few paint companies eschewed naming one color, focusing on a range of hues instead. Behr introduced three palettes: Comfortable, Composed, and Confident. Comfortable features lighter colors such as baby blue (Peek a Blue) and subtle gray (Close Knit). Composed has moderate tones, such as the teal Polished Aqua. Confident offers bold







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colors, such as the deep orange Fired Up, and the stark red Hot and Spicy.

Valspar named 12 Colors of the Year, ranging from the green Crushed Oregano (also known as Fickle Pickle or Parrot Feather), to the water-like Lake Henry (or Roadster Blue), to the pitchblack Twilight Purple (or Black Currant).

To see all of the colors, go to probuilder .com/2017-Paint-Colors online.

HOUSING FORECAST

REPORT PREDICTS HOUSING TRENDS

Millennials are infamous for delaying major life events such as getting married, having children, and buying a house. So it's fitting that the housing industry will have to wait a bit longer for them to have their big year.

Trulia released this year's outlook, titled "Housing in 2017: Discouraged Democrats, Revived Republicans, and Middling Millennials," written by Trulia chief economist Ralph McLaughlin. Among other topics, the report delves into Millennial homeownership, rising mortgage rates, and the markets to watch in 2017.

To gather data, Trulia commissioned two Harris Polls of two groups of just over 2,000 respondents each—one in late October before the presidential election and one after it in mid-November. The polls revealed that many between the ages of 18 and 34 don't consider homeownership to be part of achieving their American Dream. In November 2015. the share of Millennials that said homeownership was a goal reached a high of 80 percent after a five-year climb from 65 percent. In 2016, that rate dropped to 76 percent in the pre-election poll and 72 percent in the post-election poll.

A large majority of the group, 83 percent, still said they plan on buying a home, but 73 percent said they won't do so until the end of 2018. McLaughlin anticipates that 2017 will be a weak year for Millennial homebuying. Owners of existing homes may struggle to sell, but builders will be fine.

"For the most part, first-time homebuyers don't buy new homes," McLaughlin told Professional Builder. "They buy used ones, they buy existing ones. They may buy new homes later in life, but at least headed into 2017, we don't think it's going to hit builders that hard."













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MARKET UPDATE

While mortgage rates were low in 2016, hovering between 3.3 percent and 3.6 percent for a 30-year-fixed loan for most of the year, the land-scape is changing. In November and

December of 2016, rates rose nearly 50 basis points (half of a percentage point). Various predictions have average 30-year-fixed mortgage rates in 2017 as high as 5 percent, according

to the Mortgage Bankers Association. McLaughlin estimates that rates will be in the 4 to 5 percent range.

The Trulia report says that rising rates won't curb homebuying this year. McLaughlin wrote that mortgage rates would have to double nationally for the cost of buying a median-price home to equal the cost of renting one for the median rent. In some more affordable markets, such as Houston and Philadelphia, mortgage rates would have to rise to 14 percent for owning and renting to be equal.

Rising mortgage rates are the least of potential buyers' concerns. The report notes that just 18 percent of respondents said that rising rates were keeping them from buying a home. More prohibitive factors include saving for a down payment (59 percent), poor credit (38 percent), and increasing home prices (35 percent).

Trulia named 10 housing markets that are poised for a surge in 2017, based on metrics such as job growth, vacancy rates, affordability, and inbound vs. outbound home searches. Florida had five markets on the list, including No.1-ranked Jacksonville. The state's most populous city scored well in home search ratio, low vacancy rates, and job growth but was only average in affordability.

"From a home builder's perspective, if a home builder could build homes that would be affordable to the middle class, we think there is opportunity there to capitalize on what otherwise is a very strong housing market," McLaughlin says.

Strongjob growth in the private sector and an aging Baby Boomer population boosted other Florida markets—Cape Coral-Fort Myers and Deltona-Daytona Beach—Ormond Beach—into the top three. The remainder of the top 10, in order are: Grand Rapids, Mich.; Tampa-St. Petersburg, Fla.; Colorado Springs, Colo.; Charleston, S.C.; San Antonio; Phoenix; and North Port-Sarasota-Bradenton, Fla. **PB**



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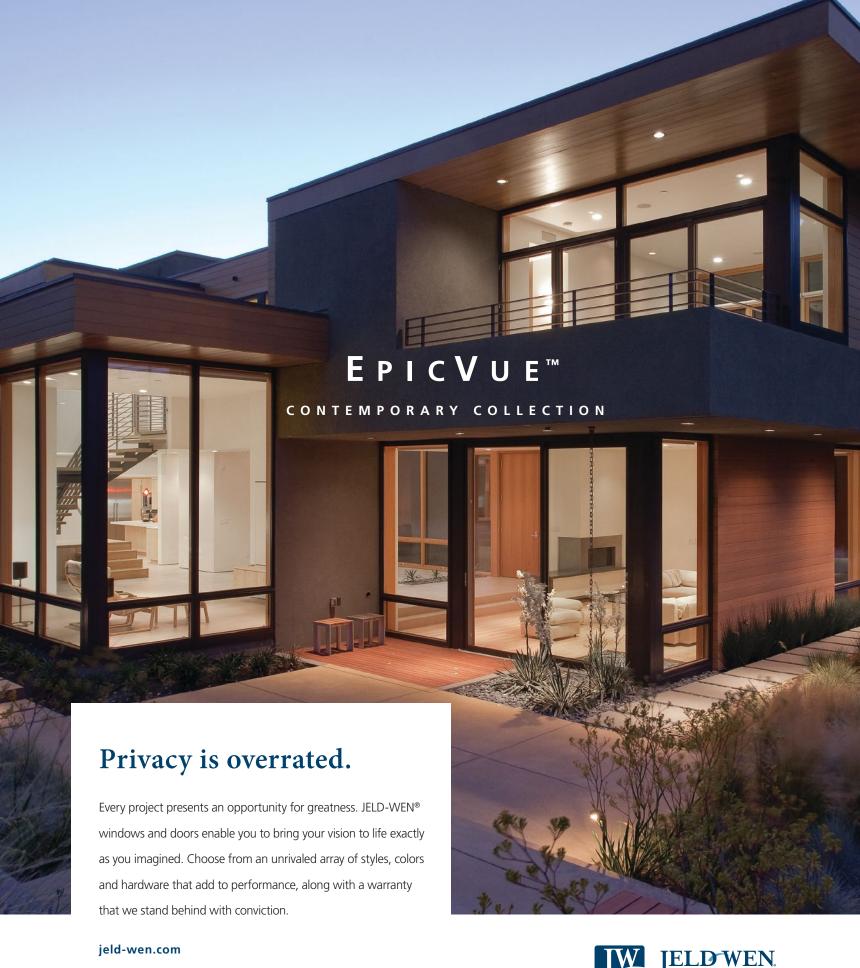


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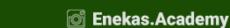














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OPPORTUNITY ARISES FROM AN UNUSUAL ELECTION

ne of the most divisive election campaigns in our nation's history is finally over. Defying pollsters and election prognosticators, the Republicans, now led by President-elect Donald Trump, control the White House and both chambers of Congress for the first time since 2005–06.

These results present a great opportunity for the National Association of Home Builders (NAHB) to advance its policy priorities. The association has a tradition of reaching out to both sides of the political aisle to work on important housing issues that affect the livelihood of our members and millions of households across the land.

When the members of the 115th Congress convene in Washington early in January and the new Trump administration celebrates its inauguration, we know there will be plenty of unfinished housing business, and we plan on being there to make sure they get the job done.

We need to reduce the costly burden of excessive government regulation. We need to ensure that any tax reform efforts protect small businesses and recognize the importance of vital housing tax incentives such as the mortgage interest deduction and the Low Income Housing Tax Credit. We need to ease tight credit conditions for homebuyers and ensure that small businesses can get loans. We need to advance comprehensive housing finance reform, with the federal government acting as a backstop in times of crisis to protect the 30-year mortgage and bring private capital back into the marketplace.

During this campaign, NAHB took unprecedented steps to elect pro-housing candidates to Congress by elevating housing as a national issue. For example, for the first time in its history, NAHB endorsed congressional candidates for office. Of the 137 congressional candidates that NAHB endorsed, 129 won their races on Nov. 8.

NAHB advocacy staff and member volunteers will be visiting old friends and new faces in Congress to make sure lawmakers understand our priorities and the importance of housing to the nation's families and to the broader economy. We will be pushing hard for legislative accomplishments that will benefit the entire nation.

-Ed Brady, 2016 NAHB Chairman

ABOUT NAHB: THE NATIONAL ASSOCIATION OF HOME BUILDERS IS A WASHINGTON, D.C.-BASED TRADE ASSOCIATION REPRESENTING MORE THAN 140,000 MEMBERS INVOLVED IN HOME BUILDING, REMODELING, MULTIFAMILY CONSTRUCTION, PROPERTY MANAGEMENT, SUBCONTRACTING, DESIGN, HOUSING FINANCE, BUILDING PRODUCT MANUFACTURING, AND OTHER ASPECTS OF RESIDENTIAL AND LIGHT COMMERCIAL CONSTRUCTION. FOR MORE, VISIT NAHB.ORG.







September, but housing starts rose 25.5 percent during the same period. Remodeling spending in October

dropped 0.6 percent to a seasonally adjusted annual

rate of \$159.1 billion.









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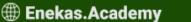
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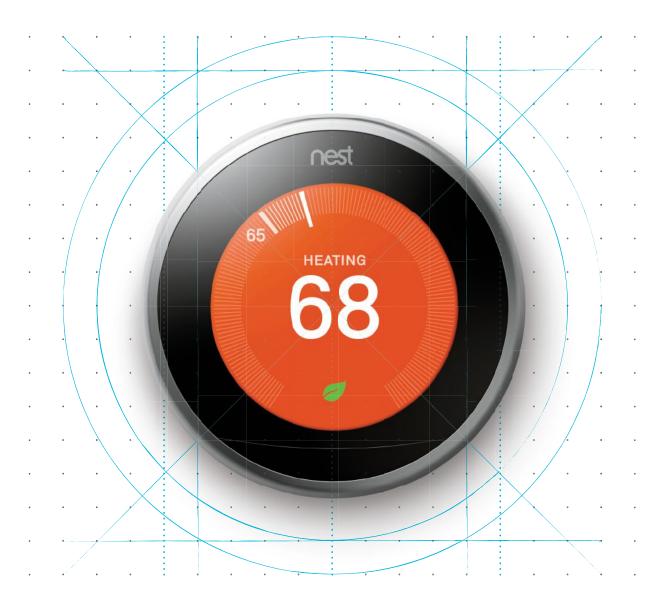












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BUILDERS AND ARCHITECTS REPORT ON AMENITIES FOR THE MOST IMPORTANT **ROOMS IN THE HOME**

By Mike Beirne, Senior Editor

lmost three-quarters of builders and architects surveyed in Professional Builder's 2017 Kitchen & Bath survey said that the kitchen is where they sell the most upgrades one Colorado architect noted that the room simply "is one big upgrade." That space is becoming more open, and perhaps larger, as many respondents wrote in open-text comments that they had implemented or planned to introduce floor plans with kitchens that improved traffic flow and connected to a great room or to outdoor space.

In the bath, survey participants also either have enlarged or plan to enlarge the shower area and add multiple shower heads, linear drains, and zero-threshold entries. Some are doing away with the tub/shower combo, although soaking tubs still are a popular feature.

More insights regarding the building community's read on client preferences for bath and kitchen features are in the charts that follow.

METHODOLOGY AND RESPONDENT INFORMATION: This survey was distributed between Nov. 21, and Dec. 12, 2016, to a random sample of Professional Builder's print and digital readers. No incentive was offered. By closing date, a total of 81 eligible readers had returned surveys. Respondent breakdown by discipline: 37.9 percent custom home builder; 19.0 percent architect/designer engaged in home building; 15.2 percent diversified builder/remodeler; 12.7 percent production builder for move-up/move-down buyers; 6.3 percent luxury production builder; 1.3 percent production builder for first-time buyers; 1.3 percent multifamily, and 6.3 percent other. Approximately 51.3 percent of respondents sold one to five home units in 2016, and 12.8 percent sold more than 100 units.

KITCHEN

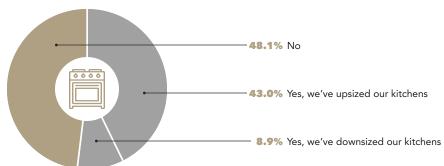
APPROXIMATELY HOW MANY HOUSES BUILT/DESIGNED BY YOUR **COMPANY DURING THE PAST 24 MONTHS INCLUDE THE FOLLOWING KITCHEN FEATURES?**

	ALL	MOST	SOME	NONE
Energy-efficient/Energy Star appliances	68.0%	21.3%	5.3%	5.3%
Granite/quartz countertops	58.9%	23.1%	14.1%	3.9%
Island	48.7%	37.2%	6.4%	7.7%
Low-flow fixtures/faucets	43.4%	26.3%	21.1%	9.2%
Walk-in pantry	35.9%	30.7%	21.8%	11.5%
Breakfast bar	28.8%	31.5%	27.4%	12.3%
Professional- or designer-grade range hood	23.4%	29.9%	36.4%	10.4%
42-inch/extended-height cabinets	21.8%	28.2%	28.2%	21.8%
Professional-grade oven/cooktop combination	15.8%	31.6%	34.2%	18.4%
Breakfast nook	18.4%	27.6%	30.3%	23.7%

BASE: 81: PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

Appliances grab more luster in this year's poll as the professional-grade oven/cooktop combo makes its debut in the top 10.

IN GENERAL, ACROSS ALL THE HOUSE PLANS YOUR COMPANY OFFERS, HAS THE SIZE OF YOUR KITCHENS CHANGED IN THE PAST 24 MONTHS?



BASE: 81; PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

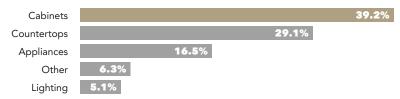
Consumer demand is the top reason builders and architects cite for larger kitchens, even if the livable square footage in the rest of the house has decreased. The kitchen is the gathering place, so it's the most used room in the house. Also, the need to accommodate larger refrigerators, chef's kitchens, and bigger islands was mentioned as reason for requiring more space.







WHAT IS YOUR SINGLE BIGGEST FEATURE WHEN IT COMES TO SELLING KITCHEN UPGRADES?



BASE: 81: PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

Aside from the builders who sell their spec homes as-is on the market, on-demand hot water, paint and metallic finishes, and countertops were the upgrades mentioned in the "other" category.

BATH

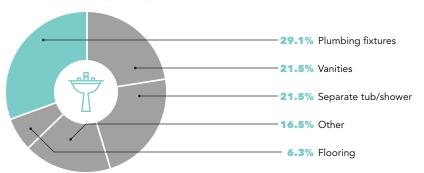
APPROXIMATELY HOW MANY HOUSES BUILT/DESIGNED BY YOUR COMPANY DURING THE PAST 24 MONTHS INCLUDE THE **FOLLOWING FEATURES?**

	ALL	MOST	SOME	NONE
Dual vanities/lavatories in the master bath	49.4%	34.2%	11.4%	5.1%
Separate tub/shower in master bath	44.3%	34.2%	18.9%	2.5%
Granite/quartz vanity top	41.0%	23.1%	26.9%	8.9%
Decorative tile	36.0%	33.3%	18.7%	12.0%
Water-saving fixtures	38.7%	21.3%	30.7%	9.3%
Multiple-head shower system	18.9%	21.5%	50.6%	8.9%
Additional storage areas	16.2%	21.6%	51.4%	10.8%
Soaking tub	13.2%	23.7%	43.4%	19.7%
Solid-surface vanity top	12.2%	27.0%	31.1%	29.7%
Dual vanities/lavatories in secondary bath	10.5%	23.7%	43.4%	22.4%

BASE: 81; PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

The most popular bath amenities are basically unchanged from the results of the 2016 survey.

WHAT IS YOUR SINGLE BIGGEST FEATURE WHEN IT COMES TO SELLING **BATHROOM UPGRADES?**



Tankless water heaters, zero-threshold showers, and tile upgrades were mentioned most often in the "other" category. BASE: 81; PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

WHAT OTHER CHANGES, IF ANY, HAVE YOU MADE TO YOUR KITCHEN DESIGNS **DURING THE PAST 24 MONTHS?**

- "Steam ovens and more pre-finished cabinets."
- Texas custom home builder
- "More mix of materials, getting away from a homogeneous look." - Missouri kitchen and bath products dealer
- "Adding chases behind all ranges/cooktops on nonexterior walls for high-power exhaust hoods."
- Georgia production home builder
- "Kitchen has a charging station, and islands work as multipurpose table prep area."
- Indiana architect/designer

WHAT'S THE SINGLE BIGGEST CHANGE YOU PLAN TO MAKE TO YOUR KITCHEN DESIGN/ **FEATURES IN THE NEXT 24 MONTHS?**

- "Incorporate kitchen more directly with living space."
- New York custom home builder
- "Kitchens that are not open or not as open so as to reduce the overall cost of HVAC installation/operation and to reduce noise and odors throughout the living areas. Clients are realizing that a small exhaust fan above the range does relatively little to solve those problems, and most of the time the kitchen is a messy, smelly, unpleasant workroom." - Ohio architect/designer
- "More double islands, more pocket offices, undercabinet outlets." - Washington custom home builder
- "More walk-in pantries/storage, reduce the amount of cabinets so a kitchen does not look like a kitchen."
- California architect/designer
- "Incorporate cabinet lights, lower height of microwaveoven space." - Indiana architect/designer







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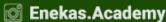
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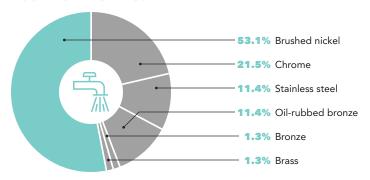
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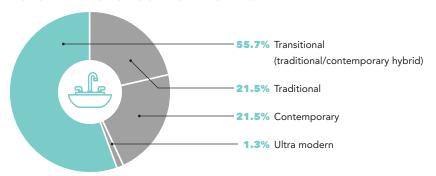


WHAT IS THE MOST POPULAR FAUCET/FIXTURE FINISH AMONG YOUR HOMEBUYERS?



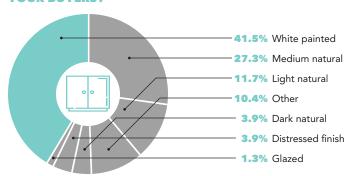
BASE: 81; PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

WHEN IT COMES TO FAUCET SELECTION, WHICH STYLE IS MOST **POPULAR AMONG YOUR HOMEBUYERS?**



BASE: 81: PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

WHAT TYPE OF CABINET FINISH IS MOST OFTEN SPECIFIED BY **YOUR BUYERS?**



BASE: 81: PROFESSIONAL BUILDER 2017 KITCHEN & BATH SURVEY

There's a great deal of variety in the "other" answer for this question, including cool and warm grays, opaque stains, modern, and anything but white.

WHAT CHANGES HAVE YOU MADE TO YOUR BATHROOM DESIGN IN THE PAST **24 MONTHS?**

"Gone to a freestanding tub as opposed to having a tub deck; eliminated the so-called makeup area in our double vanities." - Illinois production home builder

"Tub is optional instead of standard, larger showers."

- Illinois luxury production home builder

"Deleting his and hers toilets from master bath, downsizing tub area and upsizing shower area."

- Georgia production home builder

"More living-in-place features."

- Texas custom home builder

"Walk-in shower."

- South Carolina custom home builder

WHAT IS THE SINGLE BIGGEST CHANGE YOU PLAN TO MAKE TO YOUR BATHROOM **DESIGN IN THE NEXT 24 MONTHS?**

"No-door shower, multiple showerheads."

- Illinois custom home builder

"Redesign to include small area for bench or sitting."

- New York custom home builder

"Decorative tile showers, barn doors for shower enclosure." - Virginia production home builder

"Aging client and safety features like grab bars, shower seats, bidets." - Maryland architect/designer

"More curbless showers for people to age in their home." - Florida semi-custom home builder



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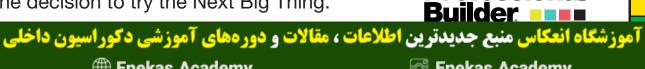
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THE PERFECT MARKETING

NO BUDGET? PROCEED AT YOUR OWN RISK. OR, CHECK OUT OUR STRATEGIC SPENDING GUIDE FOR THE COMING YEAR

By Kevin Oakley, Contributing Editor





orking with different-size builders across the nation has taught me many things. The first is that every builder is convinced that both they and their marketplace are unique. Every once in a while, it's actually

true. The second is that asking marketing or business leaders for specific budget information and breakouts often evokes a similar emotional reaction to a star salesperson being invited to an all-day training course on preparing perfect contract paperwork (hint: not "yippee!").

Half the time I discover that no real budget exists. The other half, the budget hasn't been updated since it was originally created. The irony is that there is a deep need to know what the ROI of marketing initiatives is today, and without asserting full control of your budget, the battle is already lost. Financial consultant Dave Ramsey hits it on the head when he says, "A budget is telling your money where to go instead of wondering where it went." Financial planner Carl Richards is even more direct with Budgeting = Awareness.

STOP BOOTSTRAPPING THE MOST IMPORTANT PART

No one ever argues with me when I share my belief that 100 percent of today's consumers are heavily influenced by the internet. Yet when I recently asked 50 marketing leaders what percentage of their budgets were dedicated to online, the average was roughly 30 percent. That means that the single largest factor in whether you're likely to hold a pricing appointment only gets a small portion of your financial investment. This also means that many marketing leaders know what needs to be done to improve online traffic and scheduled appointments, but they're trying to drive results on a shoestring budget. The result: delays, poor quality, and frustration for the builder and the buyer.

THINK LIKE AN INVESTOR

What would Warren Buffet do? That's rarely a bad way to look at a financial issue, and it's how I want to encourage you to look at every dollar you spend in 2017. Investors look for returns—both short term and long term. When you spend money on an ad, of any kind, it has no momentum to it. The moment you stop paying for it, it goes away and leaves very little—if any—lasting impact. It has zero long-term return.







BUDGET FOR 2017

When you invest in content, process improvement, and people, you get short and long-term returns. Photographs and videos that you invest in today will always be able to provide value on your website. They also can provide short-term returns by improving the effectiveness of the ads you choose to run. The key is to find the right content, processes, and people that can build positive long-term momentum while also executing for you in the short term.

THE NUMBERS

The following breakdown will serve as a useful starting point for you and your team as you put the finishing touches on your 2017 plan. Remember: A budget is never final and can always be adjusted. It serves as a tool for discussion, not an iron wall.

1% of Projected Revenue = Total Marketing Spend

As long as you fall between 0.07% and 1.5% you have my support. Anything lower than 0.07% and you're underinvesting in your own company. When the next downturn hits, you may suffer for it. Anything over 1.5% and there's significant waste. Note that this number doesn't include model-home expenses or salaries (but it does include sales offices in model homes).

50% or More Online

The majority of your investment must be in the digital world. This number includes your online ads (Google pay per click, Facebook, syndication sites, display), as well as all development costs related to your website and online sales program (servers, maintenance, upgrades, CRM) and all website content (photos, video, renderings, site maps, written descriptions).

You'll obviously want to spend the majority of your time working through the largest area of your budget. A good place to begin within this 50% is to break it into these percentages:

If 50% of your marketing budget is \$100,000:

- 50% toward advertising (\$50,000)
- 25% toward web development/tools/CRM (\$25,000)
- 25% toward content (\$25,000)

In years where you feel you don't need to heavily invest in your website, your web development budget can be lower, freeing up more money for even better content. Use the guides as a starting place and move the money around among these

three categories, but be sure to keep the total amount of your online investment at or above 50%.

12% to 20% Signage

Your signs are a direct reflection of your brand: Spend enough to keep them looking good. Faded signs are cause for concern to a sales prospect. They communicate that the good times for this community have come and gone. This budgeting number includes billboards—something that, in general, I don't recommend builders invest in. (The next time you're on the road, notice how many people are trying to use a mobile device while driving. Billboards can't compete for attention with glowing screens, plus billboards are often overpriced.)

5% to 8% Events

Your model is the ultimate experiential marketing tool. Use any excuse you can to encourage people to make a visit and fall in love. Grand openings; customer-appreciation events, such as pet adoption days; and real estate agent events will bring people to your homes.

2% to 6% Collateral

All of the paper in the sales office today is there for two groups of people: real estate agents and sales staff. Your sales prospect may show temporary interest in reviewing information on paper, but they'd much rather have it instantly accessible and accurate on your website.

16%—Everything Else

If you take the high end of each range I gave so far, you would still have 16% remaining. This can go toward gifts for buyers and real estate agents, market research, direct mail, agency support—any number of items. The only area it should not be invested in is radio or TV advertising, unless your total budget is more than \$1 million.

Start 2017 with confidence that you've created a budget that proactively chooses where you want your money to go and what result you want to achieve. Once you master the art of building and working a budget, executing on what truly drives results becomes a whole lot easier. **PB**

Kevin Oakley is managing partner at Do You Convert, a company exclusively focused on online sales and marketing for home builders and developers. Write him at kevin@doyouconvert.com.







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LABOR SHORTAGES ARE AN INDUSTRYWIDE EPIDEMIC. HERE'S HOW TO HIRE AND RETAIN TOP TALENT

By Tony Callahan

here was a time when employees stayed with one employer throughout their entire careers. That's rare these days. Today, builders, trades, suppliers, and manufacturers are all struggling to attract good people. So, how do you find and retain quality employees?

IT STARTS WITH HIRING. Making the right hires is one of the most important things you do. Don't take on people who change jobs as often as they renew their license plates. A career that spans 20 years and 15 jobs should give you pause. Understand the difference between a quality employee and one who's waiting for the next opportunity. Seek out people who are loyal, committed, and passionate about what they do.

■ BECOME THE EMPLOYER OF CHOICE. You don't build a reputation as a place that people want to work based on national survey ratings; it's the result of what current employees say about you in the marketplace. Good job applicants are better informed than in the past: Just as you check their references, they'll check yours. A good applicant will want to talk to your employees, suppliers, and even your customers. Promising prospects want to work for employers that have core values consistent with theirs, and they'll check to make sure that the stated values are lived out through the organization. Becoming an employer of choice means creating a culture where people feel a part of something bigger than building houses, installing materials, or supplying or fabricating products. That's the cornerstone of keeping quality employees.

INVEST IN YOUR LEADERSHIP TEAM. To your employees, the leadership team is the company. Provide that team with training and feedback that goes beyond technical training. Seminars, workshops, mentors, team facilitation, employee development, and change management should be included, as well as soft skills that help leadership be more effective with their team. Lead your leaders by example and they'll probably follow. Encourage them to do





GOOD HIRING

360 reviews—holistic assessments will continually improve their leadership of others. Help members of your leadership team identify and resolve small issues before they become problems that affect morale.

A grad school professor taught me the Pinch Theory, which encourages team members to address issues when they're small, before they spiral out of control. It works like this: If someone says something that you think may have been taken the wrong way, have a one-on-one with that person and ask for clarification. That allows both parties to clear the air so ill feelings don't linger in the working relationship.

TREAT PEOPLE WITH RESPECT. This one is obvious but bears repeating: Public praise and appreciation, especially for efforts above and beyond, goes a long way. According respect earns respect. The old adage to treat people like you want to be treated is a good start, but there's risk in assuming that everyone views the world as you do. Instead, treat people the way they want to be treated. To do that, you have to get to know the individuals you manage. Spend time with your team, understand the challenges they face on the job, and do all you can to help them. If you do need to address poor performance, always do so in private, in a one-on-one setting.

5 BENCHMARK COMPENSATION FOR EACH JOB IN YOUR ORGANIZATION. Know the market rate for the people on your team—specifically, what a competitor is willing to pay them. Compensation within the home building industry has skyrocketed in the past couple of years because there aren't enough good people to go around. Competitors are driving up compensation packages, and some offer management titles for positions that don't require managing anything. That's not something I recommend, but it's worth bearing in mind when comparing compensation rates in any benchmarking survey. Consider what the employee actually does, rather than just their title. Pay for the work that is done, the value that is added, and not some arbitrary title. If you don't pay your team competitive rates, the competition will.

LEAD PEOPLE; MANAGE PROCESSES. Nobody I know wants to be managed; they want to be led, inspired, and appreciated. Methods vary depending on the knowledge and experience of the individual, as well as the tasks they are assigned. An employee with low knowledge and no experience at performing a new task will need more hands-on management. Those with high knowledge and significant experience are likely to take offense to a leader who treats them as if they don't know how to do their job. The key here is to understand that a long-term employee should be led differently depending on the task that they're assigned. Just because they have been around a long time doesn't mean they know how to do new tasks or even how to do their current tasks in new ways. I've seen employees fail when a manager delegated a new task without the proper guidance and training. Your leadership approach should be flexible for the employee and situation.

JUNDERSTAND THAT RETAINING QUALITY PEOPLE IS GOOD FOR BUSINESS. Turnover can prevent a company from achieving its long-term goals. The hiring process is long, the stress put on a team that is shorthanded takes a toll on everyone, and onboarding new employees takes time (even more time for them to be productive members of the team).

But turnover isn't all bad. Poor performance is worse, in that it can contaminate your team. Do all you can to help subpar performers be successful by providing specific direction, training, and clear expectations of performance, but take action when needed. Good employees who work hard will resent a manager who fails to address employees who are not pulling their weight.

Most companies realize the impact that a good employee can have on their organization and they are anxious to fill open positions. In this hiring climate, don't settle for less than ideal: recruiters are hitting the phones, leveraging social media, using any means they can to fill their clients' need for quality employees. **PB**

Tony L. Callahan, CPSM, CSCP, has worked in the home building industry for nearly two decades.







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Sam Rashkin, Chief Architect Building Technologies Office, U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy

epartment of Energy analysis shows that commercial acceptance of zero energy-ready homes could save homeowners approximately \$350 billion in utility bills, add about 120,000 persistent new jobs that can't be outsourced, and reduce carbon emissions by around 3 million metric tons. Leading builders are willing to take the leap on these high-performance homes and are providing a whole new buyer experience. The homes are future ready, comfort ready, tech ready, health ready, solar ready, and moisture resistant. For these leaders—and their buyers—this is the future of housing, and it's here today.

With these homes, the builders are seeing decreased time on the market, improved customer satisfaction, reduced callbacks, and compelling market differentiation. As proof that the future of housing is here today, take a look at the Grand winners that follow. To read more, visit our Tour of Zero: http://energy.gov/eere/buildings/doe-tour-zero.

GRAND WINNER FOR INNOVATION IN PRODUCTION HOMES

MANDALAY HOMES, PHOENIX

Through advanced framing techniques and value engineering, Mandalay Homes worked vigilantly with architects and engineers to reduce the amount of lumber needed in its homes. The builder ensures that its trade partners understand priorities and helps them find ways to reduce waste and reuse bits that would otherwise go to the local dump. "A marked reduction in the amount of material delivered to our sites is a great indicator of our efforts," says Geoff Ferrell, Mandalay Homes' CTO.

- The Dells at Cathedral Point, Prescott, Ariz.
- Layout: 3 bedrooms, 3 baths, 1 floor, 2,207 square feet
- Climate Zone: IECC 4B, mixed-dry
- Completion: March 2016
- Category: Production

MODELED PERFORMANCE DATA

- HERS Index, without solar: 47; with solar: -2
- Projected annual energy costs, without solar: \$1,473; with solar: -\$234
- Projected annual energy cost savings (vs. home built to 2012 IECC), without solar: \$897; with solar: \$2,334
- Projected annual energy cost savings, without solar: 4,206 kWh, 392 therms; with solar: 16,081 kWh, 404 therms
- Added construction cost, without solar: \$2 to \$3 per square foot; with solar: \$6 to \$9 per square foot

KEY FEATURES

- DOE Zero Energy Ready Home Path: Performance
- Walls: 2x6 24-inch o.c. studs, advanced framing, R-17 spray foam in cavities, R-4 continuous rigid foam exterior, coated ⁷/₁₆-inch OSB taped at seams for moisture barrier, stucco siding
- Roof: 1/2-inch coated OSB decking taped at seams, felt, battens, tile
- Attic: Unvented attic, raised-heel trusses, R-25 open-cell foam on underside of roof deck
- Foundation: 2-inch R-10 foam at slab edge to 24 inches deep, on interior of stem wall on conventional slab
- Windows: Vinyl-framed, dual-pane, argon-filled, low-E, U=0.29, SHGC=0.23
- Air sealing: 0.83 ACH 50
- Ventilation: ERV
- HVAC: Two-stage 95 percent AFUE gas furnace, 18 SEER AC in conditioned attic
- Hot water: 95 percent efficient, natural gas tankless water heater
- Lighting: 90 percent LED, 10 percent CFL, motion sensors, Energy Star ceiling fans
- Appliances: All Energy Star
- Solar: Wired for solar
- Water conservation: All WaterSense fixtures, smart-timed drip
- Energy management system: Automatic controls of HVAC and lighting
- Other: EPA indoor airPLUS certified, no-/low-VOC paints, stains, adhesives, and flooring

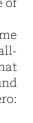
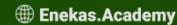


PHOTO: COURTESY MANDALAY







BUILDING SCIENCE



GRAND WINNER FOR INNOVATION IN CUSTOM HOMES (FOR BUYER)

IMERY GROUP, ROSWELL, GA.

Luis Imery, owner of Imery Group, and two-time winner of a U.S. Department of Energy's Zero Energy Ready Housing Innovation Award, can tell you that achieving a zero energy home doesn't just happen; it's the result of a lot of planning and collaboration.

PROJECT INFO

- High-Performance Bungalow, Roswell, Ga.
- Layout: 3 bedrooms, 2.5 baths, 1 floor, 2,194 square feet
- Climate Zone: IECC 3A, mixed-humid
- Completion: October 2015
- Category: Custom for buyer

MODELED PERFORMANCE DATA

- HERS Index, without solar: 41; with solar: 6
- Projected annual energy costs, without solar: \$650; with solar: \$202
- Projected annual energy cost savings (vs. home built to 2009 IECC), without solar: \$1,281; with solar: \$1,896
- Projected annual energy savings without solar: 21,353 kWh; with solar: 31,610 kWh
- Added construction cost, without solar: about 5 percent

KEY FEATURES

- DOE Zero Energy Ready Home Path: Performance
- Walls: 24 inches o.c. advanced framing, R-23 blown fiberglass, two layers R-5 foam sheathing, 1x furring behind cladding
- Roof: Coated sheathing, two layers rigid foam above deck, ice-andwater shield, furring strips, Energy Star cool metal roof
- Attic: Unvented attic, R-38 blown fiberglass netted to underside of roof deck, ice-and-water shield, furring strips, Energy Star cool metal roof
- Foundation: R-10 rigid foam under slab and at slab edge
- Windows: Wood-fiberglass-framed, double-pane, low-E, U=0.35, SHGC=0.25
- Air sealing: 0.51 ACH 50
- Ventilation: Spot exhaust ventilation plus balanced ventilation with powered fresh-air intake
- HVAC: Ducted mini-split heat pumps, 16 SEER, 9.2 HSPF, in conditioned attic
- Hot water: 50-gallon heat pump water heater, 2.4 EF
- Lighting: 50 percent CFL
- Appliances: Energy Star refrigerator, dishwasher, clothes washer
- Solar: 6.3 kW PV
- Water conservation: WaterSense fixtures
- Energy management system: Internet monitoring
- Other: EPA Indoor airPLUS



GRAND WINNER FOR INNOVATION IN CUSTOM HOMES (SPEC)

DWELL DEVELOPMENT, SEATTLE

This home spent zero days on the market and sold at a neighborhood record price. Dwell Development's mission is to have every one of its homes be Net Zero energy-ready, an approach that's sustainable for many reasons. "It's good for the community, good for the economy, good for the built environment, and good for knowing and showing to everyone that you can design and build a net zero home and be profitable," says Anthony Maschmedt, principal and founder at Dwell Development.

PROJECT INFO

- Emerald Star, Seattle
- Layout: 3 bedrooms, 3 baths, 3 floors, 2,117 square feet
- Climate Zone: IECC 4C, marine
- Completion: October 2015
- Category: Custom spec

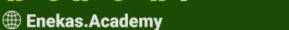
MODELED PERFORMANCE DATA

- HERS Index, without solar: 45; with solar: 0
- Projected annual energy costs, without solar: \$472; with solar: \$51
- Projected annual energy cost savings (vs. home built to 2012 IECC), without solar: \$888; with solar: \$1,628
- Projected annual energy savings, without solar: 9,896 kWh; with solar: 18,090 kWh
- Added construction cost, without solar: 10 percent

KEY FEATURES

- DOE Zero Energy Ready Home Path: Performance
- Walls: Double 2x4 stud wall, 12-inch cavity dense-packed with R-46 cellulose, 1/2-inch OSB sheathing, fluid-applied weather-resistive barrier, reclaimed barn wood, and standing-seam metal siding
- Roof: R-84: Unvented 16-inch cathedral roof with R-64 blown fiberglass, ½-inch OSB sheathing, 3-inch R-20 polyiso, ¼-inch protection board, standing-seam metal roof
- Attic: No attic
- Foundation: Poured concrete foundation stem walls, slab-on-grade with 4-inch R-16 EPS under slab and full perimeter thermal break R-8 slab edge
- Windows: Triple-pane, low-E, argon-filled, wood-frame, U=0.09, SHGC=0.50
- Air sealing: 1.17 ACH 50
- Ventilation: HRV, MERV 7 filters
- HVAC: 83-gallon CO₂ heat pump water heater, 450 percent efficient, for radiant floor heat and hot water
- Hot Water: CO₂ heat pump water heater
- Lighting: 100 percent LED
- Appliances: Energy Star refrigerator, dishwasher, clothes washer, dryer, induction range
- Solar: 8.1 kW PV
- Water conservation: All WaterSense low-flow fixtures, 420-gallon
- Energy management system: Adaptive use home management system
- Other: Electric-car charging station, no-/low-VOC finishes, 100 percent reclaimed siding, 90 percent FSC or reclaimed wood, recycled content tile and countertops PB

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WAYS TO REDUCE DIRECT COSTS

DIRECT COSTS ARE USUALLY THE LARGEST SLICE OF THE COST-COMPONENT PIE FOR BUILDERS.
CUTTING THEM GOES A LONG WAY TOWARD SAVING MONEY

By Al Trellis

or the vast majority of builders, direct construction costs constitute the largest single component of cost, and thus, logically, they become the first and most important area of potential savings. Most of these savings are derived from some combination of the following strategies.

INCREASE EFFICIENCIES

There are two significant components to this approach. Better prepared construction documents lead to better communication, fewer questions, reduced misunderstandings, and less wasted time dealing with mistakes. To increase efficiencies, you need to require:

- 1. Standardized drawing formats, dimensioning, notations, and terminology. Actual people in the field have to build what is drawn, and they deserve consistency, accuracy, and clarity.
- 2. Better detailing of plans. Good construction plans use sections and exploded drawings to assist workers in the field by specifically showing how you want various details to be constructed.
- 3. Standard details and components. Proper preparation of the construction documents requires an integrated approach that incorporates the knowledge of the designer/draftsman, the purchaser/specifier, and the construction supervisor. In this way, the working drawings will be fully compatible with the specifications and the plans will incorporate details and readily available products that we know we can obtain quickly and at a good price.

The second component of increased efficiencies involves reviewing and revising your plans using what is commonly referred to as value engineering (or lean design). This process first applies fundamental cost analysis to the individual design and construction details of a house plan and then goes through a similar process that relates to the specifications and inclusions. The following is an overview of the guiding considerations as applied to home design.

- 1. Overall design: In this phase, the design is reviewed from a global perspective with an eye toward cost reduction. It's not uncommon to completely reject or redesign in this phase when a global problem is discovered. Specifics to consider include:
 - **Modularity:** Optimal use of modular materials, such as 4x8 sheet goods and dimensional-length lumber.
 - **Shape and size:** Essentially, using minimal materials for a given square footage, such as:
 - Percentage of space above the garage
 - Ratio of square feet to exterior wall linear footage
 - Number and size of openings
- 2. Structural design: This phase details the structural components of the plan and attempts to find the least-expensive construction methods, including those for:
 - Wall systems: Stud size and spacing; header sizes; nonload bearing wall design; sheathing selection; connection details
 - Floor systems: Size and type of joists; size and type of beams and columns; subfloor selection
 - Roof systems: Trusses versus rafters; rafter design; sheathing selection; connection details
- 3. Nonessential components: In this phase, the plan is reviewed with an eye toward eliminating any components deemed to be nonessential or that are believed to contribute less to perceived value than their cost warrants. Examples may include omitting a second window in a secondary bedroom or the elimination of bridging or strapping not required by code.
- 4. Less-expensive components: The final step in the valueengineering sequence is to check individual pieces and parts to evaluate whether there are less-expensive but still acceptable substitutions that can be made in the existing design. It could be using a 48-inch base cabinet rather than two adjacent B24s for the same cabinet space at lower cost.

Remember, it is possible to excessively value engineer a new home. While reducing costs is an important goal, cost reduction must be done in the larger context of creating overall value.









BUY BETTER

The purchasing function is a key factor in any comprehensive program that aims to reduce direct costs. It's not uncommon, especially among small companies, to find building companies with strong estimating and weak purchasing abilities. This is the result of asking an individual to do multiple activities for which he or she isn't equally well-equipped. When purchasing, builders should:

- 1. Avoid sole-source purchases. Even the most diligent businessperson will lose a step without constant competition and external motivation to improve. Consistently obtaining multiple quoted prices is a fundamental requirement of any exceptional purchasing strategy.
- 2. Use the internet. The availability of almost unlimited information through the web can act as a virtual bidding process when properly utilized. This is especially true for certain types of materials and material suppliers, where the opportunity for direct shipment creates a viable alternative to traditional supply channels. Great purchasing is really about knowing the true value of that cost, when to pay it, and how to minimize it.
- 3. Assess installed sales versus separate purchase of labor and materials. More and more the trend is to use trade contractors that provide both labor and materials. There are definite advantages to this practice, primarily in the areas of responsibility and reduced management effort on the builder's part. The issue here is about the cost versus the value of any economies created. It's important to constantly compare the true total costs of installed sales to the costs of purchasing labor and materials separately. This is especially true when the materials used are relatively simple, such as drywall and siding.
- **4. Consider using buying groups.** There are several cooperative buying groups, all of which give the builder an opportunity for pre-negotiated, volume-based prices and rebates. Explore and analyze these groups to see whether the services provided are a good fit for your company.
- **5. Monitor the marketplace for new vendors.** The importance of this cannot be understated. Well-established

- trades can get complacent; newer ones may offer better service or pricing in their desire to secure new business and grow.
- 6. Make sure the bidding system is logical, organized, and efficient. This ensures that procuring bids is relatively easy. Failure to have such a process will result in an unspoken but real reluctance to obtain frequent competitive bids.

CHANGE SUBCONTRACTOR PRICING PARADIGMS

Allowing trade partners to use pricing methodologies that don't accurately reflect reality is a sure way to overpay. Using simplistic mathematical pricing models, such as dollars per square foot, often results in any gains derived from value engineering benefiting the trade rather than lowering costs for the builder.

Another problem with price-per-square-foot quotes is that for most trades, costs aren't linear. In many parts of the country, electricians will quote by the square foot, but simple logic tells us that the last square foot costs considerably less than the first (that is, the service panel is already included). This is an example of a model that increasingly punishes builders as houses get larger and larger.

The first step in ensuring that the quoted price is correct is to understand how that price was derived. Don't hesitate to get trades to explain their thinking. Only then can you assist them in finding a better way to price their work and eventually get to a place where you can tell them what you will pay.

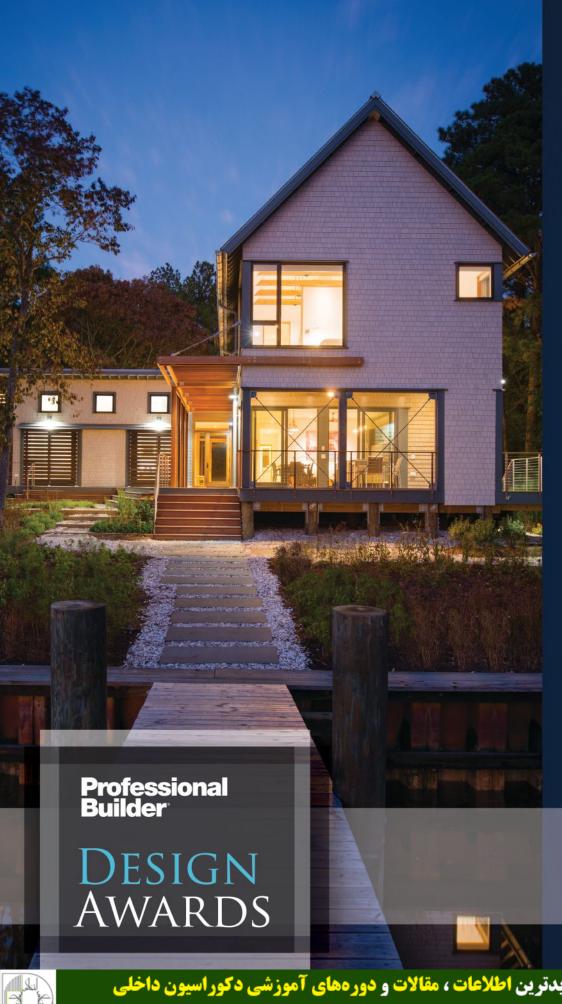
BECOME A PREFERRED CUSTOMER

One of the best ways to consistently obtain good pricing from trade partners is to be a good partner yourself. For most subcontractors, this means giving them three things they very much want: a reliable, steady volume of work; clean, organized jobs ready for the next trade; and rigid adherence to agreed-upon payment terms. **PB**

Al Trellis is president of Home Builders Network (hbnnet.com), in Mount Airy, Md.







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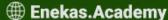
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RAFTSTOPPING FC MAI FFFICIEN

INSULATING AND AIR SEALING UNSEEN AND HARD-TO-REACH POCKETS IS CRITICAL TO ENERGY-EFFICIENT HOMES

By Richard Baker

ou've probably heard the term "draftstopping" but perhaps aren't sure what it means. It sounds like a good idea, right? Mitigating interior drafts is a theory of good thermal performance and energy efficiency, though we tend to limit our frame of reference to walls and other areas we can see. Those details are critical, no doubt, but they're also obvious and are usually adequately addressed.

I'm talking about the places that aren't so obvious—at least once the home is finished: wide swaths of uninsulated or unsealed construction that are often neglected or aren't considered in the overall scheme of whole-house energy efficiency. You wouldn't leave a window wide open and expect good thermal performance, so don't expect a quality thermal envelope without paying close attention to all areas of the wall.

Picture the framing cavities of an exterior wall below the rim of a bathtub, for instance. Because the tub is typically set in place before the insulation crew do their thing, it can be difficult (at best) to effectively insulate, air-seal, and encapsulate that now-hidden wall section.

The same is true for areas behind prefabricated fireplaces, chimneys, and mechanical chases, as well as double-wall and attic knee-wall assemblies. The result? When using fibrous insulation such as fiberglass or cellulose, convective heat transfer can reduce the R-value of those assemblies, their overall thermal efficiency and comfort, and the effectiveness of the HVAC equipment.

The solution is relatively simple, though a different sequence, trade, or both may be needed. Before the cavities and other voids are covered up or made inaccessible by a tub or shower enclosure, chimney flue, or fireplace insert, have the framer or the product installer add insulation and encapsulate it with a rigid, full-height, and completely sealed panel to

serve as an air barrier. That kind of assembly renders convective loops far less likely.

Discuss and settle details and performance expectations beforehand with your trades so that everyone knows the drill, and educate and inform your building inspector before he visits the site so he doesn't red-tag the work or make you tear it out.

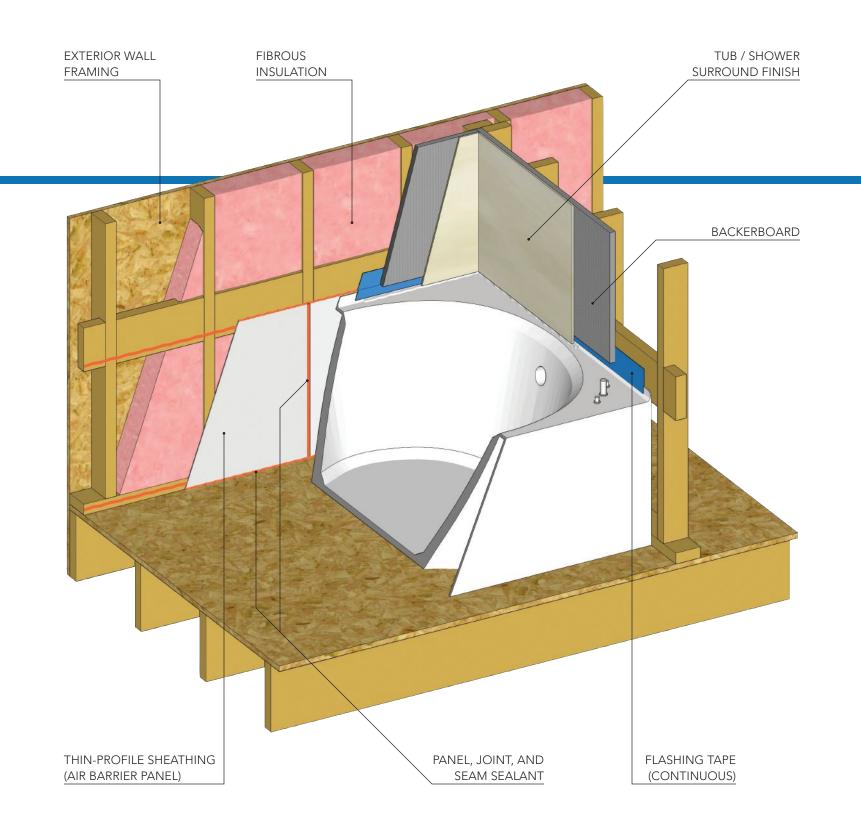
Use the illustration, opposite, and follow this best-practices checklist to draftstop behind a tub, and check out this reference from the Building America Solution Center for fireplace and chimney assemblies: https://basc.pnnl.gov/resource-guides/ walls-behind-fireplaces#quicktabs-guides=1.

- **1.Insulation:** Fill the entire wall cavity with insulation to the code-compliant (or better) R-value.
- 2. Air barrier panel: Cut sheathing material—such as fibercement board, paperless or glass-mat drywall, thin-profile sheathing, or rigid insulation—to fit so it covers the entire exterior wall surface behind the tub, and encapsulate the cavity insulation. If necessary, add blocking between the framing members to fully fasten the air barrier.
- **3.Air barrier sealant:** Apply a thick bead of sealant to the exposed surfaces of the framing members, including the plates and any blocking.
- **4. Air barrier fastening:** Nail or screw the air barrier material to the framing.
- **5.Joint and seam sealant:** Apply sealant or expanding foam along joints and to seal seams and any holes made through the air barrier material. Once the tub is installed, seal any holes around the tub drain. PB

Richard Baker is a program manager on the Builder Solutions team at IBACOS.











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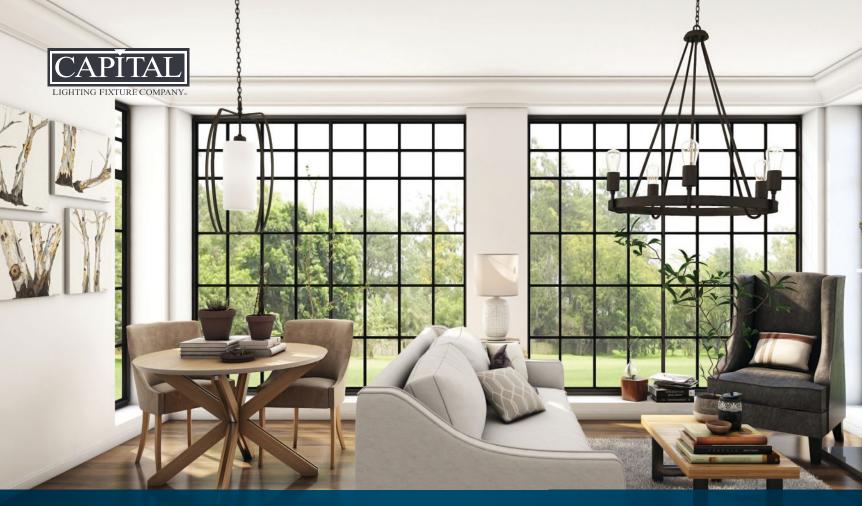


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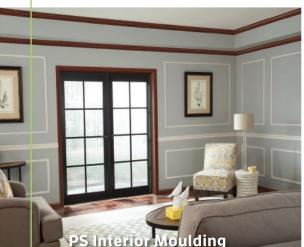




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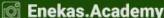
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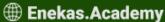
NATIONWIDE Flomes



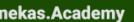












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NEW AMERICAN HOME









ontemporary architecture is a signature of Phil Kean, principal of Phil Kean Design Group, in Winter Park, Fla., and architect and builder of The New American Home 2017. Many a Kean home offers a hat-tip to the roots of modernism, such as the International Style that developed here and in Europe in the 1920s and '30s, or the Prairie Style originated by American icon Frank Lloyd Wright. Yet another icon of American culture helped inspire Kean's design of The New American Home 2017: the group of 1950s celebrities known as the Rat Pack and the fun-loving postwar era that personalities such as Sammy Davis Jr., Dean Martin, and Frank Sinatra came to symbolize. Fast-forward half a century, and this year's edition of The New American Home is a 21st-century take on the glamorous, sprawling ranch houses of the 1950s. In Kean's hands, the architectural style that grew up in Palm Springs, Calif., is equally at home in Lake Nona, Fla.







FLOOR PLAN

A house of glass that's built around a putting green and a pool, The New American Home 2017 is an indoor-outdoor haven. The design elaborates on the courtyard idea with mini-courtyards within courtyards set on precise axes, and covered lanais that offer connections to the outdoors and privacy. Sightlines throughout the home provide abundant natural light, not to mention views of the pool and putting green, as well as to the pond and golf course beyond.

Lake Nona, a gated community 15 minutes south of Orlando airport, is home to impassioned amateur and professional golfers alike, as well as tennis pros and snowbirds from all over the world. With a casita that boasts its own kitchenette and three guest suites, the five-bedroom, seven and a half-bath home can easily accommodate family and guests that come from afar for extended stays.

Kean intended the home to feel like a mini-resort built for good times. A swimming pool, hot tub, workout room/spa, golf-simulator room with bar, and a game room with a pool table offer play spaces of every sort. "This is a house where you put on Frank Sinatra, have a martini, and feel like you've arrived," Kean says.













NEW AMERICAN HOME









MOD PODS

The 12,509-square-foot home has 8,245 square feet of conditioned space with the rest designated as outdoor area. Its innovative pod configuration offers privacy and energy efficiency, too. Kean designed the plan so that each separate pod can be shut down for minimal HVAC use when unoccupied. This helps the house be as energy-wise as it is expansive and is achieved via electronic dampers that divert air to the rooms that need it and ensure some dehumidification is occurring at all times, even when rooms aren't in use.

What's more, the spaces "talk" to one another to breathe and filter so that each zone has its own return air, with air conditioning units by Trane providing the main filtration for the home. Balance between spaces' HVAC is achieved via 14-inch air conditioning ductwork that connects the spaces to one another and to the 5-ton variablespeed air conditioner with MERV-13 filters and a 19.25 SEER rating. Ceiling fans positioned throughout the house and in the covered outdoor spaces help optimize airflow. Ideally, the home maintains a humidity level that's less than 55 percent, minimizing mold and dust-mite spores, says Drew Smith, COO of Two Trails Sustainable Building Consulting, the home's third-party certifier. The home is aiming for multiple certifications: National Green Building Standard (NGBS) Emerald, Indoor air-PLUS, Energy Star, and LEED for Homes.





NEW AMERICAN HOME







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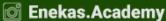
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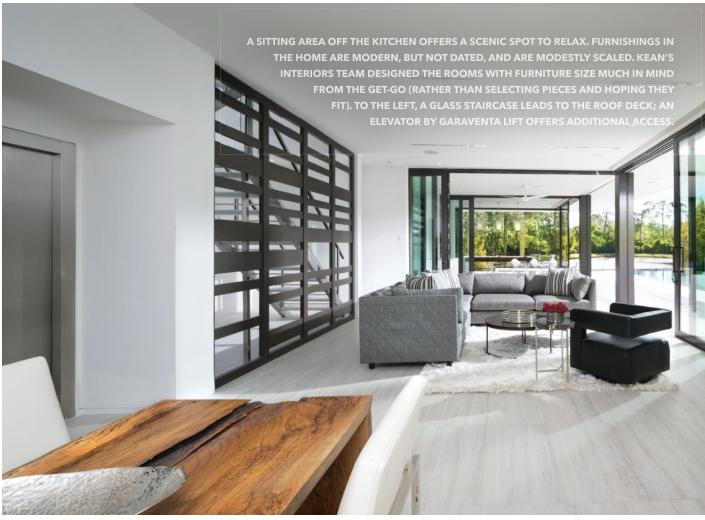
LUXURY HOME, **ENERGY MISER**

A 12,000-square-foot house that lives lightly sounds implausible, especially when more than half of the walls are glass. Yet energy costs are expected to come in at just under \$250 per year, thanks to numerous features working in concert. Many appliances are Energy-Star rated and all light fixtures are LED, including a control system that's timed to sunrise and sunset, with wiring by



Eaton. The roof, which has an R-21 value, is insulated with Icynene; exterior walls are R-16.2 thanks to a combination of injected foam on the insulation blocks, 34-inch extruded foam and insulation board by Kingspan, plus a radiant barrier from Fi-Foil and drywall by CertainTeed.

Sliding glass window-walls are low-E single-glazed, with a thermally broken aluminum frame. The windows' SHGC ratings range from 0.23 to 0.17.









NEW AMERICAN HOME





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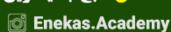




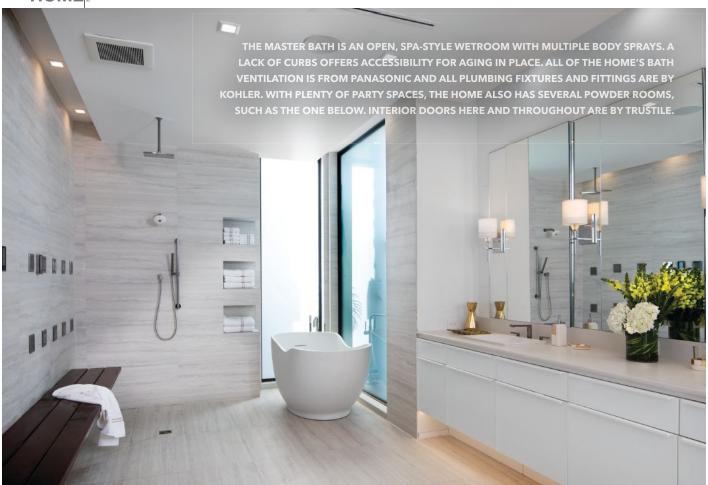
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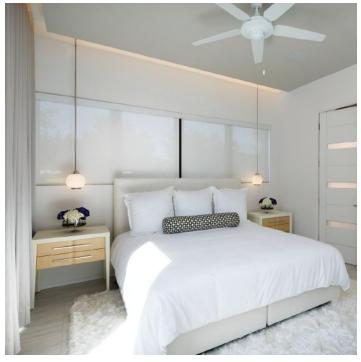
NEW AMERICAN HOME











ABUNDANT LIGHT

A hefty portion of The New American Home's energy savings comes from the rooftop's 60-panel 17 kW solar array. Two Tesla battery units, 14 kW each, are tucked at the north side of the house with the other mechanicals. They store the power collected by the rooftop's solar array, minimizing energy demand on the home after sunset.

A Kohler generator supplies additional backup power, if needed. In the event of an outage, major appliances and HVAC can run, with enough power for radio and television so homeowners can get news and weather updates. Final numbers were still being run at press time, but Smith says that the home's HERS Index score is zero.

With floor-to-ceiling windows and white surfaces galore, the need for artificial lighting during the day is minimal. Phantom Screens, positioned throughout the home, work in tandem with generous overhangs to manage solar gain, substantially reducing the indoor air temperature.





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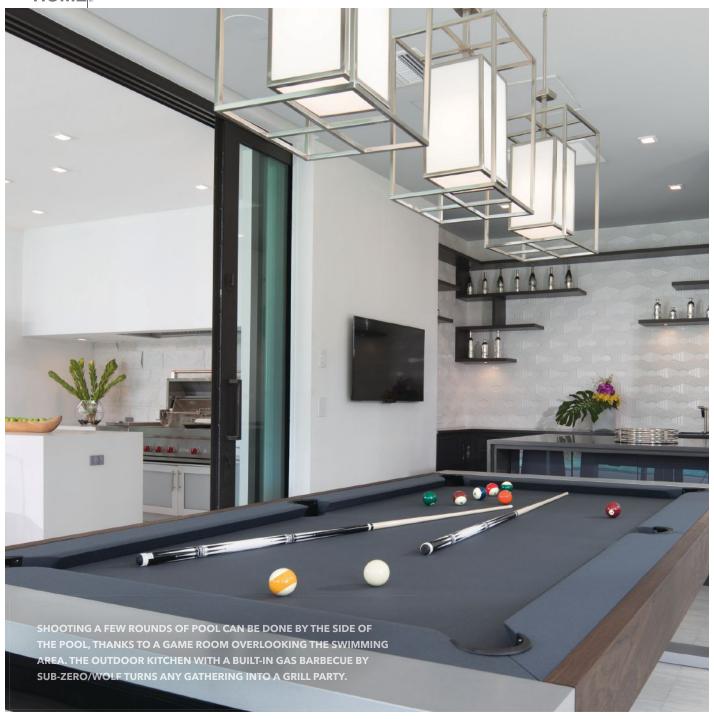








NEW AMERICAN HOME



BREATHING EASY

Low- or no-VOC paints and finishes by Sherwin-Williams are used throughout the house. Overhead fans help maximize airflow and support air filtration. Concealed pullout vacuum hoses throughout the home make getting rid of dust as easy as possible. In all of the baths, Panasonic fans provide ample

ventilation and dehumidification, ranging from 80 cfm to 120 cfm, based on the square footage of the room.

A key aspect of sustainability is little modification needed for aging in place. The New American Home is built at ground level and on one level, with wide doorways, several showers easily accessible via walker or wheelchair,

commodes that are easy to reach, and faucets that don't require gripping. Sliding doors feature automatic controls in case occupants aren't strong enough to operate them. The rooftop deck can be reached via a Garaventa Lift elevator. The casita, with its separate entrance, could be home to a nanny, aging parents, boomerang kids, or caregivers.







*NEW AMERICAN HOME! 2017





WATER-SMART, STORM-WISE

The New American Home features eight Energy Star–rated gas tankless water heaters in a piggyback sequence to ensure that a constant supply of hot water is delivered in the most energy-efficient manner. Low-flow lavatory faucets and toilets by Kohler (with an average 1.28-gallon flush) are in all powder rooms and baths. Plumbing fittings by SharkBite allow pipes of differing materials to be connected without an adapter, minimizing waste (and trips to the plumbing supplier). They also require no glue.

Drought isn't a worry in Florida, but easing pressure on aquifers is. Once established, landscaping, such as Zoysia, a warm-weather turf grass, and podocarpus, bottle brush, Buddha belly bamboo, Schilling's holly, and six varieties of palm don't require much water

in addition to rainfall. Pine bark is used instead of cypress mulch to minimize the use of cypress, a native Florida tree that's an integral part of the wetland ecosystem. Drip irrigation is installed under the plant-bed mulch.

Storm runoff is managed by smooth stones that help drainage, plus downspouts, gutters, and pop-up drains that divert storm water to the street and then the pond. The raised platform deck was designed to prevent penetration, minimize the chance of leaks, and divert runoff to the garden. An energysaving side benefit of the roof deck: It provides shading for the roof, reflecting sunlight rather than absorbing it. A fine gravel channel that borders the home is part of a Polyguard system that aids drainage, discourages mold by keeping plants and moisture from exterior walls, and deters termites.





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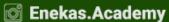
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NEW AMERICAN HOME



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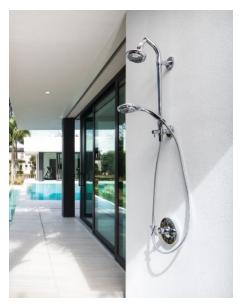






NEW AMERICAN HOME





















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Town & Country Luxury Fireplaces

TruStile Doors

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*NEW AMERICAN HOME PRODUCTS











Augustian Surrounding The New American Home's rooftop terrace and summer kitchen are stainless steel cable railings by AGS Stainless. The custom-designed flat-top railings, from the Clearview line, are factory fabricated and shipped for onsite installation. Welding and polishing are done by hand. In addition to the flat style, top rails come in round, round with lighting, wood, and with stem reducers. Two lengths—36 inches and 42 inches—are available, as are many colors. Powder coating is optional. (Bronze Sponsor)

Countertops in The New American Home are made by **Caesarstone**. The engineered quartz material requires no sealants and comes in more than 20 standard colors and 20 custom colors. Resistant to scratches, cracks, stains, heat, mold, and mildew, Caesarstone has four

times the flexural strength and double the impact resistance of granite, the manufacturer says. It comes with a lifetime warranty. (Bronze Sponsor)

The New American Home incorporates a number of **Eaton**'s products, including decorative switches, advanced lighting controls, USB receptacles, and circuit protection. The CH ¾-inch load centers enclose CH circuit breakers for power distribution and premium protection. They are the largest load center available and have the highest main breaker short-circuit rating in the industry. The plug-on neutral technology creates time savings of up to 25 percent for each AFCI or GFCI installation. (Gold Sponsor)

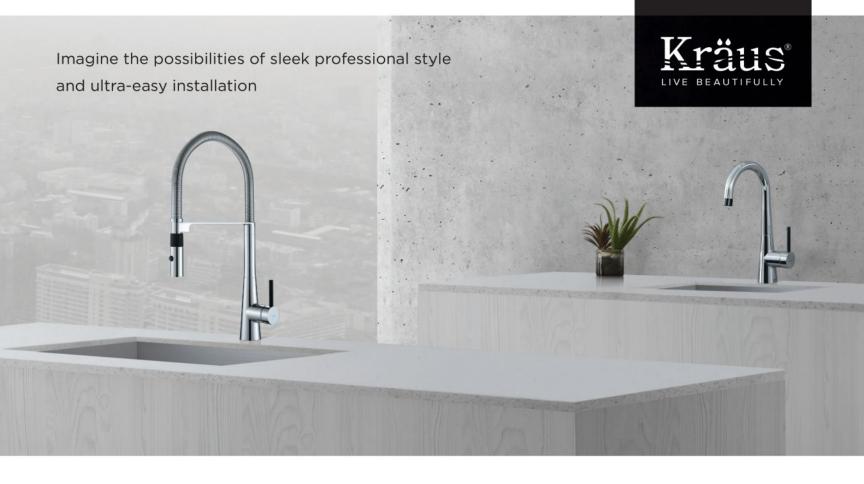
Designed to easily score and snap, SilentFX QuickCut provides STC

ratings of 50 or higher, decreasing sound transmission through walls and increasing labor efficiency. It consists of an enhanced noise-reducing drywall and a sound-dampening viscoelastic polymer that **CertainTeed Gypsum** combined in one board to reduce sound transmission. Also in the show home are the company's AirRenew, Easi-Lite, Type X drywall, and Aquabead corner bead. (Bronze Sponsor)

Because it contains no cellulose, M-Shield reflective insulation from Fi-Foil eliminates the food source for mold growth. It is intended for use on furred-out masonry walls, has a Class A flammability rating, and passes the ASTM C1338 fungus test. It also meets and, in some cases, exceeds the Florida and International Building Codes. (Bronze Sponsor)













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NEW AMERICAN HOME PRODUCTS











Clopay's Avante garage doors are constructed with a 2¹/₈-inch-thick commercial grade aluminum frame designed to be virtually maintenance-free. Frosted tempered glass panels allow natural light into the garage during the day while maintaining privacy. Solid aluminum panels to match the frame are also available. Panels come in glass, acrylic, polycarbonate, aluminum, and wood finishes. Avante's frames and solid panels are offered in nine standard colors plus custom colors, and there are 12 glazing options. Doors that meet many local wind-load requirements are available. (Bronze Sponsor)

Tenvironmental StoneWorks, which both manufactures and installs stone veneer, has developed a component system that lets builders and architects pick the trim bands and patterns of install. In The New American Home, for example, the

stone veneer that continues from the exterior into the interior combines Sabbia as the trim and Bugnato as the larger block, both in the light Bianca color. Sabbia comes in several textures. (Gold Sponsor)

FlashShield flexible gas piping saves time during installation and provides more options in deciding where gas-fired appliances will go in a home, says the manufacturer, Gastite Division of **Titeflex Corp.** The metallically shielded gas pipe provides the highest possible level of lightning protection. FlashShield is the only flexible gas piping to meet the electrical arcing requirements of the ICC-ES PMG LC1027 listing criteria. (Silver Sponsor)

Trane's heat pumps come in three price points: economy, standard, and premium. The competitively priced XR series includes models with a SEER rating of

up to 17.25; midrange XL heat pumps have a SEER rating of up to 18; and the XV20i variable-speed heat pump has a rating of up to 20. The XL18i (SEER rating of up to 18), was chosen for The New American Home. Several models feature humidity control and some have variable-speed compressors. Trane also makes air conditioners, air handlers, gas furnaces, oil furnaces, coils, ductless systems, packaged systems, and geothermal systems. (Silver Sponsor)

Mith its in-line drive system, Garaventa Lift's Elvoron elevator requires no machine room. All of the drive components, including the controller box, can be mounted within the hoistway. The Premium Door Package includes three-speed side sliding doors on the elevator cab and each landing. For The New American Home, brushed stainless steel doors were selected. (Bronze Sponsor)







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Water inevitably penetrates exterior cladding at some point. A practical way to handle that is to install Kingspan Greenguard DC14 drainage mat. Made of extruded polystyrene, DC14 doesn't absorb moisture. With drainage channels on both sides, it permits easy drainage for water and allows air movement between the siding and sheathing to help keep the wall dry. Also in The New American Home are the company's XPS insulation board and KoolDuct preinsulated ductwork. (Silver Sponsor)

The Exhale showerhead from **Kohler** offers four spray choices: full coverage with large, air-infused drops; drenching rain; pulsating massage; and a gentle rinsing spray. Also in The New American Home's baths are the company's DTV+ and DTV Prompt digital shower systems, Abrazo freestanding bath, Veil one-piece dual-flush toilet, Jute bathroom vanity cabinet, and Ceramic/Impressions and Iron/Impressions sinks. Kitchen and entertaining area fittings include the Prolific undermount kitchen sink. Karbon bar sink faucet, Carafe kitchen sink faucet, Brinx top-mount bar sink, and Aquifer water filtration system. (Gold Sponsor)

Some of **MiTek**'s line of 4,000 USP connectors went into the construction of The New American Home. The company offers a comprehensive collection of code-evaluated connectors, framing hardware, fasteners, anchors, and epoxy. (Silver Sponsor)

With much of The New American Home floor done in tile, underlayment is essential. Polyguard Products' TERM tile underlayment barrier acts as an anti-fracture membrane, moisture barrier, and sound deadener. In addition, it contains the company's termite barrier sealant, which blocks termites from entering the house if any cracks develop in the concrete slab underneath. Two other Polyguard Products barriers also help protect the home from termites: TERM isolation joint barrier and TERM Particle Barrier. (Bronze Sponsor)

The WhisperGreen Select ventilation fan allows builders and homeowners to choose among a combination of features, such as airflow (50, 80, or 110 cubic feet per minute), motion sensor, condensation sensor, and night light. The fan, made by Panasonic Eco Solutions North America, is UL listed for installation in tub and shower enclosures when it's used with a GFCI-protected circuit. (Gold Sponsor)







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Instead of being mounted in the typical location on the garage ceiling, the **LiftMaster** 8500 is attached to the wall. The ceiling then becomes available for storage, and the appearance is cleaner. The opener operates quietly, and with the company's free MyQ app, homeowners can receive smartphone alerts if they forget to close the garage door. (Bronze Sponsor)

Phantom Screens are retractable, offer insect protection, solar shading, temperature control, and added privacy for doorways, windows, and large openings such as patios, verandas, and lanais. The screens are designed to pull into place when required and retract out of sight when not in use. Some models are motorized. The screen used in The New American Home's great room is 40 feet

wide—the widest the company has ever made. (Bronze Sponsor)

The **SharkBite** EvoPEX fitting is designed for PEX pipe and engineered as an easy alternative to toolbased pipe-joining methods. The pushto-connect design reduces the risk of installation errors by providing a visual indicator that assures a proper connection has been made. Other behind-thewall rough-plumbing elements from the company in The New American Home include PEX pipe, water-control valves, and washing machine and ice maker boxes. (Silver Sponsor)

1 Peaturing alternating clear and champagne-tinted glass accents, The Pointe from **Progress Lighting** provides an element of sparkle in The New

American Home. A coordinating one-light wall sconce features a polished chrome finish. The company also provided ceiling fans for the home. (Bronze Sponsor)

With its true flat finish, Sherwin-Williams' Duration Home acrylic latex paint for interior use offers the same durability and burnish resistance as matte and glossier sheens. Most stains clean up with mild soap and water with no color rub-off and little visible shine afterward. This paint-and-primer-in-one repels stains. Matte and satin versions are available. Also used on The New American Home is the company's Emerald exterior acrylic paint, which can be applied in temperatures as low as 35° F and is also a paint and primer in one. Emerald paint resists mildew, blistering, peeling, and color fade. (Silver Sponsor)





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NEW AMERICAN HOME PRODUCTS











Contemporary exterior wood doors from **Simpson Door Co.** feature clean lines, uncluttered looks, and distinctive styles. For The New American Home, Simpson provided a one-of-a-kind door, an opportunity that's available to all builders and offers doors in any wood species and unlimited sizes and options. The company also makes matching sidelites and transoms and interior doors. (Bronze Sponsor)

22 Sub-Zero and Wolf kitchen appliances play a prominent role in The New American Home with its four kitchen areas. And with the size of the home, it makes good sense to have refrigerator drawers in the master bedroom breakfast bar, guest suite/casita, and wine bar—not to mention in the main kitchen itself. Also found in the home are the company's under-counter refrigerator, freezer, refrigerator, freezer, refrigerator, freezer, refrigerator,

erator, wall oven, dishwasher, induction cooktop, built-in coffeemaker, microwave, steam oven, ice machine, wine storage, outdoor refrigerator, outdoor grill, and outdoor hood, plus Asko washer and dryer, which Sub-Zero sells. (Platinum Sponsor)

Interior doors in The New American Home are from two lines of **TruStile Doors** panel doors: Tru&Modern and Tru&Modern Infinite Rail. The Tru&Modern stile-and-rail door (pictured) comes in 9-rail, 13-rail, and panel versions with one to 11 inserts; the Infinite Rail line offers 13 styles with a variety of ¼-inch kerf cut and ½-inch metal inlay configurations. Both lines are available in paint-grade MDF and 19 wood species. (Bronze Sponsor)

24 Zero-clearance linear gas fireplaces from Town & Country Luxury Fireplaces have direct ignition. While the fireplaces look warm, coolglass technology protects hands that might touch the glass box. Fireplaces are available in lengths from 3 to 106 feet. The Architectural Series is the world's first smart fireplace that thinks every 3 seconds to maintain optimal flame. (Bronze Sponsor)

25 Icynene Classic Max is an ultralow-VOC open-cell spray foam insulation and air barrier that eliminates the need for an ignition barrier in unvented attic assemblies. It allows for reentry by trades after one hour and reoccupancy by residents after two hours of active ventilation at 40 air changes per hour. Classic Max can be sprayed in a wide temperature range and is a certified Greenguard Gold product. (Gold Sponsor)







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Clockwise from top left: Rob Turner, President Interior Design, Phil Kean Design Group; Tony Mancini, Group Director/Principal, Professional Builder magazine, SGC Horizon; Steve Earl, VP Operations, Phil Kean Design Group; Brad Grosberg, Principal, Phil Kean Design Group; William Nolan, Task Force Advisory, The New American Home; Paul Sullivan, 2017 Task Force Chair, The New American Remodeled Home; Tom Swartz, Task Force Vice Chair, The New American Home; Bill Owens, Task Force Vice Chair, The New American Home; Kelly Grove, Interior Design Coordinator, Phil Kean Design Group; Jim Kaiser, Construction Manager, Phil Kean Design Group; Chris Kaba, VP Construction, Phil Kean Design Group; Serena Hahn, Operations Manager Construction, Phil Kean Design Group; Judy Brociek, Director of Events, SGC Horizon; Tucker Bernard, Director, NAHB Leading Suppliers Council & The New American Home; Alyssa Smith, Assistant Designer, Phil Kean Design Group; Phil Kean, Principal, Phil Kean Design Group; Laura Wales, Design Assistant, Phil Kean Design Group



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Ursula Schwartz

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Landscape Design: Mills Design

Group, Oviedo, Fla.

Green Building Consultants:

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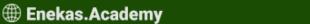
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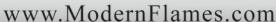


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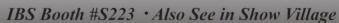


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SURVEY SAYS

PART TWO: THE TRADE SHORTAGE GETS WORSE BEFORE IT GETS BETTER

By Scott Sedam, Contributing Editor



n the first part of this two-part series, based on our nationwide survey on the trade shortage (see Professional Builder, December 2016), we

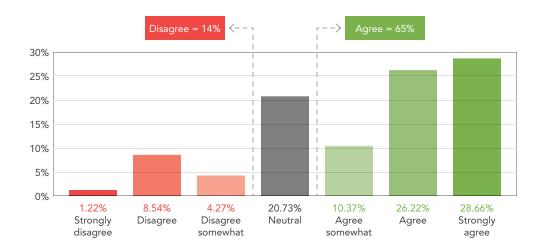
examined feedback from 167 builders in response to five questions about the impact of the trade shortage on their business. There were no real surprises, just an almost universal affirmation of the issue's severity. Virtually all agreed that trade availability is a critical issue that has inflated schedules, increased direct costs, compromised quality, and limited deliveries and growth. The sole minor deviation was that "only" two-thirds of respondents indicated that quality has gotten worse. Overall, the responses were in line with what we've seen in the 20 or so weeklong Lean implementations we run annually, with an average of around 25 suppliers and trades participating in each one.

In Part 2, we consider the results of the second group of five questions, and although the responses generally skew the same way as in Part 1, the feedback on a few of the questions isn't quite as clear. Let's take a look.





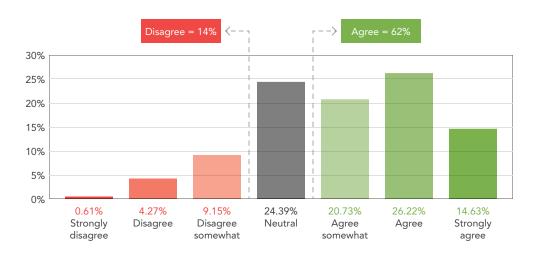
6 the shortage of trades is worse than this time last year



Overall, two-thirds of respondents said the trade-shortage problem worsened in 2016 compared with 2015, with strong weighting toward "Agree" and "Strongly Agree" responses. But 21 percent of respondents were neutral, reporting that the problem is pretty much the same as it was last year. We can't know for sure if "the same" describes a good situation or a bad one, but our considerable field experience suggests it's the latter. We do, however, have 14 percent, about one builder out of seven, reporting

that the shortage has lessened compared with a year ago. These results may come from a market where the trade shortage isn't as severe, such as Salt Lake City, which is among the very few that might qualify. Or it could come from those few builders that are in markets with serious shortages, yet they've figured out how to beat the reaper. We have seen it done, albeit rarely, and those builders have developed an incredible competitive advantage.

7 the shortage of trades will be worse one year from today



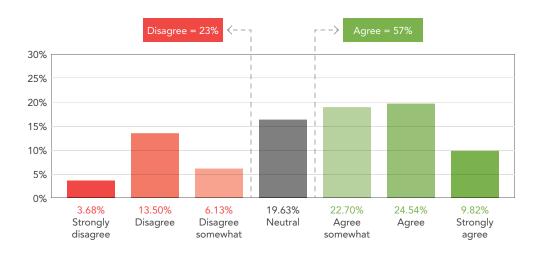
Will the trade shortage grow in 2017? A slight decrease in the strength of agreement on this question is seen in the shift of the cumulative agreement (green box) distribution to the left. Yet that's tempered by a slight shift of the level of overall disagreement (red box) to the right. Meanwhile, a quarter of participants are expecting no change in the "situation"; that situation being that the availability of trades is a "critical" issue—as shown in Graph 1 in Part 1 of this series, where 93 percent of respondents agreed. Putting this all

together, we can conclude that 88 percent of respondents expect the 2017 trade shortage to be at least as bad as today, with 62 percent expecting it to be even worse. Sobering, to say the least.





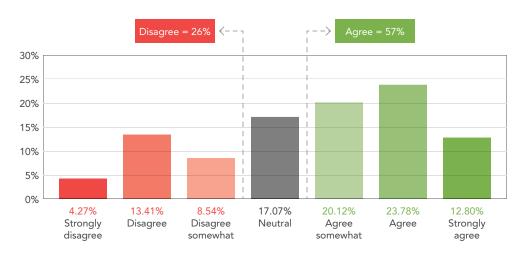
8 we suffer less from the trade shortage than our competitors



This is where the answers get more curious. Here we have a distinct majority of 57 percent stating that they suffer less from the shortage than their competition. With just a quarter showing some disagreement and a large neutral of nearly 20 percent, what do we conclude? Are these builders really doing better overall dealing with the crisis they all subscribe to compared with other builders? The distribution of these surveys is perhaps slightly weighted toward TrueNorth clients. Knowing that, it may be more likely

those builders would answer yes, as the vast majority of them have been working to some degree on solving the trade shortage. Do they truly represent a "better than average" group? Or is this just human nature? I'm reminded of how in training-needs surveys that we've conducted over the years, respondents always set the need for training in the overall company as greater than their own personal need. When we see a broad problem, do we always think it doesn't affect us as much as the other guy(s)? At this point, the answer remains a mystery, but feel free to email me with your conclusion—or at least a couple of clues.

9 we have taken specific, tangible steps to help build the trade base



Although the results here show the greatest disagreement among respondents, I still feel a bit incredulous at the response. I hope it's true that 57 percent of our builders have taken specific, tangible steps to build the trade base. Yet in almost countless presentations, ranging from Builder 20 groups with about 20 people in attendance to groups at association meetings-NAHB, IBS, or PCBC, numbering as many as 300—I ask this same question very directly. "If I went to your

town today and asked your people as well as your trades to show me evidence that you have taken specific, tangible steps to build the trade base, how many could do it? P.S. Anecdotes do not count as evidence." Most often, I get no hands, and in large groups I rarely get more than two or three. So where are the 57 percent hiding? Perhaps it's definitional and those responding to this survey are simply thinking of their own local efforts to find trades, whereas the question was intended to address the issue of building the more macro trade base in any given market. Similar to question 7 above, there is no definitive conclusion to draw here, but I encourage each builder to take a long hard look in the mirror and ask the tough question: Are you doing enough?



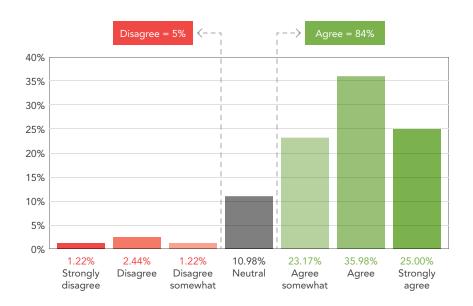








10 THE MAJORITY OF OUR TRADES CONSIDER US AS GENUINE PARTNERS WITH THEM IN THE BUSINESS



Perhaps it's fitting that the final survey question causes the most consternation. We have a huge builder plurality of 84 percent stating that the majority of their trades consider them as genuine partners in the business, with just 5 percent disagreement. Can this be true? We've had more than 4,500 suppliers and trades involved in Lean implementation weeks over the past 10 years, during which we've been able to closely watch how they work with builders. My analysis of the "genuine partner" question, if we ask the trade directly and in confidence, is at best a third. That is, one-third of trades will agree that both parties solidly meet the terms for what being a "genuine partner" requires from each party. Another third, or perhaps a bit more, will hedge on this, saying they have a productive relationship but something less

than a "genuine partner." A final third, or perhaps a bit less, will describe the working relationship as one of convenience for both parties, lacking in true commitment.

My stand-alone analysis of the final survey question left me uneasy, my assessment being so far off from the responses of our builder participants. I harp on taking supplier and trade feedback at face value, so should I not apply the same standard to responses from our builders? I decided to send an emergency email to our four TrueNorth senior associates, who average better than 30 years' experience each, asking them the same question: Do trades consider builders to be "genuine partners?" Keep in mind, those builders who work with us to implement Lean are clearly demonstrating their desire—or, at minimum, their intent—to work as partners. The median response by our TrueNorth field consultants was that only 25 percent of trades consider their builders to be genuine partners with them in the business. Was I being generous? You may disagree, but the deep experience of five industry professionals—each in their 60s, by the way—is tough to dispute. We've worked with those builders who rate at the top of the scale on genuine partnering, and we know the difference between the real deal and the also-rans.

In some ways, the feedback from these 10 questions is what we expected. As stated at the start of this column, it's clear: Trade availability remains a critical issue that has inflated schedules, increased direct costs, compromised quality, and limited

deliveries and growth. The somewhat surprising feedback, however, is that most of the participants feel they're better off than the average competitor, that they have taken significant steps to build the trade base, and that the great majority of their trades consider themselves genuine partners in the business. Serious questions remain, though, from those with considerable experience in trade partnering and working to solve the trade shortage. Are a huge number of builders kidding themselves? I'll leave that for you to decide. Regardless, there is tremendous work to be done. I hope you've followed the recent columns where I reported on how builders, builder associations, and schools have teamed up to produce impressive results in helping solve the trade shortage. Meanwhile, how about sometime in 2017 I find myself compelled to write about you and your firm's success solving the trade shortage? Let me know. No survey required. PB

Scott Sedam is president of TrueNorth Development, a consulting and training firm that works with builders to improve product, process, and profits. For a free PDF of "Solving the Trade Shortage"—a series of 12 articles published in Professional Builder, plus our Saved Day Calculator Excel Template—email your request to info@truen. com. You may reach Scott at scott@truen.com or 248.446.1275.







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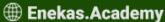
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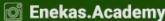


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DESIGN CREATIVITY, SUSTAINABILITY, AND SMART PLANNING-YOU'LL FIND ALL THIS AND MORE IN OUR SELECTION OF PLATINUM AWARD WINNERS FROM THE 2016 BEST IN AMERICAN LIVING AWARDS

By Susan Bady, Senior Editor, and Teresa Burney

2016 BALA JUDGES

SUSAN BADY

Senior Editor, Professional Builder and Custom Builder magazines, Arlington Heights, III.

ED BINKLEY

Design/Business Director, BSB Design, Safety Harbor, Fla.

STEPHANIE HENLEY

Co-President, Beasley & Henley Interior Design, Orlando

YU-NGOK LO

Principal/Design Director, YNL Architects, Los Angeles

KAREN KASSIK-MICHELSOHN

Designer, Michelsohn & Daughter Construction, Anchorage, Alaska

CHRISTINA PRESLEY

President/Founder, Epic Homes, Littleton, Colo.

SEAN RUPPERT

Principal, OPaL, Cabin John, Md.

BILL SANDERSON

Vice President of Construction and Land, BR Knez Homes, Painesville, Ohio































PLATINUM AWARD FOR BEST SINGLE-FAMILY DETACHED HOME, 3.001 TO 3.500 SQUARE FEET

Waterside is a 3,200-square-foot lakefront home that incorporates elements of the farmhouses, cottages, and Victorian homes prevalent in the area. The steep-pitch gabled roof, double-hung mullioned windows, wraparound porch, stone accents, and board-and-batten siding are all references to these architectural styles.

Taking full advantage of the peninsula site, architect Wayne Visbeen created an asymmetrical design that captures views of water and woods from a series of projecting porches and patios. The indoor/outdoor spaces include a three-season porch with a fireplace and covered patio, perfect for entertaining. In most locations, Visbeen says, the porches "come right out to grade."

"Rather than build right on the water, we decided to build in the center of the peninsula, then carve views out to different portions of the lake," Visbeen says, "so you have a lot of outdoor living opportunities."

Inside, the highlights include a roomy first floor with 1,800 square feet of living space, with a mudroom and laundry, study, and an openplan living, dining, and kitchen area. Upstairs is another 1,400 square feet, including a large master bedroom with a 10-foot ceiling, two secondary bedrooms, and a bunk room. There's also a 1,300-square-foot lower level with a walkout family room that connects the interior and exterior. An additional bedroom on this level welcomes guests.

Waterside was purchased by a family from Chicago that uses it as a vacation home. To accommodate visits from extended family, they had the builder finish out the second-floor bonus room.

The judges felt the massing of the home was "just right." They loved the red farmhouse roof and the fact that the plan has many twists and turns that "keep it from looking like two barns glued together." The interior, they said, was tasteful and classic.

PROJECT NAME: WATERSIDE

LOCATION: WOLCOTTVILLE, IND.

DESIGNER/ARCHITECT: VISBEEN ARCHITECTS,

GRAND RAPIDS, MICH.

BUILDER: PETE'S CONSTRUCTION, WOLCOTTVILLE

PHOTOGRAPHER: JEFF GARLAND









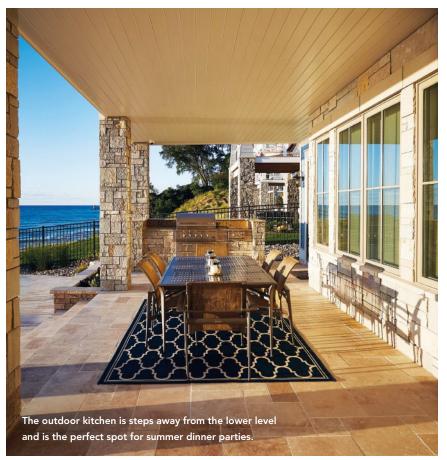






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PLATINUM AWARD FOR BEST SINGLE-FAMILY DETACHED HOME, OVER 4,001 SQUARE FEET

Onaway was designed as a cottage for narrow lakefront lots, albeit a roomy cottage at 4,319 square feet. The garage is oriented toward the street, the main living spaces face the lake, and the entryway is on the side of the house. An open floor plan and layered outdoor spaces ensure that Onaway works as well for family living as it does for entertaining.

The exterior features elements of both Shingle style and Craftsman architecture, with board-and-batten siding accentuating the steep roof gables and classic shingles cladding the lower half of the structure. Oversize roof brackets and porch columns with stone bases are a nod to the Craftsman aesthetic.

Inside, furniture arrangements and low built-ins define the perimeter of living spaces, while keeping the rooms open to one another with views of the lake. The cottage feel of the exterior is carried inside with a neutral, crisp white and blue nautical-themed palette. The kitchen features natural wood cabinetry and a long island capped by a pub-height table.

The master suite, second bedroom, laundry room, and office are located upstairs. The best views of the lake can be found on the master bedroom's private deck. There is also a lower level with a gathering space, kitchenette, bedroom, and "lake" bath that can be accessed from inside as well as from the adjacent pool patio.

Above the garage and separate from the main house is a bedroom suite and bunk room for overnight guests. Custom-built stairs with built-in storage drawers lead to the top bunks.

The judges deemed Onaway "architecturally stimulating" and praised the well-executed details and the synergy between the exterior and interior.

PROJECT NAME: ONAWAY

LOCATION: SOUTH HAVEN, MICH.

DESIGNER/ARCHITECT: VISBEEN ARCHITECTS,
GRAND RAPIDS, MICH.

BUILDER: MIKE SCHAAP BUILDERS, HOLLAND, MICH.
INTERIOR DESIGNER: BENCHMARK WOOD & DESIGN

PHOTOGRAPHER: ASHLEY AVILA PHOTOGRAPHY





STUDIO, HOLLAND



PLATINUM AWARD FOR BEST SINGLE-FAMILY DETACHED HOME, UP TO 2,000 SQUARE FEET

Like all of the Ludlow Cove Cottages, the 1,866-square-foot Townsend is designed with 360-degree architecture and thoughtfully placed on the home site to offer the best possible views of water, woods, and parkland. It features detailed design techniques and innovative energy-efficient elements.

The interior is a mixture of high-quality finishes and modern fixtures, coupled with design that transforms small areas into practical living spaces. Universal design accommodates aging in place, with an open floor plan and main-level master suite. The primary living spaces are oriented toward the water. Thoughtful touches can be found throughout, such as the reading nook next to the living-room fireplace. Storage is maximized, with built-in shelves under the stairs and a "landing zone" for keys, phone chargers, and other daily necessities.

On the second floor, there are two additional bedrooms with a shared bath, and



a loft for reading, working, or relaxing.

Custom details include Craftsman accents, Shaker cabinets, stainless steel appliances, and designer paints and finishes. The inviting front porch, charming back patio, and picturesque views inspire outdoor living unique to the Northwest.

The judges applauded the home's composition and massing and the fact that no space is wasted. "Fantastic use of space [with the] little nooks and crannies, [such as] the reading nook," they noted.

PROJECT NAME: TOWNSEND

LOCATION: PORT LUDLOW, WASH.

DESIGNER/ARCHITECT: UNION STUDIO ARCHITECTURE

& COMMUNITY DESIGN, PROVIDENCE, R.I.

BUILDER: WESTHARBOR HOMES, PORT LUDLOW

DEVELOPER: PORT LUDLOW ASSOCIATES,

PORT LUDLOW

INTERIOR DESIGNER: PAM SAFTLER, PCS DESIGN, REDMOND, WASH.

PHOTOGRAPHERS: JEFF CAVEN, PETER HANSON,
AND ERIC KERTTULA









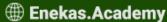
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PLATINUM AWARD FOR BEST RENTAL DEVELOPMENT UP TO FOUR STORIES

Capitol Yards, a 280-unit apartment complex adjacent to downtown Sacramento, Calif., is situated between a minor-league ballpark and a single-family residential zone. Consequently, a residential feel to the north and a civic space anchored by the clubhouse to the south connects the ballpark to the residential community.

Capitol Yards is within walking distance of the Sacramento Capitol building and the downtown area, which attracts young professionals who desire a walkable environment. Unit types are mixed, to create a wide distribution of family sizes within each of the courtyard micro-communities. The dwelling units wrap around three sides of the tuck-under parking to create a narrow aperture at alley entrances, eliminating massive parking areas or driveways at the street.

Glass and steel construction provides an opportunity for expansive windows, unique forms, large cantilevers, and dynamic massing. Capitol Yards is a highly sustainable project, with flow-through ventilation,



proper solar orientation, exterior sunshades, and a radiant roof barrier minimizing the need for air conditioning even during hot Sacramento summers. Highperforming solar glazing, high insulation values, LED lighting, and zoned mechanical systems result in a beautiful building that doesn't compromise on environmental stewardship. Underground basins throughout the site capture stormwater to recharge the local groundwater supply. Zoned

irrigation and thoughtful landscape design minimize water use on site

PROJECT NAME: CAPITOL YARDS

LOCATION: WEST SACRAMENTO, CALIF.

DESIGNER/ARCHITECT/LAND PLANNER: MOGAVERO
ARCHITECTS, SACRAMENTO

BUILDER: INLAND CONSTRUCTION, SACRAMENTO
DEVELOPER: THE WOLFF CO., SCOTTSDALE, ARIZ.
PHOTOGRAPHER: JOHN SWAIN PHOTOGRAPHY









PLATINUM AWARD FOR BEST KITCHEN

The designers of 6 Ocean created a balance between shiny-sleek and warm-organic in this decidedly modern kitchen. White lacquered cabinets and a turquoise blue, recycled-glass island countertop are anchored and warmed by a wood-clad ceiling, a wood floor inlay, floating backlit wood shelves, and a simple wood bar top with a live edge.

Other organic materials play a part in the design. Custom stone slabs with discreet finger pulls cover drawer fronts, offering a streamlined appearance. Downlights cast sculptural pools of light onto the lacquered cabinetry, creating a focal point over the range. A custom wood-and-metal-clad floor-to-ceiling window creates a sculptural element in the kitchen.

LOCATION: PALM BEACH, FLA.

DESIGNER/ARCHITECT: AFFINITI ARCHITECTS,
BOCA RATON, FLA.

BUILDER: MARK TIMOTHY LUXURY HOMES,
BOCA RATON

INTERIOR DESIGNER: MARC-MICHAELS INTERIOR
DESIGN, WINTER PARK, FLA.

PHOTOGRAPHER: ED BUTERA/IBI DESIGNS

PRO IECT NAME: A OCEAN

PHOTOGRAPHY







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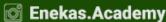


















PLATINUM AWARD FOR BEST SINGLE-FAMILY COMMUNITY. **100 UNITS AND OVER**

Imagine a modernized Colonial Williamsburg with 727 custom-designed homes rooted in American architecture sitting in a natural setting with a brook running through it, and your mind's eye would probably conjure up something like Hallsley.

The 700-acre development in Chesterfield County, Va., sits on one of the most desirable tracts of land in the area. The developer had the good sense to capitalize on the site's natural attributes, giving special attention to landscape design and preserving 25 percent of the woodlands throughout.

While the wooded natural landscape takes center stage, planners also managed to tuck in resort-style amenities rare in the area. There is a grand clubhouse with terraced patios, a cabana bar, and a water park for adults and kids, plus tennis courts and a sand volleyball court. There



are whimsical touches to the amenities, including a dog park and a child's dream of a playground complete with a zip line, babbling brook, fishing pond, and playhouse village.

Some 44,000 home seekers flocked to the neighborhood between Aug. 1, 2015, and July 31, 2016. As a result, 150 homes were sold in that time period. Home prices ranged from the \$500,000s to more than \$1.5 million. The sales yielded \$105 million

in volume, a 63 percent increase from the year before.

PROJECT NAME: HALLSLEY LOCATION: MIDLOTHIAN, VA. DEVELOPER: EAST WEST COMMUNITIES, MIDLOTHIAN LAND PLANNER: E.D. LEWIS & ASSOCIATES, RICHMOND, VA.

PHOTOGRAPHER: BRYAN CHAVEZ/GAMMA PHOTOGRAPHY









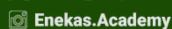


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PLATINUM AWARD FOR BEST HISTORIC PRESERVATION/ RESTORATION

The remodeler of this 1840 classic Greek Revival home had two main objectives: first, to bring back as much of the two-story, historic part of the home to its original state as possible; and second, to create a modern, open floor plan to accommodate a large family. That meant extensive renovation of a 1960s addition. Hindering the project was severe water damage, plus mold growth that had occurred during a 10-year period of vacancy.

The kitchen was relocated to the center of the home, with an open floor plan connecting it to the family room.

Much of the renovation involved removing non-period additions, including drywall that hid the original heart-pine walls. The heart pine was cleaned and left in place. The windows in the original part of the house were painstakingly removed



and the glass replaced with period wavy glass found in salvage yards.

Finally, modern updates were made, bringing all the electrical, HVAC, and plumbing up to code. Another concession to modern life was the addition of closets and a mudroom.

PROJECT NAME: HISTORIC RENOVATION RETREAT ROAD LOCATION: WESTMINSTER, S.C.

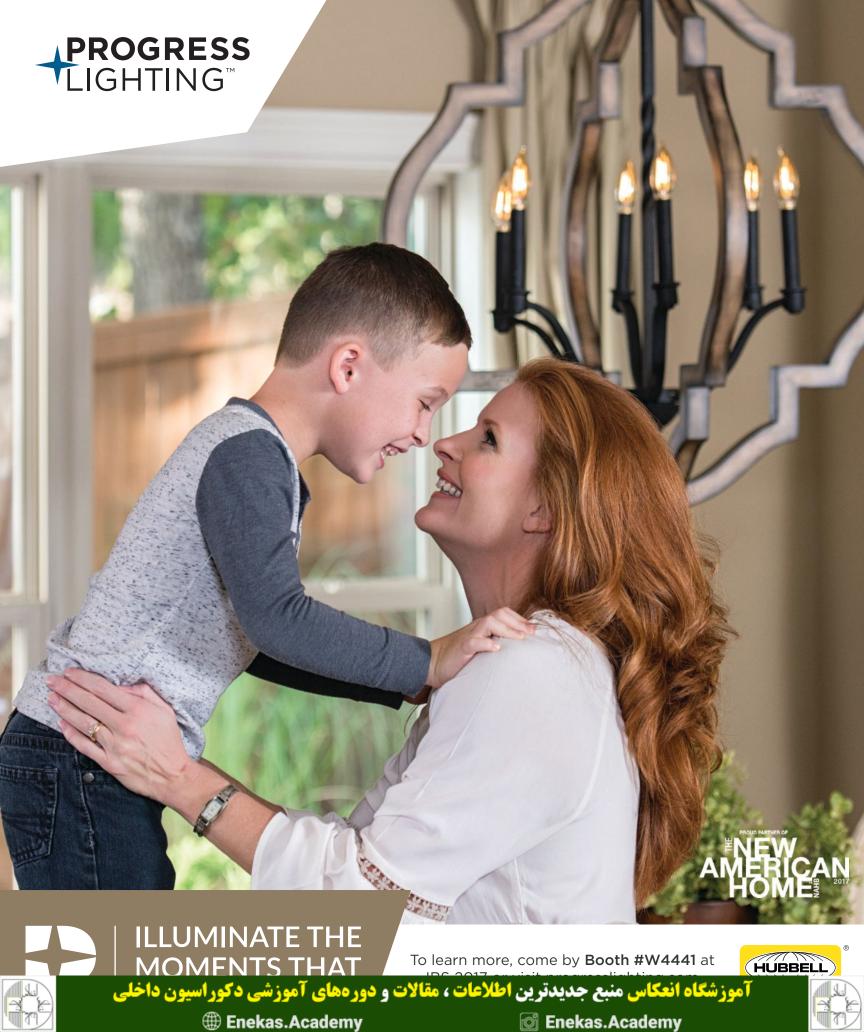
DESIGNER/ARCHITECT: SUMMEROUR & ASSOCIATES. ATLANTA

REMODELER: THE BERRY GROUP, SIX MILE, S.C. PHOTOGRAPHER: EDIE ELLISON/ACCENT PHOTOGRAPHY













PLATINUM AWARD FOR BEST SINGLE-FAMILY DETACHED HOME. 2,000 TO 2,500 SQUARE FEET

Visually, Camelia is spot-on with its southern vernacular roots. The wraparound front porch and traditional façade cry out for lemonade breaks on hot South Carolina afternoons. In Summers Corner, where the home is located, there's a good chance that a neighbor will mosey by before you finish your drink. Homes in that community all have strong connections to the street.

While Camelia's interior is in keeping with its traditional exterior, the floor plan is modern, open, and informal. The kitchen island is expected to become the meeting place for the household, yet there is still space for a traditional dinner table for holidays and entertaining guests in the open kitchen.

The home, sited on a pie-shape lot with the point in the backyard, makes use of the space with both a detached garage and a carport, offering covered space for outdoor living out of the view of neighbors. A second screened porch is also attached to the rear of the home.

Sale prices are between \$500,000 and \$750,000.

PROJECT NAME: CAMELIA AT SUMMERS CORNER LOCATION: SUMMERVILLE, S.C.

DESIGNER/ARCHITECT: HOUSING DESIGN MATTERS. JACKSONVILLE, FLA.

BUILDER/INTERIOR DESIGNER: SABAL HOMES, MOUNT PLEASANT, S.C.

DEVELOPER/LAND PLANNER: WESTROCK LAND

& DEVELOPMENT, NORCROSS, GA.

PHOTOGRAPHER: JOHNSON PICTURES









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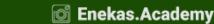
















PLATINUM AWARD FOR BEST AFFORDABLE MULTIFAMILY DEVELOPMENT

Celadon, a 17-story building at 9th and Broadway in San Diego, is a game-changer for developers looking to create affordable housing. It's the first to mix 9 percent tax-credit funding and 5 percent tax-credit funding in a single vertical subdivision in California. Already, other development groups have adopted the innovative strategy across the country. An additional 400 units of new affordable housing have since been constructed using similar financing.

Built on a former parking lot, Celadon offers 250 affordable rental apartments that embrace a multigenerational population. Eighty-eight units are targeted as supportive housing, including 25 reserved for youth aging out of foster

care and adults under the Mental Health Services Act. Seniors can find homes in 63 of the apartments.

The building itself is a piece of sculpture that sits on a four-story plinth base that melds into the historical fabric and scale of the neighborhood. Above, the tower is slender, with angled bays on the west side tilted to protect it from the setting sun's glare and to direct interior views to San Diego and the ocean beyond.

PROJECT NAME: CELADON AT 9TH & BROADWAY LOCATION: SAN DIEGO

DESIGNER/ARCHITECT: SVA ARCHITECTS AND STUDIO E,

BUILDER: TURNER CONSTRUCTION CO., CHICAGO DEVELOPER: BRIDGE HOUSING CORP., SAN DIEGO INTERIOR DESIGNER: CHAMELEON DESIGN, COSTA MESA. CALIE.

PHOTOGRAPHER: STEPHEN WHALEN







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PLATINUM AWARD FOR BEST SENIOR HOUSING, SINGLE FAMILY

Wakefield Plan at Regency at Summerlin may target upscale 55-plus buyers, but it could easily appeal to any socially inclined buyer who prefers a climate conducive to indoor-outdoor living. The home's modern lines are attractive to Millennials as well as their grandparents.

The entrance opens into a small foyer that quickly reveals an open floor plan with a dining room, great room, and kitchen. The view extends to a 30-foot-wide covered patio with an optional fireplace. Buyers can customize the sliding doors up to a width of 24 feet.

The public part of the home is separated from the private side, creating a clear demarcation between the two. The 2,323-square-foot home can also be customized to include a second master suite for those with snoring spouses. To enable aging in place, the homes are all one story and are ADA compliant.

PROJECT NAME: WAKEFIELD PLAN AT REGENCY AT SUMMER! IN

LOCATION: LAS VEGAS

DESIGNER/ARCHITECT: KTGY ARCHITECTURE+PLANNING, IRVINE. CALIF.

BUILDER: TOLL BROTHERS, LAS VEGAS

INTERIOR DESIGN: CDC DESIGNS, COSTA MESA, CALIF.
PHOTOGRAPHER: CHRISTOPHER MAYER









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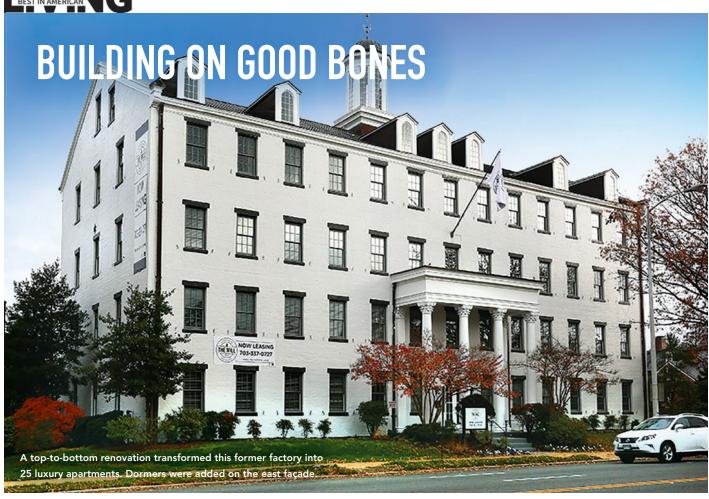
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PLATINUM AWARD FOR BEST ADAPTIVE REUSE, MULTIFAMILY

The Mill has seen a few things during its 170 years on Washington Street in Alexandria, Va. It has been a cotton factory, a Union Army facility, a spark-plug factory, a bottling plant, and an office building. Yet it still has life within its spectacularly built brick walls.

CAS Riegler bought the 26,283-square-foot building in 2013 and took it down to its brick and wood bones. The bricks were re-pointed and the exterior repainted. A new copper roof and energy-efficient windows were also added, along with contemporary touches that blend well with the bricks. Glass railings, interior steel stairs and railings, wide-plank hardwood flooring, and high-end cabinets, countertops, and stainless steel appliances look right at home. Residents have access to a clubroom on the building's top floor that

opens onto a shared terrace with views of Washington, D.C., Old Town Alexandria, and the Potomac River.

Dormers were added and attic space was converted into livable space to make room for two-story loft units on The Mill's top floor. The meticulously restored building yielded 25 living units ranging from 457 to 1,960 square feet. The Mill also has a private park. Rental rates range from \$1,850 to \$5,500 per month.

PROJECT NAME: THE MILL
LOCATION: ALEXANDRIA, VA.

DESIGNER/ARCHITECT: COOPER CARRY,
WASHINGTON, D.C.

BUILDER: SNEAD CONSTRUCTION, WASHINGTON, D.C.

DEVELOPER: CAS RIEGLER, WASHINGTON, D.C.
INTERIOR DESIGNER: AKSEIZER DESIGN GROUP,
ALEXANDRIA

PHOTOGRAPHER: MARLON CRUTCHFIELD
PHOTOGRAPHY















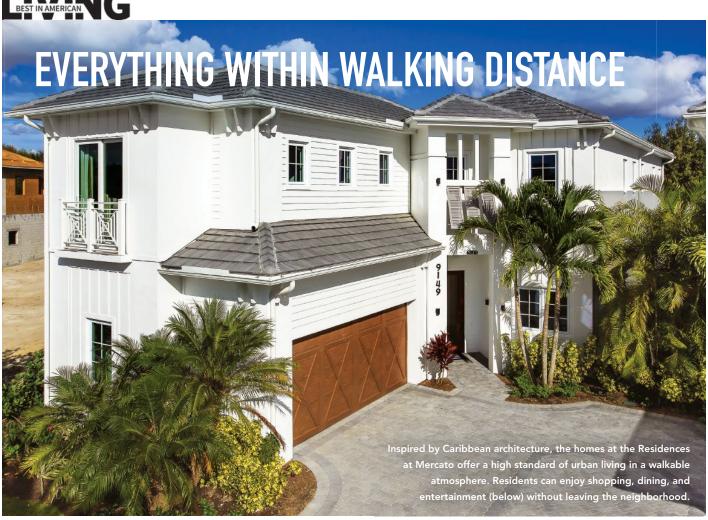


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PLATINUM AWARD FOR BEST MIXED-USE COMMUNITY

There is hardly a need to back the Audi out of the garage at the Residences at Mercato. All the requirements for sustenance, creature comforts, and entertainment are just a walk outside the gates of this village of 47 two-story, single-family homes neighboring a posh shopping complex. Residents can eat at a variety of restaurants, take a yoga class, catch a movie, meet with their broker, get a massage, facial, or haircut, and buy a Tommy Bahama shirt for leisure lounging at the pool party that night, all without leaving the neighborhood.

The homes, most in the 3,000-squarefoot-plus range, loosely channel Caribbean architecture. All include three to five bedrooms and indoor-outdoor spaces for soaking up the sun, dipping



toes into a small pool, and taking in the sea breezes from the Gulf of Mexico. located minutes from the community. The homes are selling at a rate of one

The 53-acre urban mixed community includes 30 single-family homes and 17 villas. The commercial component, with 456,359 square feet of high-end retail and office space, is almost completely occupied.

PROJECT NAME: RESIDENCES AT MERCATO LOCATION: NAPLES, FLA. DESIGNER/ARCHITECT: MHK ARCHITECTURE AND PLANNING, NAPLES **BUILDER: LUTGERT CONSTRUCTION, NAPLES** DEVELOPER: THE LUTGERT COS., NAPLES INTERIOR DESIGNER: CLIVE DANIEL HOME. BOCA RATON, FLA. PHOTOGRAPHER: NAPLES KENNY-REAL ESTATE





PHOTOGRAPHY



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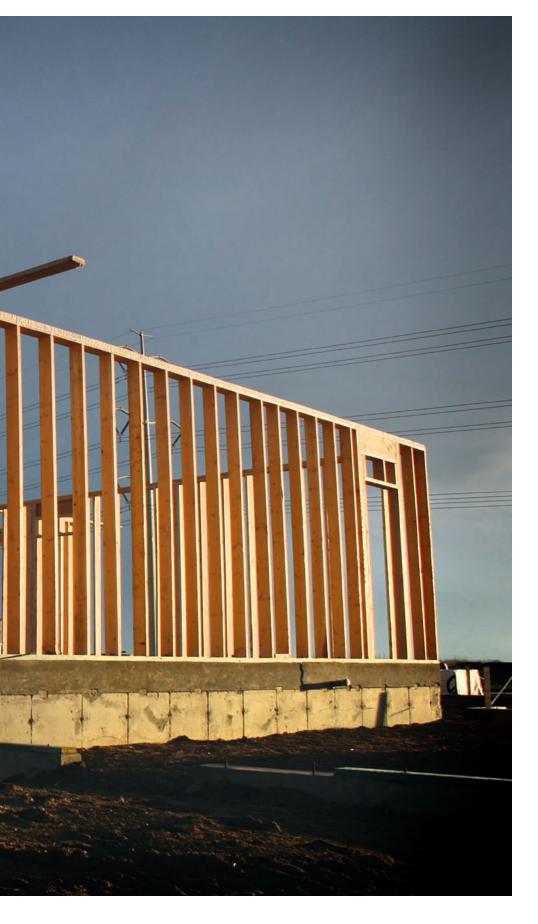












By Glenn Cottrell

hen the idea for this article first came to be, the initial concept was "advanced framing," also known to old-schoolers as "optimum value engineering" or simply OVE. But this article isn't about that.

Don't get me wrong, advanced framing is a great concept and a valuable best practice. Reducing the number of sticks required to build a high-quality house frame has helped builders combat lumber price spikes, reduce jobsite waste, and achieve greater insulating values throughout the thermal shell. Advanced framing works. But the housing industry's biggest problem right now isn't volatile lumber prices or increasingly stringent energy codes. It's the lack of skilled construction labor, specifically framers. And the problem is only getting worse.

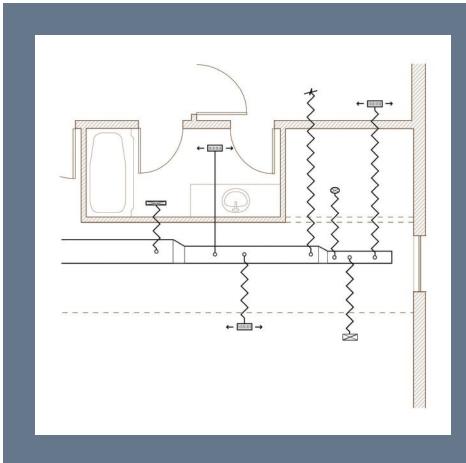
LABOR IS SCARCE

I won't go deep into the numbers or the reasons why, but suffice it to say that builders in many markets across the country, among all housing types and price points, are suffering the aftershocks of the housing bust when it comes to finding enough framers to keep up with demand for new homes.

By some estimates, our industry needs a half-million more construction workers right now; without them, builders report rising labor costs, quality sacrifices, slow cycle times, and an uncertain future. So we looked at advanced framing through the lens of the labor shortage, thinking perhaps that fewer studs, joists, headers, and cripples may reduce the amount of time and manpower it takes to frame a house.







FRAMING THE PROBLEM, AND SOLUTIONS

If you're going to gather your project team prior to construction to work out the kinks among their respective scopes of work, you'd better bring more than doughnuts and coffee to have a productive conversation that resonates.

Use two-dimensional plans, such as the one here, either printed or on a digital screen, to show the framing plan as it is intended to be built, overlaid with the MEP layouts to expose—and solve—problem areas among your trade contractors in real time.

No more chicken scratch that has to, literally, go back to the drawing board; with the team around you, changes can quickly be made, verified, agreed upon, and effected. Your subs will walk away confident of an "easy" install and impressed that you asked for and applied their voices to the process.

But our experience working with the field superintendents of several large-volume builders told us that such savings were unrealistic and rare. That's because advanced framing requires a thoughtful (and thus more time-consuming) approach, at least until it's embedded throughout your framing crews—itself a tough nut given the transient nature of that trade, general lack of consistent training, and language barriers.

And besides, saving a little time on each frame job isn't really the issue; getting enough framers to the jobsite is. And calling them back to rework what the mechanical, electrical, and plumbing (MEP) trades leave in their wake not only increases costs of labor and materials but also jeopardizes the delicate sequence of events required to bring a home to market—and therefore your cash flow and profitability.

As great as it is, advanced framing alone won't solve the housing industry's labor shortage; fewer sticks may open up the frame a little for the mechanical subs, but only just. We need to widen the lens, broaden our approach to innovation, and create a culture in which framers want to work for you and will show up when you call.

COME TOGETHER, RIGHT NOW

You have a structural engineer working for you, right? A crew of site supers and maybe even a few carpenters on the payroll? And, of course, your favorite (or at least most available) framing contractors. Toss in your in-house estimator and your MEP subs and invite everyone to a sit-down to go over your plans and specs.

Timing is critical, and these powwows aren't a one-shot deal. They start before you break ground on a new model home (especially if it's a new plan) and continue through the frame walk and after the MEP trades are done with their work.







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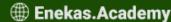




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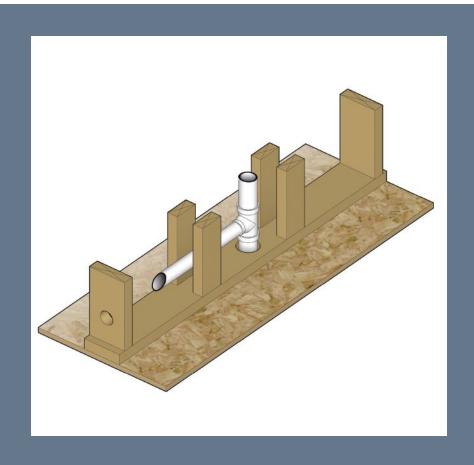












FRAMING FOR PLUMBING STACKS

Flexible water and natural-gas piping have made it easier for plumbers to work around framing members to get where they need to go, but plumbing stacks aren't as accommodating. Like duct runs, large-diameter rigid ABS or PVC Schedule 40 pipes and vent stacks need space within the structural frame.

The illustration at left suggests a 2x6 exterior wall strategy (a better solution for a well-insulated shell, anyway) that enables the framer to turn a few 2x4 studs sideways around the stack area while maintaining the integrity of the frame. An interior 2x6 plumbing wall produces the same benefits. The solution accommodates the stack and gives the plumber room to set it correctly. The wider 2x6 studs also create a broader area to drill and place horizontal pipe runs to the stack.

The goal, of course, is to give everyone who has a stake in the structural frame a voice in its engineering and construction and to come up with a final plan that accommodates plumbing, electrical, and mechanical runs before the first load of lumber arrives on the jobsite. It also achieves a balance between structural integrity and affordability while helping stabilize your schedule, steady your budget, and standardize your cycle times.

It helps even more if you can create the frame in a digital 2-D or (even better) 3-D environment and overlay the MEP plans on top of it, at which point it should be fairly obvious where the issues are ... and how to collectively solve them.

Such meetings also serve to encourage esprit de corps across the team, replacing the discord and disrespect among subcontractors that is, unfortunately, embedded in the current culture.

Chances are good that, if properly facilitated, pre-construction and subsequent in-process meetings will reveal some significant efficiencies and their share of aha moments—like the fact that engineered I-joists have factory-cut holes for pipe runs and can accommodate duct runs while maintaining the integrity of the joists—that build the knowledge base of everyone involved.

Perhaps most importantly, such collaboration creates a culture of shared responsibility and, ultimately, success. That's a pretty powerful drug that breeds the loyalty you seek from your framer and every other subcontractor you rely upon to build your homes.

Believe me, your framers will go along with it, even when change appears counter-intuitive in the current labor market. Those I know are committed to following the plans provided (especially if they've had a hand in designing them) and appreciate details more than ambiguity.







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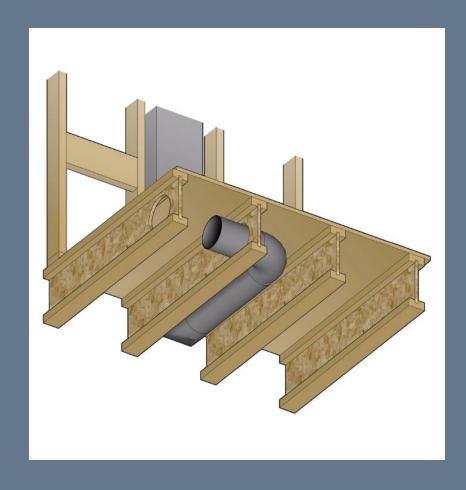


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FRAMING FOR DUCTWORK

The vast majority of new homes are heated and cooled by forced-air systems, requiring a network of duct runs of various sizes, shapes, and turns within the structural frame. HVAC contractors have been known to rip out, cut, or otherwise alter framing members (read: build an ugly chase) to accommodate their duct runs and vent openings.

As the illustration at left shows, a bestpractice solution leverages wood I-joists or open-web floor trusses (a better floor frame, anyway) to integrate ductwork and other mechanical system components into framing. This practice allows the design to be implemented faster, eliminates variations to the framing and HVAC plans in the field, and minimizes interior bulkheads. Running ductwork in the floor cavity also reduces the number of 90-degree turns in the duct run for faster and better delivery

PRACTICAL PRACTICES

Habitual collaboration among your design and building teams is essential and valuable, but I recognize that you may also appreciate some actual framing techniques that will better accommodate the MEP trades and mitigate rework by your framing crew. To that end, the sidebars throughout this article provide some illustrated guidance for a few methods we've found to be effective. Namely, better ways to communicate effectively with your framer and other trade contractors, as well as framing for ductwork and plumbing stacks—two areas that otherwise often result in framing rework.

Ideally, your framer will slowly but surely give up the rework clause (and income) in his contract. If not, don't be afraid to ask for that once it's clear that the team is in lockstep and that rework is no longer required.

LAST WORD

The root issue, of course, is that our industry refuses to transition away from labor-intensive, on-site stick building as its prevailing framing method. Sure, that method can be made better, but it's not the long-term solution to the current framing labor shortage and its ripple effect on costs, quality, and cash flow.

That solution lies in the widespread adoption of systems-built housing, beginning with factory-built framing components and evolving to whole-house panelization and modular packages that put most of the building process under one roof. It's a future that the current labor woes have brought into focus, but it remains to be seen if our industry will follow that path. **PB**

Glenn Cottrell is managing director of the Builder Solutions team at IBACOS.





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SIDING TRIM ROOFING





BORAL

By Stacey Freed

n 10 years, the first of the 77 million Baby Boomers will turn 80. That's the age, say those involved in senior housing, where the intersection of the built environment and health is critical—where many begin to feel frail and need more support. "The typical age of entry into [supportivecare communities] is in the early and mid-80s," says Chuck Harry, chief of research and analytics for the National Investment Center for Seniors Housing & Care (NIC). "A decade from now is when we'll really start to see the boom in that aging population," Harry says. "Many investors now are gearing up to identify how they want to participate in this sector." The question, Harry asks, is: "What properties will be of interest to those people who are expected to be different from the current generation or the 'silent generation'?"

YOUNG-OLD VS. OLD-OLD

While 55+ housing has been a market segment for years, the people living in those communities have different wants and needs from those in their 80s. Yet, people are living longer and the generation that invented youth culture is now reinventing what it means to grow old. They're driving the demand for housing amenities, from yoga studios to walkability to hiking trails to use of smart-home technology, and will continue to do so as they move through their later years. "Longevity research is showing us that living longer isn't just about how long your parents lived, it's your lifestyle-socially connected, financially well, engaged in community,"













says Ryan Frederick, founder and CEO of Smart Living 360, which develops residential communities focused on wellness and well-being. "And [individuals] control these factors," he adds.

In the past, for those needing more care (assisted living and skilled nursing), an institutional model was the only option. Or there are continuing care retirement communities (CCRCs), often built way out of town where land may be least expensive. "We got into the habit of literally taking older people and setting them out to pasture," Frederick says. "To some degree, the 'greatest generation' was so accommodating that they just did what people told them. The Boomers won't do that."

How are builders responding? And

in what ways can homes that are suitable for older buyers be profitable for builders? New modes of elder living are emerging: homes built along universal design principles, projects that emphasize connection to the surrounding community, and others that focus on wellness. "There's real opportunity here for builders," says Jim Barbato, president of Pride Mark Homes, in Victor, N.Y.

UNIVERSAL DESIGN THAT MEANS IT

While universal design isn't yet business as usual, more builders have been incorporating these features into their homes. In some cases it's driven by demand (the recent popularity of walk-in

showers), in others by local code. Pima County, Ariz., for example, has a "visitability" ordinance for all new homes. Building requirements include a nostep entry, doorways at least 30 inches wide, lever door handles, reinforced walls in ground-floor bathrooms for future installation of grab bars, and electrical controls within reach for people in wheelchairs

But a recent study by the Demand Institute says that for Boomers who are renovating their homes, "a significant number will make style and value a priority over aging-friendly features. In fact, the top Boomer reasons to renovate are similar to those of younger generations." Some 78 percent of study participants said they were renovating





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55+ HOUSING



An open kitchen and communal table at The Woodlands at John Knox Village, in Pompano Beach, Fla., encourages engagement and belonging.

to increase home values; 44 percent said they were doing it to make it easier for aging. "A home that's better suited for a wider range of people," says Erik Listou, co-founder of the Living in Place Institute, "is going to have increased value."

Understanding this connection is a great business differentiator for home builders. Communities such as Active West Builders' Riviera Walk, at Riverstone in Coeur D'Alene, Idaho, which won a 2016 Best 55+ Single-Family Community (less than 200 homes) Gold award from NAHB, are recognized in part for their commitment to universal design and sustainable building practices.

CREATING COMMUNITY

Oft-cited research by AARP and others shows that more than three-quarters of the population want to remain in their homes as they age. And, if not in their homes, in their communities. "But the issue is there aren't enough options," says Rodney Harrell, director of livable communities for AARP. "If you're in a community of 90 cul de sacs of single-family homes, that's your only choice; you can't choose a one-story place or walk to a grocery store or park, and that's a trade-off we force people to make."

When people talk about "community," implied is a sense of connectedness and a nostalgia for knowing their neighbors, for towns built on a human scale and with less reliance on cars. Those sentiments are the driving philosophy for Frederick's Smart Living 360, which recently completed The Stories at Congressional Plaza, in Rockville, Md.

"People want to be where the action is and don't want to be defined by their age but rather by their interests," Frederick says. The Stories is in an urban setting, so amenities already

A BUILDER TAKING STEPS

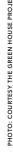
For many elders, the inevitable issue of added care will need to be addressed. The Green House Project, a nonprofit consultancy, is radically rethinking nursing homes so that the day to day of residents is more normalized, dignified, and communally focused (more info on page 152). For one Memphis builder who was rethinking the role of his work, embracing the new model became a feasible way to make a living post-downturn.

Billy Reed was financially wiped out during the Great Recession. He had been volunteering in New Orleans after Hurricane Katrina when he realized the importance of serving the people who were going to live in any home he built. Reed credits his own parents' nursing home experiences and hearing about a Green House home in Wyoming for his current work as a founder and board member of a 501(c)(3) nonprofit called Life Options of West Genesee, in Brighton, Tenn.

Reed and a partner found land for which development as a commercial medical subdivision had stalled during the crash. Streets, power lines, and sewer lines already existed. The bank owned a number of the lots. Reed and his partner contracted with the bank, contingent on procuring financing. Most Green House homes are begun by an operating agency, such as an existing assisted-care facility. Reed was coming at it from the developer side, so he hired a consultant who operated a home and rehab facility and eventually found someone qualified to operate a skilled nursing facility.

Admitting that there's a lot to learn, Reed and his group are still in the early stages. He envisions three houses, each with 10 bedrooms, for skilled nursing, and three houses, each with 10 bedrooms, for assisted living. To be a Green House home, Reed must have a financial feasibility study done by a national-level market research firm. (He's using Brecht Associates, based in Pine Beach, N.J.) The Green House staff helps consult on the model. "We're being schooled," Reed says. "We've spent about 10 months just learning about it, talking with architects." His 501(c)(3) board had already been to the town early in the process to share plans and "we were received graciously," Reed says. "We have a lot of letters of support."

By mid-December of 2016, Reed expected to have approval for a certificate of need for 30 beds from the State of Tennessee. He should have financing and begin site development during the first quarter of 2017. "That I have developer skills, knowledge, and experience, and I bring a 501(c)(3) to Green House means a lot. I wouldn't in a million years try to do this from the standpoint of a real estate deal," Reed adds. "I'll end up earning some good money, but I think the significant thing is to be working with people who are







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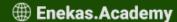
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exist—sidewalks, restaurants, shops, grocery stores, Metro, and bus lines. "We're in a walkable neighborhood," Frederick says, and the project "looks like a contemporary apartment building with each unit incorporating universal design in showers, better lighting, roll-out shelving, and nonslip flooring." There's a lifestyle ambassador—part life coach, part concierge—whose job is to help residents connect with the wider community. There are flex-space common areas, access to the outdoors with a courtyard and patios, and a state-of-the-art gym.

Smart Living 360 also puts an emphasis on technology. "We've basically created a smart home," says Frederick, adding that they have "scaled technology to be prepared for the future when doctors might want to communicate with you. There will be a lot of in-home technology that will help you with your health." As the co-developer of The Stories, Smart Living 360 works with other developers

and hires local builders for these projects. The company is looking for other locations in the mid-Atlantic and in the Northeast and Southeast.

A different approach to senior neighborhood building is when a community creates its own custom development. That's how Quimper Village, a senior cohousing project in Port Townsend, Wash., was born. Founders Pat and David Hundhausen discovered architect Charles Durrett, a principal in McCamant & Durrett Architects, in Nevada City, Calif., and a proponent of senior cohousing. (Durrett is credited with coining the term "cohousing.") The Hundhausens, along with 27 others, researched all aspects of cohousing via classes taught by Durrett, then purchased land and hired Fairbank Construction, in Seattle. They broke ground on Quimper Village late last July.

Set on 6.2 acres, Quimper Village is made up of 28 one-, two-, and threebedroom homes ranging from 910 square feet to 1,335 square feet in size and costing between \$297,000 and \$425,000. There's a 3,000-square-foot common house, which includes a kitchen where residents can eat together if they want; separate storage facilities; and a wood shop, art studio, and a bike barn. The development is located on a public trail that leads to a state park and it's within walking distance of the picturesque town of Port Townsend. (There are 163 cohousing communities across the nation, according to the Cohousing Association of the United States.)

For the builder, says project manager David Wrinkle, the project is being run in the same way as any other small development construction project, but he says there's more to it than profitability. "It's not just fiscal, there's something spiritual," he says, "and it's helping our community grow in nice ways. This is a great project for Port Townsend."

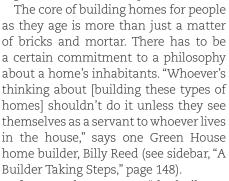




together," Barbato says, "and made it part of the community and made sure

Barbato is a home builder but has a history of doing light commercial projects as well. A community that contracts with Green House must follow certain guidelines. Barbato worked

I'd be the builder of the facility."



If, as Dr. Thomas says, "the built environment is central to well-being," then builders and designers are crucial to our collective future. Those builders that are positioning themselves to surf the coming wave will find their own businesses succeed. "There's a great cultural mismatch between the built environment and the needs and $\frac{5}{8}$ desires of an enormous aging generation," Thomas says. "If a builder goes to a banker and says, 'I've got a plan for a new approach to housing older people,' then [he's] on to something." PB

Stacey Freed, a writer in Rochester, N.Y.,



When Jim Barbato of Pride Mark Homes was building out a community in the suburbs of Rochester, N.Y., he sold 4 acres to St. John's Home. The Penfield Homes at St. John's Living are built right into the community. Included is safe access to outdoor space.

WELLNESS AS A PRIORITY

"The built environment is central to well-being," says Dr. Bill Thomas, a geriatrician and founder of the Green House Project, a nonprofit consultancy that's rethinking nursing homes. Green House has three core values, says senior director Susan Ryan, "real homes, meaningful life [culture], and empowered staff [organizational change/human architecture], all of which help an elder live the best life."

In a traditional nursing home, Thomas says, "the sign says 'home,' but your eyes say 'no.' Nothing signifies 'home' in a nursing home." In institutional settings, residents feel disempowered. They don't make meal decisions, they don't get to participate in cooking, and they feel a distinct lack of privacy. "Conventional [skilled nursing] architecture forces strangers to share a bedroom and a toilet," Thomas says.

In Green House homes (now trademarked), residents are referred to as elders. They live in small homes, each with 10 private bedrooms that include a bathroom and an overhead lift (to

carry an elder to the toilet from the bed, if needed). The communal kitchen, with its large wooden table, is the center of the open floor plan. "People in Green House homes do what people everywhere do, they come together and share meals around a table," Thomas says. Ryan points out that the cozy, personal setting and shared table have noticeable benefits: "There's visual cuing for an elder who may have some impairment," she says. And because the distance between the bedroom and the kitchen is short, Ryan has seen people walking who, in a traditional nursing home, had to be wheeled down a long corridor to an elevator. "It's a whole normalization of the programs and the environment." she adds.

In Rochester, N.Y., St. John's Home, a traditional 455-bed skilled nursing facility, worked with the Green House Project to build a new, and first in the nation, skilled nursing facility embedded in a suburban townhouse neighborhood. Pride Mark's Jim Barbato sold St. John's a 4-acre parcel of a townhouse community he was building. "I tied two parcels



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IDENTIFYING AND CLOSING THE

REALIZE THAT CUSTOMERS ARE YOUR REASON FOR BEING, AND RELY ON THEM FOR TRUSTWORTHY FEEDBACK

By Charlie Scott, Contributing Editor

ome builders can learn a lot from two recent events that shook up the nation and the world: Brexit and the historic 2016 U.S. presidential election. Both proved the importance of listening to the voice of those you serve. And in both cases, stakeholders relied on flawed data sources, including exit polls and media reports, which they then used to reinforce their own prejudices and beliefs that everything was just fine.

What does this have to do with home builders? Plenty. Many have the same pattern of depending on biased information to reinforce their belief that they, too, are just fine. This head-in-the-sand approach, even when it's unintentional, results in failing to catch shortcomings before they become full-blown surprises. For home builders, a reliable Voice of the Customer (VOC) program and customer-centric strategies are keys to identifying and solving customer-satisfaction gaps—and avoiding your own version of Brexit.

MINDING THE GAP

The customer-satisfaction gap is the void between the builder's brand promise and how well the customer perceives the builder did in delivering on that promise. Studies show that builders who measure, acknowledge, and close their customer-satisfaction gaps have higher sales, better profits, and enjoy greater employee satisfaction. Here's how they do it.

The brand promise. This promise combines several factors. The main contributors that craft it are: the company website claims, such as "A Great Experience"; advertisements; and model homes. It also involves the salesperson, builder, or real estate agent, and their ability to accurately set customer expectations. If it's true that nature abhors a vacuum, then it follows that when a home builder fails to set accurate expectations, customers will create their own. Those are unmeasurable and are a recipe for extreme dissatisfaction.

Delivering on the brand promise. Here's where it gets tricky. Just as with the election, the data the home builder receives must be objective and accurate. In the election, various interests had a pony in the race and published flawed polls or asked respondents improper/ineffective questions. Due to flawed

approaches and vested interests, many respondents told pollsters what they thought they wanted to hear. The same is true for home builders who conduct their own customer-satisfaction surveys, closing surveys, or opt to meet their customer for the dreaded face-to-face home builder interview.

Does the adage "buyers are liars" ring a bell? A customer will often default to conflict-avoidance mode and provide an automatic "just fine" review, just as they may when a waiter approaches the table at a restaurant. Falsely positive responses can reinforce a builder's falsely positive view on how well it's performing as a company. It doesn't occur to the builder that the customer may not want to share their true feelings about their experience for fear of retribution during the remaining warranty service phase—kind of a "let's not tick off the waiter or else he'll spit in the soup" philosophy.

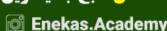
MEASURING THE GAP

The customer-satisfaction gap can be objectively measured by analyzing the difference between the perceived brand promise and the home builder's real performance. While some customer-satisfaction firms may simply use the customer's Willingness to Refer response as a proxy for satisfaction, more sophisticated customer-satisfaction outfits have tested algorithms that help identify the range of customer engagement, from Evangelically Supportive to Dangerously Disappointed, using only responses that are heavily correlated to future referral sales activity. More granular responses help to identify the root cause of customer dissatisfaction and its severity. This makes the VOC feedback more valid and actionable.

It's not uncommon for home builders to achieve a 90 to 95 percent Willingness to Refer, but still be producing stressed customers who, in reality, offer conditional referrals or don't refer. A customer's conditional referral goes something like, "You may consider ACE Builders, as long as you have time to regularly visit the jobsite to check the work." Amazingly, we've observed many home builders that receive ratings of 90 to 95 percent Willingness to Refer, with customer enthusiasm/engagement ratings of less than 50 percent. These home builders are doing most things correctly, but the gaps in their customer-satisfaction







CUSTOMER-SATISFACTION GAP

experience stress or dull the customers' experience to the point that while they may be willing to refer, they won't do it with the gusto it takes to convince those being referred.

Home builders that lose more than 40 percent of their customers' enthusiasm have a difficult time achieving referral sales rates of more than 20 percent, while top-performing builders produce more than double that outcome at 35 percent to 45 percent referral sales. The cost of nonconformance caused by satisfaction gaps can be 20 to 25 percent of possible future sales. Identifying, acknowledging, and solving your customer-satisfaction gaps benefits home builders, homebuyers, and employee job satisfaction.

We recommend that you use a legitimate third-party source to objectively measure and quantify your customer-satisfaction gaps. It would be a bonus to be able to benchmark your customer satisfaction alignment with other top-performing home builders for additional motivation and to more accurately identify your gap's cost of nonconformance.

ALIGNING PROMISE AND PERFORMANCE

After you define your brand promise and secure objective customer feedback, you have a stake in the ground to help you measure progress so that promise and performance align. There are three primary factors: Processes, People, and Management.

Processes. Home builders invest huge amounts of time in detailed prints, scopes of work, purchase orders, and checklists to make sure everyone is in sync to build a home. But when it comes to building customer experience, far less effort is invested. Build the customer experience as you would a house: Engineer a reliable process (the experience plan), scopes of work (outlining individual responsibilities), and checklists (individual performance standards and measurement). It must be simple. All staff must understand and be able to teach the customer experience on how the home is to be built, in addition to "what" home is built. Salespeople should have a clear teaching tool. Without a well-taught, team-oriented plan, even the best employees can fail to set customer expectations. As W. Edwards Deming said, "A bad system will beat a good person every time"—and the same goes for a nonexistent system, too.

People. All staff in a customer-centric organization must have three essential skills: communication, consistency, and a commitment to teamwork. A well-crafted VOC survey will provide the feedback managers need to recognize great performers, coach underperformers, or replace poor performers.

Obviously, if the builder lacks a customer-experience or customer-communications plan, then managers lack the tools they need to teach the company experience to staff members. What would happen if there were no construction blueprints for the construction team and trades? Houses would be inconsistent and unpredictable. If real estate truly is about location, location, location, then customer satisfaction is about communication, communication, communication.

Management. Home builders must have accurate, actionable, and accessible information to manage individual performances and the overall customer experience. I see countless home builders with sophisticated financial reports, spot-on scheduling software, and various operational dashboards that don't include VOC metrics. They thoroughly review financial and schedule variances. The same should be done with customer dissatisfaction, as each customer-satisfaction variance represents a future loss of sales and profits that dwarfs most other cost variances.

Without regular review and high visibility, the VOC can quickly become secondary or worse. Those senior leaders who own VOC feedback and integrate it into regular reviews, side by side with other financial metrics, have much smaller customer-satisfaction gaps and stronger financial performance.

Bringing alignment to an organization is the primary responsibility of any leader. A by-product of closing the customersatisfaction gap is organically generated teamwork—a great asset to any organization. Never give up: Great results are worth the effort (just ask the Chicago Cubs who won the World Series after 108 years). Everyone wants to be part of a winning team. PB

Charlie Scott is has more than 30 years of first-hand home building experience and is currently the director of Woodland, O'Brien & Scott for Constellation HomeBuilder Systems. Write him at charlies@woodlandobrien.com.







STARTER HOMES

Cost-effective ideas for homes that serve entry-level buyers and downsizers, too

By Larry W. Garnett, FAIBD, House Review Lead Designer

ately you may have noticed an increasing number of articles regarding the shortage of entry-level homes. That's because it's a critical issue in home building. Our industry could be compared to a ladder, where the bottom rungs are the first-time buyers, the top is the luxury market, and everything in between is the move-up (or move-down) buyer. If you eliminate those first rungs, the ladder is unstable and will likely come crashing down. Although we typically consider the starter home as an opportunity for first-time buyers to get a toehold on this housing ladder, many aging Baby Boomers are looking to step down to a smaller, more economical home. So, what's called a "starter home" potentially becomes the first and perhaps the last home for many of us. The challenge to build efficiently designed and cost-effective houses becomes greater each day with skyrocketing land prices, higher impact fees, and a growing labor shortage. The next few pages will present some innovative and cost-effective design ideas. Let us know if you have any thoughts or solutions regarding this crucial market segment.

2017 HOUSE REVIEW THEMES

FEBRUARY Master Suites

MARCH Live/Work

APRIL Narrow Lot Solutions

MAY Outdoor Living Spaces

JUNE Multigenerational Design

JULY Small Homes That Live Large

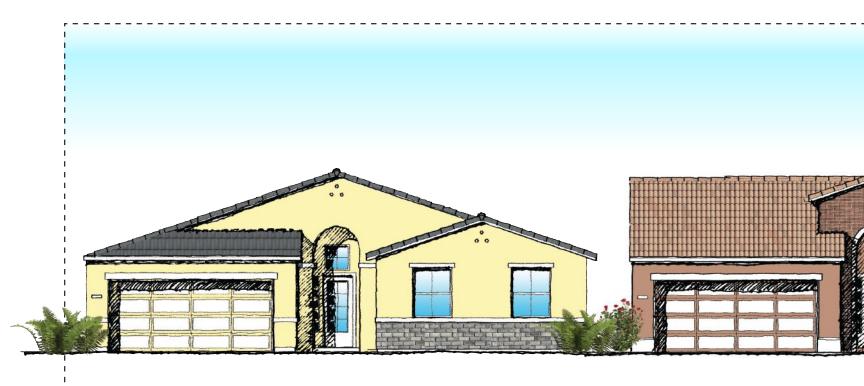
AUGUST Multifamily for the

Single-Family Builder

SEPTEMBER On the Boards **OCTOBER** Luxury Homes

NOVEMBER Pocket Neighborhoods

DECEMBER Contemporary Designs









his four-bedroom, two-bath plan can fit a 60-by-88-foot lot with 20-foot front and rear yards. It's basically a square shape that allows flexible roof massing to take advantage of different solar collector orientations. As with most starter homes, it also works well for the movedown market.

- ♠ The wide foyer is roomy enough for a hall table or coat tree and boot bench
- A jumbo kitchen island overlooking the great room is the focus of family activity
- A covered porch tucks under the main roof, tying indoor and outdoor living spaces together. It can be enclosed as a screened or sun porch
- The window seat adjacent to the kitchen encourages conversation with the cook
- There's direct access from the garage to the kitchen, with a niche convenient for shoe and coat storage
- The master suite has an oversize walk-in closet. A glass-enclosed water closet allows natural light to flood the rest of the bathroom. The tub has been omitted in favor of an oversize shower
- The fourth bedroom can function as a den, retreat, exercise space, or children's playroom. It can be left open to the hallway or connected to the master suite
- Two secondary bedrooms face the front of the house
- Not your standard traffic zone, the laundry is a dead-end space large enough for a counter and optional sink

ARCHITECT

Richard Handlen, AIA, LEED AP EDI International richard.handlen@edi-international.com edi-international.com 415.362.2880

PLAN SIZE

Width: 50 feet Depth: 48 feet Living area: 1,800 sf FRESNO











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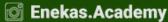
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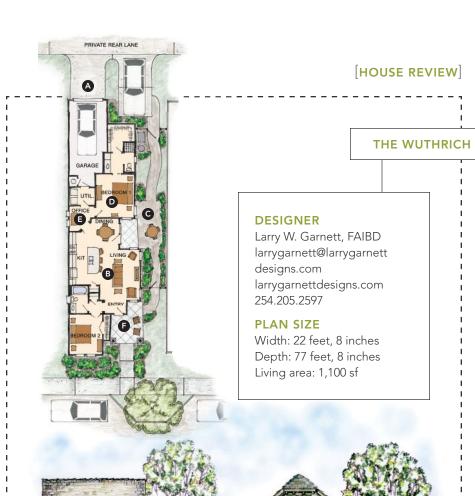


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spacious two-bedroom home with a small footprint.
 A single-car garage (11 by 22 feet) and an open parking area provide space for two automobiles

replacing at least one of the car spaces with living area. This 1,100-square-

space for a second car. Shifting the garage area to living space results in a

foot home offers a one-car garage along with a dedicated uncovered

- The open concept floor plan allows for views from the kitchen, dining, and living areas to the side courtyard
- © Private side courtyard
- Split bedroom locations offer privacy
- An office alcove has space for a small desk, with clerestory windows above for plenty of natural light
- The front porch extends the living space outdoors and becomes a neighbor-friendly feature, encouraging interaction with sidewalk passersby





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SMART START HOME, TRADITIONAL OR MODERN

ARCHITECT

Donald F. Evans, AIA The Evans Group devans@theevansgroup.com theevansgroup.com 407.650.8770

PLAN SIZE

Width: 40 feet Depth: 60 feet Living area: 1,755 sf



oday's first-time buyer is looking to purchase a home that is within their budget, is maintainable given their lifestyle, and that can grow with them. This three-bedroom home with an open floor plan hits that check list. What's more, the floor plan doesn't determine the exterior styling. We designed this home with modern and traditional elevations. Pick one, depending on your market.

- Traditional elevation with a stone base, brick trim, lap siding, and shutter details
- Modern elevation with stone and siding accents at the entry; stucco; metal roof; and frosted-glass garage door
- © Open grand room plan with gourmet kitchen island, dining room, and living room with views of the covered verandah and backyard
- Drop zone entry from the living garage has a separate laundry room. A "living garage" is a space that can be used by the family for whatever their purpose by simply backing the cars out
- With today's through-the-wall electric A/C units, garage floor finishes and frosted glass garage doors, the livinggarage space adds square footage
- Every bedroom can accommodate a king-size bed
- The split plan is designed for privacy. The master suite at the rear of the home has a large walk-in closet, freestanding tub, glass shower, and dual vanities













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[HOUSE REVIEW]

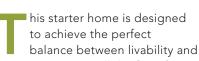
THE LUMINA

DESIGNERS

GMD Design Group Scott Gardner, AIA scott@gmddesigngroup.com 919.320.3022 Donnie McGrath donnie@gmddesigngroupcom 770.375.7351

PLAN SIZE

Width: 30 feet Depth: 35 feet Living area: 1,473 sf



construction cost. All the floor framing runs in the same direction for the entire house, and it bears upon a wall running through the center of the home. The minimal breaks in the plan occur only on the front elevation to create breaks in the massing. This home is illustrated with both mid-century modern and Craftsman elevations to show the varied looks that can be achieved with the same floor plan.

- A Spacious and inviting entry foyer creates a strong first impression
- **B** Two-car garage
- © Efficient kitchen layout minimizes cost

- Living space is open to adjacent roomsWalk-in closets for secondary bedrooms
- Generous master suite and bath



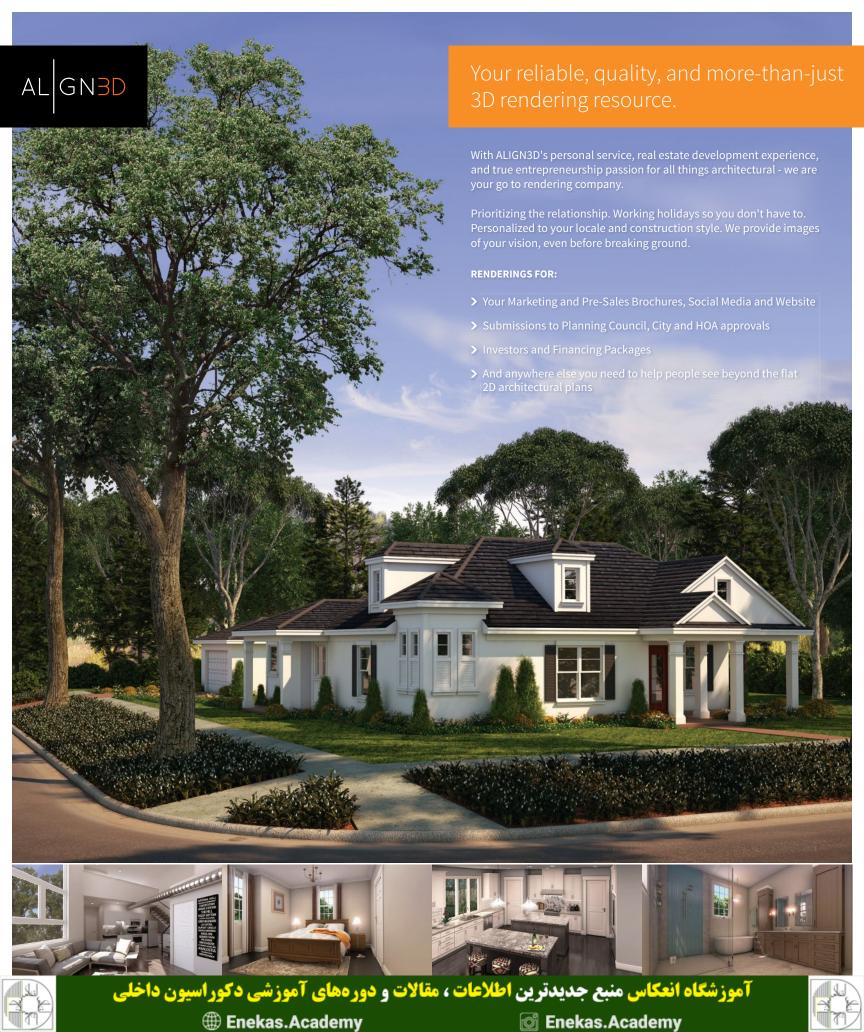












HOUSE REVIEW

LOIS

ARCHITECT

Todd Hallett, AIA, CAPS TK Design & Associates thallett@tkhomedesign.com tkhomedesign.com 248.446.1960

PLAN SIZE

Width: 31 feet, 4 inches Depth: 44 feet, 4 inches Living area: 2,251 sf



etting started on the path to homeownership can be tough. Most first-time buyers are juggling a tight budget, a young family, and possibly student loans. The first-time buyer design should be efficient to build, current in design, and marketable. The home must provide thoughtful amenities that make the buyer's life just a bit easier.

- 🙆 Great room appears larger than its actual dimensions, thanks to the open stairway, which provides visual space
- **B** Large pantry offers ample storage
- © Narrow plan form allows home to fit on small lots
- The massing of the plan allows for simplified, efficient construction without
 . .
 - compromising drama
- The stairway is central to the home. This accomplishes two goals: great visual effect and efficient planning with limited circulation space
- Central stair minimizes circulation space and allows for a loft
- Secondary bedrooms are separate from the master, yet still close enough for checking in on young children











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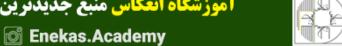
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IBS/KBIS PRODUCTS PREVIEW



OUTDOOR CABINETS

Danver Stainless Outdoor Kitchens is introducing three new cool-tone cabinet door finishes: Slate, Winter Sky, and Pearl Night Blue. The stainless steel doors are painted using a powder-coat process, which protects against rust and weathering and ensures a virtually maintenance-free finish. The manufacturer says that gray is an anchor color that pairs well with brighter hues, while blue evokes a calming feeling.

For more info circle 851



GROUT-

Rapid curing allows Hydroment Vivid from

Bostik to be ready for foot traffic in just 4
hours. The premium-grade, cement-based
grout has consistent color technology and
enhanced stain and efflorescence protection.
Suitable for demanding kitchen and bath
projects, it's fiber-reinforced for increased
crack and sag resistance. The grout exceeds
requirements of ANSI A118.7 and contains
Bostik's Blockade Antimicrobial Protection.

For more info circle 852





FAUCETS -

The Nature Cross Collection of bathroom faucets from MCN European Enterprises offers an industrial look that melds modern and retro designs. The metal fixtures resemble pipes in old factories and warehouses, and handles are utilitarian crosses with rounded ball tops. Different configurations are available, including a wide-spread faucet, tub spout, and thermostatic and pressure-balance tub and shower sets. Available in Polished Chrome, Brushed Nickel, and Polished Nickel. For more info circle 854



HANDLESET-

The new San Clemente handleset from **Kwikset** is sleek and modern, with clean lines and a low-profile design. An adjustable screw allows for easy door mounting and a guaranteed fit. It comes in five finishes—Venetian Bronze, Satin Nickel, Polished Chrome, Satin Chrome, and Iron Black—and provides a contemporary finishing touch to entryways.

For more info circle 853



REFRIGERATOR

The CS 1360 cabinet-depth refrigerator-freezer tower from **Liebherr** is just 24 inches wide, making it a great option for compact kitchens. The unit now has BioFresh safes, where users can adjust humidity scales for separate meat and vegetable compartments. The CS 1360 has a stainless steel exterior with LED lighting on the inside; DuoCooling controls allow for the fridge and freezer to have their own independent cooling circuits, eliminating air exchange; and SuperCool and SuperFrost functions quickly chill and freeze foods. **For more info circle 855**





IBS/KBIS PRODUCTS PREVIEW

DECKING

Zuri Grooved Boards from **Royal Building Products** combine the look of hardwood with the durability and low maintenance of PVC. The grooved boards have a hidden fastener with pre-threaded screws for quick and easy installation. The 5/4 inch by 5 ½ inch boards are available in 12-, 16-, and 20-foot lengths, and have two spacing options: 3/32 inch and 3/16 inch. **For more info circle 856**





WINE COOLER

The Designer Series 300 Bottle Dual Zone Wine Cooler (DS-300) from Vinotemp is only 30 inches wide but holds and chills up to 300 bottles of wine in two separate temperature zones. Via touchscreen controls, the upper compartment can be set between 40° F and 56° F, and the lower one between 54° F and 65° F. The front-vented cooler has a blue LED interior lighting system that reduces the growth of bacteria and mold. The dual-pane, Argon-gas-filled insulated glass door reduces UV radiation. For more info circle 857



OVEN-

To honor both the company's 333rd birthday and the 30th year of the EB 388 oven, **Gaggenau** will introduce the EB 333 oven in April. Measuring 36 inches wide and nearly 19 inches tall in a stainless steel finish, a sleek TFT touch display allows precise heat management. The oven door, with its signature raised window, is made from a single piece of 3 mm stainless steel that's weighty and substantial but easy to open and close due to a soft self-close mechanism. The unit continues Gaggenau's tradition of an interior coated in proprietary cobalt-blue enamel. **For more info circle 859**



FOAM SEALANT

Builders no longer need to carry multiple products for different gap sizes. Fill All Insulating Foam Sealant from Tytan can be used in all general gap-filling applications, from 1/4 inch to 3 inches, without losing adhesion or effectiveness. Compared with other products, it offers 15 to 25 percent more yield, shrinks less, and will not overexpand, according to the manufacturer. The sealant can be cut after 1 hour and cures in 6 hours. It takes 24 hours to fully cure, after which it can be cut. sanded, or painted. For more info circle 860



CONNECTORS AND FASTENERS

Simpson Strong-Tie will introduce Outdoor Accents, a new line of exterior-rated connectors and fasteners in a black powdercoat finish that protects against corrosion. The galvanized steel, Mission style connectors include post bases, strap ties, and angles as well as a hex-head washer, used with a structural wood screw, that gives the look of a bolted connection but with easier installation. Outdoor Accents hardware accommodates 4-by and 6-by lumber sizes. For more info circle 858







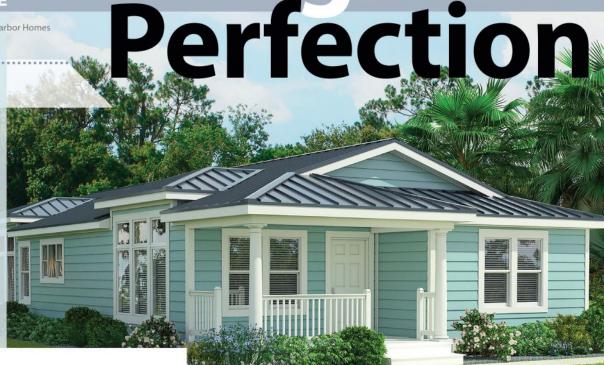
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IBS/KBIS PRODUCTS PREVIEW



PATIO DOORS

The MultiGlide patio door from **Andersen Windows and Doors** blurs the line between indoors and outdoors with large expanses of glass in a contemporary or traditional panel style. The door fits openings up to 25 feet wide and 10 feet tall, and panel widths can be 28 to 60 inches wide. Patio doors come in either stacking or pocket configurations, with one-directional or two-directional operability. All Andersen glass options are available, including triple-pane glass, and the panels are made of all-aluminum, or aluminum-clad wood for a touch of warmth.

For more info circle 861



SURFACES —

Say goodbye to fridge-mounted scratch pads and bid adieu to those colorful magnetic refrigerator letters. You can write messages, keep grocery lists, and draw pictures directly onto Formica Writable Surfaces, a new offering from Formica. The marker boards and chalkboards can be installed in kitchens or bathrooms, on tables, islands, backsplashes, cabinets, counters, and more. New designs include LoveWords (shown), ColorBook, ImagiGrid, White Markerboard, Gray ChalkTalk, and Black ChalkTalk. For more info circle 862



RANGE HOOD -

The Meteorite range hood from **Elica** provides high-performance perimeter aspiration to quietly and effectively remove fumes. The glass and polished steel unit has a touch-control command backlit on the glass and sensors that allow the hood to self-adjust to conditions in the kitchen. LED strips direct light onto the cooktop, and a Tune-White feature allows users to adjust the tone of the white light to best suit the aesthetics of the space. The hood is available as either a 36-inch wall-mounted model or a 48-inch island version. **For more info circle 863**

SHOWER PANEL

The Thermostatic Shower Panel from **Lenova** is sleek and feature-rich. The minimalist-style panel has a stainless steel finish and offers a spainspired experience with a rain-shower top, multiple body sprayers, and a hand-held nozzle. The single-handle design offers high pressure resistance and control over water flow and temperature, keeping temperatures within 1° F when the rain shower and body sprayers are used at the same time. The Cool-Touch handle ensures that the handle doesn't get hot, even when water temperatures are high. The Thermostatic Shower Panel measures 50 inches by 8 inches, with a 19-inch showerhead depth. **For more info circle 864**

CABINETS

The +STAGE line of cabinet units from Poggenpohl can be used in the kitchen or living room and can blend in with other storage or stand alone. Units have slide-in hinged doors, called pocket doors. Different themes such as Breakfast (shown), Bar, Office, Wardrobe, Kitchen, and Tea have unique shelving, drawer, and rack configurations. The cabinets come in four heights and are 120 cm wide and 65.4 cm deep. For more info circle 865









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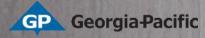


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5.	What type of construction is your firm involved in? (Check ALL that apply.) A ☐ Single Family — Custom D☐ Remodeling B ☐ Single Family E☐ Light Commercial C ☐ Multi–Family F☐ Other (specify):						
6.	How many homes does your firm build per year? (Check one box only.) A \square Over 500 units B \square 101 – 500 units E \square 1 – 10 units C \square 26 – 100 units F 0 units \square						
7.	What is your firm's annual revenue? (Check one box only.) A ☐ More than \$10 million B ☐ \$5 million to \$10 million C ☐ \$1 million to \$4,999,999						

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料氏W AMERICAN HOME^{製 2017}





The New American Home 2017 was designed and built by Phil Kean Design Group. The home was designed in what they call pods, hich lets homeowners customize how they use the 8,245 square feet open- plan home interior. Outstanding elements include many glass walls, a 2,000-square-foot rooftop terrace, and new products that play a key role in making it beautiful and innovative.

The home will be open for tours during NAHB's International Builders' Show, Jan. 10-12, 2017 in Orlando, Florida.







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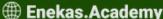














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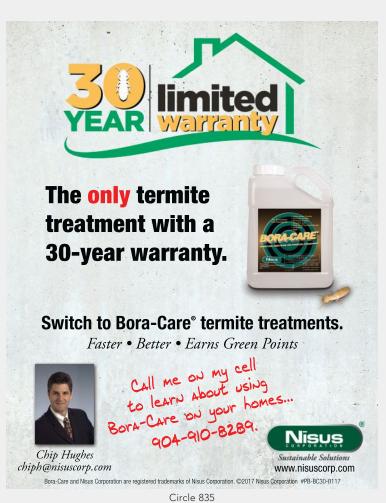
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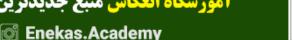














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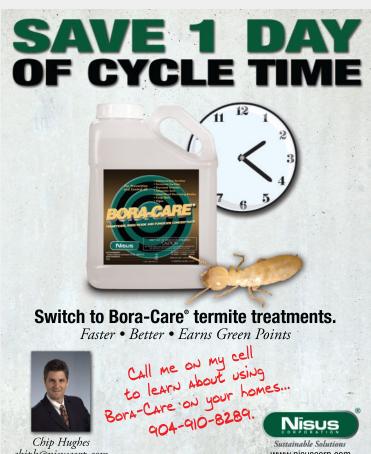
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Tim Kane on MBK's diversification and the underserved market for shelter



Tim Kane CEO MBK Homes Irvine, Calif.

uring the darkest days of the recession in 2009, managers for MBK Homes reexamined the builder's role as a provider of single-family homes and repositioned the company with the broader mission of being a provider of shelter. Today, this division of multinational real estate parent company Mitsui & Co. has 1,000 rental units under development, in addition to closing between 175 to 200 single-family homes by the end of the fiscal year in March 2017.

Is MBK's diversification into single-family detached construction, multifamily, rental housing, and assisted living a long-term strategy or more like taking advantage of current opportunities?

It's long-term. With a Japanese company, everything is Along-term. So let's talk about the landscape here. There's a housing shortage approaching us. In the '70s, over that 10year period, there were approximately 17 million dwelling units built. That includes for-sale homes, apartments, mobile homes—all types of shelter. During the '80s, '90s, and 2000s, it ran somewhere between 13 million to 15 million during each decade. And for the decade we're in now, I think it's about 9.5 million (units). By the way, during this period, the U.S. population has increased from 200 million to 320 million people, jobs have grown, and we have Millennials in the marketplace. As you can see, we've really undersupplied the market. Part of that is due to the devastation from the lending crisis from which we haven't yet pulled out. The big question is: What are Millennials going to do? Are they going to be renters or buyers? No one really knows. It's a conversation that goes on and on in every builder forum we've attended. But we do know that Millennials need places to live, so it's either going to be an apartment or a home, and MBK wants to be in both markets to supply shelter to those people.

Any insight yet as to whether your renters are going to be longer-term lessees than what is typically expected?

No, I don't have enough long-term data about projects that we've been building and leasing to give you a definitive answer. But from the information I do have, we know it's unlikely to change. There are a lot of ways to explain that. One is that the average person isn't staying more than a year in an apartment: After a year, they change jobs, find another place to live, find a newer place, want new amenities, or find a new girlfriend, partner, whatever. One of the beauties of renting is that it gives you flexibility. It gives you the ability to be much more mobile than if you own your home, and I think people want that flexibility.

Have some of your renters turned into MBK homebuyers?

■ We haven't seen much of that.

Have you learned anything about renter preferences that then turned into features for your house products?

We have. The pet-washing station is a perfect example. Pets are a big deal. More than 50 percent of Millennials have pets, and we make sure we try to accommodate pets in our designs. The other thing is packages. With so much online ordering, what do you do with all these packages? So our apartments have package concierge services: There are lockers that Amazon, FedEx, and UPS can put packages in, email you a notification, and you can go and pick up the package. We're doing it at all of our rental projects right now, and we're looking at how we can incorporate that kind of stuff into our for-sale projects as well.

Does MBK intend to manage its rental properties someday?

We still use an asset manager for that, except for one portion of the business that we decided we're pretty good at. Asset managers are adept at the other parts of the business. The asset manager we have manages more than 50,000 rental units across the country, so they have the ability—through economies of scale—to do lots of things we can't. For instance, they have an on-site videographer who works for them and goes around shooting video and helping put web pages and advertising together. Well, we don't have enough volume to keep a staff videographer.

For the complete interview with Tim Kane, see probuilder.com/kane





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