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# september

# Professional Builder Volume 84, No. 9





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PHOTO: CHRISTOPHER MAYER PHOTOGRAPHY



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# For Homebuyers, Size Matters

s affordability for U.S. homebuyers getting better or worse? As usual, it depends on where you live, but in many areas, the answer is worse. According to real estate brokerage Redfin, in 2017, 72% of homes for sale in Las Vegas were considered to be affordable, dropping to 63% in 2018. In Seattle, the number of affordable homes fell to 46% in 2018 from 58% in 2017. Real estate listings website Realtor.com's data shows the number of affordable homes in Louisville in 2018 stood at less than 20%. down from 23% the year before, and in cities such as Grand Rapids and Charleston, only 6% of listings met the definition of affordable in 2018. (Affordability is generally considered to mean that housing costs for a median-price home should consume 30% or less of average annual wages.)

Nationally, 2019 second quarter numbers reported by property data company Attom Data Solutions show that median home prices in 353 out of 480, or 74%, of counties are not affordable for average wage earners. Other reports reveal that prices across the nation for the most affordable third of homes are rising as supply diminishes. Year-over-year price increases in the first half of 2019 approached 9% while supply dropped by 14.5%. Census Bureau data demonstrate the trajectory of price differences in real numbers: In 2009, the median price of a home in the U.S. was \$220,000; this year, it's \$320,000.

Of course, it's more expensive to build a house in 2019 than it was in 2009, and recent home price escalation reflects that. Building material price increases, labor costs, extremely competitive prices for land, and increasing regulatory expenses have jacked up the cost of homes considerably. But another big reason for the increase in median home prices stems from the type and size of homes being built.

No one can blame builders for following the money and offering bigger, more amenitized homes to the large contingent of buyers who want and can afford them. But it has left a sizeable, and growing, group of house hunters in the cold. Consider this: In its latest Home Buyers and Sellers Generational Trends Report, the National Association of Realtors clearly shows that the mostly starter-home buying

Millennials (79 million strong) are the largest generation of buyers (37%) currently, but the number of new homes built in 2018 that were 1,800 square feet or smaller was less than 22%.

Some jurisdictions are attempting to respond to the shortage of affordable homes by changing zoning codes to allow accessory dwelling units, clustered homes, and duplexes and other multifamily configurations in traditionally (or exclusively) single-family areas. But these revisions are unlikely to greatly improve the nation's overall housing supply issue.

Home builders, on the other hand, can make a big impact, and a few have stepped into the breach. One of the earliest, and now most successful, is housing giant D.R. Horton. Horton founded its lower-priced Express Homes division for first-time buyers in 2014 and its downsizing Baby Boomer brand, Freedom Homes, in 2016.

Buyer response to these smaller, less expensive homes has been overwhelming. According to an article by Mitchell Schnurman on *The Dallas* 

Morning News website, in the second quarter of 2019, Horton reported closings of nearly 11,000 homes for \$300,000 or less—more than two-

thirds of its total closings. Four years ago, the company closed 6,700 homes in that range. Its Q2 numbers represented a total gain of 13% in closings, an 11% gain in revenue, and an increase of 5% in profits and 20% in margins.

Other large builders, including KB Home, Meritage, NVR, and, most notably, two companies better known for their luxury product, Toll Brothers and Ashton Woods, are shifting their focus and following suit. Hopefully, this about-face, together with lower interest rates, may serve to turn what we currently think of as a generation of renters into homebuyers after all.

Denise Dersin, Editorial Director ddersin@sgcmail.com



The industry has left a sizeable, and growing, group of house hunters in the cold



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For advertising contacts, see page 54

# Design for All

've never really bought into the talk that great housing design costs more money. But then, I'm not a builder, and certainly not one large enough to invest in an in-house design team or to commission plans from a big-name architectural firm for every new community.

I'm also aware that most builders usually pull from a library of house plans, perhaps making a few minor changes to accommodate a particular lot or buyer, but otherwise rely on what's been built, with some degree of sales success, in the past. If it ain't broke, right?

But two days spent sifting through entries to our annual Design Awards (starting on page 22) and another two days touring product with a wellknown builder applying its luxury-home prowess to more attainable price points reinforced my belief that great design can be realized in all types of housing at any price point in any market. You just have to want to do it.

For proof, the kitchen of our 2019 Project of the Year features a single wall of major appliances within base and wall cabinets fronted by a long island fitted with a sink, more storage, and seating—a simple yet elegant

solution. "It's easier to make small things look good," says the builder Josh Wynne, who provided a walk-in pantry behind the kitchen at far less cost. "It's hard to design a big kitchen that looks good and is inexpensive."

In the case of the luxury production builder shifting into more attainable product, it comes down to respect and choices. Yes, they down-spec the big-ticket stuff, but they still offer contrasting colors for the island cabinets and countertop, distinctive tile on the backsplash, deep baseboard trim, and a package of connected home devices powered by a robust wireless signal (all standard), not

to mention outdoor areas and indoor niches that belie lower price points. "It's our responsibility to come up with design elements that respect the investment buyers are making in a new home, regardless of price," the builder told me.

So when you get a chance, take a close look at the Design Award winners published in this issue and on probuilder.com, and at the other design resources we offer, for ideas that suit your budget and deliver higher value than the "tired-but-true" plans you're (re)using now. It just may provide the boost you need to refresh your product and outplay the competition.

Rich Binsacca, Editor-in-Chief rbinsacca@sgcmail.com @ProBuilderMag



It was my distinct pleasure and honor to join our team of Design Awards judges, who not only worked diligently and collaboratively, but genuinely enjoyed one another. Clockwise from top left: architect Tessa Smith, builder Michael Freiburger, designer Larry Garnett, and architect Lorelei Petit.



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# HOUSING MARKET SNAPSHOT **BUILDER CONFIDENCE IMPROVES** 20 2013 **NEW-HOME SALES INCREASE** 1,000 800 646,000 600 2013 HOUSING STARTS DECREASE 1,50 1.253 1.250 500 250 REMODELING SPENDING DECLINES 230.00 220.00 210.000 200.000 190.000 \$177.45 million 150,000 130.000 July builder confidence gained a point to 65 in the NAHB/Wells Fargo Housing Market Index. In June, adjusted new-home sales increased 7% to 646,000, while housing starts slipped 0.9% to an annual rate of 1.253 million units. After adjustments to previous months, remodeling spending decreased 0.5% to \$177.45 million.

# LOOKING AT THE INTEREST RATE ENVIRONMENT

n intensified trade war with China has spooked markets and brought a notable decline in interest rates, which usually is good news for home builders. But the recent declines haven't resulted in a corresponding increase in new residential construction.

NAHB chief economist Robert Dietz notes that home sales are not rising in response to lower mortgage interest rates because rates are falling for the wrong reasons: uncertainty related to trade and growth concerns. Dietz believes this is a good time to buy a home or finance a home improvement project. But a lack of entry-level housing remains a challenge for younger households because there are not enough housing starts to keep pace with demand.

Even though the costs of developing land, constructing a house, and buying a home are now lower, market participants are cautious because of the uncertainty that has caused rates to fall. Tariffs and trade conflicts increase the costs of new-home construction while producing regional weakness in export-dependent regions, which can hurt local housing demand. This effect has been seen in the Midwest where the trade war has weakened demand for agricultural products.

Lawmakers must advance policies that will improve housing affordability for buyers and renters. At the federal level, the recent presidential executive order on this subject was an important step. At the local level, government officials need to be aware that NIMBYism ("not in my back yard") hurts younger households.

Housing affordability needs to be a 2020 election issue. Current credit market conditions are a reminder of the role housing plays in the business cycle. The housing industry often feels the pain first and then leads the economy out of a soft patch or recession when low rates stimulate more housing construction. The Great Recession was a notable exception to this trend.

Low rates have returned to the marketplace, but new-home construction has not yet responded in a significant way. For housing to provide a lift to the broader economy, the nation must make real progress on housing affordability.

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.



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# MEASURING THE CUSTOMER EXPERIENCE



IN THE CONSUMER AGE, GO BEYOND STANDARD BUYER SURVEYS TO UNDERSTAND THE WHOLE JOURNEY

### By Jimmy Diffee

ow do you measure customer experience? As a customer experience (CX) consultant, I get that question all of the time from home builders, followed by, "We do customer satisfaction surveys. Doesn't that count?" Yes, but I often discover that such surveys are sent after move-in, when there's little a builder can do to save a bad buying experience.

The reason most builders send post-occupancy surveys is to reduce defects, limit warranty claims, and improve product performance for future customers. That practice and outcome does improve future customer experiences to some degree, but mostly it's to save the builder money or to serve as market/product research.

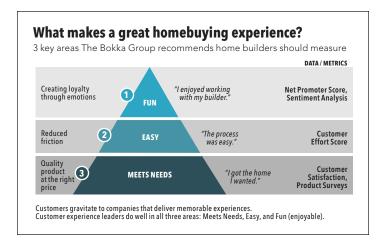
That's not a bad thing, but the problem is that it paints a misleading or incomplete picture of what your customers went through during the buying and building process. In the Age of the Consumer, it's time to raise the bar.

Simply, builders that deliver memorable customer experiences get it right in three key areas: Meets Needs, Easy, and Fun, as prioritized in the pyramid illustration, above. Thinking of your CX metrics this way reveals opportunities to raise the bar well beyond the basics and will help you increase overall customer satisfaction, referrals, reviews, and value by distinguishing your brand from competitors. Let's look at each one.

### **MEETS NEEDS**

This is the foundational component every builder needs to get right to survive in the Age of the Consumer because it's the product itself: your homes and communities.

As I mentioned, most builders already measure this metric to some extent, most commonly by a Customer Satisfaction Score, which asks, "How satisfied are you, on a scale of 1-10, with your home's (windows, doors, cabinets, etc.)?" These are great metrics for giving customers the home they expect. Unfortunately, it's where meaningful measurement of the CX ends for most builders.



### **EASY**

The second level of the pyramid tells you how easy it was to do business with your company throughout the process—a process that involves more moving parts than any other consumer purchase. And the buyer needs to be involved, personalizing the home along the way. So we need to measure and reduce friction at every touchpoint.

The Customer Effort Score is a straightforward metric based on a five-point scale of "Very Difficult" to "Very Easy," where customers are asked how much effort was required on their part at each key interaction along the journey, giving your company a road map of where you make it easy, or not.

### FIIN

You can get the first two metrics right and still fail to create a memorable customer experience by not making an emotional connection with the buyer. Think of a company you're loyal to for its customer experience; you can probably recall something it did to personally connect with you. For a homebuyer, that could be as simple as finding a framed photo or a gift in the new home upon move-in. These memorable moments along the journey also get shared in the form of social media and online reviews and are therefore extremely powerful.

The best metrics for measuring Fun are Net Promoter Scores (NPS) and open-ended comments analyzed from surveys and review sites, also known as Sentiment Analysis.

It's important to note that you should take measurements at each phase of the building cycle (sales, selections, construction, etc.) to help get a complete picture of a customer's journey and to allow you to identify problems early in the process, fix them, and keep customers from going off the rails.

Doing so paints an accurate, actionable picture of the customer journey of peaks and valleys so you can turn a mediocre experience into an unforgettable one. **PB** 

Jimmy Diffee is a customer experience consultant and keynote speaker for the home building industry. He's the designer of BuilderCX, a pre-built dashboard and survey solution for builders. Contact him at jimmy@bokkagroup.com or bokkagroup.com.

# MIND THE GAP

THE EXPANSION GAP BETWEEN DISSIMILAR MATERIALS IS A CRITICAL DETAIL TO PREVENT COSTLY CALLBACKS AND WARRANTY HEADACHES

### By Tim Kampert

ome callbacks are so obvious and easily preventable that they should never happen. Yet they do. A perfect example is the improper detailing of masonry or natural stone veneer around windows and doors.

In many of the homes I see during field inspections, brick or stone veneer has been butted tight against window or door trim or frames. It may look good, but the problem is that trim materials, usually wood or vinyl, expand when temperatures and humidity rise, while brick and stone are much more stable in those conditions. When the trim or frame expands and pushes against the brick, something must give, and it's not going to be the brick.

In many cases, the expanding trim or frame has no choice but to move away from the brick, which squeezes the window or door, causing it to bind. At that point, the builder's only real option to relieve the pressure and keep it from happening again is to either cut the brick (in the case of a brick return) or to shave back the trim, if possible. Either way, it's an expensive fix that most builders would rather avoid.

### **LEAVE A GAP**

Prevention is remarkably simple: just leave a \$1/8-inch gap between the brick and the window, then fill it with a backer rod and high-quality sealant that meets ASTM C920 Class 25 minimum standards to absorb expansion and contraction.

Getting this right isn't difficult and, in fact, masonry manufacturers and suppliers include shims in shipments to the jobsite that are sized to ensure a proper gap between their materials and other, dissimilar, products, namely windows and doors.

In the past, most masons knew to use those shims. But the exodus of skilled labor from the construction trades has left

a workforce that doesn't understand a lot of small but important details, including that one.

The key question is how to get today's workers to do the job right—and consistently.

### TRAINING FOR PERFORMANCE

Training your trades for this detail is straightforward. Once you point out the shims (or other scrap material on site that happens to be appropriately sized for that job) and explain what to do with them (and why), most crews understand it easily and quickly.

A complicating factor is the high labor turnover in the masonry trades and the fact that you can't count on getting the same crew for every house ... which means you have to keep an eye on it and maintain diligent training.

The builders I know who get consistently good results tend to pair training with inspections for accountability. For instance, the builder's quality assurance manager or job supervisor might make it a point to check each house while masonry veneer is being applied. If the veneer is butted tight against a dissimilar material, the masonry sub has to pull it off and redo it, at their expense. It usually doesn't take long before the sub's managers are emphasizing this detail to their crews.

To be fair to everyone, builders need to include this gap in their written specifications or scopes of work and make their expectations and consequences clear to the masonry sub, as well as the trade that will apply the backer rod and sealant (usually the painter). But, of course, that's the same requirement for any successful quality assurance effort. **PB** 

Tim Kampert drives quality and performance in home building as a building performance specialist of the PERFORM Builder Solutions team at IBACOS.









# PROJECT OF THE YEAR/GOLD CUSTOM HOME SeaThru | Sarasota, Fla.





# 2019 PROFESSIONAL BUILDER **DESIGN AWARDS**

**ENTRANT/BUILDER: Josh Wynne Construction** 

**ARCHITECT: Sweet Sparkman Architects** 

**INTERIOR DESIGNERS: Sweet Sparkman Architects, Josh Wynne Construction, and BLU Interiors PHOTOGRAPHER: Ryan Gamma Photography** 

SIZE: 3,442 sf

HARD COSTS: \$1.65 million

hen SeaThru was finished, builder Josh Wynne stood at the entrance to the guest wing at the end of the property and looked west to watch the sun set over Sarasota Bay ... through the glass-enclosed lower level of the main house between him and the water. It was a purposeful design move, of course, initially envisioned as a playful novelty for occasional overnight

visitors. But when Wynne actually took it in for the first time, "It was a really powerful thing," he recalls. "I was surprised by how strong it was and [how it] really defined the architecture."

That clever through-view isn't the only thing unusual about the 3,442-square-foot custom home. Entering the property through a modest gate, a first impression reveals a center courtyard between the main house and the guest wing—a relatively unusual feature for a waterfront lot, at least among more recent housing developments along the bay.

In fact, the original house on the third-acre lot established that pattern, and SeaThru pays homage to its approach and the crackerbox history of the once-quaint fishing town on the Gulf side of Florida—one that Wynne, a local, appreciates not

# **JUDGES**

Michael Freiburger, Managing Principal, Director of Design and Construction, NEWLOOK design | build + development, Wilmette, III.

**Larry Garnett**, FAIBD, Larry Garnett Designs, Glen Rose, Texas

**Lorelei Petit**, Senior Designer, BSB Design, Sacramento, Calif.

**Tessa Smith**, AIA, CPHC, LEED AP, Principal, The Artisans Group, Olympia, Wash.

just for its simple elegance and charm, but also for its inherent efficiencies and comfort. "It was the original green home," he says, referring to the passive lighting, ventilation, and shading afforded by that vernacular, a passion and commitment he has incorporated into his custom home building business. "It's inherently more sustainable and naturally more efficient."

Another nod to the original house is the use of local bluestone, though Wynne employed it more liberally for SeaThru, cladding privacy walls and bookending the interior of the main home's ground level between the all-glass east and west elevations. So, too, are the extensive if simply constructed covered outdoor living areas and breezeways.

More contemporary touches include the main home's staircase, which appears to be suspended from the ceiling, its thin profile and elements interrupting the view only slightly while a plinth-like base provides storage; a cantilevered "sunset" room—a happy accident of FEMA requirements to elevate the buildings above grade—offers unobstructed views of the bay and the pool area and boat dock in the foreground. "It's a great use of scale, proportion, and materials," noted the judges. "The massing and proportions are spot on and every inch is intentionally designed." —Rich Binsacca









# GOLD ATTAINABILITY

The Residences at Hayes Washington, D.C.

**ENTRANT/ARCHITECT:** 

Torti Gallas Urban

**BUILDER: Harkins Builders** 

PHOTOGRAPHER:

Torti Gallas + Partners

**UNITS: 71** 

UNIT SIZES: 519 - 973 sf HARD COSTS: \$160/sf

ocated in a leafy single-family neighborhood at the eastern edge of the District of Columbia, The Residences at Hayes transform what was once an eyesore into a valuable community asset.

Part of a public housing revitalization effort, the building replaces a municipal trash transfer station with high-quality, family-oriented, mixedincome housing that allows longtime residents the opportunity to remain in their neighborhood.

A third of the 150 tax-credit rentals are reserved for those earning up to just 30% of the area median income (AMI), while the rest are available for those earning up to 80% of AMI. The project "superbly addresses the lower-income segment," the judges said, and achieves "a great sense of community."

Massing, materials, and a complementary palette ensure the new building blends with the surrounding neighborhood, including nearby single-family Capes and bungalows. A series of courtyards break up the scale of the building and activate the street edge. Massing defines each courtyard, so the façade is composed of a series of deep pavilions, each leading to an entry. "There's a great sense of architectural integrity here," commented one judge.





The redeveloped 1-acre site also improves the pedestrian experience by adding a much-needed sidewalk. Now "the street is full of kids going up and down on their scooters," says Stephanie Farrell, principal with D.C.-based architect Torti Gallas Urban.

Individual apartments range from studios to four-bedroom units. All

include a dishwasher, ceramic-tiled bath, walk-in master closet, and in-unit washer and dryer. Many larger units also have a deck or patio. Community amenities include a club room, teen lounge, fitness center, computer lab, playground, and green space. It's also just a mile from a Metrorail station. —Camilla McLaughlin

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# GOLD SINGLE-FAMILY PRODUCTION, OVER 3,100 SF

Rolling Hills, Product B, Plan 1 Rolling Hills, Calif.

ENTRANT/ARCHITECT:

**Robert Hidey Architects** 

**BUILDER/DEVELOPER: Toll Brothers** 

INTERIOR DESIGNER:
Savannah Design Group
PHOTOGRAPHER:

**Christopher Mayer Photography** 

SIZE: 4,525 sf

SALES PRICE: \$3.5 million HARD COSTS: \$145/sf

et on the hills of the Palos Verdes
Peninsula overlooking the Los
Angeles skyline and the San Gabriel Mountains behind it, with
distant glimpses of the Pacific Ocean,
Rolling Hills creates "a remarkable
experience like no other around the
view," says architect Garrett Hoskins of
Robert Hidey Architects, in Irvine, Calif.

The result is a contemporary farmhouse that takes advantage of the California climate and lifestyle and celebrates a seamless transition between indoor and outdoor spaces.

"We organized the living experiences based on the views and the landscape," says Hoskins, by wrapping exterior spaces around the interior spaces. "We took the corner out of the dining room, so that when you open the glass doors, any barriers to the view are eliminated."

The courtyard expands the great room, with a covered loggia behind that. Floor finishes are the same inside and out, with flush thresholds.

It's a constant play of one room opening onto another, says Hoskins, and the windows and doors also allow for passive cooling and heating, achieving the





design's intent to create a place where the homeowners feel "as if they were on vacation."

"It's an interesting interpretation of the farmhouse concept," commented one judge, while another praised the floor plan's feeling of openness on the home's tight lot.

The panel also noticed the little things included in the design, such as the "fun" cove lighting embedded along the ceiling beams in the owner's bedroom and the sunbeam totem over the pool.

—Stacey Freed



"We need to buy equipment without breaking the bank."

# But did you check eBay?









# PROFESSIONAL BUILDER DESIGN AWARDS

# JUDGES' AWARD/GOLD CUSTOM HOME

Vail Duplex Vail, Colo.

ENTRANT/DESIGNER:

Brandon Architects

BUILDER/DEVELOPER:

Meadow Mountain Homes INTERIOR DESIGNER: Ultra-Mod

**Home Concepts** 

**PHOTOGRAPHER:** Jeremy Bittermann

SIZE: 10,063 sf (two units)
HARD COSTS: \$580/sf

enerously fenestrated cantilevered rooms bring the natural beauty of the Rocky Mountains into the living spaces of this ski country duplex. The 10,063-squarefoot structure takes the form of modern stacked cubes, portions of which appear to be levitating.

The steel frame, exposed in the master suite, is anchored and tied down to the foundation at the home's lowest level. The units are separated by a concrete demising wall 30 feet tall and 12 inches thick for physical and acoustic separation. Judges were wowed by the use of materials and the home's placement on its half-acre lot.

"The site was challenging because the buildable area was limited to a small portion of the large site," says architect Chris Brandon of Brandon Architects, in Costa Mesa, Calif., noting the mostly sloping, tree-covered parcel.

With that, "Orientation was important for the clients to be able to enjoy the valley but also to look out onto the hillside of the property," adds the architect's project manager Justin Johnston.

A light well provides natural light to a below-grade lower level for one of the units, while outdoor living



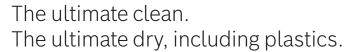


spaces afford spectacular views with elements that preserve privacy. "This is the best duplex ever," remarked the judges. "There is brilliant attention to detail and the livability of both units. A perfectly thought-out design."

Serving clients that Brandon describes as "well-traveled, with a fun, unique design taste," the home reflects the couple's style with pops of color, a wealth of art and sculpture, and natural finishes that befit the mountain setting. —Peter Fabris







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# **GOLD MULTIFAMILY**10Eleven M Street Washington, D.C.

ENTRANT/DESIGNER:

**Torti Gallas Urban** 

BUILDER/DEVELOPER: 11M Partners, Community Three Development INTERIOR DESIGNER: Darryl Carter PHOTOGRAPHER: Torti Gallas Urban

**UNITS: 71** 

**UNIT SIZES:** 520 - 1,500 sf SALES PRICE: \$400,000 to

\$1.4 million

HARD COSTS: \$215/sf

esigning fresh, innovative buildings can be particularly challenging in infill settings where existing structures must be accommodated and complemented.

The 10Eleven condominium in the Mt. Vernon Square neighborhood of Washington, D.C., replaced a blighted corner parking lot with a mixed-use project that adds a distinctive focal point to the intersection.

Judges appreciated the building as a "wonderful and thoughtful addition to the neighborhood" and noted the "respectful new construction adjacent to a historic church."

"10Eleven is an artful integration of classical and contemporary design," says Sarah Alexander, principal at Torti Gallas + Partners, in Silver Spring, Md. "The overall building is composed of two distinct pieces that each read as their own buildings—one classical, one modern—which gracefully wrap around an existing historical townhouse."

The 71-unit building, which was nearly 80% sold out upon completion, features a neoclassical façade on M Street, inspired by some of the city's





"best addresses," and a modern façade with glass bay windows on the 11th Street side, which is the more commercial frontage. In addition, the modern section's ground floor has 4,000 square feet of retail space, including outdoor seating that contributes to revitalization of the neighborhood.

The judges, who described 10Eleven as "incredibly smart and respectful," loved the detailing, which they found to be a "beautiful use of preservation and contrast." The creative design is a tribute to existing buildings in the surrounding historical Shaw neighborhood. —Michele Lerner





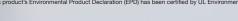
# **The Back**

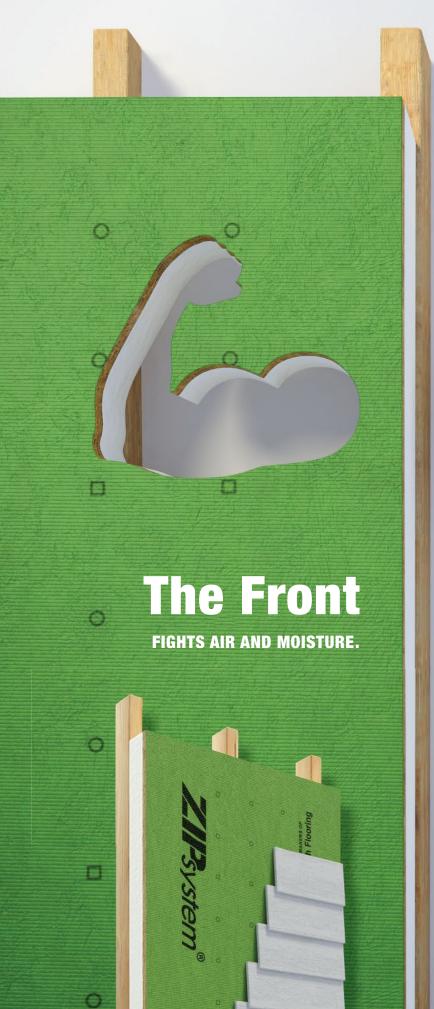
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# GOLD CUSTOM HOME

Kiht'han Sagaponack, N.Y.

**ENTRANT/ARCHITECT:** 

Bates Masi + Architects

**BUILDER/DEVELOPER: K. Romeo** 

INTERIOR DESIGNER:

Bates Masi + Architects PHOTOGRAPHER:

Bates Masi + Architects

CITE. F OOD of

SIZE: 5,000 sf

**SALES PRICE AND HARD COSTS:** 

Confidential

idespread flooding from the tidal surge of Superstorm Sandy in 2012 put the wisdom of building coastal homes on Long Island in question. And just as plans for Kiht'han were kicking off, new zoning requirements and building codes put the seaside property in a "velocity zone," where the prospect of ocean waves crashing through during storms was to be expected.

The typical engineering solution in that environment is to raise the structure on pilings and design it as if it was sitting on the ground. But architect Paul Masi of Bates Masi + Architects, in East Hampton, N.Y., questioned those building conventions, and his inspired design reflects that effort.

Kiht'han is actually a series of four structures, including a pool house. The structures were elevated, but a clever and elegant board-and-batten exterior wall treatment, slatted along the bottom, screens the undercarriage but allows flood waters to flow under the structures. "The flood zone solution is absolutely amazing," said one judge.

The same treatment is also held off the exterior walls in some places, and





continued up the façade, such as in front of the staircase, to buffer natural light and cast dramatic shadows.

"The siding transitioning to slats that hide and integrate the house is so elegant," commented another judge.

Separating the home into distinct structures also allows more paths for water to flow freely, relieving pressure on any one or just a few structural elements. "The buildings are like stepping stones in a stream," Masi says.

Two second-floor glassenclosed bridges connect the three volumes of living space, while decorative interior elements, such as three-foot-high modern wainscoting on the second floor, echo the board and batten exterior. Distinctly modern, the interior features floor-to-ceiling glass to capture spectacular views of an estuarial pond and the ocean.

"This home is a study in humanly scaled, richly detailed, and flawless spaces," said a judge.—P.F.

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# GOLD NEW COMMUNITY

Altis Beaumont, Calif.

ENTRANT/BUILDER: Pardee Homes DESIGNER/ARCHITECT: Bassenian

**Lagoni Architects** 

**INTERIOR DESIGNER: (Multiple)** 

**PHOTOGRAPHER:** 

Christopher Mayer Photography SIZE: 1,473 – 3,094 sf across

12 models

SALES PRICE: From the low \$300,000s HARD COST: \$68.45/sf (average)

ppealing to the 55-plus market segment, Altis will eventually comprise 704 homes nested in the established Palm Springsarea Sundance community. "Altis was a way to open a new demand pocket," says Matt Sauls, VP of marketing and product development for Pasadena, Calif.-based builder/developer Pardee Homes, per market research indicating sales of 120 to 150 homes annually for the new community.

Like most planned communities, Altis offers a wide choice of home sizes and price ranges, but it avoids the trap of separating those products by elevation or footprint. "Sometimes you get a clique system when you do that," Sauls says. "The community becomes organized along socioeconomic status."

At Altis, homes of different sizes and elevations often abut one another, an arrangement that promotes diversity in architecture and household income. "We found that buyers really like that approach," Sauls says.

Two miles of walking trails, or "paseos," shrank backyards slightly, but, "A huge backyard is not as important to this type of buyer," according to Sauls.



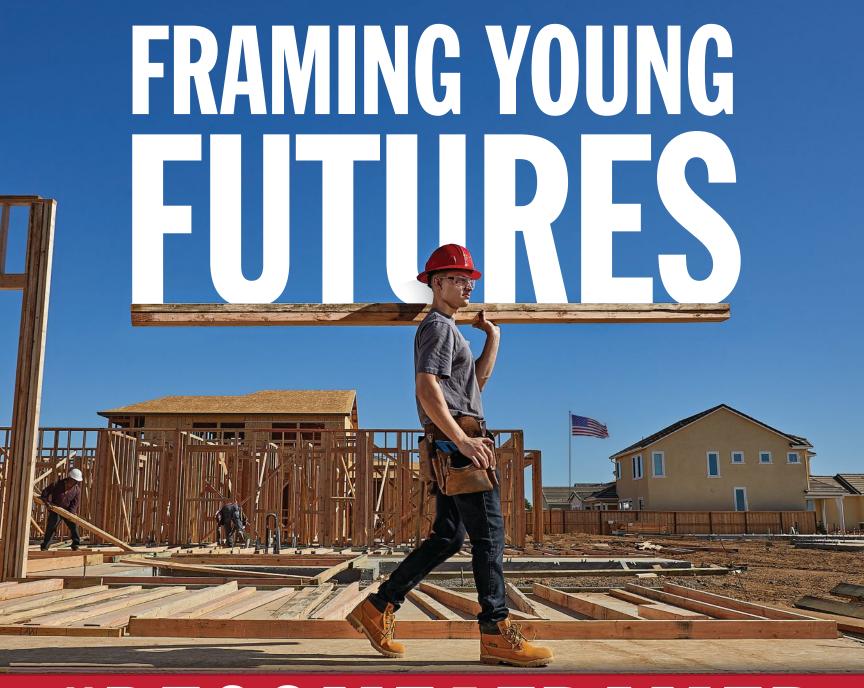


The trails intersect parks, including a centrally located 7.5-acre community hub that includes a 16,000-square-foot recreation center, an impressive structure that features a "DIY bar" and space for a mixology club, a game room, and a large fitness center. A 4,500-square-foot beach-entry pool and a 2,400-square-foot lap pool adjoin the rec center. "The project has spectacular public spaces and amenities," one judge said. "The clubhouse has some great details."

The active adult set puts a premium on security, so the community is walled off from the surrounding neighborhood with a guarded main gate and two gated secondary gates.—P.F.







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#### PROFESSIONAL BUILDER DESIGN AWARDS

#### **GOLD** INFILL

Laidley Street Cottage San Francisco

ENTRANT/BUILDER: MT Development

**DESIGNER/ARCHITECT:**Red Dot Studio

PHOTOGRAPHER:

John Lee Photography

**SIZE: 3,500 sf** 

**HARD COSTS: \$2 million** 

ike much of San Francisco's housing stock, Laidley Street Cottage was built to last 100 years. When local builder Victor Mezhvinsky took on the task of renovating the deeply set back property, dating from 1909, the goal was a much-needed upgrade to building systems, the floor plan, and the front elevation.

The result is a completely different

view to the street, highlighted by a contemporary, twostory-plus expanse of glass (described as "killer natural lighting," by one judge) on the front façade. "It's really a different house," says Mezhvinsky, "one that recalls a mountain cabin, but set in the middle of the city."

The revised plan focuses on right-sizing the home to the site and adding only a small amount of square footage so that, "even though it's sandwiched on the property line, it doesn't feel that way," he says.

It helps that the lower level features a folding window wall from the kitchen

and living area to a deck and gardens terraced down to the street. Above that, the light-filled guest bedroom opens

to a full-width deck. Outdoor access continues along the back, where the second-floor master bedroom opens to a patio shielded by tasteful privacy walls." There are just really beautiful details throughout," said another judge.

Drought-tolerant landscaping, along with a new gate and fence, helps ensure privacy from the street while also creating an entry sequence that progresses from its urban setting to private personal space. "It's an impressive outdoor entry," commended the judg-

es. "Overall, this is extremely well done and a great application on a difficult infill site." —*C.M.* 





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#### GOLD MULTIFAMILY

The Rouge at Pivot Rutherford, Edmonton, Alberta, Canada

ENTRANT/DESIGNER: DTJ Design BUILDER/DEVELOPER: Averton INTERIOR DESIGNER: Averton PHOTOGRAPHER:

Merle Prosofsky Photography

SIZE: 2,136 sf

SALES PRICE: \$750,000 HARD COSTS: \$135/sf

hile multifamily developments that add density to close-in suburbs are common, it's rare to see the level of dramatic design apparent in the architecture at The Rouge at Pivot.

Located just 10 minutes from downtown Edmonton, the townhomes at Pivot are meant to introduce the luxury and contemporary style of city living to a quiet suburb.

"We wanted to bring urban sophistication to the suburban market," says Seth Hart, senior designer on the project for DTJ Design, in Denver. "We turned the party wall between the units into an exclamation point on the elevation."

The contemporary-style townhouses include a flat roof and floor-to-ceiling windows with black trim on the exterior and interior. Hart compliments Averton, the builder, for its commitment to adding interesting architecture to a relatively ordinary suburban location.

The staggered floor plans, clean lines, and well-proportioned exteriors attracted the judges to this project, with one judge writing, "The design feels flexible and effortless, and the glazing is fabulously considered."





The largest unit, The Rouge, has an elevator option to appeal to multiple market segments. The efficiently designed yet flexible floor plan includes parking on the lower level with a patio outside, an open kitchen with living and dining areas, and a deck on the main level. It also features a

yoga studio or activity room and a bedroom on the third level and a fourth-level master bedroom flanked by two roof terraces.

"Great finishes, charming scale, a whimsical exterior, and thoughtful detailing," said one judge. "This is my absolute favorite project!" —M.L.



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#### PROFESSIONAL BUILDER DESIGN AWARDS

### GOLD CUSTOM HOME

Sangre de Cristo House Santa Fe, N.M.

ENTRANT/DESIGNERS: Specht Architects

**BUILDER/DEVELOPER:** 

Wolf Corp. PHOTOGRAPHER:

**Casey Dunn Photography** 

**SIZE: 3,500 sf** 

HARD COSTS: \$2.2 million

ridgetop location looking to Santa Fe's Sangre de Cristo Range freed architect Scott Specht from design constraints surrounding the city's historical central plaza.

The result is a streamlined modern composition with ties to the surrounding landscape and the region's iconic forms. "It had to fit in with the hills, so it is very low, sort of dug into the earth," explains the Austin, Texas-based architect. "Strikingly beautiful" was one judge's assessment of the elevations.

Two massive concrete walls form the home's backbone, defining the entry and organizing interior spaces. The walls run perpendicular to each other, beginning on the outside of the home and continuing inside as interior walls, creating a sense of integrity and harmony.

A narrow skylight traverses the 125-foot length of one wall, turning it into a work of art as the sun's passage throughout the day traces the wall's surface. The walls also provide thermal mass, important in a climate with extreme differences in temperature.

Extensive glazing and telescoping doors further integrate inside and out. A deeply cantilevered roof form creates portals around the perimeter, forming deeply shaded outdoor rooms oriented toward primary views.





"It's made of earthen materials, and all of the concrete and board forms are used in a way that shows the hand labor put into the house," Specht says.

Wood beams with a clean, modern execution provide another reference to

the region's heritage.

Judges commented on the "amazing" combination of board-formed concrete and wood beams, along with the linear skylights, concluding: "It's an absolutely stunning home, inside and out." —C.M.



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#### GOLD ON THE BOARDS

**ENTRANT/DESIGNER:** 

**Brandon Architects** 

**RENDERING: Brandon Architects** 

SIZE: 13,308 sf

he judges cited this single-family home for its creativity and "innovative solution for garages," which isn't surprising, given that the client's car collection drove the design process. One judge called this project "long, lean, and sexy," an apt description for an unusual residence that includes a rooftop deck that has a pool and spa with a view.

"The client had a unique set of program requirements that focused on having a double-height garage space with a mezzanine that overlooks his car collection," says Tyler Wilson, project architect with Brandon Architects



in Costa Mesa, Calif. The client also wanted to pull his cars through the property without backing out onto the street, presenting Wilson's team with a unique design challenge to keep the front of the home as attractive as possible and not overwhelm the front façade with garage doors.

Privacy and security were a concern for the client, so the architect opted to artificially raise the grade to create a terraced bluff that disguises the lower level. That move helps hide a majority of the garage doors from the street, Wilson says, while managing the access points onto the property.

A sloped landscape wall softens the street frontage, helping reduce the appearance of the home's overall scale, while also making it look like it's rising out of the landscape. The resulting design appears to float the house above the garage spaces, with extensive landscaping muting the sleek lines of the building. The judges not only praised the innovative garage solution, but also the project's proportions, scale, compelling lines, and use of materials. —M.L. PB

#### **ALSO RECOGNIZED**

Go to **probuilder.com/pbda2019** to see more photos of the winners and complete profiles of projects also earning recognition this year:

#### SILVE

#### **CUSTOM HOME**

**Pescador**, Newport Beach, Calif., Brandon Architects

## SINGLE-FAMILY PRODUCTION HOME, 2,001 - 3,100 SF

**The Colony at the Grand**, Fairhope, Ala., Ingram & Associates

## SINGLE-FAMILY PRODUCTION HOME, 2,001 - 3,100 SF

The Magnolia at Westside Landing, Austin, Texas, DTJ Design

## SINGLE-FAMILY PRODUCTION HOME, OVER 3.100 SF

Coastal Farmhouse in Berry Farms, Franklin, Tenn., Astikon Architecture + Construction

## SINGLE-FAMILY PRODUCTION HOME, OVER 3.100 SF

Miraval II, Costa Mesa, Calif., Dahlin Group Architecture | Planning

## SINGLE-FAMILY PRODUCTION HOME, UNDER 2.000 SF

**Vita**, Plan 3 at Altis, Beaumont, Calif., Pardee Homes

#### **BRONZE**

#### **CUSTOM HOME**

**Greystone Point**, Boerne, Texas, Craig McMahon Architects

#### **HONORABLE MENTION**

#### **CUSTOM HOME**

**Shorecliff Residence**, Mequon, Wis., Racinowski Design Studio

#### **CUSTOM HOME**

**Private Residence**, Casey Key, Fla., Michael K. Walker & Associates

#### MULTIFAMILY

**Prado at Cadence Park**, Irvine, Calif., Dahlin Group Architecture | Planning

#### **NEW COMMUNITY**

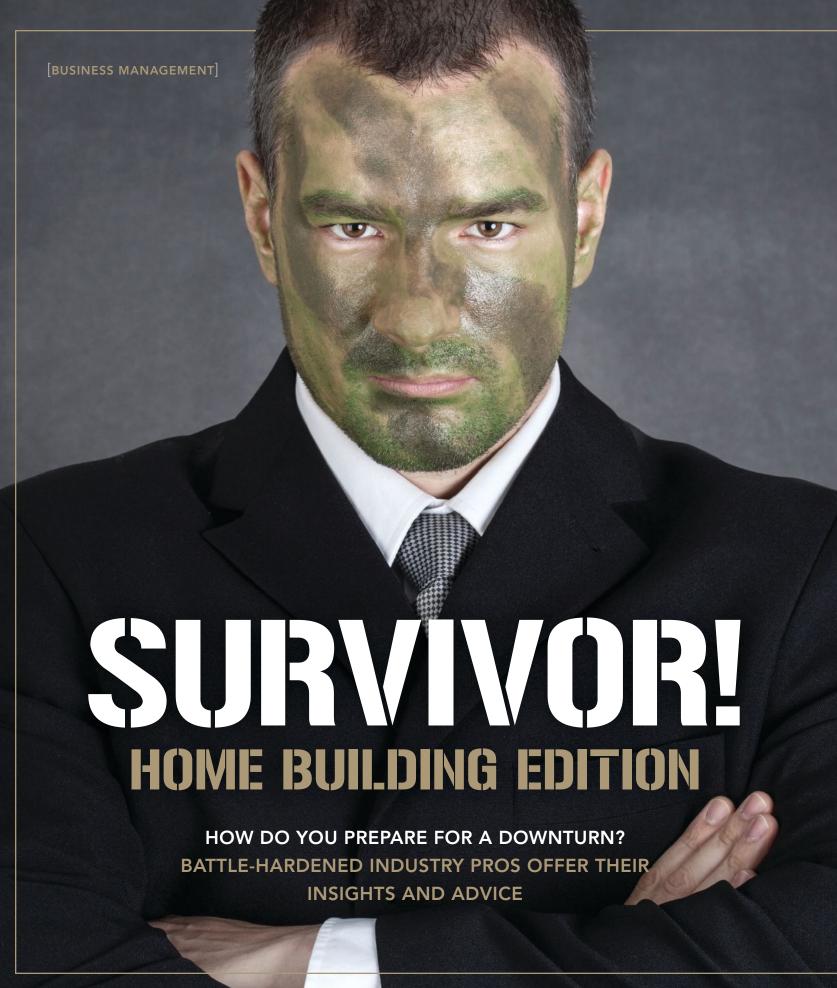
The Great Park at Great Park
Neighborhoods, Irvine, Calif., FivePoint





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#### By Scott Sedam, Contributing Editor



n "The Next Housing Downturn—Is It Too Late to Get Ready?" in the July issue, I noted that many pundits and provocateurs predict a slowdown of some note in early 2020, and how one industry authority has proclaimed it already too late to prepare. I spent the

remainder of that article detailing specific things builders can do to simultaneously improve their current operations and prepare for the possibility of a downturn. I developed those ideas watching and working with survivors of the last big crash, combined with what my firm, TrueNorth, has learned through more than 200 Lean Process implementations.

The next logical step: query some of those survivors and ask for their recommendations. What do they suggest builders do to prepare for what will come, sooner or later?

Their responses are interesting, ranging from common, expected themes to divergent opinions. These are the voices of experience.

#### LARRY WEBB

#### THE NEW HOME COMPANY, ALISO VIEJO, CALIF.

Larry is an industry legend, from his time developing John Laing Homes into a powerhouse and selling it just prior to the last big housing crash, to his launch of The New Home Company, now operating divisions in Northern and Southern California and Arizona. Here are Larry's recommendations.

- 1. Reduce your general and administrative expense (G&A). In good markets, staff numbers get bloated and salaries escalate—in particular, look at your highest-price team members.
  - 2. Lower your leverage. Whatever it is, reduce it.
- 3. Save your cash. Buy less land and save money for rainy-day opportunities.
- 4. Refocus your team. In good times, home builders can get into market positions outside of their wheelhouse and get away with it. In bad times, it kills you. Do what you do best, nothing else.
- 5. Remember: Culture and people matter even more during bad times. Evaluate everyone and focus on your stars at every level.

#### **DON HUBBLE**

#### **HUBBLE HOMES, BOISE, IDAHO**

Don Hubble, founder and president of Hubble Homes, is a straight-shooter, a solid builder, and is very involved in his Boise community. He keeps it simple, with this admonition: "I have one major belief," he says, "and it's probably the same No. 1 on everybody's list: Don't pay cash for land right now at today's market value."

#### **DAVE ERICKSON**

#### GRAYHAWK HOMES, COLUMBUS, GA.

While fighting the housing recession, Dave, the founder and president of Grayhawk Homes, also fought off much larger builders from Atlanta trying to nab a share of his market.

He was successful on both fronts and has this to tell you: "First, if you own a big land position, make sure your finances have durability. That applies universally, but it now becomes critical. Second, you must ask, if you had passed on that land position, who would have gotten it instead, and then what happens if interest rates U-turn on you, as happened during the first two quarters this year? Finally, if we do get a slowdown, as soon as you're convinced it's real, don't be slow to cut costs and people. That was my weakness in the last downturn: I was too slow to adjust staff to the new reality."

#### SCOTT DIRKSCHNEIDER

#### BROOKLINE HOMES, CHARLOTTE, N.C.

Before launching fast-growing Brookline Homes in 2014, company president Scott Dirkschneider gained a wealth of experience with both national and local builders. His 40 years in home building, preceded by degrees in both architecture and construction management, give him a rare perspective.

Scott says: "I see many builders, especially the nationals, running around like Chicken Little, proclaiming 'The recession is coming. Don't buy land! Don't buy any more land!' It's not too late to prepare for a recession, but it will be easier for some than for others. It surprises me the number of builders who seem to forget what they learned in the last recession. The smaller builders can actually prepare for a recession much more quickly and easily than the typical national. To survive,

#### [BUSINESS MANAGEMENT]

we must become, then stay, Lean in every aspect. We have only 20 plans—I wish it was 10—across seven communities, and we purposefully offer very few options. If every buyer is asking for it, we make it standard and raise the base price. Our salesforce is commission-based, our variance to total cost is less than 0.2%. Our staff-to-home ratio is >13 homes per employee. We buy most of our lots on an option basis. Land will bury any builder that isn't prepared financially for the next downturn. Finally, having gone through LeanWeek, we continue to discover new ways to improve product and process and apply Lean to our bottom line. Being Lean definitely gives us a leg up."

#### **TODD BOOZE**

#### IDEAL HOMES (RETIRED), OKLAHOMA CITY, OKLA.

As a co-founder and president of award-winning company Ideal Homes, Todd sold his share of the business to his former partners earlier this year and is now retired, although no one who knows Todd believes that will last for long.

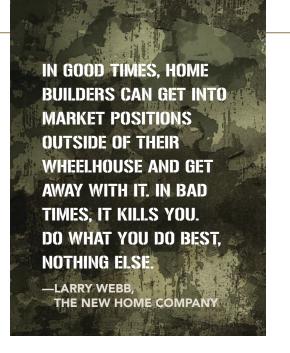
A long-time examiner for the National Housing Quality Award, Todd adds a couple of items most others overlook:

- 1. Technology: "Many builders use multiple databases because employees create their own spreadsheets to manage their process, forgoing the fully integrated software they have because they 'just don't like it.' We ran into that and it created a lot of work behind the scenes because people held on to their sacred cows. You must get your technology and databases in order."
- 2. The million dollar question: "How many of these builders are working with their trades to help the trade improve, which in turn helps the trade's relationship with the builder and results in better pricing? We have waste in our own systems for sure, but think of the cost of waste in our trades and vendors, in how they do things. I always try to work with individual trades where I see obvious problems and I discuss issues at meetings with them, but there is nothing better than going to their playing field and helping them. It's tough to do; we have so much to work on in our operations. Yet there are tremendous opportunities if we help others get what they need, then we in turn will get what we deserve."

#### **JOHN ALLEN**

#### BROWN HAVEN HOMES, BLAIRSVILLE, GA.

John Allen is one of those visionary leaders who goes his own way, always thinking first of what he can do, instead of what he can't. From its small-town north Georgia base, Brown Haven Homes is rapidly expanding its on-your-lot business into North and South Carolina, building great homes in beautiful settings.



John steps back to a macro level and asks some intriguing questions. "First, our margins shouldn't be so thin as to dramatically alter the way we do business when the slowdown comes. But I question the entire premise because so many experts who missed it last time are once again selling fear. The contrarian in me thinks. 'If all

those guys are going left, then I'll go right." He identified trends that go against the fear of recession, including:

- 1. Fed Chairman Powell hinting at rate decreases.
- 2. No real leverage in the system, meaning debt is low.
- 3. Real talent and labor shortages, aka low supply = more demand
- 4. Global large-scale capital is flooding to the U.S. for yield due to insane ZIRP [zero interest rate policies] by central banks around the world.

"I suggest you request written points on why the 'experts' are predicting a recession—other than an inverted yield curve—and it has been too long since the last recession. Ask them about how the entire central banking world is moving toward 'Modern Monetary Theory,' as the 'Efficient Market Hypothesis'—the basis for business decisions since World War II—is becoming more outdated by the minute. I have a hunch this may not make it into the article." (Editor's note: Of course, this made it, John! We love contrarian views.)

#### **MARC ROUSSO**

#### JAYMARC HOMES, SEATTLE

Marc Rousso and his partner Jay Mezistrano are two of the most interesting and passionate builders you'll ever meet, in a truly unique market, Mercer Island and Bellevue, Wash. With zero vacant land, each lot is a tear-down, and base prices start at about \$2.1 million, most selling for far more. The two former college DJs built a substantial company that got beat up thoroughly in the last recession and they vowed, never again.

Marc reports, "We faced a 'slowdown' here in Seattle from July [2018] to March of this year. During that time, each of the 10 moves below came into play. As is our policy, we had 1½ years of overhead in the bank, and we needed 50% of it to weather the slowdown, paying for overhead and extra expenses the lenders required from us."

1. Reduce cost of overhead and "B" players now. Keep the best of the best on the team. The rest will understand. JayMarc let





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#### **BUSINESS MANAGEMENT**

three people go in October and has only added one part-time person since.

- 2. Purchase land that has a quick turn, preferably finished lots on take-down schedules.
- 3. Start negotiating with multiple vendors and suppliers ahead of a downturn. JayMarc actively sought out other vendors to bid against the old guard and it proved very beneficial.
- 4. Value-engineer plans by working with vendors and suppliers. The builder is doing this with all of its new plans this year and it is helping immensely.
- 5. Monitor, then eliminate variance purchase orders by adding them into scopes of work.
- 6. Reduce cycle time in buying, permitting, building, and selling the home. Create a better even flow and Lean manufacturing program. "We all went to Lean/Kaizen training and made it a part of our values," Marc says.
- 7. Build a bucket of cash, at least one year of overhead, not used for acquisitions.
- 8. Create a pool of investors that can jump on opportunities when the downturn arrives.
- 9. Take care of your team members by being honest and transparent with where things are in the business and the market.
- 10. Follow the Great Game of Business by Jack Stack. "We always have done this," Marc says. "Everyone loves the transparency."

#### **BILL SAINT**

#### CLASSICA HOMES, CHARLOTTE, N.C.

Bill Saint was president and CFO at Simonini Builders when it received the National Housing Quality Gold Award in 2001 and led his own company, Classica Homes, to NHQ Gold two years ago. If you seek great product coming from an exceptional culture, visit Classica.

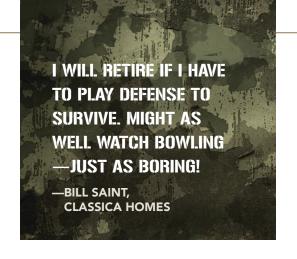
Bill says the best defense is a good offense: "I say, after going through the last downturn, defense sucks. It's no fun. It's demoralizing. I will retire if I have to play defense to survive. Might as well watch bowling—just as boring! Offense is about sales. Offense is about inspiring customers to buy when the world says no. Offense is about keeping your team engaged to grow, think, work hard, sweat, and create the remarkable. I say, offense!"

#### **MARK ADLER**

#### MARK ADLER HOMES, WEST BLOOMFIELD, MICH.

When I launched TrueNorth 22 years ago, Mark was one of my first two clients, and he has experienced it all, doing whatever it took to get through the last housing crash and emerging with a new company and a different approach.

Mark puts it in plain language, with a touch of humor—something we'll need as we march on toward this downturn,



which may or may not be just over the horizon: "I see a slowdown, not a crash," he says. "I just plan on staying a bit aggressive, but not crazy. I see the young guys with no battle scars going cra-

zy and I wonder about their fate."

He adds: "Don't sign personally. If you absolutely must sign personally, then DO NOT HAVE YOUR WIFE SIGN! One thing you can count on when it comes to builders and developers is that we are the ultimate optimists. An old-timer—even older than me—told me: 'When a steamroller runs over a builder/ developer, all that's left is a Rolex watch and two brass balls.' For me, I never have—nor will I—own a Rolex watch."

#### **SCRATCHING THE SURFACE**

This is a good start, but there's much more to consider. George Casey, another industry legend and the CEO of real estate consulting firm Stockbridge Associates, sent me a slide presentation he put together after the last housing recession. The presentation is so rich in content that summing it up would take an entire column, so stay tuned for that.

Meanwhile, the one thing we we'd like to avoid is the self-fulfilling prophecy. If we expect a slowdown, will we hasten its arrival? If we aggressively plan for it, will we make it worse? There is an entire field called "behavioral economics" that deals with psychological and sociological impacts on economies, and my review of some of the literature makes it perfectly clear: Sometimes expectations move markets, sometimes they don't. That's not much help.

Some may say we shouldn't even raise the issue, just keep on keepin' on. But to adapt some phrasing from Neil Young: "I've seen the recession and the damage done." It was horrific. Half of U.S. builders—and an even greater percentage of the trades—went under.

I challenge you to find any builder who will say we couldn't have been better prepared. So, we'd best heed the words of the survivors. Almost no one believes the next slowdown will be as bad as the previous one a decade ago. Yet if it's just half as bad, even one-third as bad, we'll all have our work cut out for us to remain within the ranks of the survivors. Time to get started. PB

Scott Sedam is president of TrueNorth Development, a consulting and training firm that works with builders to improve product, process, and profit. For a free PDF of "Process and Profit—Bridging the Margin Gap," Scott's collection of columns on finding margin in any market, email your request to info@truen.com. You may reach Scott at scott@truen.com or 248.446.1275.



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#### TRACK SAW

**Bosch** has introduced a new track saw. Weighing 9.8 pounds, the GKT13-225 offers a 13-amp motor, electronics to help maintain speed under demanding loads, overload protection, a swiveling hose port, and a lock-off release mechanism. An adjustable track guidance mechanism is sold separately.

For more info circle 800



#### MODULAR STORAGE

Milwaukee Tool has added two new items to its Packout Modular Storage System. Featuring a quick-attachment mechanism, the Dolly (shown) and the Mounting Plate allow users additional options for transporting and storing their existing Packout collections. The Dolly, made from impact-resistant polymer, offers a 250-pound weight capacity, while the Mounting Plate, which supports 100 pounds on the floor and 50 pounds on the wall, helps stabilize Packout storage in the shop. For more info circle 802





#### COMPACT DRILLS AND DRIVERS

The Xtreme Subcompact Series from **DeWalt** is a collection of five compact, brushless 12-volt Max tools that includes drivers and drills. The tools are designed to fit into tight spaces and are lightweight (from 1.5 to 1.75 pounds) to promote good ergonomics. Each has a Fuel Gauge charge indicator, LED lighting, and belt hook. The collection includes a drill/driver, impact driver, screwdriver (shown), impact wrench, and hammer drill. **For more info circle 803** 

#### CORDLESS / CORDED TABLE SAW

Metabo HPT's MultiVolt is the industry's first 10-inch cordless/corded table saw, according to the manufacturer. The tool uses a 36-volt DC brushless motor and offers a working table size that measures 28 ¾ inches by 22 inches with an out-feed support of 28 ¾ inches by 2 inches for additional material support. A telescoping table extension can support a maximum of 35 inches rip capacity when set up to the right and 22 inches when set on the left. For more info circle 804



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### 1. Which of the following best describes your company's

- primary business? (Check one box only.)

  10 □ Builder, Developer, General Contractor 20 Architectural Firm, Engineering Firm, Architectural/Engineering Firm, Designer of Homes
- 30 Manufactured or Modular Home Builder
- 40 ☐ Remodeler working in building activities 50 ☐ Land Development
- 90 Other (please specify)
- 2. Which category best describes your job title?
  (Check one box only.)
  10 Owner, Partner, Corporate Executive, Director,
- General Manager
- 20 Architect, Designer, Engineer
  30 Construction Manager, Superintendent,
- Purchasing Agent, Buyer
- 40 Other Management personnel
  50 Sales or Marketing Manager
  90 Other (specify):

- 3. What type of construction is your firm involved in? (Check ALL that apply.)

  A 

  Single Family – Custom

- ☐ Single Family
  ☐ Multi–Family
  ☐ Remodeling
- Light Commercial
- Other (specify):
- 4. How many homes does your firm build per year?
- (Check one box only.)
- Over 500 units
- ☐ 101 500 units ☐ 26 100 units ☐ 11 25 units
- D
- ☐ 1 10 units 0 units  $\square$
- 5. What is your firm's annual revenue?
- (Check one box only.)
  A More than \$10 million
- □ \$5 million to \$10 million
  □ \$1 million to \$4,999,999
- □ \$1 to \$999,999
- \$0 □

- Which of the following building materials, products or equipment do you buy, specify or influence the selection of? (Check ALL that apply.)
   □ Appliances

- 23 Siding
  24 Sound and Security Systems
- Trucks
  Windows
  None of the above

7. Which of the following publications do you receive personally addressed to you? (Check ALL that apply.)

A Builder

8. Excluding land, please indicate the cost per square

- ☐ Custom Home
- C Neither
- foot of the homes your company builds (Check ALL that apply.)
- A \$251/sq ft or more

☐ \$100 sq ft or less

- ☐ \$121-\$150/sq ft ☐ \$101-\$120/sq ft
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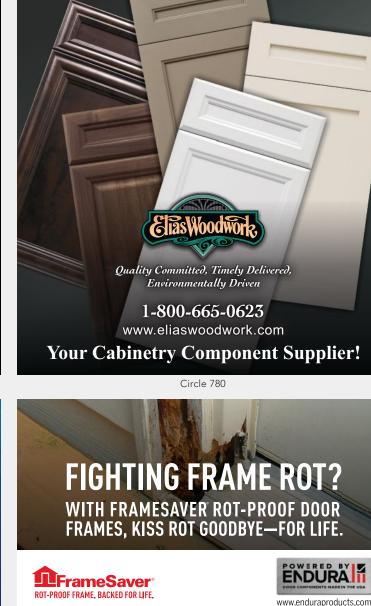
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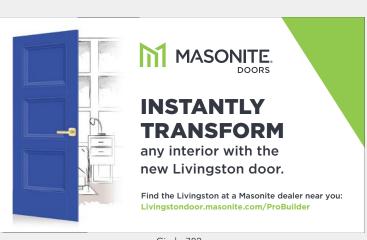


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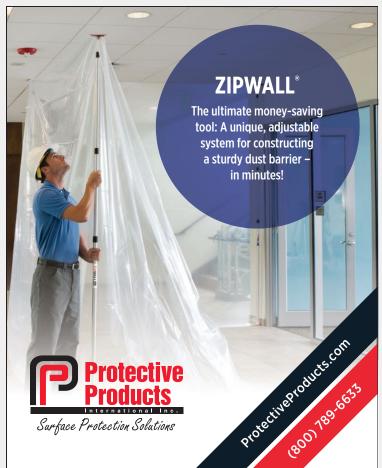
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# ModsPDX's **Nathan Young**: The framer who went modular



Nathan Young CEO and Principal Builder ModsPDX Portland, Ore.

athan Young sits in the middle of his 60,000-square-foot warehouse in north Portland, Ore., wearing a thick, hooded sweatshirt with the words "Game Changer" across the front. An old-school site-builder and framer by training, he's been leading (and growing) ModsPDX, an off-site home construction/modular business, since the Great Recession caused him to rethink his approach to legacy building methods.

To be sure, ModsPDX is not a high-tech facility run by robots or similar automation, but it doesn't need to be. In fact, combining detail-oriented, building-science—based stick framing with a manufacturing mindset and a controlled construction environment is all Young needs to achieve greater efficiencies and lower production costs than his on-site competitors.

It might not be as sexy as some offsite advocates portray, but Young's measured approach may well be the poster child for changes in housing construction.

# What got you started in factory-built housing?

A The market crash [of 2008] took us from 12 guys to just me and a significant amount of overhead I was

still paying for. I started looking into modular and found it wasn't much different from stick building, just more controlled. When we moved our framing operations indoors, the principles were to better understand the science of building and how to put our products together more efficiently to build a higher-quality product.

## How does ModsPDX achieve efficiencies?

In any kind of building construction, every house is essentially a combination of boxes; it's just how you put those boxes together [that varies]. If we can standardize the [dimensions of the] box—what I call a universal building platform—I know, for instance, that every one of my floor joists is the same length, and I can "mass produce" them quickly.

We also save a lot of time because, being inside, we can just unplug and leave our tools and hoses where they are at the end of the day and pick them up [to start working] the next morning. On a jobsite, you might spent 45 minutes setting up at the start of the day and another 45 minutes rolling up at the end of the day. That time isn't lost in here.

## What other benefits have you realized?

Our tolerances here are extremely tight. That floor [points to a nearby module] is 78 feet end-to-end and has a <sup>1</sup>/<sub>8</sub>-inch variance over that length. We also don't have any moisture in our buildings; the wettest our lumber ever gets is when it's delivered. We're also always building on the floor of the

warehouse; each module for a fourstory townhouse or apartment building is on the floor versus up in the air when you're outside, which is a safer and faster way to build.

# How has your approach to building changed?

Our brains have changed from being very linear in how we build to having more of a manufacturing mindset, such as where and how to stage materials and modules or panels for receiving and shipping. We went from focusing on speed, like an on-site framer, to efficiency, like a manufacturer, and looking at the whole system versus just the framing.

# What role does automation play in your operation?

We've looked a lot at automation, but there's a high capital cost. By the time we would have programmed the machine to know everything we need it to do, I'd have a house framed. It's really an issue of scale and downtime. You need a steady volume to continually feed that machine, and the minute you don't have enough, your ship is going to sink.

# Is this a model for the future of modular housing?

For smaller builders, I think something like this is fairly attainable. Basically, we work in a 60,000-square-foot warehouse with overhead cranes and a Gradall forklift and about \$50,000 in table saws, shop saws, and nail guns. It [doesn't cost] multimillion dollars to get into it. **PB** 



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