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Contents



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DEPARTMENTS

10 From the Editor

Up Front

- 13** Pulse
- 18** Design Trends
- 20** Products
- 24** Business
- 28** Industry

Project

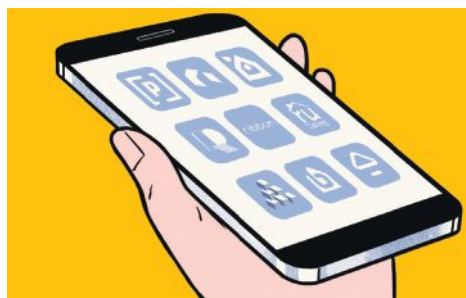
32 Desert Dream

NAHB Notes

- 49** Chairman's Letter
- 50** Home Innovation Research Labs
- 52** Dietz's Economy
- 56** Last Detail

24

FEATURE



42

Instant Gratification

With large amounts of cash flowing into property technology, will instant buying, artificial intelligence, and machine learning help boost new-home sales?

By Robyn Griggs Lawrence



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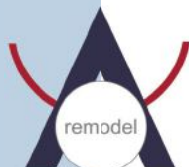
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BUILDER
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Why Design Thinking Matters

AMONG THE NOT-SO-DEEPLY BURIED TREASURES OF THE English language are words that do double or triple duty in their job of conveying meaning. Here's a handful of such words: Comfort. Balance. Warm. Love. Solace.

What do they share in common? In each instance, the single word serves as a triple threat: a noun, a verb, and a gut feeling or "state of being," whose presence or absence is conspicuous.

The word "love" has astonishing meaning, both when it's there and when it's taken away. Too, the fuel of that meaning flows out to us as both the name of the actual experience—love—and the act of doing it. And so on for those other terms.

What does this have to do with builders, and the fact that we're taking a back-to-the-future course for our annual home building executive event? The gathering of strategic leaders of high-volume, single-family building firms formerly known as Housing Leadership Summit will relaunch as the Builder 100 Summit. I recently talked with Maria Giudice, who will keynote the event, about one of these extra-powerful words, one that means more now to home building enterprises today and for their future than it ever has: Design.

Giudice qualifies it this way: "It's a noun. It's a verb. And it's a state of being."

And like love, at an enterprise level, our viscera know it when it's there and miss it when it's not. What the industry's strategic leaders

need to get, however, is an exponentially rising hidden cost to value creation when design is absent, deficient, or too narrowly defined.

Design, in this case, means far more—with all due respect to their value—than elevations, floor plans, exteriors, and indoor-outdoor living. In this case, it's a noun, a verb, and a state of being whose fully unleashed presence may be a lifeline to your company's future.

This is how Hot Studio founder Giudice plans to connect the dots for home building strategic leaders when she explores how building enterprises can get at hidden costs and risks by elevating design to a strategic systems level.

"With design thinking, you can start to see pathways as architecture, construction, engineering, sourcing, manufacturing, AI, robotics, and business outcomes fuse along collaborative team value streams," says Giudice, who formerly served as Autodesk's first vice president of experience design. "Once we got design embedded strategically, stakeholders were able to be more creatively customer-centric. It was a transformation."

Giudice has eyes open in terms of understanding reasons many home building companies seldom veer from familiar zones of comfort and success. "I'm going to talk about risk-taking, and about change agency, and about being focused as human, people-centric organizations, and about looking at problems and challenges as systems problems and challenges, not just in isolation," she says of her upcoming session. "And how to get shit done, especially now that the wall between our team member associates and customers is fully transparent."

Would a high-volume builder be looking at a brighter future were it to have a design executive officer among its top leaders? Find out at the Builder 100 Summit, May 11-13, in California.

Right now, the Holy Grail home builders are talking about is the "digital thread," a map for data, materials, time, and skill to converge productively into places people want to live and own. The power of design can bring that digital thread, full-stack, to life. **B**

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² BUILDER magazine Brand Use Study, 2002-2018, OSB Category.

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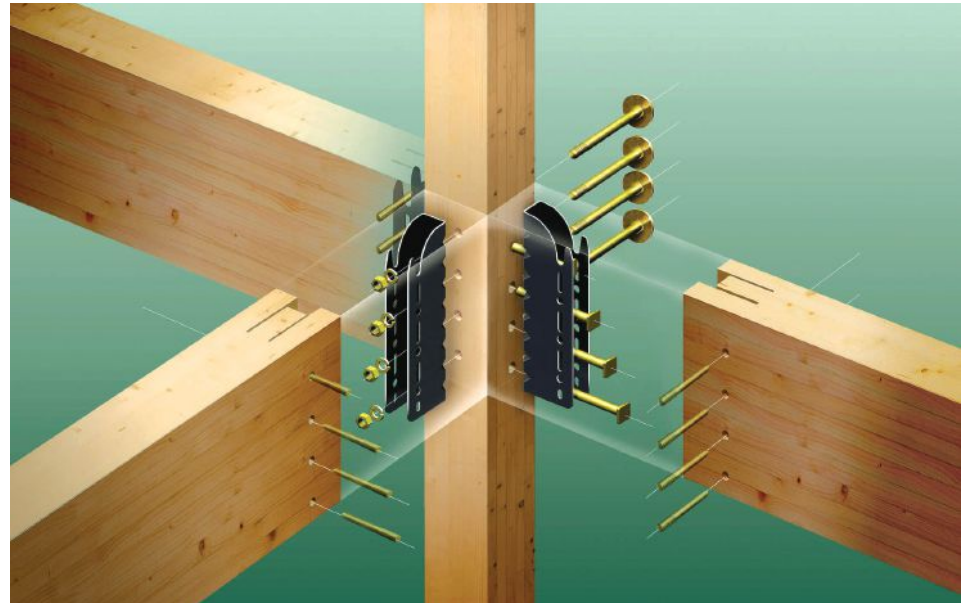
TWO BUILDING TECHNOLOGIES—DEBUTING FOR the first time in North American construction—captured the attention of home builders who in January visited the Chōwa—Living In Balance project by Sekisui House and Woodside Homes in Las Vegas. The home was unveiled during the International Builders' Show. Over 2,000 builders and tradespeople either visited the Chōwa home in the Ridges neighborhood at Summerlin, or checked in on demonstrations of the home's two key construction innovations at the BUILDER exhibition booth during IBS.

What sets these innovations apart as transformative building technologies? The answer is in how they impact the construction process, and, ultimately, the job they do. One delivers builders "first-time right" velocity of assembly. Both make homes safer and more resilient, as increasingly frequent and more intense natural hazards put more people at risk in their homes.

The structure uses game-changing assembly technology—called SHAWOOD, a proprietary building line developed by Sekisui House in 1995 that is marketed in Japan and Australia. SHAWOOD originates as a digital thread and carries through a precision-manufacturing process that produces 100% of the building's structural enclosure and internal wall, flooring, and roof-truss system in factory conditions.

"This system enables each house to be tailored to the needs of the customers like custom homes. At the same time, we can build a stronger, more resilient home with shorter construction time compared to typical houses," says Joel Abney, national vice president of operations for Sekisui House's Woodside Homes.

Project supervisors, whose customized building enclosure with kit pieces were never assembled in this way in the U.S. before, went from foundation to ready for roof nail-down in eight-and-a-half days, with six workers and two team members from Japan orchestrating the process:



METAL JOINTS

In Sekisui House's proprietary SHAWOOD system, structural laminated posts and beams fit onto metal sleeves and fasten with tensile bolts and drift pins for a tight, durable joint.

1. No circular saws. No cutting on-site was necessary, as every structural detail of the home had been pre-built digitally, and then physically constructed in Sekisui House's Kanto, Japan, factory.

2. Trilingual jobsite. English, Japanese, and Spanish were spoken on-site, and despite common terms and interpretations getting "lost in translation," what translated without issue was the numerical, labeled system of positioning, fastening, and connecting each post to its pre-designated location and orientation, and each beam fitting perfectly where it had been engineered, and factory-cut to millimeter precision in Japan.

3. Velocity. Speed with accuracy, productivity gain, and profitability came from the precisely executed, easy-to-implement building system.

"The kinds of planning, building systems, proprietary tools, and processes Sekisui House brought to this project for the first time, resulting in a framing crew that didn't even speak the language being able to understand it and do it ... that's what amazes me about this endeavor," says Woodside Homes Las Vegas division president Kent Lay, whose divisional team, with Michael Salerno as Woodside project director, took on the Chōwa—Living In Balance building program a little over a year ago.

The U.S. federal government has paid out over \$220 billion in home insurance claims resulting from wildfires, hurricanes, and other natural disasters in the past two years. That's more than the previous 20 years combined. That's not a statistical anomaly. The National Oceanic and Atmospheric Administration reports that the number of billion-dollar disasters is "clearly trending upward." That's why the U.S. home building industry must make building more resilient houses a top priority.

That's also why the U.S. home building industry can learn from Sekisui House and its 60 years of experience building homes in Japan, which is prone to superstorm typhoons, seismic activity, wildfires, and

other natural hazards. This is where the strength of SHAWOOD and the fire- and weather-resistance of Sekisui House's exterior material, Bellburn—used on the Chōwa project—come into play.

"There are 3 components to secure superi- or strength of SHAWOOD," says Abney. "They are glue laminated timber that is used for the structural timber material, the metal joint sys- tem, and earthquake resistance."

Abney explains that the quality of the glue laminated timber can be managed quantita- tively similar to steel, which enables consistent and accurate structural engineering. He notes that pillars and beams are tightly connected using various MJ steel brackets, and each pillar is directly fixed to the foundation using a spe- cific connection bracket. While most struc- tures in the U.S. gain lateral load capacity through a firm, solid, and continuously direct connection to the foundation, the SHAWOOD system anchors each post to a metal, shock-ab- sorbing stand whose "fin" slides into the post like a sleeve before bolting in place.

"Even with the limited contact to the foun- dation, the Sekisui House system has capacity at least up to U.S. code to ensure we can absorb different forces that stress lateral load capabili- ty," says Kent Barber, senior vice president at L.R. Nelson Consulting Engineers. Barber con- verted the entire Sekisui House SHAWOOD structural engineering system into terms state and local code and inspection officials could understand and approve as equal to or even superior to U.S. building codes. "The differ- ence is, whereas U.S. frames rigidly lock to foundations to ensure that lateral load capac- ity, the Japanese system is designed to rock and give, and then fall back into place."

Even the massive 9.0 earthquake that struck northern Japan in 2011 did not totally or partially collapse over 177,000 homes built by Sekisui House. The SHAWOOD system's track record for performance amid seismic shocks and stresses provides evidence for Bar- ber's case that the technology would stand up to adverse conditions in the U.S. equally well.

Meanwhile, Chōwa's exterior siding, Bell-

burn, provides fire and weather resistance for the home. Ceramic pots are traditional Japa- nese artwork from an ancient era, and Bellburn is manufactured with the same craftsmanship mentality. Bellburn's color comes from the di- rect baking of the glaze, which produces a dis- tinctive surface. The color will not fade throughout the 60-year lifespan of the product, according to Sekisui House. Porcelain secures intensity by baking in high temperature, which in reverse can cause contraction.

"Bellburn is manufactured and quality con- trolled at our in-house factory using the lead- ing-edge equipment to achieve the dimensional contraction tolerance of $\pm 1.5\text{mm}$," says Wood- side's Abney. "Bellburn is baked in a high tem- perature, which prevents any heat transfer into the house up to 1,400 degrees Fahrenheit."

As U.S. home builders pursue both veloci- ty and resilience, it is clear there is much to learn from the Japanese construction tech- niques used for the Chōwa home. For more on the project, visit builderonline.com/chowa-living-in-balance.—JOHN MCMANUS

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NAHB UNVEILS THE BEST PRODUCTS OF IBS

NAHB NAMED WINNERS IN NINE CATEGORIES FOR ITS EIGHTH ANNUAL Best of IBS Awards during the recent International Builders' Show in Las Vegas. The awards received over 350 entries, and winners were chosen by a panel of independent judges made up of reporters and building professionals.

NAHB awarded an overall Best in Show award to Enginuity Micro-CHP by Enginuity Power Systems. The product was also named the Best Energy Efficient Product and Best Home Technology Product. Of the award entrants, the judges said Enginuity Micro-CHP "seems to be the biggest game changer." The product's goal is to remove existing gas-fired water heaters and replace them with a single unit that produces a home's hot water, space heating needs, and electricity. The 500cc single-cylinder engine makes up to 6.2 kilowatts of power, meaning it only has to run a few hours a day to provide the hot water and electricity needed to keep an average-sized U.S. home comfortable, according to the manufacturer.

AeroBarrier by AeroBarrier was named the Best Green Building Product for 2020. It is a cutting-edge envelope sealing technology for commercial, residential, and multifamily applications. The product launched at IBS in 2018 and was named Best in Show and Most Innovative Product that year. The AeroBarrier system includes a compressor, generator, blower door, emitters, hoses, and the AeroBarrier machine.

The Marvin Skycove was named the Best Indoor Product for 2020. The window, built on a steel structure, is designed to hold 60 pounds per square foot. "The space that [Skycove] creates can be used to solve many different problems that we don't solve today among window and door companies, and that is to create space perhaps in a smaller kitchen or where a couch would not normally fit," Levi Geadelmann, senior

marketing product manager for Marvin, told ProSales—BUILDER's sister publication—at IBS.

Marvin's Awaken Skylight won the Best Window and Door Product category and was also recognized as a finalist in the Best Home Technology Product category. The skylight comes with supplemental lighting, which can be controlled via a mobile app or bluetooth-enabled wall switches. The skylight enables homeowners to maximize the space for natural daylight, as the light well goes straight up to the glass without a stepped approach. "That allows the glass to be larger, so you're getting more daylight opening for the same size rafter or truss spaces," Brian Farnes, product and system engineer at Marvin, said in an interview with ProSales.

Atlas Granite's MASST, a laser and light technology that can transform any solid surface into a touchscreen, was named the Best Kitchen & Bath Product at IBS, and the Outdoor Living Experience by Somfy, StruXure Outdoor & Phantom Screens was named the Best Outdoor Product.

Metwood Building Solutions' 2810HR Joist Reinforcer was named the Most Innovative Building Material. The joist reinforcers are engineered light gauge steel add-ons that allow tradesmen to run utilities right through joists. The product provides flexibility in the routing and installation of utilities when using engineered I-Joists or 2x Joists, says the firm.

BILT 3D Intelligent Instructions by BILT Incorporated was named the Most Innovative Construction Tool. The mobile app features interactive, 3D step-by-step instructions for products requiring assembly, installation, set-up, repair, or maintenance.

"The 2020 IBS exhibitors really brought their A-game this year," said Fred Tobin, NAHB conventions and meetings committee chair, in a statement. —VINCENT SALANDRO

Leading in LEED Certification

The U.S. Green Building Council shares the top 10 states with the most LEED-certified projects

The U.S. Green Building Council has announced its annual list of the Top 10 States for LEED green building certifications. Each of the 50 states is ranked based on the number of LEED-certified square feet certified per person in 2019, based both on 2010 U.S. Census population data and on commercial and institutional green products certified throughout 2019.

This year's top 10 states are home to more than 105 million people total,

including more than 80,000 LEED green building professionals. Colorado took the top spot this year for the first time since 2011, after coming in sixth in 2018, with 23,962,344 new certified gross square footage across 102 green building projects. Altogether, these projects represent 4.76 square feet of certified space per Colorado resident. Illinois came in second, with 3.85 square feet of certified space per capita, and New York in third, with 3.76.

While Washington, D.C. is not included in the top 10, as it is a federal territory and not a state, it far and away leads the nation with 52.86 new LEED-certified square footage per capita this year, or 31,810,018 square feet across 143 projects. D.C. became the first LEED-certified city in 2017, and in 2019 earned LEED Platinum certification for the Golden Triangle Business Improve-

ment District—the world's first business improvement district to earn this certification.

"As we embark on a new decade, the USGBC community is focused on helping more projects get on the path to LEED certification and a more sustainable future," says Mahesh Ramanujam, USGBC president and CEO. "Over the last year, the Top 10 states have certified projects that serve as incredible examples of how green building can create more sustainable and resilient spaces that improve our living standard. ... As we enter our next chapter, we are committed to helping more buildings, cities and communities improve their sustainability performance through LEED." —MARY SALMONSEN

For more on the top 10 list, visit usgbc.org/resources/top-ten-states-leed-2019



2019 TOP 10 STATES FOR LEED GREEN BUILDING

- 1 Colorado
- 2 Illinois
- 3 New York
- 4 Massachusetts
- 5 Hawaii
- 6 Maryland
- 7 Virginia
- 8 Minnesota
- 9 Oregon
- 10 California

Source: USGBC. State rankings calculated by dividing square footage certified in 2019 by state population per 2010 U.S. Census records.



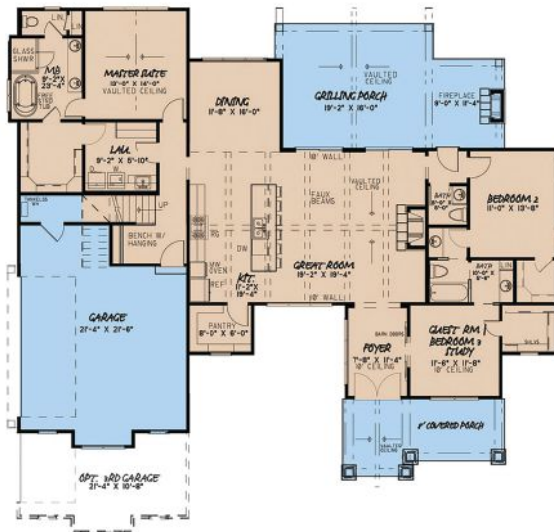
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Living Large in Less Space

How to make a single-level home under 2,100 square feet feel impressive

by AURORA ZELEDON

FIRST IMPRESSIONS ALWAYS MATTER, BUT EVEN MORE SO WHEN you're trying to sell a one-story home. They don't typically have the same impact from the street as a two-story home. But the practicality of a single-level layout can't be beat, especially when marketing to baby boomers.

Here's a new farmhouse design that will make you do a double take, as it clocks in at a total of 2,073 square feet. It looks much bigger, largely thanks to the soaring, barn-inspired gabled roofline over the garage, which holds a flexible bonus space. Rugged stone and warm wood accents add extra dimension to the farmhouse exterior.

"The inspiration behind this plan was the need for a design that really made you feel as if you had the barn design as a focal point while maintaining the newer modern looks and open floor plan," explains designer Michael E. Nelson.

Inside, the open layout centers around the massive kitchen island, which is designed to seat six people. The vaulted ceiling draws the eye up and is echoed in the master suite and out on the grilling porch. Another thoughtful touch: the third bedroom easily transitions to an office with barn doors that open to the foyer.

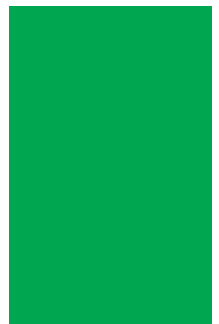
See more one-story house plans with big curb appeal at go.hw.net/BD0320-plans. **B**



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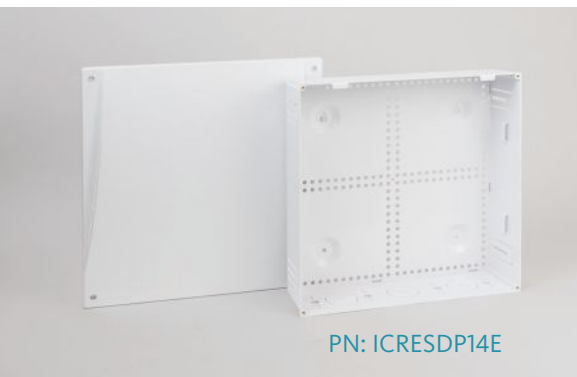
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3	Crawlspace, slab (basement available)	\$2,700
BATHROOMS		PDF
2.5		\$1,350

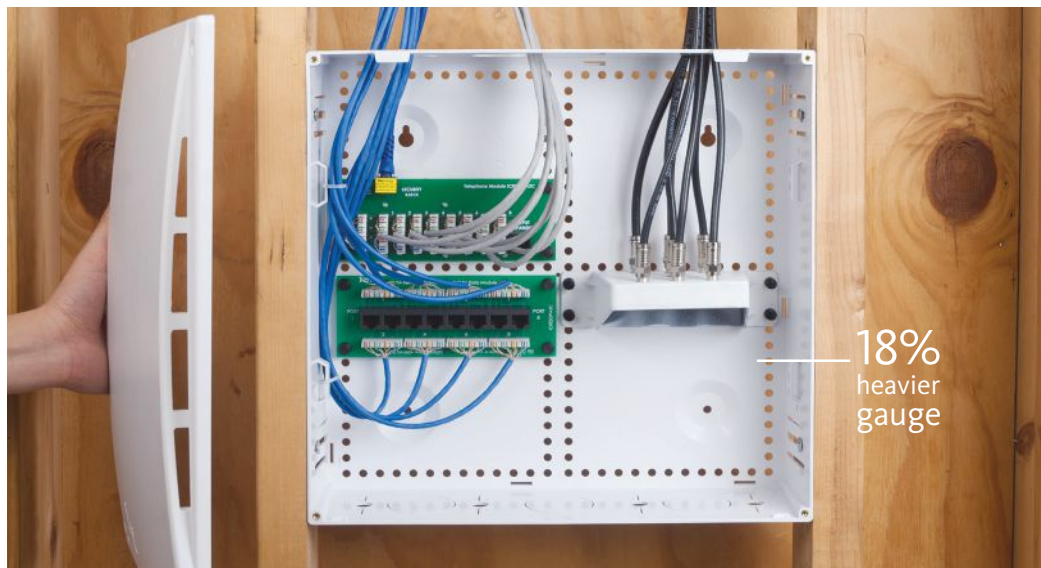




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Kitchen Connection

Sleek design and smart home features took the lead for appliances at the Kitchen & Bath Industry Show

by **MARY SALMONSEN**

▲ PERLICK

Perlick's new 30-inch column refrigerator is divided into four separate temperature zones, designed to keep food stored at the ideal temperatures and conditions for freshness. Using the PerliQ touchscreen interface, users can customize the temperature of each zone or access smart presets for deli items, meat, fish and fresh produce. The interior is finished in stainless steel on the upper half and slate-black stainless steel on the lower half, in order to enhance the brightness of fresh food under LED light, according to the manufacturer. The produce compartment features an electronic humidity monitor and dual filtration system. perlick.com



◀ BOSCH

The 24-inch, ventless heat pump dryer in the 500 Series connected compact laundry pair functions on an efficient, closed-loop system with no heating element, which recycles warm air to efficiently dry clothes. The dryer features a patented self-cleaning condenser, which uses moisture collected from wet clothes to clean the condenser unit. Its drain flows into a standpipe, expanding installation flexibility by eliminating the need for a side sink. The pair is compatible with HomeConnect, allowing users control of the laundry via smart devices. bosch-home.com/us

▼ FISHER & PAYKEL

The 24-inch Integrated Wine Column marks a new addition to Fisher & Paykel's Integrated design collection, designed to blend seamlessly against existing cabinetry with clean design lines and stainless steel hardware. It is available panel ready or with a stainless steel door panel, and installs flush with 1/8-inch gaps. The column has a 91-bottle capacity, with two temperature zones, four preset wine temperature modes, customizable lighting and absorptive rack materials to reduce vibration. fisherpaykel.com/us



▼ SMEG

The Victoria range and hoods are featured in Divina Cucina, SMEG's third collaboration with Italian high fashion house Dolce & Gabbana. Each finish is a reproduction of an original art piece hand-painted on a SMEG appliance. The Carretto series, launched in 2019, is illustrated with fruit displays in reds and oranges, while the Majolica series (shown), due in 2020, showcases intricate blue-line patterns and illustrations of Sicily's Mount Etna and the Valley of the Temples on a white base. smeg.com



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▲ **JENNAIR**

JennAir has introduced 48-inch Dual-Fuel Professional Style Ranges to its two main design expressions: Rise, a professional-grade aesthetic with reverse-knurled handles and bold geometric details, and Noir, a modern, minimalist aesthetic defined by black glass fronts. The Noir range offers five dual-flame brass burners and a chrome-infused griddle, while the Rise range features four burners, a griddle, and a grill element. Both ranges feature dual oven cavities with flat tine racks, dual-fan true convection cooking, and remote control via smart device. jennair.com



▲ **THERMADOR**

The 36-inch Freedom Induction Cooktop includes 56 induction elements across the surface, enabling simultaneous heating of up to six pots and pans. The Sapphire Glow feature provides a visual cue when a pot is heated or moved, and the MyZone feature enables automatic power level shifts when a pot or pan is moved. The cooktop may be controlled through a full-color touchscreen or a smart device via HomeConnect. It pairs with the Masterpiece Downdraft, a slim ventilation panel that retracts into the countertop when not in use. thermador.com



▲ **GAGGENAU**

Gaggenau's 400 series combi steam ovens feature a full surface grill, expanded oven cavity, ceramic glass front, and a multicore temperature probe with a one-degree variance, three temperature sensors, and continuous revision of estimated cooking time based on its readings. An automatic cooking system includes pre-programmed settings for particular dishes, which may be modified to fit users' needs. The oven is Home Connect compatible, and recommended to pair with Gaggenau's vacuuming drawer. gaggenau.com



▲ **SAMSUNG**

The latest edition of the Family Hub smart interface is now available in a side-by-side refrigerator format. The redesigned interior features a larger capacity than previous models, with vents to keep contents evenly cooled. It is available in a stainless or black stainless finish, and features flat doors, recessed handles, and a minimal dispenser. The Family Hub interface enables the Family Board, a digital bulletin board; View Inside, which allows users to look inside their fridge, and Smart View, which mirrors a phone or TV. samsung.com

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People Builders

Seven qualities that every home sales manager should possess to construct the ideal team

by **SYMONE GARVETT**

WHILE SEVERAL PROFESSIONALS MAY ARGUE THE ROLE OF a new-home sales manager has changed over the years—especially with technology evolving every day—in many ways, the attributes and personality traits needed to do the job well have remained somewhat the same.

Today's home sales associates focus on the sales process, build trust with potential buyers, and master the art of following up, while sales managers need to provide a positive work environment and overall example, set specific goals for their teams, and give their teams the tools to achieve those goals.

BUILDER spoke with new-home sales executives to find out what attributes make a great sales manager in 2020. These seven qualities will help position your sales team for success:

Easy-to-use touchscreens can help salespeople and their customers when selecting all the variables that go into buying a home.

1. A coaching and people-first mentality.

Although the true business of a home builder is building, the industry starts and ends with people, including the customers, employees, builders, and vendors. Sales managers should be able to identify the strengths and weaknesses of a salesperson and coach them to their full potential, says Bob Musa, president of Computer Presentation Systems, a software solutions provider for home builders. When sales leaders put forth the effort into training their people and help them develop good habits, the company in turn can ultimately benefit.

2. Genuine interest in their people's success.

According to Mark Heidmann, director of sales and marketing at Trendmaker Homes, sales managers should not only be interested in the success of their internal salespeople, but also with their external customers. "We have to take an interest in the process from start to finish," he says. "From their search and the actual sale to all the parts that go into a mortgage, their design studio experience, to the build, and closing ... we have to have interest in all those things and support them going well for both the salesperson and customer we are servicing at the end of the day."

3. The ability to radiate positivity.

Every day, sales leaders are responsible for the frame of mind of their people. Amy Rino, chief customer officer at Taylor Morrison, says, "You can't create a positive outcome with a negative attitude." Leaders should invest time in creating a positive environment for their workers, so the salespeople can focus solely on the customer's needs and make them feel good about their home buying decisions. "It's the foundation of what we do in sales and leading sales," Rino explains. "We are all about creating feelings and the memories in the future for our families."

4. A steady or steadfast approach.

Housing professionals know there can be highs and lows to this industry, many of which are out of a single person's control. The real estate market as a whole goes through its cycles, and there can be successes and drawbacks in new communities or during home building processes.

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ADVANCED SALES

Software from Computer Presentation Systems allows home buyers to see floor plans on a big screen (above), while sales offices help buyers visualize what they want in a home.



"It is critical for sales leaders to take the time on the front end to get to know [employees] and allow them to get to know us, because that relationship is so important and it sets the tone for how we move forward."

—AMY RINO, TAYLOR MORRISON

Plus, there are personal highs and lows in the lives of each individual team member. To be a successful sales manager, leaders need to be able to smooth out these highs and lows—or even anticipate them—and make adjustments as necessary, notes Heidmann.

5. Honest, upfront connection.

Although every manager has their own unique style, it takes courage and vulnerability to be a leader. Rino suggests creating an open and honest relationship upfront during the hiring process to show that the company and its leaders genuinely care about its employees and will help them find balance between their personal lives and the real estate sector. "It is critical for sales leaders to take the time on the front end to get to know them and allow them to get to know us, because that relationship is so important and it sets the tone for how we move forward," she says.

6. A reflective perspective.

Many have heard the line "never forget where you came from," and it's an important one to remember in new-home sales. A large percentage of sales managers started out working as greeters or salespeople in new-home centers. Rino reminds her team of this quote often and asks them to recall their work ladders. "We have to remember where we came from and appreciate the journey," she states. "Never give up on the basics, because they are the fundamentals of how we create success in sales."

7. Passion to keep learning.

As the business continues to evolve, it is also essential for sales managers to welcome new ideas, thoughts, and technology. Thirty years ago, sales managers didn't have access to customer relationship management software, electronic purchase agreements, interactive websites, social media, or virtual reality.

"Technology has removed a lot of the burden from the salesperson of communicating information to the potential buyer," says Computer Presentation Systems' Musa. Staying ahead of the curve and learning how to use the best new tools could help the company become more organized, keep goals on track, and increase home sales. **B**



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Dean Mon, president of D.R. Mon Group, surveys a jobsite.

Taking the Reins

BUILDER talks with this year's NAHB chairman about the industry challenges ahead

by **SCOTT SOWERS**

DEAN MON IS NAHB'S CURRENT CHAIRMAN OF THE BOARD. He is president of the Shrewsbury, N.J.-based D.R. Mon Group, which has created communities throughout Morris, Hunterdon, Union, Hudson, and Monmouth counties. The firm prides itself on building affordable single-family homes, condos, and apartments, with an emphasis on sustainability. Mon has served as the president of the New Jersey Builders Association and the Metropolitan Builders & Contractors Association of New Jersey. BUILDER recently asked Mon about the state of the housing industry and his areas of focus for the coming year.

Q: What is the best thing about being in the building industry?

A: Coming to the United States from Cuba as a young person, I saw a lot of opportunity, but wasn't entirely sure what direction to take. I was drafted into the Army in 1968 and spent two years as an artillery sergeant in Vietnam. During that time, I became an American citizen, which unlocked many doors for me.

After my service ended, I started my career as an engineer, and then went to work with my father-in-law, who was a builder. I later

left his business to start my own, moving from remodeling to multifamily green building.

My favorite thing about being in the building industry is the relationships I have made at NAHB. Those friends and colleagues helped me begin to see the real problem: Affordable and desirable housing is out of reach for too many Americans. That's how, and why, I got into the multifamily business. I wanted to help people achieve their dreams of owning a home without going into crippling debt. I wanted to help others find their direction in this land that afforded me so much opportunity.

Q: You've placed a high priority on the affordability issue. Is there anything you or the national building industry can do to help deal with the issue?

A: Building homes that are affordable to buyers continues to be the greatest challenge for builders; this includes the many factors that drive up the cost of home building. Currently, economists say that buying a home would be a "financial stretch" for typical American families in 71% of U.S. counties.

The key factors contributing to this affordability crisis are a lack of skilled labor and the burdensome cost of regulatory compliance. As the demand for skilled workers goes up, so does the cost of employing those workers. NAHB is working hard to spread the word to high school students, veterans, and many other groups about the fulfilling and good paying careers to be had in residential construction.

As for the cost of regulatory compliance, regulations that impact the building industry are set by bureaucrats and elected officials at each level of government. Throughout the 2020 election cycle, NAHB will be engaging with candidates on this issue, making sure that creating a favorable regulatory environment for home building is a legislative priority moving forward.

Q: Will serving as chairman during an election year have any impact on achieving your goals?

A: This is an enormously consequential election year, and NAHB will be very active in supporting pro-housing, pro-business candidates for public office. Pushing back on burdensome regulations and government overreach, and educating and building up our workforce to provide an increasing number of high-quality, affordable



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homes for our customers remain high priorities. We'll capitalize on the opportunity afforded to us by the conversations taking place around the election to elevate those goals.

We're engaging with the election process in several ways. Our biggest push currently is our town hall series, with local leaders, candidates, and industry experts who will highlight key issues surrounding housing affordability and discuss solutions to these challenges.

Q: What are the biggest challenges faced by builders in your market?

A: Starting out in the remodeling side of the business, I realized there was so much more opportunity to help people by getting into building multifamily. Then, I saw where the market was headed, and I followed suit. I wanted to offer home buyers the ability to live out the American dream of homeownership, in a modern, green, affordable way.

But regulations currently make up about one-third of the cost of building, and every \$1,000 of additional cost prices over 158,000

potential home buyers out of the market. NAHB just released a study on green market activity that indicates added cost is one of the biggest challenges facing green builders; another is that the average consumer does not understand what makes a home green. It's our job as builders to communicate the benefits of a green home in a way that consumers can understand to help drive market demand.

Q: How have those challenges helped shape your priorities?

A: With the burden of regulations, builders must increase the cost of selling a home to make even a small profit margin. After all, most home builders are small-business owners trying to make it like the rest of us. That is why my priorities on political advocacy remain: Because housing will not become more affordable unless we are intentional about supporting pro-housing candidates that will help roll back these burdensome regulations.

I want to emphasize how imperative it is for our members to be engaged in the code devel-

opment process at both the local and national level. The more people we have speaking up for our industry, the easier and more streamlined the process will become for everyone.

Q: Any advice for builders who want to learn about building green, affordable housing?

A: My relationships with other NAHB members were the catalyst to my business becoming what it is today. My advice for builders trying to learn more about affordable, green housing is to reach out to someone who's already doing it. Making use of the tools offered through voluntary, above-code third-party green certification programs has helped me demonstrate the value and quality of building green in my market. One of my recent New Jersey projects was among the first in the state to be certified according to the National Green Building Standard, LEED, and Energy Star. The more you build green homes, the more the learning curve disappears for you and your subcontractors, ultimately increasing efficiency and productivity, and reducing costs. **B**

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The architects added the eye-catching, gabled volume on the west side of the urban lot to create additional shade from the intense Arizona sun in the courtyard.





Desert Dream

A modern home in Phoenix mirrors the textures of a saguaro cactus

by **SYMONE GARVETT**
photography by **DAN RYAN**

ONE OF THE DEFINING PLANTS OF THE AMERICAN Southwest, the saguaro cactus, grows in the Sonoran Desert with a distinctive columnar form with branches or arms that generally bend upward. The beauty of the natural wonder—that's covered with a thick waxy coating, hard spines, and flexible bristles—was the inspiration behind the design of the Pleats project by Phoenix-based architecture firm The Ranch Mine and builder Boxwell Homes.

The home's owners stumbled upon the lot in 2007. They identified it as the perfect piece of property, due to its location north of uptown Phoenix and south of the desert and the Dreamy Draw Mountain Preserve. After years of saving, the clients approached The Ranch Mine—a national award-winning, husband-and-wife-led architecture firm known for its modern courtyard houses that exemplify urban, desert living—to remodel the existing house on the property.

"We love this neighborhood. We love our lot. We don't love the house," the clients stated in the firm's initial questionnaire. "We want to create smart space—space to be together, to be alone, to entertain, to meditate, to scream."

In addition to creating miniature havens around the home, the clients also stressed that indoor-outdoor living was "critical to the success of the project." They are drawn to the outdoors and love to explore the surrounding area with their two rescue dogs.

Utilizing the original home's foundation to save a bit on cost, the team settled on a floor plan with two volumes, including the new 1,850-square-foot house with three bedrooms and three bathrooms, and a detached two-car garage in the rear, which created a three-sided courtyard surrounding a pool.

Exterior materials for the home were selected to echo the surrounding desert landscape by adopting specific elements from the saguaro cactus. The house's name, Pleats, was derived from the corrugated metal that wraps



the volume, reminiscent of the pleated pattern on the exterior of the cactus. The material also was chosen for its durability and ability to deal with radiant heat.

“The climate and geography are the first stages of inspiration in every home we design,” says Cavin Costello, principal architect at The Ranch Mine. “This, combined with our client’s mutual love for the desert, inspired the exterior of the home.”

The new, gabled volume on the west side of the front elevation was also designed with the unique cactus in mind. It features a custom hemlock wood slat pattern that evokes the forked ribs, while the recessed entry is similar to a saguaro boot, or the holes in the giant plant

that many desert animals use as homes. White stucco was used to clad the original structure that was saved, as well as the south-facing gable where the outdoor shower is located.

In addition to adding warmth, pattern, and texture to the front of the home, the gabled roof was added to allow the homeowners to take in the mountain views and to provide an open, indoor-outdoor great room that seamlessly connects the kitchen, living, and dining areas with the exterior patio. A perforated metal patio cover eases the transition from the bright, sunlit exterior to the interior, while the addition of the tall roofline also provides additional shade in the courtyard from the intense Arizona sun.

“The reality of Phoenix is that most lots are simple, flat rectangles surrounded by neighbors on all sides, not blessed with the beautiful desert terrain, flora, and fauna you think of when you think of the Sonoran Desert,” says Costello. “We shaped the house to create a courtyard, a traditional way of creating a shaded, protected space in the desert.”

The clients also wanted guests to have direct access their new guest suite. Unfortunately, there wasn’t an opportunity to put the suite in the rear based on other program requests. As a solution, the design team decided to include a secondary door within the recessed entry that provides direct access to the guest room and camouflages into the



“We want to create smart space—space to be together, to be alone, to entertain, to meditate, to scream.”

—THE HOMEOWNERS, via the architect’s initial questionnaire

🔗 **MOUNTAIN VIEWS**

A large window wall in the great room opens the area to the courtyard pool in the foreground and mountains in the background.

🔗 **CLEAN DESIGN**

The clients requested details from three interior design styles, including mid-century modern, industrial, and European.



siding, avoiding confusion as to which door leads to the home's foyer.

For the home's interior details, the clients sought "mid-century modern combined with industrial influences with a touch of modern European hardware and design," says Costello.

The designers responded to this request by incorporating European-style hardware, fixtures, and appliances in the kitchen, while finishes like walnut cabinetry, accent lighting, and furniture add some mid-century flair. Concrete floors in the combined living space and stainless steel countertops embrace the industrial aesthetic.

Two expansive sliders with transom windows above give the great room its indoor-outdoor feel, with living and dining spaces on both sides of the glass. The perforated steel cover carries the industrial style out to the patio and offers a mix of both shade and natural light.

The contemporary interior design style with warm wood accents continues in the master suite, which also has direct access to the adjacent outdoor courtyard. A slider door opposite the bed looks onto the private oasis outfitted with a small rectangular pool and fire pit area.

With its own square window, the master bathroom also receives ample natural light. Designers chose sleek wood cabinetry similar to the kitchen for the floating double vanity, hexagonal cement tile for the floor, sphere accent lights, and individual rounded-corner mirrors to complete the clean, contemporary design.

On the opposite wing of the L-shaped main house, the design team added a standard mudroom with laundry facilities. From there, an exterior door in the space leads to the fenced-in outdoor shower, used for washing the dogs after a long hike in the mountains or for rinsing off before getting into the pool.

Pavers from the outdoor shower create a path to the side entrance to the detached garage, which is also clad in the dark corrugated metal used on the main volume. Inside, the homeowners have space for cars and outdoor gear, as well as a shop for their business, a local, all-natural skin care line.

Much like how the saguaro cactus provides shelter through its boots, the Pleats project now embraces the site, its owners, and their guests. The homeowners report Pleats is "the first home we've opened up to all friends and family" and "we're so proud to call it home." **B**



PLEATS

Location

Phoenix

Architect

The Ranch Mine, Phoenix

Builder

Boxwell Homes, Phoenix

Project Size

1,850 square feet

Site Size

9,767 square feet

Completion Date

August 2019

Construction Cost

Withheld

MINIMAL & FUN

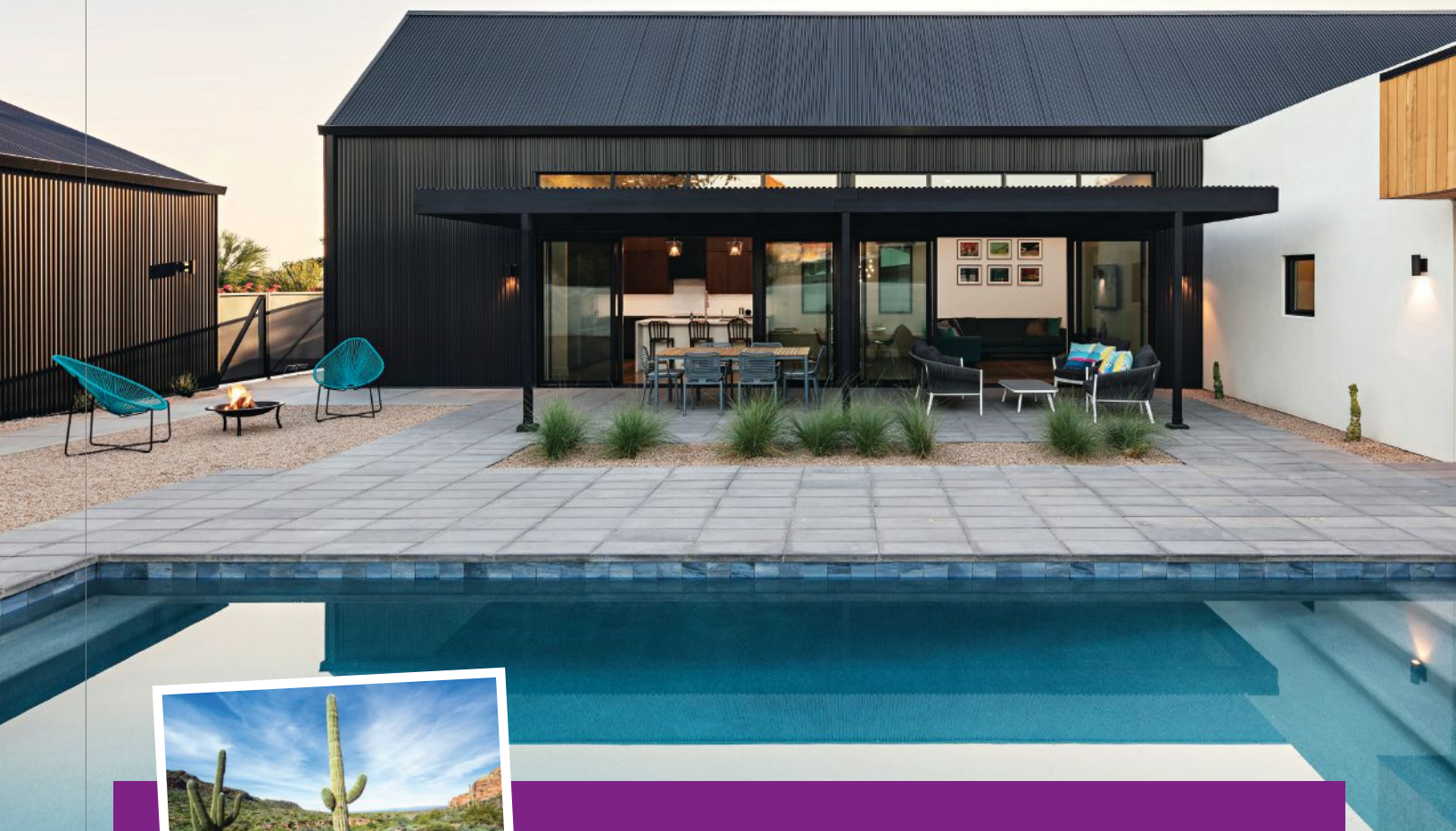
Sphere accent lights, rounded-corner mirrors, and hexagonal cement tile add personality to the master bathroom.

DIRECT ACCESS

Due to the home's L-shaped layout, the master bedroom sits adjacent to the exterior courtyard for optimal indoor-outdoor connectivity.

Floor Plan





During the design phase, the Pleats project team took many attributes of the saguaro cactus—native to the area—into consideration. The home's gabled volume and corrugated metal exterior are just two examples of how Pleats pays homage to the unique plant.

NATIVE INSPIRATION

- The saguaro cactus will only grow in the Sonoran Desert.
- It is the largest cactus in the United States, and will normally reach heights of 40 feet tall.
- It grows as a column at a very slow rate, with all growth occurring at the tip, or top of the cactus. It can take 10 years for a saguaro cactus to reach 1 inch in height.
- By 200 years old, the saguaro cactus has reached its full height, reaching upward of 45 feet tall.
- A foot of saguaro cactus can weigh upward of 90 pounds, and a full-height saguaro can weigh over a ton.
- The cactus will produce flowers during late spring into early summer. The flowers are a milky white, and emit a sweet nectar.
- Once the cactus produces fruit, bats will start to eat the fruits, and in turn help spread the saguaro seeds across the desert.

Source: National Park Service, [nps.gov](https://www.nps.gov)

"The climate and geography are the first stages of inspiration in every home we design. This, combined with our client's mutual love for the desert, inspired the exterior of the home."

—CAVIN COSTELLO, The Ranch Mine



🔗 **PRIVATE COURTYARD**

Two volumes, the main home and detached garage, create a three-sided courtyard with room to gather and relax around the pool or fire.

🔗 **OUTDOOR SHOWER**

The designers incorporated an outdoor shower off the main home's mudroom for washing the dogs or rinsing before the pool.





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CONTENTS



- 4. Cover Home: Main-Level Master**
- 6. Feature Home: Impressive Snack Counter**
- 8. Standout Farmhouse Designs**
- 15. 2,200 Square Feet and Under**
- 24. Spa-Like Master Bathrooms**
- 28. Stylish Outdoor Living**

See the stunning cover home on page 4.

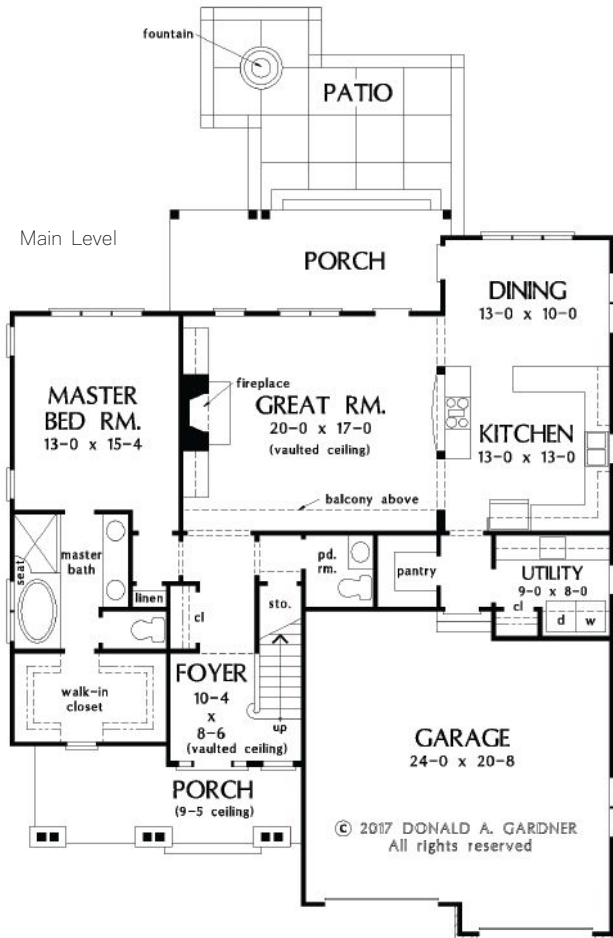
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Cover Home

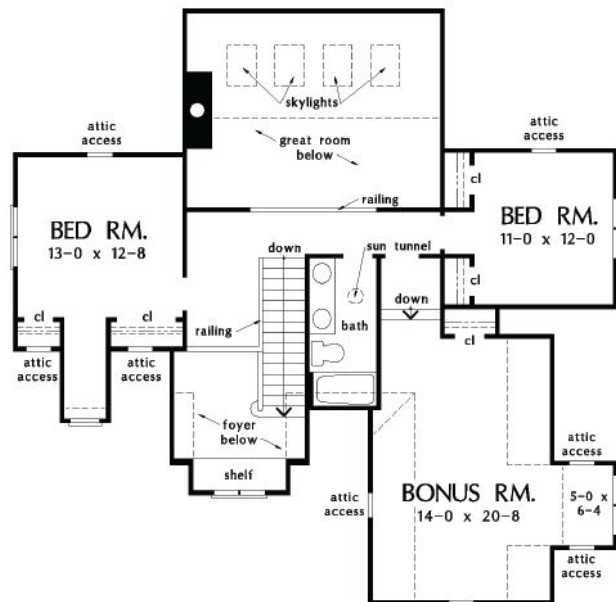


PLAN CODE: 929-1066
Style: Cottage
Square Footage: 2,110
Bonus Space: 379
Bedrooms: 3
Bathrooms: 2.5
Dimensions: 47' 8" x 57' 4"

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Second Level



MAIN-LEVEL MASTER

With a large master suite on the main level, this plan is designed to work well into the future. The living area flows over to the island kitchen, open dining room, and out to the spacious back porch. Upstairs, two additional bedrooms, a bonus space, and a bathroom reside. Don't miss the cozy fireplace in the great room!



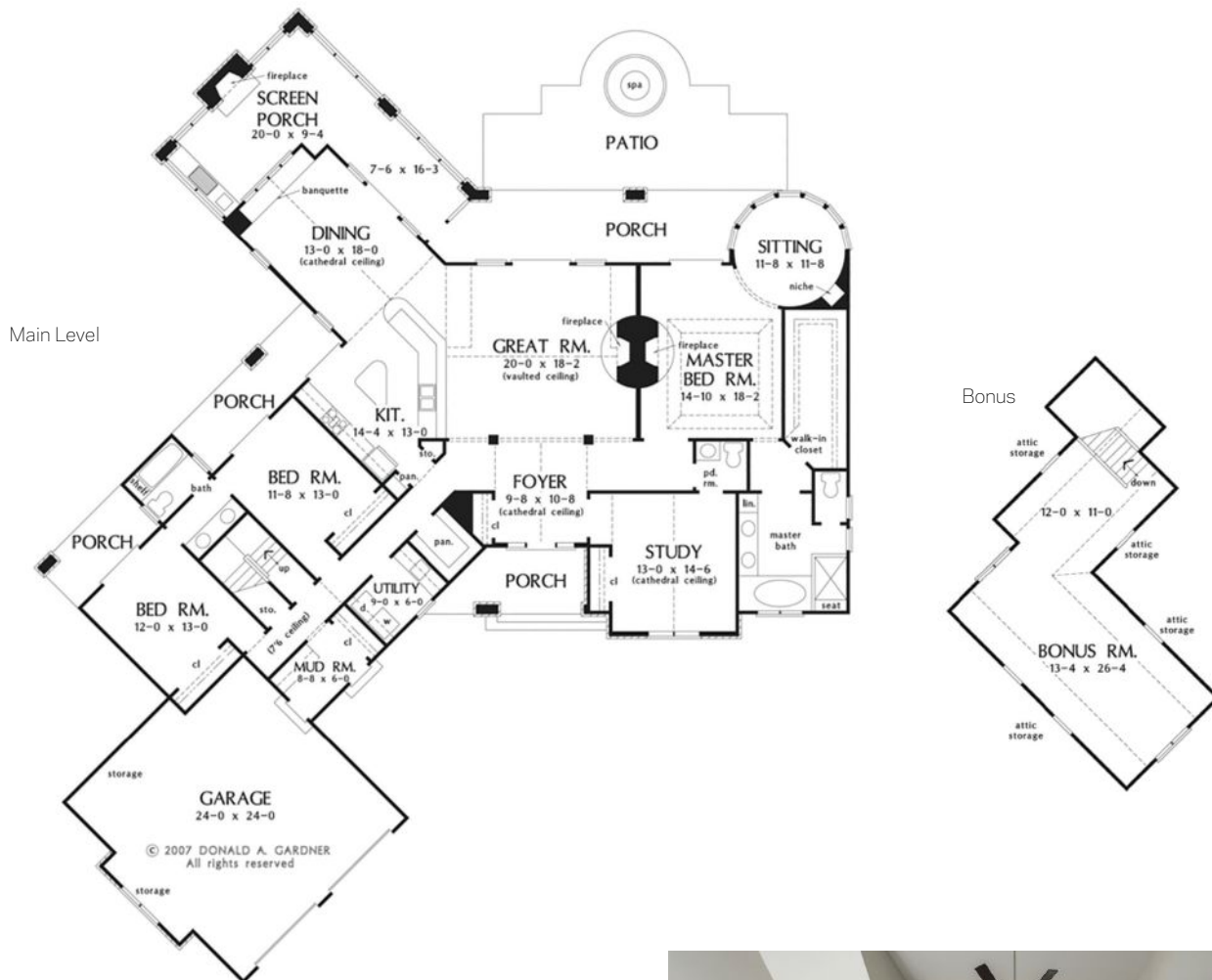
Photos courtesy of Donald A. Gardner Architects, Inc.. This home, as shown in the photograph, may differ from the actual blueprints. For more detailed information, please check the floor plans carefully.

Feature Home



PLAN CODE: 929-903
Style: European
Square Footage: 2,817
Bedrooms: 3
Bathrooms: 2.5
Dimensions: 85' 7" x 102' 5"

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IMPRESSIVE SNACK COUNTER

Our favorite parts of this design make everyday life feel special, from the kitchen's impressive snack counter to the big screen porch with a fireplace. A unique round sitting room in the master suite gives you a bright spot for reading. Porches connect to every bedroom for easy outdoor enjoyment. Keep things clean and tidy with the handy mudroom just off the two-car garage. Next to the foyer, a study could be used in a myriad of ways.



Photos courtesy of G. Frank Hart Photography. This home, as shown in the photograph, may differ from the actual blueprints. For more detailed information, please check the floor plans carefully.

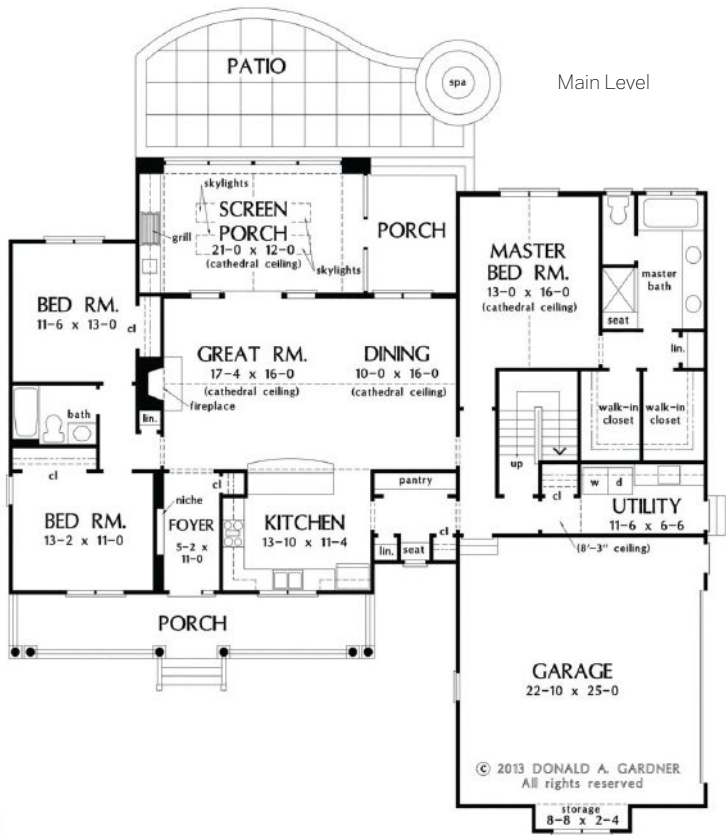


MAJOR CURB APPEAL

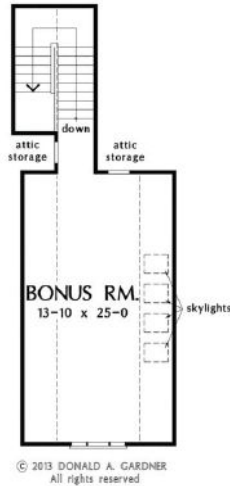
A welcoming front porch and prominent gables deliver major curb appeal to this modern farmhouse. The great room and dining area boast cathedral ceilings and open to the spacious screen porch, which features a built-in grill. A mudroom off the garage includes an extra-large pantry, closets, and a seat for taking off shoes. The master suite features two walk-in closets, linen storage, and a spacious bathroom with two sinks.

PLAN CODE: 929-8
Style: Farmhouse
Square Footage: 1,905
Bonus Space: 472
Bedrooms: 3
Bathrooms: 2
Dimensions: 65' 4" x 63' 2"

Photos courtesy of Donald A. Gardner Architects, Inc. This home, as shown in the photograph, may differ from the actual blueprints. For more detailed information, please check the floor plans carefully.

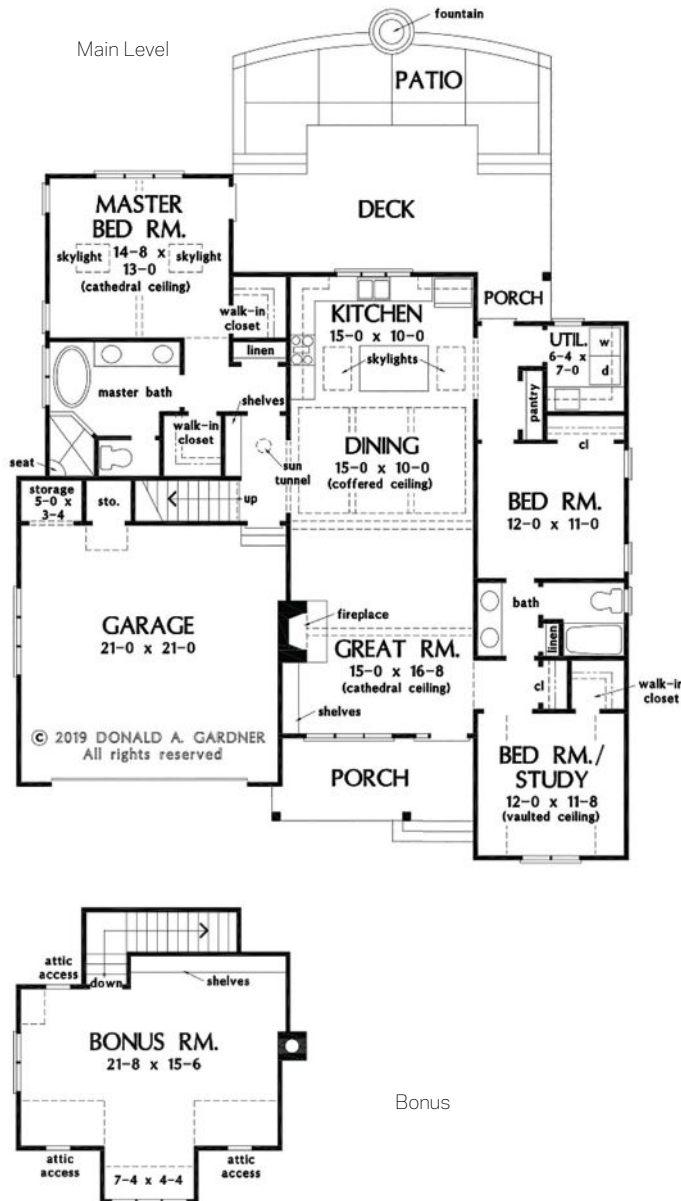


Bonus



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Standout Farmhouse Designs



STYLISH AND COMPACT

This stylish 1,678-square-foot design features a simple, compact footprint. Inside, you'll find a remarkably open layout with lots of special amenities, like ceiling treatments, skylights, and a cozy fireplace. The master suite stands out with a spacious private bathroom that boasts two sinks, a separate tub, and a large shower (a modern must-have). Upstairs, a bonus room offers additional storage or space for relaxation.

PLAN CODE: 929-1095

Style: Farmhouse

Square Footage: 1,678

Bonus Space: 360

Bedrooms: 3

Bathrooms: 2

Dimensions: 50' x 60'

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Standout Farmhouse Designs



PLAN CODE: 929-1086

Style: Farmhouse

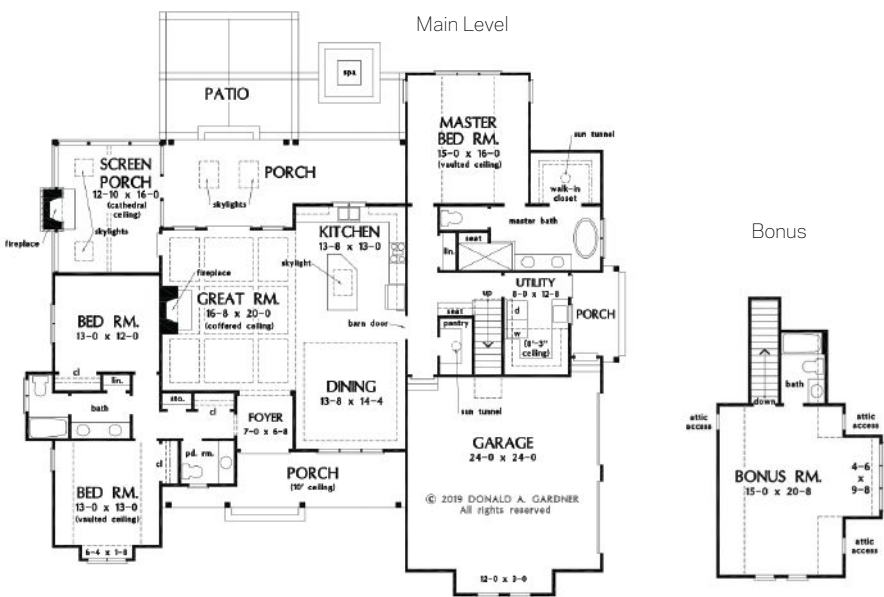
Square Footage: 2,258

Bonus Space: 430

Bedrooms: 3

Bathrooms: 2.5

Dimensions: 74' X 65' 4"



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TRENDY AND CLASSIC



PLAN CODE: 929-1082

Style: Farmhouse

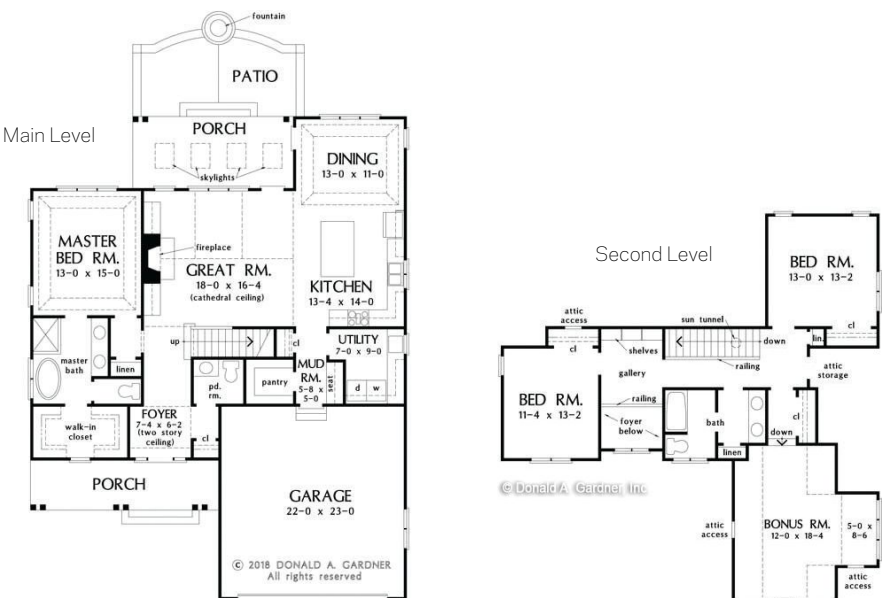
Square Footage: 2,118

Bonus Space: 320

Bedrooms: 3

Bathrooms: 2.5

Dimensions: 45' 4" x 58' 4"



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COOL FEATURES

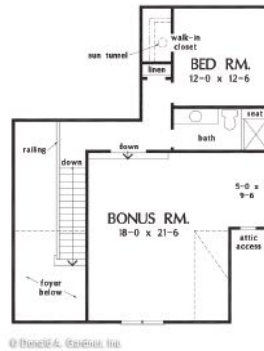
Standout Farmhouse Designs



Main Level



Second Level



PLAN CODE: 929-1081

Style: Farmhouse

Square Footage: 2,479

Bonus Space: 456

Bedrooms: 4

Bathrooms: 3

Dimensions: 47' 8" x 62' 10"

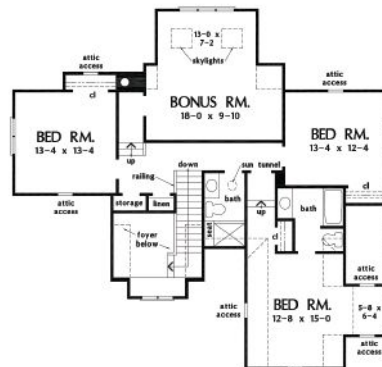
SIMPLE LAYOUT

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Main Level



Second Level



PLAN CODE: 929-1075

Style: Farmhouse

Square Footage: 2,607

Bonus Space: 283

Bedrooms: 4

Bathrooms: 3.5

Dimensions: 49' 8" x 59'

SPECIAL FEATUTURES THROUGHOUT

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Standout Farmhouse Designs



PLAN CODE: 929-1070

Style: Farmhouse

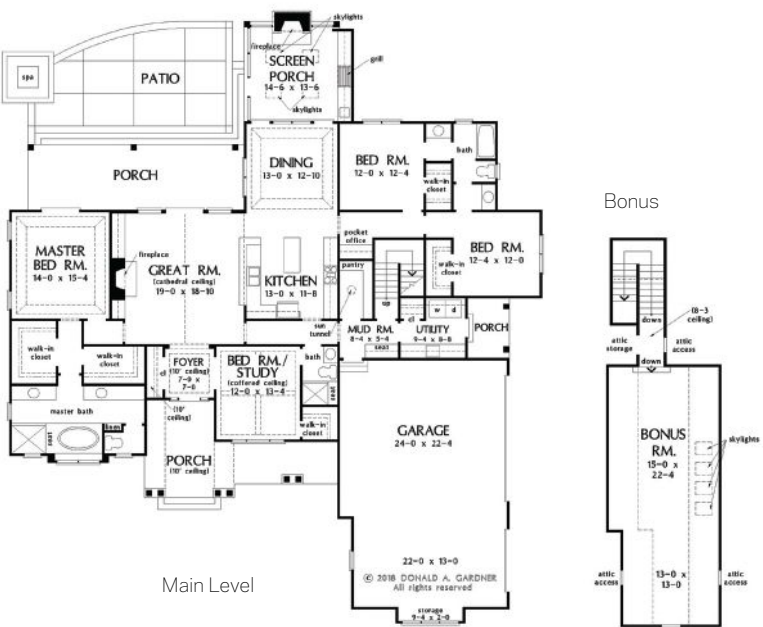
Square Footage: 2,494

Bonus Space: 640

Bedrooms: 4

Bathrooms: 3

Dimensions: 76' 4" x 87' 7"



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SLEEK ONE-STORY



PLAN CODE: 929-1064

Style: Farmhouse

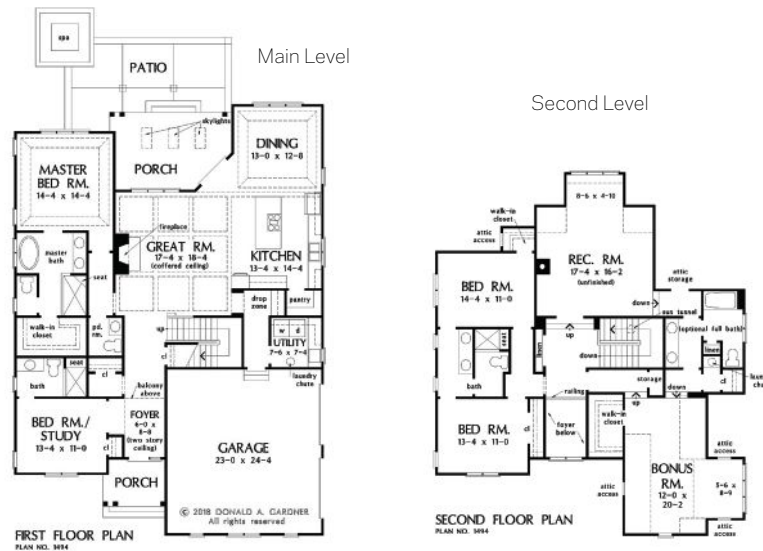
Square Footage: 2,885

Bonus Space: 576

Bedrooms: 4

Bathrooms: 3.5

Dimensions: 46' x 64'

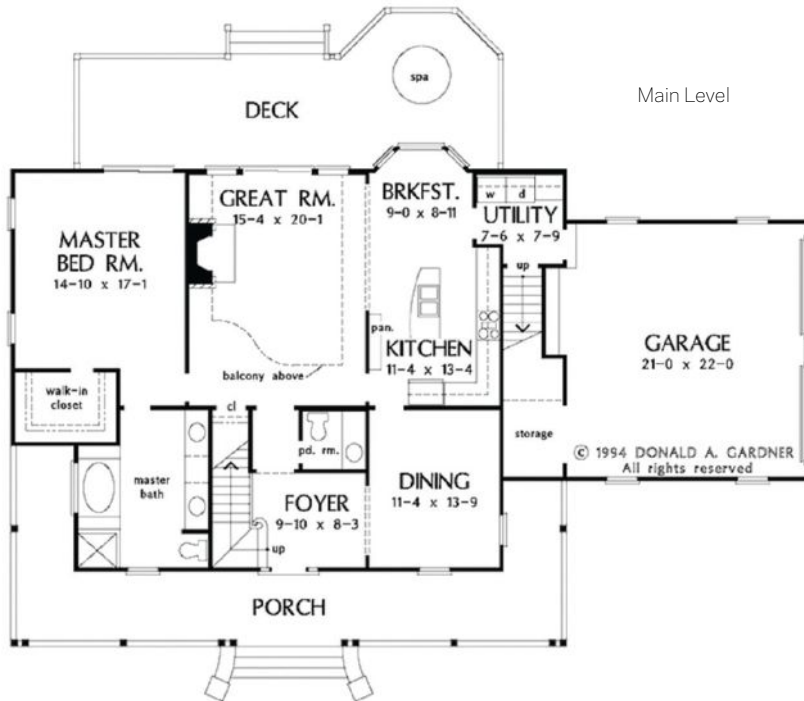


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CONTEMPORARY AND VERSATILE

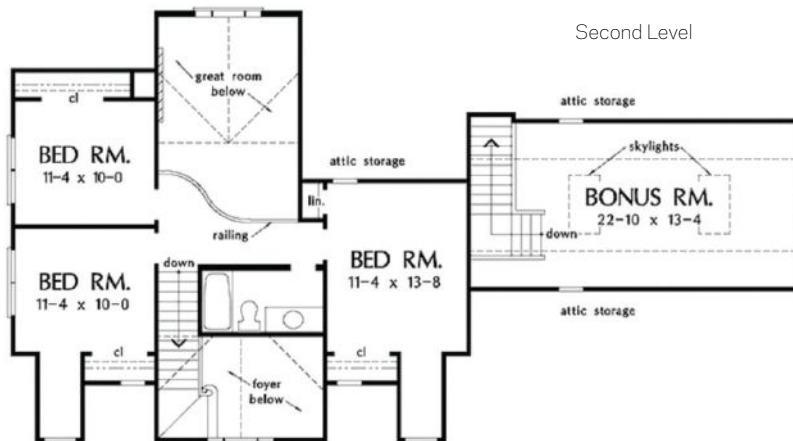


Standout Farmhouse Designs



WARM HOME APPEAL

The warm home appeal of this country house plan is as apparent inside as it is out. An open layout between the kitchen and great room creates an easygoing feel. A large pantry keeps groceries organized in the island kitchen. Tucked away on the left side of the floor plan, the private master suite features deck access, a large walk-in closet, and dual sinks. Three additional bedrooms, a full bath, and bonus space reside on the second level.



PLAN CODE: 929-215

Style: Farmhouse

Square Footage: 2,164

Bonus Space: 380

Bedrooms: 4

Bathrooms: 2.5

Dimensions: 69' 8" x 40' 6"

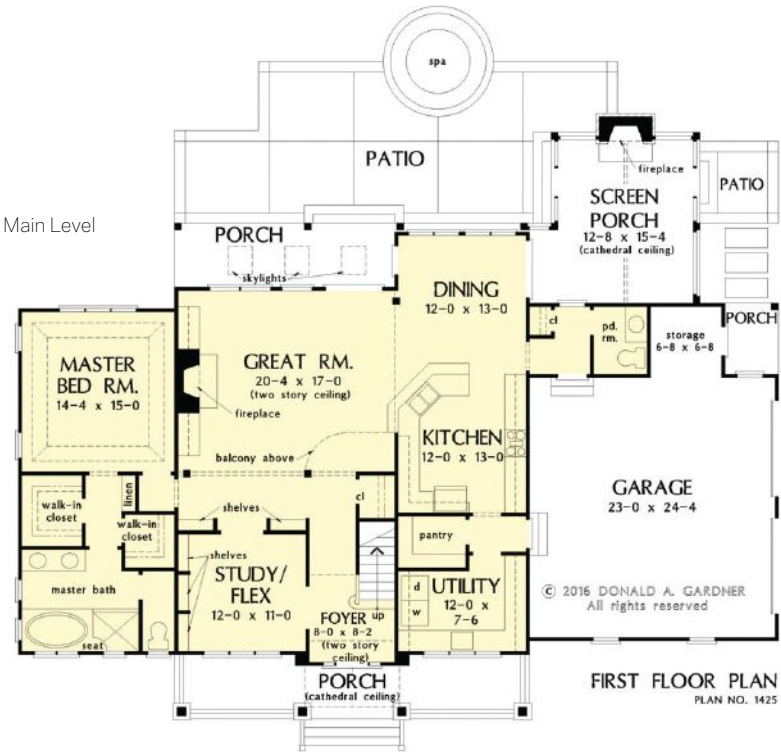
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LARGE BONUS ROOM

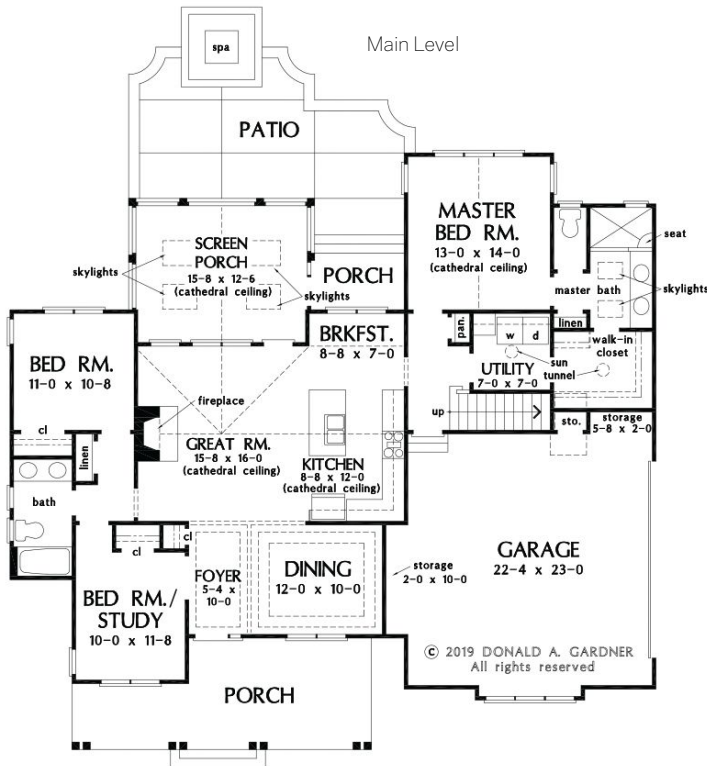
With 2,546 square feet and a flexible study, this farmhouse design works well for many different homeowners. Located on the main level, the master suite offers privacy, along with a well-equipped bathroom and two walk-in closets. Upstairs, three additional bedrooms (one of them a suite, perfect for an older child or live-in relative) enjoy easy access to the large bonus room. A screened porch sports a fireplace and stretches outdoor living into multiple seasons.

PLAN CODE: 929-1039
Style: Farmhouse
Square Footage: 2,546
Bonus Space: 393
Bedrooms: 4
Bathrooms: 3.5
Dimensions: 71' 4" x 56' 6"



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2,200 Square Feet and Under



CONVENIENT LAUNDRY ROOM

This 1,578-square-foot layout feels surprisingly upscale, from the spacious screened porch in back to the impressive ceiling treatments that draw the eye up in the great room and dining area. Here's a thoughtful touch: the master suite's large walk-in closet opens directly into the laundry room to simplify chores. The third bedroom near the front makes an equally useful study, with doors opening out to the foyer and another to the hallway for greater privacy.

PLAN CODE: 929-1094

Style: Ranch

Square Footage: 1,578

Bonus Space: 400

Bedrooms: 3

Bathrooms: 2

Dimensions: 59' x 54' 6"



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Builder House Plans

2,200 Square Feet and Under



PLAN CODE: 929-1089

Style: Ranch

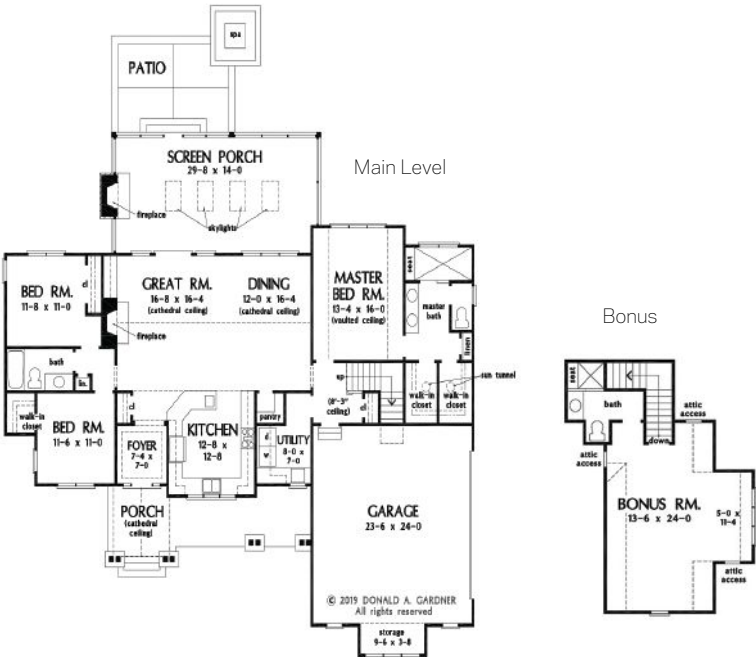
Square Footage: 1,853

Bonus Space: 463

Bedrooms: 3

Bathrooms: 2

Dimensions: 69' 6" x 63' 8"



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TWO MASTER CLOSETS



PLAN CODE: 929-1024

Style: Ranch

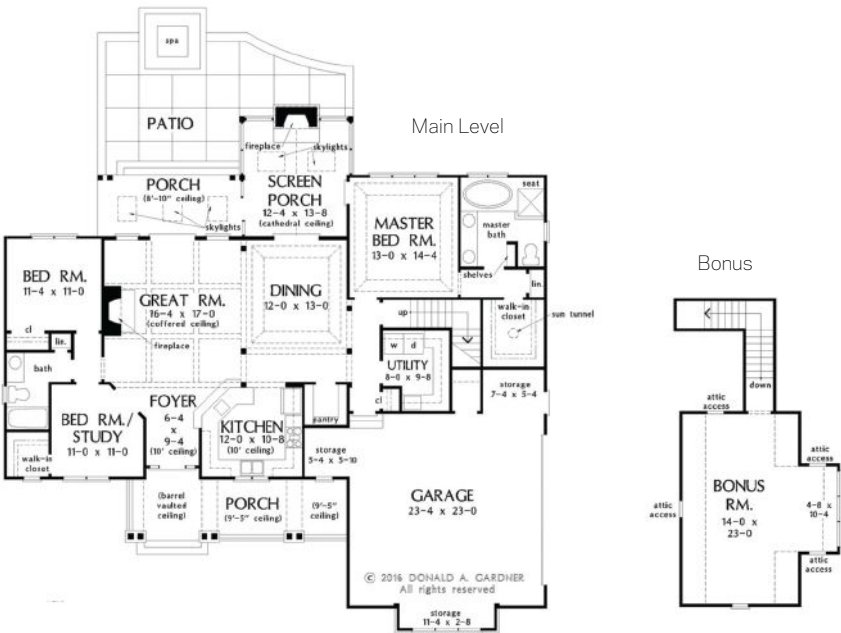
Square Footage: 1,729

Bonus Space: 472

Bedrooms: 3

Bathrooms: 2

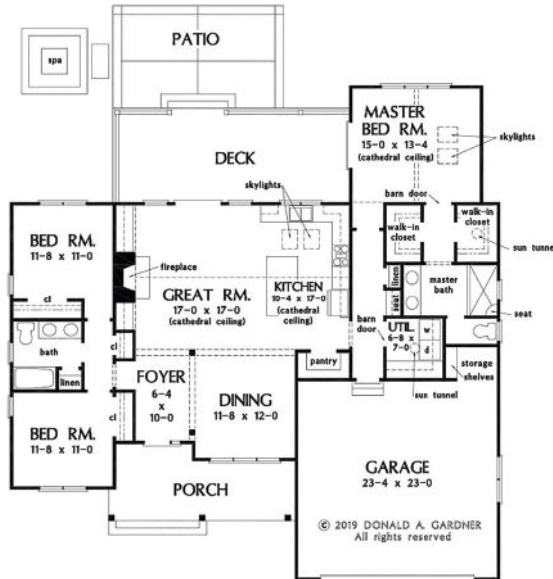
Dimensions: 65' x 62' 10"



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SWEET SCREENED PORCH

2,200 Square Feet and Under



PLAN CODE: 929-1091

Style: Ranch

Square Footage: 1,730

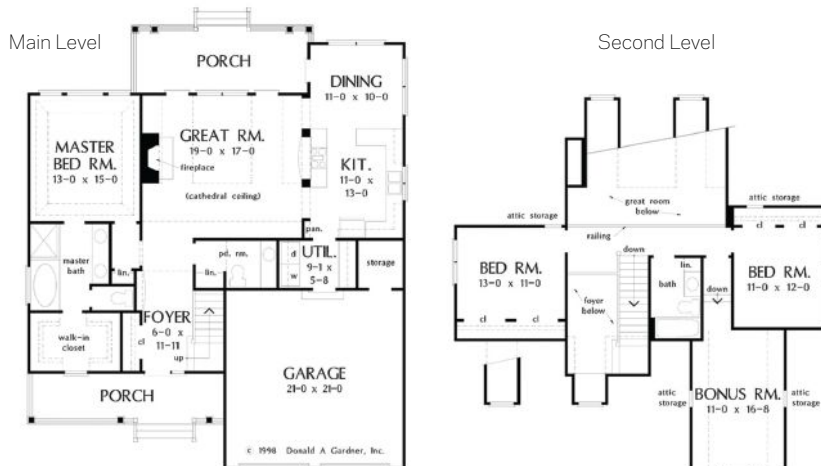
Bedrooms: 3

Bathrooms: 2

Dimensions: 57' 4" x 58'

MODERN DETAILS

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PLAN CODE: 929-532

Style: Country

Square Footage: 1,859

Bonus Space: 225

Bedrooms: 3

Bathrooms: 2.5

Dimensions: 45' x 53'

WELCOMING FRONT PORCH

Builder House Plans

2,200 Square Feet and Under



PLAN CODE: 929-1093

Style: Cottage
Square Footage: 1,839
Bonus Space: 355
Bedrooms: 3
Bathrooms: 2
Dimensions: 44' x 73' 4"



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BIG ISLAND KITCHEN



PLAN CODE: 929-1090

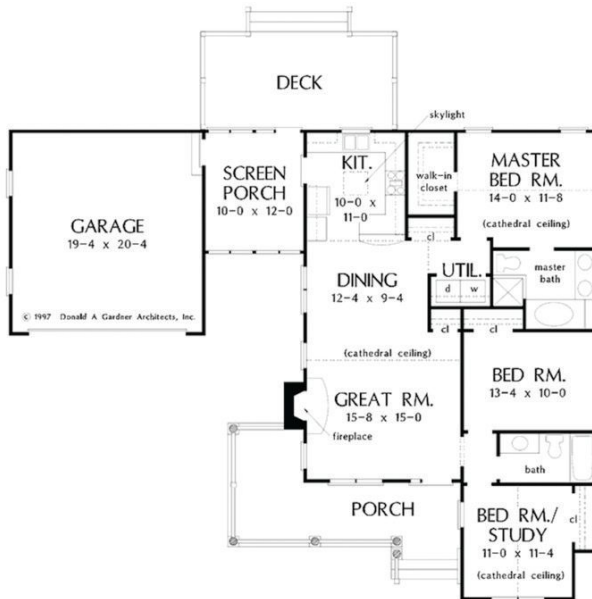
Style: Ranch
Square Footage: 1,651
Bonus Space: 408
Bedrooms: 3
Bathrooms: 2
Dimensions: 53' 8" x 56'



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COUNTRY-INSPIRED DESIGN

2,200 Square Feet and Under



PLAN CODE: 929-47

Style: Country

Square Footage: 1,246

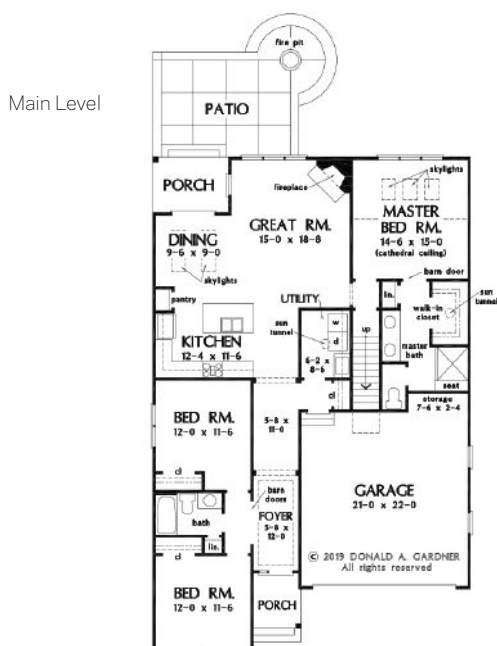
Bedrooms: 3

Bathrooms: 2

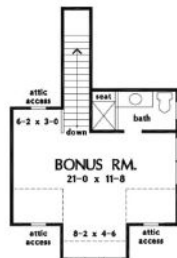
Dimensions: 60' x 48'

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Bonus



PLAN CODE: 929-1083

Style: Cottage

Square Footage: 1,661

Bonus Space: 443

Bedrooms: 3

Bathrooms: 2

Dimensions: 40' x 62' 2"

SLIM-LOT DESIGN



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Builder House Plans

2,200 Square Feet and Under



PLAN CODE: 929-1092

Style: Cottage
Square Footage: 1,428
Bedrooms: 2
Bathrooms: 2.5
Dimensions: 44' x 62' 4"



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SPACIOUS GREAT ROOM



PLAN CODE: 929-1084

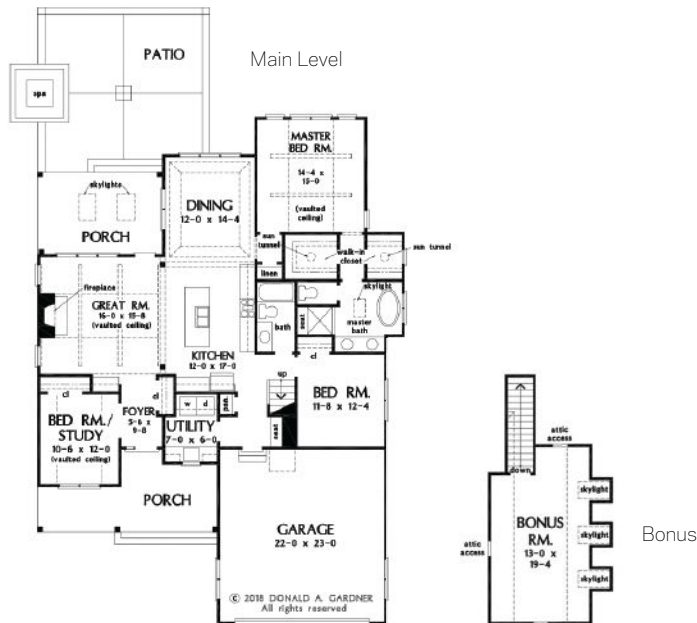
Style: Cottage
Square Footage: 1,948
Bonus Space: 300
Bedrooms: 3
Bathrooms: 2
Dimensions: 50' 8" x 77' 4"



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ELEGANT AND MODERN

2,200 Square Feet and Under



PLAN CODE: 929-1076

Style: Country

Square Footage: 1,779

Bonus Space: 326

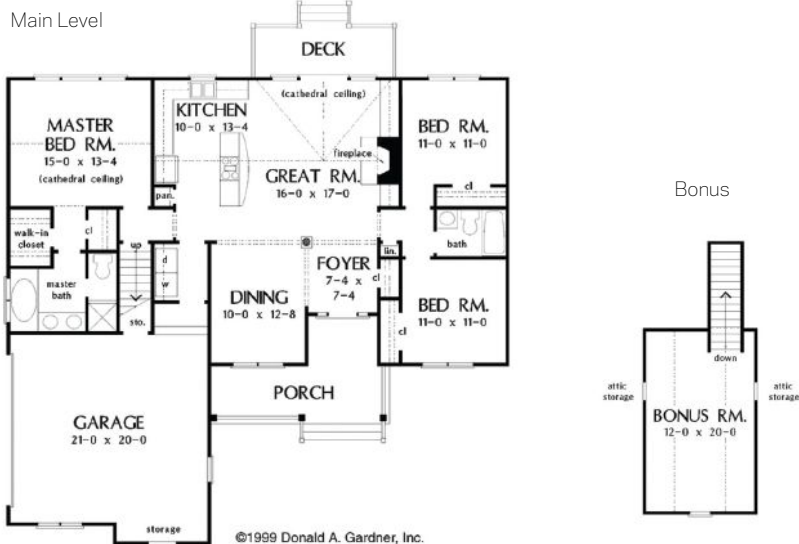
Bedrooms: 3

Bathrooms: 2

Dimensions: 49' x 67' 8"

UPSCALE MASTER SUITE

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PLAN CODE: 929-428

Style: Craftsman

Square Footage: 1,473

Bonus Space: 297

Bedrooms: 3

Bathrooms: 2

Dimensions: 53' 4" x 49' 8"

PRACTICAL CRAFTSMAN DESIGN

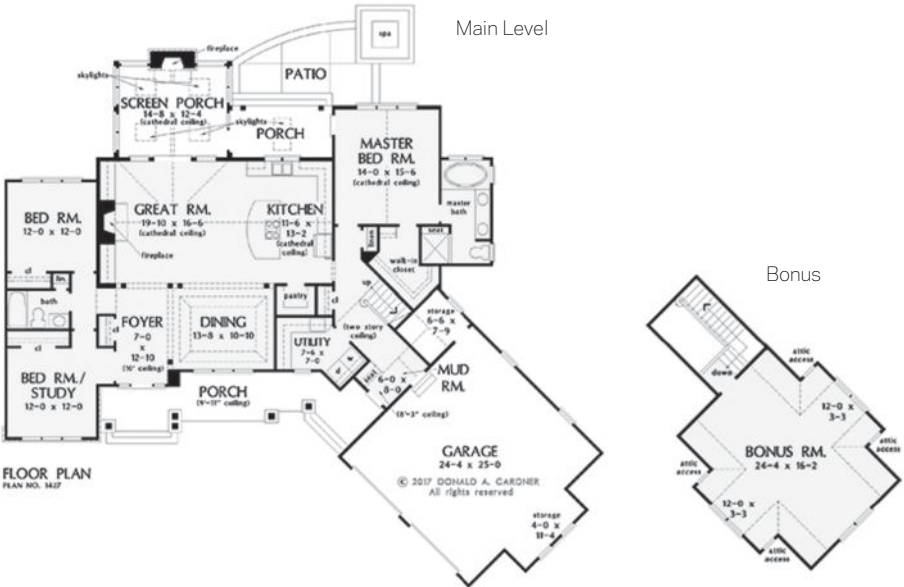


Photos courtesy of G. Frank Hart Photography. This home, as shown in the photograph, may differ from the actual blueprints. For more detailed information, please check the floor plans carefully.

2,200 Square Feet and Under



PLAN CODE: 929-1040
Style: Craftsman
Square Footage: 2,025
Bonus Space: 500
Bedrooms: 3
Bathrooms: 2
Dimensions: 80' 9" x 72' 4"

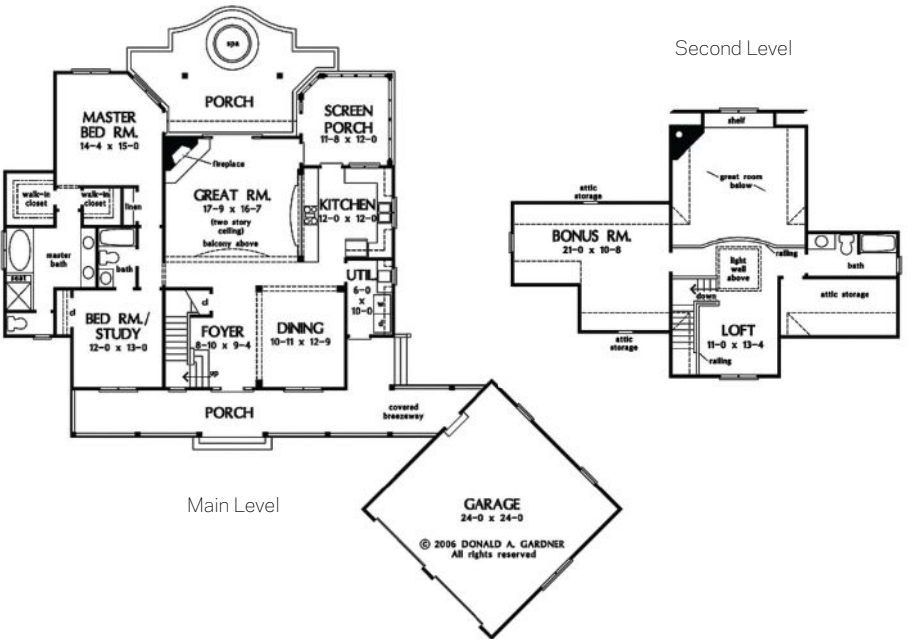


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FUNCTIONAL MUDROOM



PLAN CODE: 929-807
Style: Country
Square Footage: 2,018
Bonus Space: 320
Bedrooms: 2
Bathrooms: 3
Dimensions: 82' 10" x 76' 2"

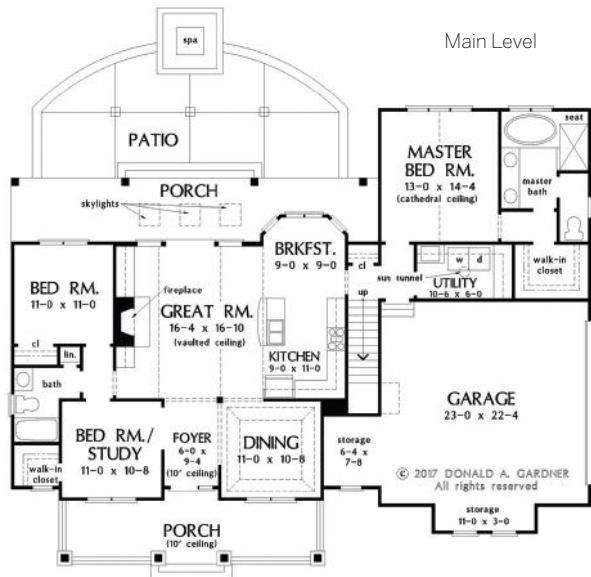


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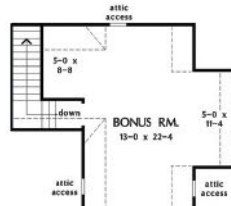
Photos courtesy of Donald A. Gardner Architects, Inc. This home, as shown in the photograph, may differ from the actual blueprints. For more detailed information, please check the floor plans carefully.

STUNNING EXTERIOR

2,200 Square Feet and Under



Bonus



PLAN CODE: 929-1055

Style: Farmhouse

Square Footage: 1,645

Bonus Space: 417

Bedrooms: 3

Bathrooms: 2

Dimensions: 64' 4" x 50' 4"

VERSATILE LAYOUT

Order online at builderhouseplans.com
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PLAN CODE: 929-1013

Style: Ranch

Square Footage: 1,908

Bedrooms: 3

Bathrooms: 2

Dimensions: 53' x 77' 10"

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ABUNDANT COUNTER SPACE

Spa-Like Master Bathrooms



BRIGHT AND OPEN

This luxurious layout places five bedrooms on one easy-to-get-around level, making it suitable for growing families. One of the bedrooms sits near the front and can easily convert to a study when needed. In the deluxe master suite, a sitting room opens to the porch, while a large shower adds a contemporary touch to the bathroom. Three more bedrooms (each with a walk-in closet) occupy the opposite side of the home. Everyone can meet in the middle at the kitchen's extra-wide island or in the spacious great room. A fireplace warms the screened porch for multi-season outdoor relaxation. For extra storage or perhaps a home office, the bonus spaces upstairs can be finished to hold over 1,000 square feet.

PLAN CODE: 929-1009

Style: European

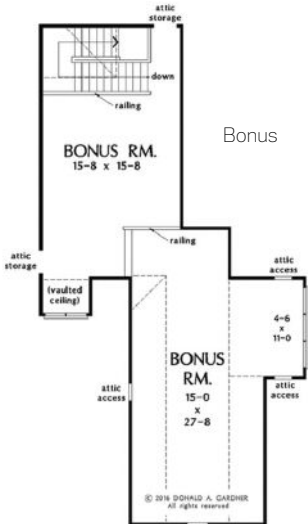
Square Footage: 3,360

Bonus Space: 1,018

Bedrooms: 5

Bathrooms: 4

Dimensions: 88' 8" x 78'



Photos courtesy of Donald A. Gardner Architects, Inc. This home, as shown in the photograph, may differ from the actual blueprints. For more detailed information, please check the floor plans carefully.

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Spa-Like Master Bathrooms



UNEXPECTED AMENITIES

It's all about the unexpected amenities inside this two-story ranch style home design. First, take a look at the kitchen, where a wide island and plenty of counter space make it easy to cook up something good. The master suite treats homeowners to two sinks, a large shower, and a tub with a view. Other highlights include the spacious screened porch, handy mudroom, and generous bonus space.

PLAN CODE: 929-1087

Style: Ranch

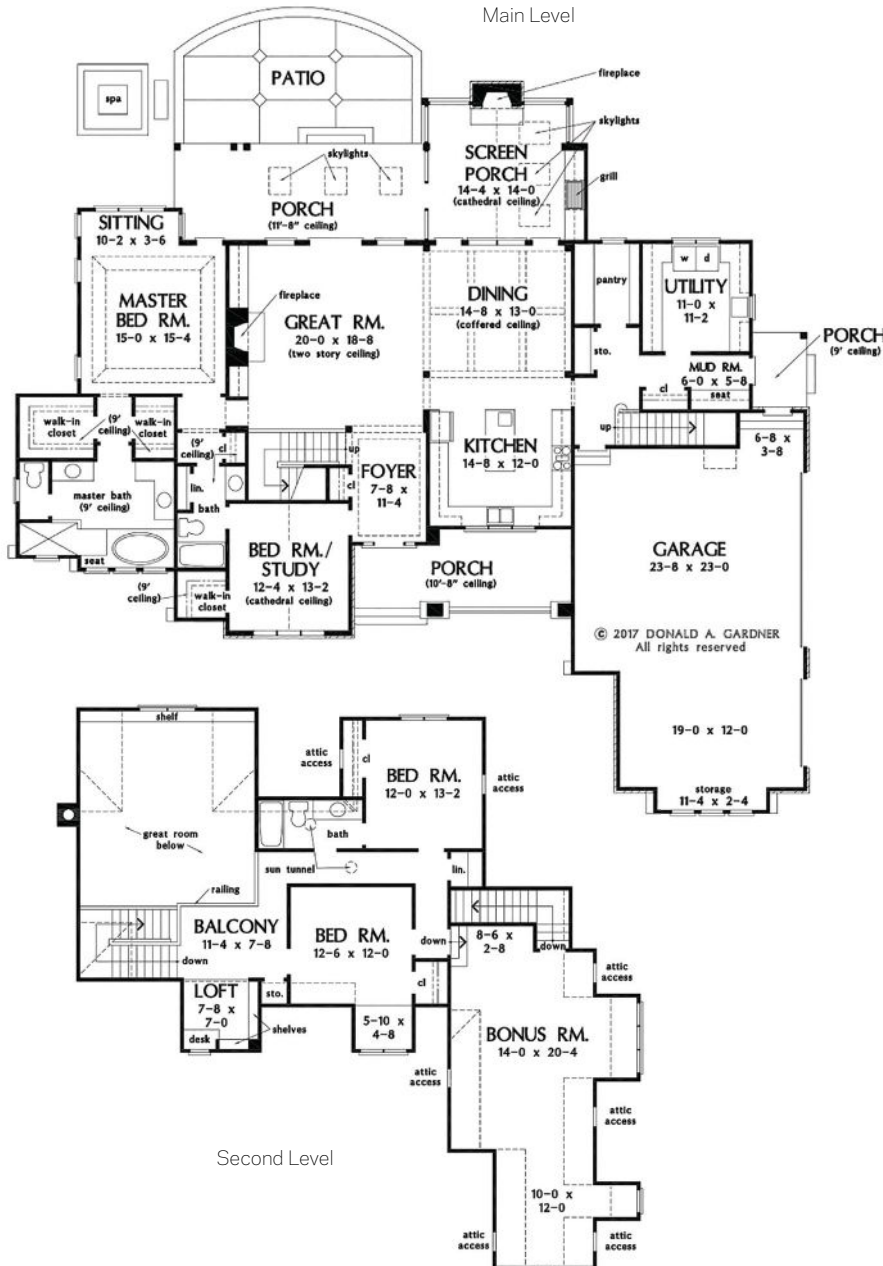
Square Footage: 3,075

Bonus Space: 525

Bedrooms: 4

Bathrooms: 3

Dimensions: 82' 6" x 75' 4"



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Spa-Like Master Bathrooms



COMPACT DESIGN

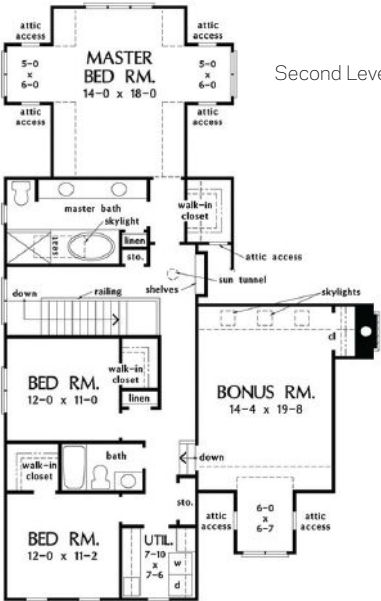
Building on a smallish lot? Not a problem. This compact design makes good use of square footage with an open layout. Special touches include decorative ceiling treatments in the great room and dining area, a luxurious master bath, bright nooks in the master suite, and skylights in the versatile bonus room.

PLAN CODE: 929-1073
Style: Traditional
Square Footage: 2,588
Bonus Space: 368
Bedrooms: 3
Bathrooms: 2.5
Dimensions: 40' x 68' 2"

Main Level



Second Level



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Spa-Like Master Bathrooms



ROOM FOR EXPANSION

Elegant details reveal themselves throughout this one-story design, from beautiful ceiling treatments to extra storage. A versatile study can become a home office or guest suite, while a bonus room offers even more space for storage or expansion upstairs. Located to the left of the floor plan, the private master suite boasts not one, but two walk-in closets.

PLAN CODE: 929-1008

Style: European

Square Footage: 3,378

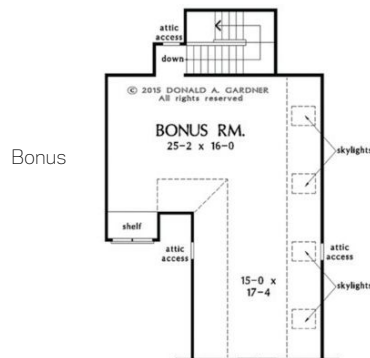
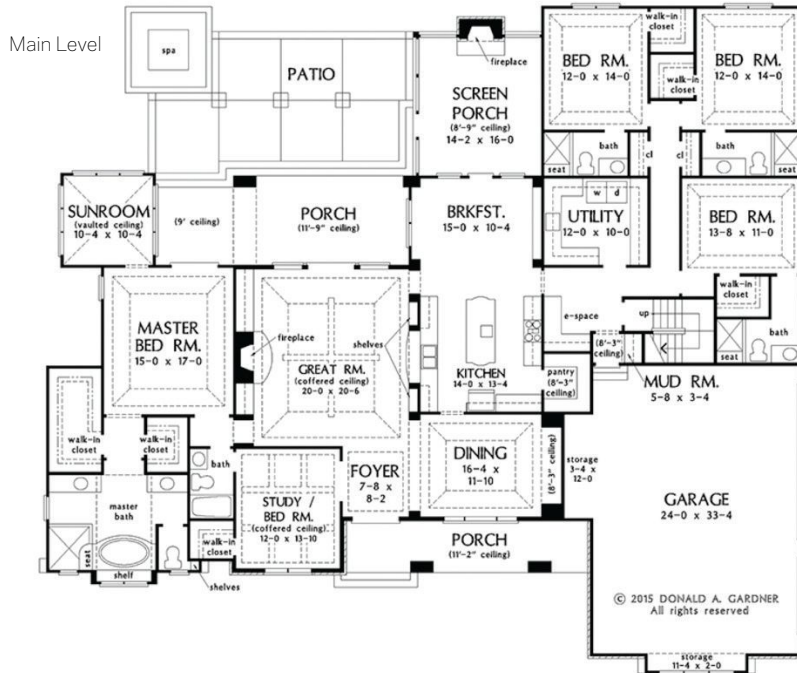
Bonus Space: 813

Bedrooms: 5

Bathrooms: 5

Dimensions: 88'6" x 77'4"

Photos courtesy of Tyler Shearer, Shearer Photo + Video. This home, as shown in the photograph, may differ from the actual blueprints. For more detailed information, please check the floor plans carefully.



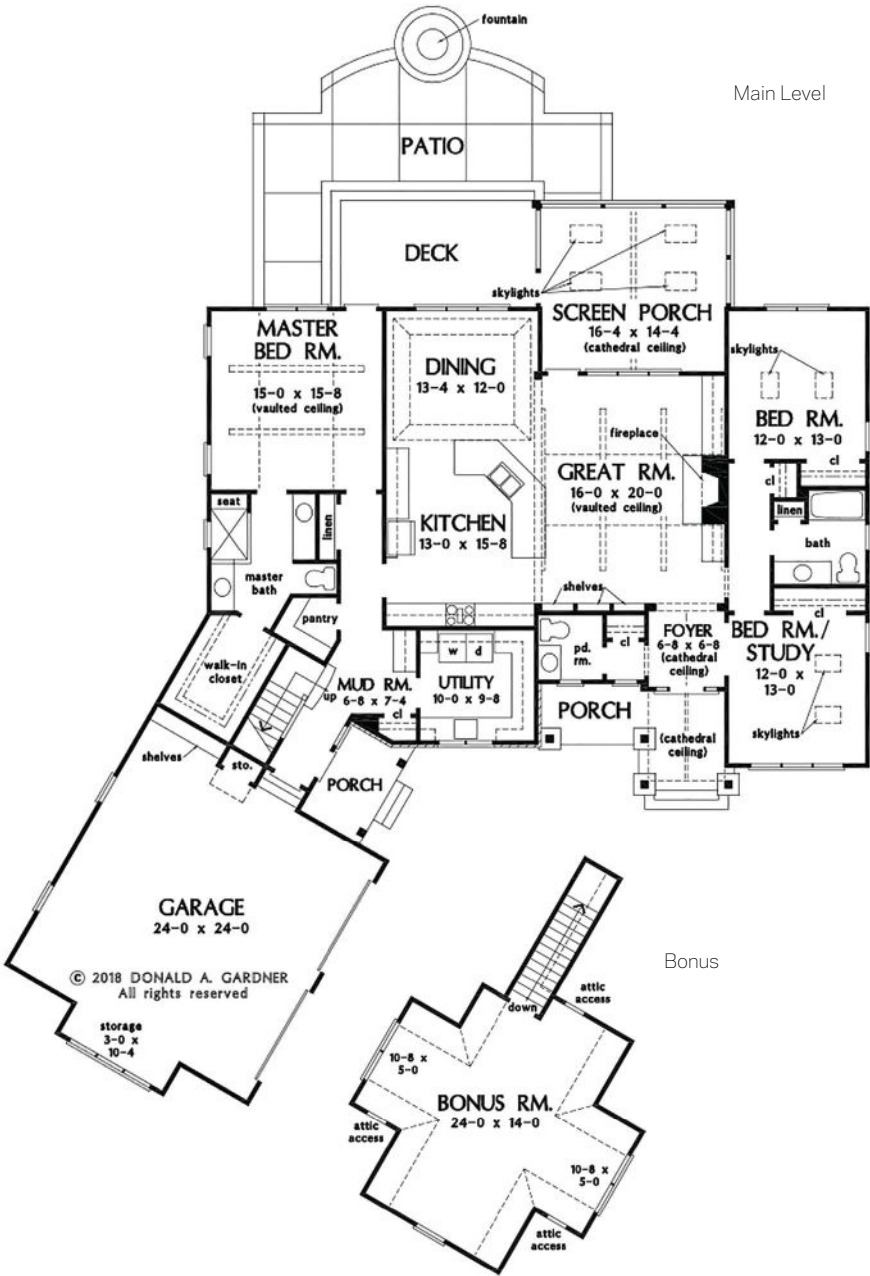
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**OPTIONS
ABOUND**

Highlights of this attractive ranch home include skylights on the screened porch, a spacious kitchen, and a cozy fireplace in the great room. A bonus room above the two-car garage allows homeowners to expand now or later. The handy mudroom keeps things organized, while a laundry room provides plenty of folding space.

PLAN CODE: 929-1088
Style: Ranch
Square Footage: 2,134
Bonus Space: 459
Bedrooms: 3
Bathrooms: 2.5
Dimensions: 75' 10" x 79' 4"



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Stylish Outdoor Living



PLAN CODE: 929-1085

Style: Ranch

Square Footage: 1,754

Bonus Space: 394

Bedrooms: 3

Bathrooms: 2

Dimensions: 65' 8" x 65'

OPEN AND RELAXED

**Order online at builderhouseplans.com
or call 1.800.634.4773**



PLAN CODE: 929-1005

Style: Ranch

Square Footage: 2,494

Bonus Space: 640

Bedrooms: 4

Bathrooms: 3

Dimensions: 76' 4" x 87' 7"

EASY PORCH ACCESS

Stylish Outdoor Living



PLAN CODE: 929-1077

Style: Farmhouse

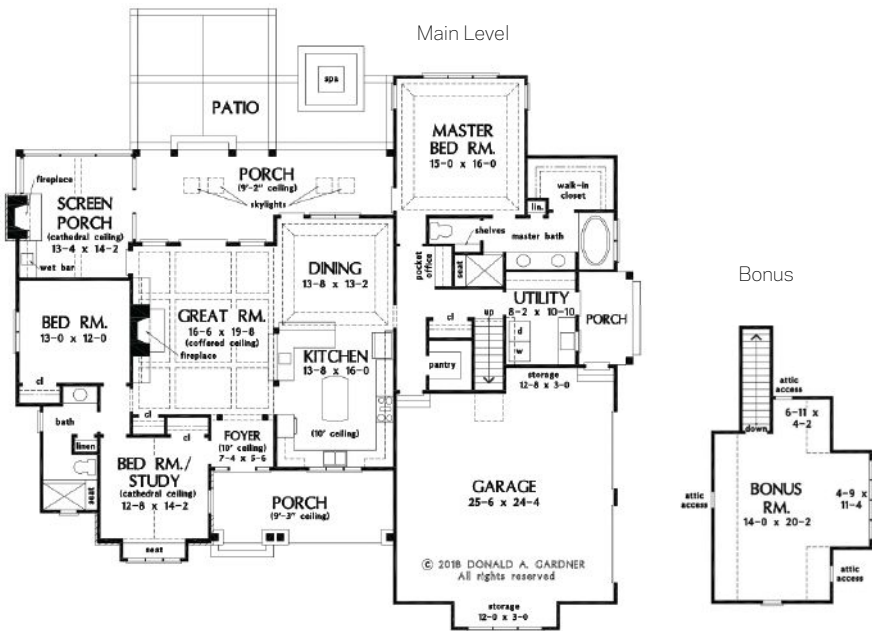
Square Footage: 2,115

Bonus Space: 391

Bedrooms: 3

Bathrooms: 2

Dimensions: 73' 3" x 64' 10"



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FUN OUTDOOR SPACE



PLAN CODE: 929-1074

Style: Contemporary

Square Footage: 2,798

Bedrooms: 4

Bathrooms: 3.5

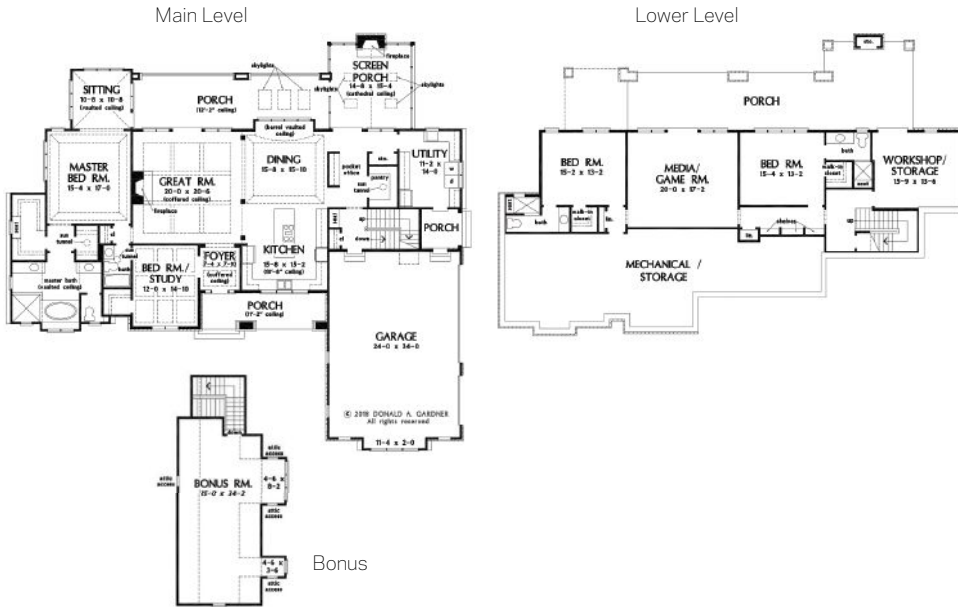
Dimensions: 82' 8" x 94' 4"



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EFFICIENT LAYOUT

Stylish Outdoor Living



PLAN CODE: 929-1072

Style: Craftsman

Square Footage: 3,822

Bonus Space: 580

Bedrooms: 4

Bathrooms: 4

Dimensions: 84' 3 x 76'

MULTIFUNCTIONAL ROOMS

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PLAN CODE: 929-1025

Style: Craftsman

Square Footage: 2,239

Bonus Space: 566

Bedrooms: 4

Bathrooms: 3

Dimensions: 69' x 81' 6"

TONS OF COUNTER SPACE



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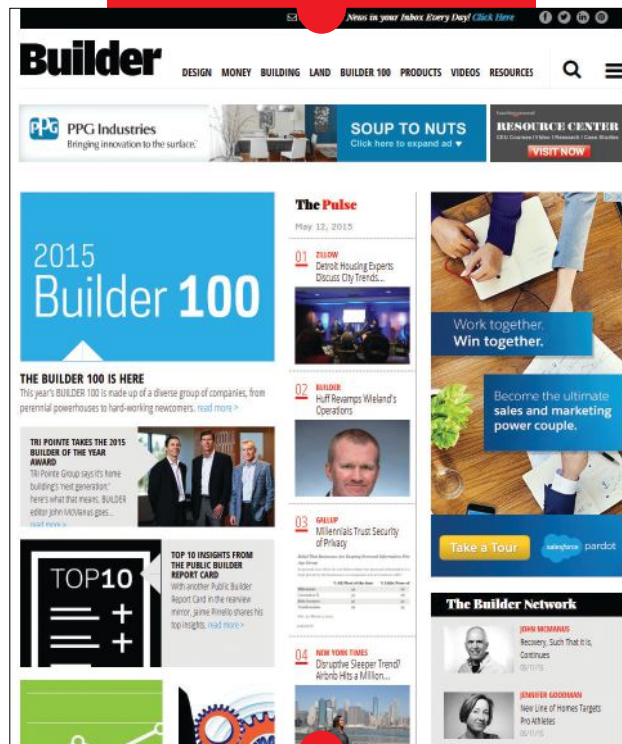
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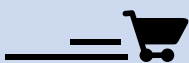






INSTANT

GRATIFICATION



WITH LARGE AMOUNTS OF CASH
FLOWING INTO PROPERTY TECHNOLOGY,
WILL INSTANT BUYING,
MACHINE LEARNING, AND ARTIFICIAL
INTELLIGENCE HELP BOOST
NEW-HOME SALES?

by **ROBYN GRIGGS LAWRENCE** illustrations by **JASON SCHNEIDER**

M

MIKE KALIS WAS SELLING HOMES FOR PULTEGROUP

when the Detroit housing market fell apart in 2006, a precursor to the national crisis to come. Hungry for sales, he began paying close attention to what worked and what didn't in Pulte's process. It quickly became obvious that helping buyers unload their current homes would go a long way toward selling more new ones.

Kalis put together a group of local investors willing to pay cash for existing homes, allowing buyers to use the margin to purchase the Pulte home of their dreams. Realizing he was on to something, Kalis started Marketplace Homes—which partners with home builders to buy and sell new-home buyers' existing homes, sight unseen, within 24 hours—in his basement.

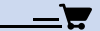
"At that time, that was so crazy," says Kalis, who helped sell more than 10,000 new homes during his tenure at Marketplace, which he left at the start of the new year to oversee a build-to-rent division of Allen Edwin Homes. "It took 13 years to become the next big thing."

Despite Marketplace's success, instant buying or iBuying was a pretty foreign concept to most home buyers and builders until recent years, as a handful of venture-backed, algorithm-driven companies offering similar services have burst onto the scene and built awareness with huge marketing money. Redfin entered the iBuying space with Redfin Now in 2017. The following year, Zillow grabbed headlines when it brought its \$658 million in cash to the table with home-buying service Zillow Offers—another step in its quest to control all aspects of real estate transactions, from initial search to closing.



A full-on disruption in how new homes are sold has—finally—begun. By decentralizing the process of buying and building a new home and putting more control into consumers' hands, technology is streamlining home buying and selling and creating unprecedented transparency. Investors are pouring money (\$14 billion in the first half of 2019, according to research firm CRETech) into property technology—what Silicon Valley calls “proptech”—as the real estate sector is one of the last industries to be digitized. Three serious iBuyers—Opendoor, Offerpad, and Knock—are duking it out in with Zillow and Redfin for control of the space.

“We may have been a bit starry-eyed and more than a little naïve,” Redfin co-founder David Selinger told Medium in 2017, “but from day one, every member of the team knew one thing: the current real estate market was all about serving the



profit needs of the agent, not about the customer, and changing that would mean changing the most important financial decision for families. Forever.”

But some change takes time. “This consumer revolution, which puts buyers in the driver’s seat, has been slower than many of us envisioned,” says Tyson Kirksey, vice president of digital marketing for Dallas-based Highland Homes. People have only recently gotten comfortable hopping in a car with a stranger for a ride across town, an idea they would have balked at 10 years ago, Kirksey says. But when it comes to buying a home—typically the largest purchase most people ever make—“they still want to do it the way their parents did it because it worked for them,” he notes.

With unprecedented access to sales history and pricing information, home buying has become easier and more efficient. But getting a home ready to sell is another story. Knowing how to price a home correctly and finding reliable professionals to help sell it remains cumbersome. Some call it the next frontier for the real estate industry.

them (and financing the deal).

In servicing home buyers, Knock works closely with the major builders in the five markets it’s in (Atlanta; Charlotte and Raleigh-Durham, N.C.; Dallas-Fort Worth; and Phoenix), Ziegler says. “We can basically allow builders to convert any contingent buyer instantly so they’re not walking out of the sales office. Builders spend thousands of dollars getting valuable customers to walk into sales center, and the last thing you want is those customers walking back out because they need to sell their home first. But it happens all the time.”

Chandler, Ariz.-based Offerpad, which has seen growth triple year over year since it blazed onto the scene in Phoenix in 2015, is in more than 500 cities and plans to be in 2,100 cities in and around metro areas across the country by the end of 2020. Builders including Meritage, Maracay, M/I Homes, Pulte, and Trendmaker have partnered with Offerpad, and Orlando, Fla.-based Maronda Homes is an exclusive partner, meaning Offerpad presents offers on

Technology is streamlining HOME BUYING AND SELLING AND CREATING UNPRECEDENTED TRANSPARENCY.

Consumers Take Control

ONCE BUYERS HAVE FOUND A HOME, THE MOST common derailment to closing has traditionally been the sale of their existing home. Marketplace competitors Opendoor, Offerpad, and Knock are beating down home builders’ doors with offers to help eliminate that contingency.

New York and San Francisco-based Knock, which was launched by two Trulia founders in 2015, aims to make trading in a home as simple as trading in a car, says Allan Ziegler, Knock’s head of business development. Unlike Opendoor and Offerpad, which partner with new-home builders to buy existing homes outright, Knock focuses on representing individual buyers and sellers through the entire home buying and selling process—helping them find a home, buying it for them with cash, selling their old home after they’ve moved into the new one, and then selling the new home back to

potential buyers’ existing homes within an hour (instead of 24 to 48 hours)—so they have numbers in hand before they’ve even left the sales office—and gives them up to 270 days (instead of 180) to close, a flexible closing date, and a free local move.

New homes account for about 15% of transaction volume at San Francisco-based Opendoor, which was founded in 2014 to enable home buyers and sellers to transact instantly online. Founded on the premise that home sellers should never have to move twice, Opendoor provides competitive cash offers with flexible close dates that can be synced with the new-home closing. “This business is growing 25% to 50% month over month, and builders love it as much as consumers do,” says Nate Harbacek, Opendoor’s head of business development. “It’s really powerful for a builder to have a solution for contingent buyers when they walk into a sales center.”

TECH MOVES IN

As proptech continues to gain traction, here are a few sites and services that intend to disrupt the housing industry

ATLANT uses a blockchain platform to simplify and streamline real estate operations, eliminating intermediaries for transactions such as ownership transfers and title validation. atlant.io

BETTER MORTGAGE CORP. is a mortgage website that gets home buyers rate quotes in seconds and preapproves them in minutes. The site, which aims to be the Amazon of homeownership, facilitates signing of all required documents online. better.com

BEYCOME provides online access to all necessary steps, logistics, and transactions people need to rent or close on a home. beycome.com

DIVVY HOMES buys homes for people and leases them back, with a portion of the rent going into escrow for a down payment to purchase the home in three years. divvyhomes.com

HOMIE automates and streamlines real estate transactions and provides a central team of real estate agents, mortgage brokers, lawyers, and other professionals necessary to buy and sell a home. Currently operating in Arizona and Utah, Homie has plans to expand nationwide. homie.com

PURPLEBRICKS combines end-to-end customer-facing technology with local real estate experts, allowing people to sell homes for a flat fee regardless of house value. purplebricks.com

REAL ESTATE EXCHANGE (REX) uses artificial intelligence, big data, targeted digital marketing, bots, and

human agents to buy and sell homes for a 2% commission. Rex uses proprietary algorithms to find and target people who may be interested in buying homes and matches them with houses based on their social media profiles, among other things. rexhomes.com

RIBBON HOME lends money to home buyers in New York, North Carolina, South Carolina, and Tennessee so they can make cash offers for 1.95% of the purchase price. The company has plans to soon expand into 10 more markets. ribbonhome.com

RICHR eliminates the need for real estate brokers by providing home buyers and sellers with the tools and databases they use (including the MLS) in Florida, with plans to expand into New York and California soon. richr.com

RULISTING lets sellers find and send messages to buyers and renters who are interested in their areas and connects them for private transactions. rulisting.com



Lennar CEO Stuart Miller noted in a recent BUILDER article that a “less stressful home sale will make homeowners more apt to move up to a new home.” Lennar worked with Opendoor as a pilot partner in 2018.

“When we take friction out of the transaction side of the business and create that transaction with ease in a condensed period of time, we take the fear out of buying a home,” Miller says, adding that if builders can help create a more seamless process, “it starts to increase the number of people that come to the new-home market and the number of transactions. That will trickle through the entire housing market, all the way up to the new-home builders.”

Opendoor buys and sells nearly 3,500 homes in 21 markets every month (more than one in two sellers accept the company’s offers, it says) and has partnered with 19 of the top 25 home builders, including Lennar, Pulte, and Taylor Morrison. The company has 30 staff people—with varying backgrounds from operations to sales to business development—dedicated to serving builders.

An investor favorite, Opendoor has raised \$1.3 billion in total equity and \$3 billion in debt financing so far. Lennar co-led a \$325 million Series E funding round and spent a year and a half working with the company to create a “trade-up” program that lets buyers request cash offers on their existing home and coordinate the closings of both.

“Our increased investment in this round is a reflection of our enthusiasm for the opportunities that lie ahead—which are incredibly exciting,” states Lennar president and chief operating officer Jon Jaffe.

“Everything we’re doing is to provide more and more control to the consumer,” says Cortney Read, director of communications and outreach for Offerpad. “They’re used to having control with things like Amazon, Netflix, and Uber, and that’s finally transitioned over to real estate.”

‘Swipe Right’ Home Shopping

EVEN BEFORE KALIS STARTED BUYING UP HOMES from his basement, digital real estate marketplaces Zillow, Trulia, and Redfin had started to push home buyers online, at least for initial searches. As those sites gained traction, people got comfortable looking for homes and finding comps for their own homes in the digital realm. Today, according to the 2018 J.D. Power Home Buyer/Seller Satisfaction Study, 88% of buyers begin their searches online, though the vast majority still turn to a real estate agent to handle the actual purchase.



**88%
of
buyers**
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SEARCHES
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THOUGH
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PURCHASE.

—J.D. POWER
HOME BUYER/SELLER
SATISFACTION STUDY

Home buyers want new homes—67% say they’re considering new construction—but they’re frustrated with real estate sites and services that don’t make it easy to find them, says Tim Costello, CEO of Builders Digital Experience (BDX).

In a recent survey of home shoppers and recent home buyers in 43 top markets for new-home sales, BDX found that 48% of shoppers who start their search preferring new construction end up buying an existing home when they run into friction. In response, enter HomLuv.com, a recommendation engine that leverages machine learning and artificial intelligence to help home shoppers discover their needs and design style by liking images of kitchens, great rooms, exteriors, and other spaces from new homes in their area and price range. The site, of which BDX is the parent company, then recommends homes based on those likes.

“HomLuv was designed to reduce the impact of friction points—to make the home-buying process easier for the consumer, and builder, and help builders increase new-home sales,” Costello says.

Home shoppers don’t want—or have time—to wade through the hundreds and sometimes thousands of unfiltered and uncategorized search results that come up when they enter a location, number of bedrooms and baths, and price range into traditional online real estate marketplaces, says Jay McKenzie, director of consumer insights and research for BDX, yet “since the dawn of the internet, the paradigm for searching for a home online had not changed”—even though buyers have.

Mark Law, a BDX vice president who led the HomLuv launch team, says millennial home buyers spend more time online looking at “visual assets” (photos) than “logical data” such as the number of bedrooms and bathrooms and square footage. They’re posting and curating their preferences on sites such as Houzz and Pinterest, but those products, Law, says, are roads to nowhere.

“They don’t get you to a builder, a community, or a house you can afford,” he says. “People create these champagne collections, but they have Coca-Cola budgets as millennials. That’s really not helping you shop.”

So while iBuying can help contingent home buyers sell their homes more quickly, sites like HomLuv can help buyers zero in on not only what they want and can afford in their new home but also which builders can provide it.

BDX launched HomLuv with a database of 100,000 homes across the U.S. listed on its digital listing service NewHomeSource.com. Users like and dislike images from those homes, giving HomLuv’s AI and crowdsourcing technology the data it needs to

create a profile on them and start selecting and curating available homes they’re likely to swipe right on.

“With HomLuv, you’re looking at and liking images real quick, you’re entertaining yourself,” Costello says. “While you have fun, it’s working for you, finding products you’re going to love.” Younger consumers have come to expect this, Costello adds, unlike boomers, who are simply “amazed it’s all online to begin with.” He says 90% of digital native Gen Z buyers would consider purchasing homes online.

When HomLuv shoppers match with builders, they can go check them out at BDX’s TrustBuilder, a third-party ratings and review site for new-home buyers. HomLuv’s builder partners get data on how shoppers are interacting with their photos and reports on everything from popular paint colors to what they searched for first (kitchens and master bedrooms most often, FYI, not the exteriors that builders typically highlight).

One-quarter of the builders on NewHomeSource, including KB Home, Pulte, Meritage, and Toll Brothers, have signed on to be part of TrustBuilder, and a sizable number is also using HomLuv. KB Home CEO Jeffrey Mezger says he values HomLuv because it helps home buyers “better decide exactly what they want in their dream home, and we can partner with them to bring that home to life.”

BDX is also leveraging NewHomeSource’s photo library with InScene, an AI engine that spits out instant insights about photos that builders can use to improve SEO, understand items in each room, access data quality, create interactive images that allow shoppers to try out different options, and even include links to sell furnishings and finishes from model homes.

“We help builders understand if their imagery is capturing the elements shoppers have said they want to see,” Law explains. “One-third of consumers going into Google jump immediately into image search. Are you tagging and representing your photos in such a way that Google will find them when someone searches for white kitchen counters in Austin?”

Highland Homes uses InScene, and Kirksey says it has been beneficial in helping all 700 employees, whether they work in purchasing, sales, or architecture, search for, filter, and access the more than 100,000 photos in the company’s library. “It’s been a real game changer,” he says. **B**

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Clear Definition

NAHB supports the new Navigable Waters Protection Rule

by **DEAN MON, NAHB CHAIRMAN OF THE BOARD**

AN EXCESSIVELY BROAD DEFINITION OF “waters of the U.S.” (WOTUS) slowed and restricted new development for years, needlessly driving up housing costs.

That’s why home builders were pleased when EPA Administrator Andrew Wheeler took the stage during the International Builders’ Show in Las Vegas to announce a final rule that resolves decades of uncertainty over where federal jurisdiction on U.S. waterways begins and ends. Wheeler noted that the new “Navigable Waters Protection Rule” is good for the economy and the environment.

NAHB has advocated for years for a clearer, more sensible definition of WOTUS. Existing rules added years and, in some cases, hundreds of thousands of dollars to the home building process.

The new rule builds upon President Donald Trump’s promise to rescind the 2015 WOTUS ruling, one that vastly expanded federal overreach regarding water and land use by regulating man-made ditches and isolated ponds on private property. The rule had also been subject to several legal challenges that halted its implementation nationwide.

For example, in August 2019, the U.S. District Court for Georgia issued a decision finding that the substance of the 2015 rule violated the Clean Water Act. In September 2019, EPA and the Army Corps of Engineers repealed it and reinstated a rule that had been finalized in 1986. The 1986 rule also suffered from ambiguity and was challenging to implement at varying development sites.

Now, for the first time, EPA and the Corps recognize the difference between federally protected waters and state-protected waters.

The new rule adheres to the statutory limits of the agencies’ authority. It also ensures that America’s water protections—among the best in the world—remain strong, while giving states the certainty to manage their land and water in ways that protect both their natural resources and their local economies.

The revised definition identifies four categories of waters that are federally regulated under the Clean Water Act: territorial seas and traditional navigable waters; perennial and intermittent tributaries; certain lakes, ponds, and impoundments; and wetlands that are adjacent to jurisdictional waters. These categories protect the nation’s navigable waters and the core tributary systems that flow into those waters.

With the new rule now finalized, builders

and developers will be better able to determine for themselves whether they will need federal permits for construction activities.

The new rule replaces the 1986 rule and narrows the extent of federal jurisdiction by excluding isolated water bodies, most ditches, and “ephemeral” waters that only form in response to rain. As a result of the new rule excluding these features, builders and developers should now require fewer federal wetlands permits under the Clean Water Act.

The new rule is a win for the home building industry, but the work is not finished. We will continue to work with the Trump administration and Congress to implement the new WOTUS rule and overcome more regulatory hurdles that harm our industry and drive up housing costs.

63 MILLION HOUSEHOLDS CAN'T AFFORD A \$250,000 HOME

In January, NAHB released new priced-out estimates for 2020. The estimates require a household income distribution along with some standard assumptions about the cost of a mortgage, property taxes, and property insurance. NAHB then judges affordability by applying the conventional underwriting standard that these costs should not exceed 28% of household income. The calculations can be used to count how many households have enough income to afford a home at various price thresholds. If looking at a pyramid, at the base are 25.4 million U.S. households with insufficient incomes to

afford a \$100,000 home. The pyramid's second “step” consists of 20 million U.S. households with enough income to afford \$100,000 but not \$175,000, and so on.

Adding up the bottom three steps of the pyramid shows there are 63 million U.S. households (out of a total of roughly 120 million) who are unable to afford a \$250,000 home. This helps put affordability concerns into perspective. NAHB reported in the fall that 49% of buyers are looking to buy homes priced under \$250,000.

For the full study on priced-out estimates, visit HousingEconomics.com.

HVAC in New Homes

Industry developments lead to changes in heating and cooling system selection for builders

by HOME INNOVATION RESEARCH LABS

TEN YEARS AGO, MANY THOUGHT RISING ENERGY COSTS AND MORE stringent energy efficiency regulations would spell doom for all-electric heating systems while sparking the market for natural gas and geothermal heating systems. But that hasn't happened.

Why? First, modest energy prices have prevailed, and heating loads for homes has declined due to improved efficiency of the building envelope. Second, single-family homes are getting smaller, and they're more likely to be one level rather than two or more. Third, there's been a surge in "exurb" development, neighborhoods in outlying large metropolitan areas, away from the city and often without access to piped gas.

Home Innovation conducts an Annual Builder Practices Survey, which results in product category reports, including "HVAC Systems in New Homes." Assessing a discrete market like this year over year reveals interesting shifts. Gas furnaces show a modest decline over the past four years, and heat pumps seem to be growing slightly along with electric-resistance and other alternatives.

Electric resistance heating is historically down over the past few decades. However, data shows its market share heating up slightly in

the past few years to about 6% of new single-family detached homes using it as the primary heating source. With building envelope improvements in housing, heating loads are declining, keeping electric resistance a cost-effective option for some areas of the U.S.

A new industry "norm" is affecting HVAC selection in ways we haven't seen before. Home affordability is on the decline, owing largely to the increased cost of building a new home. As the construction labor shortage worsens, builders report continuing increases in costs for subcontracted labor and materials. This results in more installation of systems with lower initial costs, such as traditional split-system heat pumps and electric resistance heating. By installing all-electric heat pumps, for example, builders avoid the gas hook-up fee, save on the cost for running a gas line from the curb to the house, and eliminate the need to include gas lines and account for exhausting combustion gases in the home. This is especially compelling as efficiencies of heat pumps continue to rise, making them a viable choice for cooler climates.

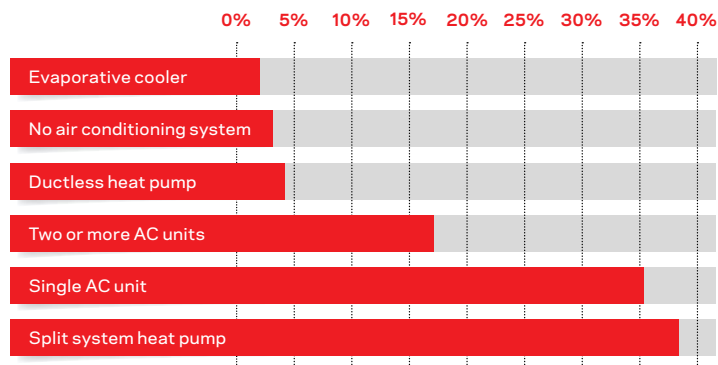
Among heat pumps installed, data reveals that electric backup systems are on a growth pattern while gas backup systems are trending flat. Ductless heat pumps, long popular in HVAC retrofits, are just now starting to capture share in new homes. And geothermal systems, while quiet and efficient, have lost share in the past few years—likely due to higher initial cost.

With air conditioning, single AC unit systems are regaining popularity over using two or more AC units in a new home. There are a few key reasons for this: 1) the increased popularity of mini-splits with multi-zones; 2) the decline in the share of two-story new homes; and 3) a decline in the average size of new homes combined with reduced cooling loads due to a more efficient thermal envelope, making dual AC units too large to efficiently cool the home.

Builders report an increase in more energy-efficient systems as well—not just from increasing energy efficiency regulations for HVAC equipment, but also due to above-code, ultra-high efficiency AC systems. For example, 22% of homes built in 2018 had 17 SEER systems compared with 12% five years earlier.

For more about the building product categories tracked via our survey, contact Ed Hudson, director of market research, at 301.430.6305.

COOLING SYSTEMS IN NEW SINGLE-FAMILY HOMES, 2018



Source: Home Innovation Research Labs Annual Builder Practices Survey



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Confidence Builder

The Housing Market Index indicates that builders are bullish and ready to expand production as new decade begins

by **ROBERT DIETZ, NAHB CHIEF ECONOMIST**

SINCE 1985, THE NAHB/WELLS FARGO HOUSING MARKET INDEX (HMI) has been a reliable indicator of home builder market sentiment and a useful gauge of future construction growth. The data for the past decade reveal the pattern and duration of the long recovery for home building following the destructive impacts of the Great Recession. The HMI is a 100-point scale, with scores above 50 indicating that more builders report positive market conditions. The index is created from a sample of hundreds of builders.

At the start of 2010, the HMI was at a level of 15 as market demand remained weak, development financing was very tight, and macroeconomic conditions were poor. The HMI was at a data series low point of 8 in January 2009, when market conditions were the most difficult. The index showed a limited rebound, rising to 22 in spring 2010, near the end of the home-buyer tax credit period. The credit was a stimulus measure, which increased home sales by 10% to 20% while active. However, with the end of the tax

credit, the HMI deteriorated to a level of 14 by September 2011.

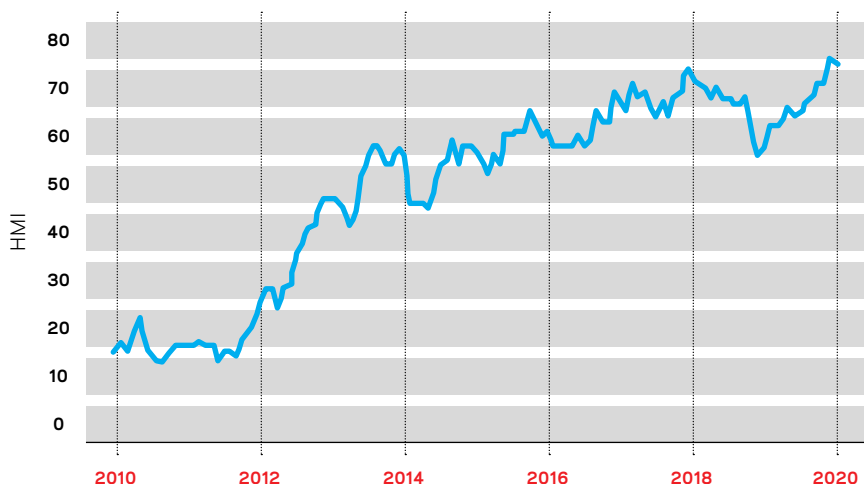
It was in fall 2011 when an organic recovery took hold. The HMI, and single-family construction, rose through 2013. In fact, the HMI reached the key break-even sentiment level of 50 for the first time in seven years in June 2013.

The HMI has since been trending higher along with single-family starts, which increased from 619,000 in 2013 to almost 900,000 in 2019. Two notable dips illustrate the macro and affordability challenges the industry faced in recent years. The first was in 2013, as part of the “taper tantrum,” a brief rise in interest rates that accompanied the Federal Reserve announcement of the tapering of quantitative easing.

The other, more recent dip was in 2018, when the HMI fell from 68 to 56 over the last two months of the year. This was a reaction of builders to concerns of an overly-hawkish Fed, and recession-related concerns attributed to a brief inverted yield curve. The analytical value of the HMI was useful here, in that it offered a warning to monetary policymakers that the interest rate hikes of 2018 were a mistake. Fortunately, the Fed went from a hawkish to dovish position, and reduced rates by 75 basis points in 2019.

This reduction in rates set the stage for current conditions. With the HMI above 70 for several consecutive months and near a 20-year high, builders are ready to expand production in 2020. With a significant housing deficit in place in the U.S., the limits on housing production are connected to issues like zoning rules, skilled labor availability, and other factors that affect the timing and cost of building new homes. But for now, builder sentiment remains solidly positive as we begin a new decade.

NAHB/WELLS FARGO HOUSING MARKET INDEX



Source: NAHB/Wells Fargo

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Tile Style

by SYMONE GARVETT

IN HHHUNT COMMUNITIES' RIVER MILL MASTER PLAN NEAR Richmond, Va., local custom builder LeGault Homes took a risk with its recent Maison Reve model and designed and built a home with modern appeal in a relatively traditional market. The 3,800-square-foot home has four bedrooms and three and a half bathrooms, and it features an open floor plan with several trending elements including shiplap statement walls, barn doors, a beverage center, and black-framed windows.

For the master bathroom upstairs, the team continued the home's

central black and white palette, beginning with the tiled floor. At the entrance, black 6-by-24-inch tiles were laid in a traditional herringbone pattern and point users into the space. The tile slowly transitions to white 6-by-24-inch tiles by the freestanding dark concrete tub to add contrast. The team also achieved continuity by utilizing the same white tile in 24-by-24-inch stacked pieces in the glass shower.

Opposite the shower, a long vanity—with sphere-shaped lighting pendants and circular mirrors—floats above the floor and allows the unique patterned tile to continue underneath.



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