



A PUBLICATION OF THE NATIONAL ASSOCIATION OF HOME BUILDERS

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Library of Congress ISSN 2325-9302

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ON THE COVER: BALA Home of the Year's English Angel. Photo by Dickson Dunlap.

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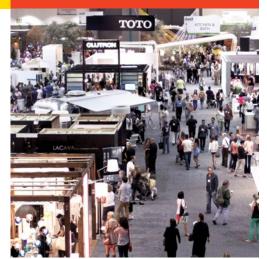
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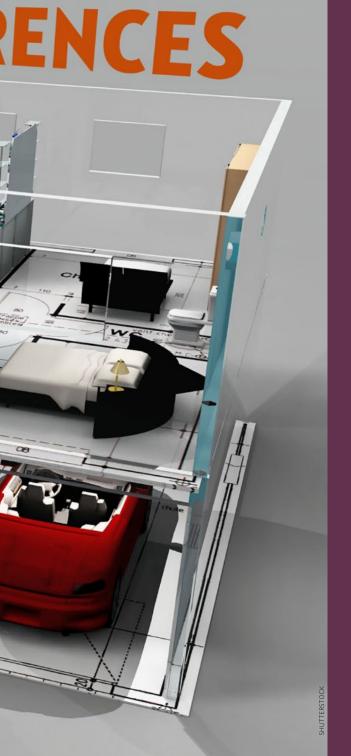


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HOSE IN THE HOME-BUILDING WORLD who lived through the housing crunch are now looking with optimism toward the future. However, they recognize that, more than ever, they need a source for measuring what home buyers *really* want and what they are not willing to give up despite the economic realities of today.

The National Association of Home Builders' (NAHB) What Home Buyers Really Want is a vital tool for assessing consumers' priorities, which the 2012 report found encompassed energy savings and storage. But it also reveals much about what buyers today don't feel is necessary in a home.

The evolving study

The NAHB Economics and Housing Policy Group has been collecting information since the early 1980s to provide housing industry stakeholders insight into buyers' preferences for home characteristics such as size, room layout and design, kitchen and baths, windows and doors, accessibility and outdoor features, technology, and energy efficiency, as well as preferences for community amenities.

The 2012 survey was conducted at the tail end of a protracted housing recession that affected not only the number of new homes built each year, but also the characteristics and features of the ones that do get built. The study shows data analyzed both for home buyers in general and home buyers broken down by age, income, Census divisions, number of homes owned, race/ethnicity, generation, prices expected to pay for homes and types of household. This breakdown allows comparison of preferences across different subsets of buyers.



Rose Quint answers additional questions about current home buyer preferences.

The Most Wanted List

So what do home buyers really want? The first answer is energy efficiency. Four of the top most desired features¹ involve saving energy: 94 percent of home buyers want Energy Star-rated appliances, 91 percent want an Energy Star rating for the whole home, 89 percent want Energy Star-rated windows, and 88 percent want ceiling fans (Figure 1).

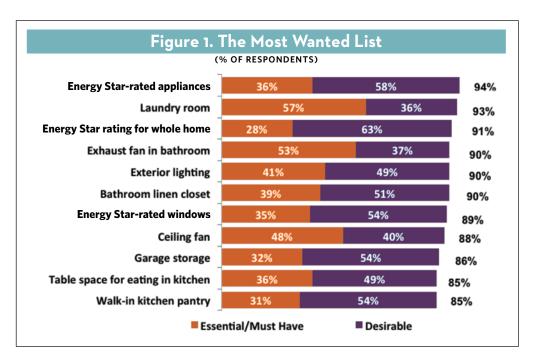
The second message buyers are sending is they want help with organization and storage. The laundry room is desired by 93 percent of buyers; in fact, 57 percent consider it essential and would be unlikely to buy a home without this amenity. Nine out of ten buyers want a linen closet in the bathroom to help keep towels and toiletries organized. Space in the garage to store bikes, sports equipment or gardening tools also ranks high on the buyers' wish list: 86 percent want those spaces. Also, a walk-in pantry in the kitchen is desired by 85 percent of buyers.

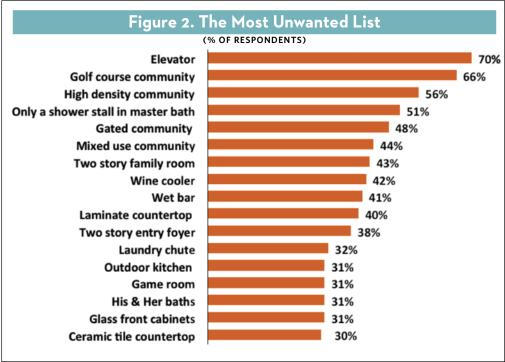
Other features most home buyers would like to see in a new home include an exhaust fan in the bathroom, exterior lighting and table space for eating in the kitchen.

The Most Unwanted List

Just as there is a "most wanted" list that is essential for builders to know, there is also a "most

unwanted" list. Home buyers taking the survey had the choice to rate features as "do not want," which meant they would be unlikely to buy a home that included that feature. Because they also had the option of saying they were "indifferent" (the feature would not influence their purchase decisions in any way), a "do not want" rating can be interpreted as a strong statement of rejection on the part of buyers.





So what features should builders be careful about including in a typical new home? First and foremost is an elevator. Seventy percent of buyers rejected the notion that an elevator is a desirable trait. Interestingly, though, the most unwanted features after that internal trait were community-based choices. For example, 66 percent of buyers do not want to live in a golf course community, 56 percent reject the idea of living in a high-density community,

48 percent do not want a gated community and 44 percent would not buy a home in a mixed-use community (Figure 2).

Back inside the house, more than half of all buyers discarded the option of having only a shower stall in the master bathroom with no tub (51 percent), and many say 'no' to two-story spaces as well: about 43 percent of buyers do not want a two-story family room, and 38 percent feel the same way

about a two-story entry foyer. Many buyers now consider these large, open spaces energy-inefficient—the last thing they want for their homes. An outdoor kitchen is not an important priority to many buyers these days either, as 31 percent flat-out discarded the possibility they needed to wash dishes, cook and refrigerate outdoors.

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Buyers Really
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discusses
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Conclusion

Home buyers have always known exactly what they want in their homes as well as what they don't want. But this survey reveals what has changed as the nation moved through the housing crisis. Today, top priorities are features that help buyers achieve energy efficiency and keep their homes organized, such as energy-efficient appliances and windows, a laundry room and a linen closet. They are not interested in

things like an elevator, community amenities such as a golf course or a gated entrance or the large two-story spaces that so appealed in the McMansion era. Because tastes have changed, along with priorities, the building industry needs to analyze findings from studies such as this one to know how to market, as well as what to build.

What Would Make Buyers Pay More?

When buyers are asked what would make them pay a higher price for a home, the answer for most is not an "environment-friendly" home. A question on whether they are concerned about the impact that building their home has on the environment elicited a response that 67 percent of buyers care, but not to the point of paying additional dollars. Another 18 percent are not concerned with this issue at all. The remaining 14 percent—a small minority—go beyond concern; however. They would also pay more for such a home.

What most buyers are really concerned about when it comes to costs are utility bills. About 73 percent agree that the projected utility costs of a new home would influence their home purchase decisions. Would they pay more to save on those utility bills? The answer is: you bet. On average, buyers are willing to pay an additional \$7,095 in the upfront price of the home to save \$1,000 a year in utility costs—a 14 percent rate of return on the initial investment.

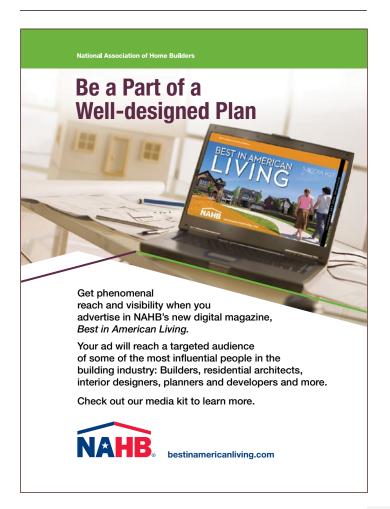
But perhaps nothing is more revealing about what home buyers really want than trade-offs—choices when given two alternatives for the same amount of money. Buyers' strong preference for energy efficiency is corroborated in that light: nine out of ten buyers would rather buy a home with energy-efficient features and permanently lower utility bills than one without those features that costs 2 to 3 percent less.

One last important point to mention is home size. Home buyers in the survey reported wanting a median of 2,226 square feet of space in their next home. That is about 100 square feet smaller than homes actually put in the ground in the first half of 2012 (2,317 square feet). Changes in actual home size have been anything but steady in recent years. After peaking in 2006 at a median 2,268 square feet, home size fell in 2007, 2008 and 2009, but then reversed course and rose in 2010, 2011 and 2012. The reason for this reversal, to a large extent, has to do with access to credit. In recent years, the less-financially solid home buyers have been shut out of the home-buying market by overly stringent mortgage lending requirements, which led to the construction of homes that mostly reflect the preferences of buyers with strong credit and large downpayments—typically wealthier buyers who can afford larger homes.

ENDNOTES

¹ The survey asked buyers to rate over 120 features as either essential, desirable, indifferent, or do not want. The total share "wanting" a feature is calculated by adding the shares who rate it essential plus those who rate it desirable.

Rose Quint is AssistantVice President for Survey Research, National Association of Home Builders. Reach her at rquint@nahb.org.





NVIRONMENTALLY-FRIENDLY AND GREEN TECHNOLOGIES in home building have paved the way for a new breed of house—one that strives for a healthy environment for its owners, minimizes the impact on the environment, promotes cost efficiency for the long haul and stands the test of time.

Those home buyers who are aware of and demand this new breed see their homes as more than just domiciles—they know that today's structures can provide a host of benefits that may not have been part of the picture in yesteryears. Meanwhile, the builders providing those homes understand that buyers want houses that carry the ethos: if it's worth doing, it's worth doing right.

One such builder who has adopted this ethos and found the rewards apparent is Maryland-based Baldwin Homes. In January, this builder received the National Association of Homebuilders' (NAHB) Green Project of the Year Award in the single-family, custom category. The builder joined nine other companies given NAHB green awards.

The awards are given for "excellence in residential green design and construction practices and for green building program and advocacy efforts." Overall, "This year's winners are particularly impressive," said NAHB Chairman Barry Rutenberg, a home builder from Gainesville, Fla. "All of those honored have shown superior dedication and leadership to the mission of sustainable and eco-friendly living."

Baldwin's Win

Baldwin's award-winning house is one of many eco-friendly homes built by the company at the Preserve at Severn Run community in Gambrills, Md. The award-winning home served for a year as a Maryland Green Designer Show Home, raising money for Hospice of the Chesapeake and Make-A-Wish Foundation of the Mid-Atlantic. (Once the home is sold, all profits will be donated to those two charities.)

At the core of the project have been the three R's of sustainability: reduce, reuse and recycle. From site development to every element of the home, the project minimized environmental impact through use of the latest green technologies and through reuse of materials that would otherwise have been destined for landfills.

It has been certified as Emerald, the highest level of the ICC 700 National Green Building Standard (NGBS) as well as Gold in the Leadership in Energy and Environmental Design (LEED) program. It's also Energy Star-certified, achieving about 56 percent better energy efficiency than a standard new home and 86 percent greater efficiency than what was standard several decades ago.



Right NAHB Project of the Year Shows the Way

Any of these accomplishments would have been an achievement, but accomplishing all of them has required special attention throughout the design and construction phases of the project to produce a home that exceeds code requirements by just about every measure. This kind of effort leads to the question: why go to such lengths in the building process?

According to Baldwin, for his company, the reasoning starts with an overall conviction to green building for the long haul.

"I think it makes sense," said Mike Baldwin, President of Baldwin Homes, Inc. "It's something we should all do" not just in building homes, but construction in general.

Getting to Emerald

Baldwin said the process of reaching the NGBS Emerald level started with the building site. The home was oriented not only to reduce the impact on its environment, but also to make the best use of natural sunlight. The home's siting minimizes heating and cooling needs.

"We positioned [the home] south, and included a front porch, which reduces solar gain in the summer, while allowing passive heat gain in the winter," Baldwin offered.

This siting, as well as the other energy-saving features the home design incorporates, is paying off: the latest utility bill for the seven-bedroom, 7,000-square foot home was \$143, Baldwin

said. The low bill also is backed up by figures from surrounding occupied homes in the same project. For example, Dr. Brianna Watson, the owner of the same-sized home next door (which was also built by Baldwin, certified to the NGBS and LEED programs, and also an energy award winner) says her bills run \$200 to \$300, which is impressive for the size home she has.

As far as sustainability of the site, the natural resources were carefully guarded from the beginning of the project, including directing construction crews where to park to protect existing trees and vegetation.

The Reward of Knowledge

Baldwin said one of the rewards of going through a formal certification program like NGBS is that the company and its staff received an education that will pay off in the long run for the builder and his customers.

"There are little things these programs teach you that help you to build a better home [overall]," he said.

An important part of that education is dealing with other parties to the project to share green expertise. For example, the architect, Cathy Purple Cherry of Maryland-based Purple Cherry Architects, brought her vast knowledge and experience in eco-friendly design into the project—every interior and exterior element reflects care-

fully calculated design decisions made as part of the planning and certification process.

For example, special motion sensors that trigger a pump to circulate hot water throughout the house were installed in all bathrooms as an innovative way to reduce needless use of the hot water system. The sensors eliminate the need to run water to get the right temperature. "By the time you're ready to take a shower, you're all set," Baldwin explained.

That innovative approach is one of over 60 different eco-friendly features (see "The Home's Features"). The idea was to use every available way to save energy and lessen the impact of the home, which required team effort among all players in the project's construction during each stage of the process.

Once the home was begun, third-party inspectors ensured compliance with green programs throughout the build, from start to finish. The result is a house that has green blood running through its veins. "It's a lot of little things that add up to the big picture," Baldwin explained. "The green building systems are a guide that balances the whole process."

This kind of thoroughness is now an integral part of how Baldwin builds home, and Mike Baldwin says winning the NAHB green award has affirmed that the effort is worth the resources. Baldwin says that more and more people who are considering building a home are using a new criterion for choosing a building: "They want a builder who understands green building science," he said.

The Home's Features

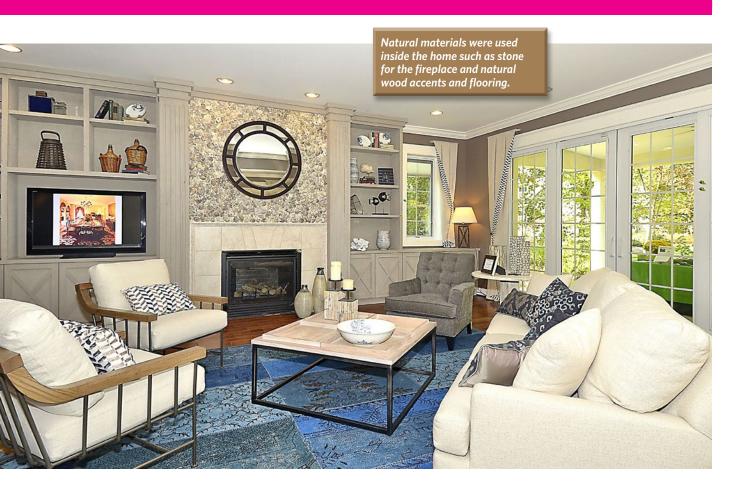
What went into this particular home to earn it the NAHB Green Project of the Year? Here's a partial list:

- Precast, panelized exterior walls composed of 2-inch thick concrete with an insulation value exceeding R21
- Windows with sun defense coating and incorporated blinds
- Recycled drywall and R15 Batt insulation
- Open cell foam insulation and Energy Star air
- Energy Star appliances; low-flow showerheads and faucets; high-efficiency toilets
- Two 2,000-gallon buried cisterns for irrigation or flushing toilets
- A solar hot-water system
- Reclaimed lumber used for flooring, built-ins; recycled and bamboo (renewable resource)
- An 18 SEER, 2-stage, variable speed heat pump; Merv 16 pleated filters and an energy recovery ventilator;
- Zero VOC interior and exterior paint
- Forest Stewardship Council-certified lumber/roof
- Native vegetation

Donna L. Cole is a freelance writer based in Annapolis, Md. She has written extensively about houses and design in Capital Style magazine, Waterfront Living magazine, Chesapeake Flavor magazine, Capital Gazette newspapers and is a frequent contributor to the Patch news websites, owned by America Online. More information on Baldwin is available at www.baldwinhomes.net.



INSERT SLIDESHOW



A WAY OF SAYING Idiak THROUGH DESIGN

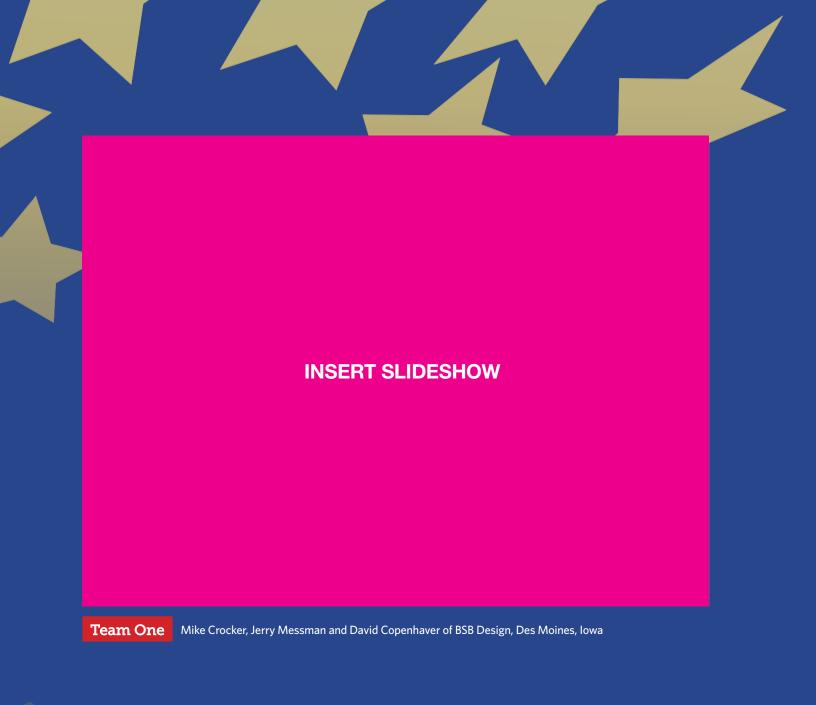
HE HOME BUILDING INDUSTRY has a potent opportunity to meet the housing needs of returning armed services heroes and their families and help them enjoy the American dream of homeownership. Builders, architects, remodelers, tradesmen, suppliers, interior designers and others in the construction industry can work together to design and provide homes. In doing so, they can give something back to America's soldiers who have suffered harm in service to our country. In recognition of this, the National Association of Home Builders (NAHB) Design Committee partnered with the American Institute of Building Design (AIBD) and Operation Finally Home, an organization that helps veterans get their lives back on track and become productive members of their communities, to conduct a live design competition at the International Builders' Show in Las Vegas earlier this year. The competition focused on designing a home for one of America's wounded veterans returning from war.

The Client:

The recipient is a married war veteran in her late twenties with a severe traumatic brain injury that causes night seizures, unsteadiness on her feet and constant exhaustion. She also suffers from post-traumatic stress syndrome and finds photography therapeutic. She has a service dog, a Chow. Because of her injuries, family members visit often to help out and could benefit from having a place to stay.

The Program:

The design required a 3-bedroom, single-family, detached home that was no more than 1,800 square feet. The home will be built by Operation Finally Home within the city limits of Clearwater, Fla. on a 50- by 100-foot lot that must include an oversized single-car garage similar to other homes built by Operation Finally Home. To meet the physical needs of the client, the home needed to include universal design features such as wide hallways and a large shower so that, in the future, a wheelchair could be maneuvered easily. In addition to the programmatic requirements, the design was to take into consideration life-cycle costs, create low maintenance needs and be placed on the lot in a way that increases energy efficiency. It also needed to fit into the context of surrounding neighborhoods, which are eclectic and made up of Mediterranean, Modern and Craftsman-style homes.



The Solutions:

Working with this set of parameters, four design teams from across the country had just nine hours to complete designs that addressed these requirements while incorporating the personality and needs of the client.

When the nine hours were up, proposals were presented to a panel of judges and posted in the exhibit hall for attendees to evaluate. In addition to a traditional judging panel, IBS attendees could choose who they thought created the best design by texting in their vote. Once text votes were tallied and after much debate and

discussion among the judging panel of Karen Kassik-Michelsohn, Barry Glantz, William Warwick, Brian Lamb, the winner was Team 3, BSB Design from Des Moines, lowa. The judges felt this design solution met the needs of the client best.

The team created a design that carefully considered the design of the interior and exterior spaces. In the rear of the home, the outdoor living area includes a pool for exercise and a pleasant seating area. In the front of the house, the designers provided additional outdoor living space with a front courtyard.

INSERT SLIDESHOW

Team Two

Trent Augustus, Michael Vaughan and Natalie Scott of XACTWARE, Orem, Utah

INSERT SLIDESHOW

Team Three

Roger Caldwell of Caldwell-Cline Architects & Designers, Marietta, Ga.

INSERT SLIDESHOW

Team Four

Derik DeLonzor, Pedro Ruiz and Dustin West, students from California Polytechnic State University, San Luis Obispo, Calif. Since the service dog is an integral part of the client's life and a member of the family, the designers provided additional features to accommodate the pet's needs including a dog wash in the garage and a dog run for exercising on the side of the house.

The judges' comment on the design was that: "This house just has everything." They specifically pointed out the oversized, dual height island that allows for both food preparation and comfortable dining. For the future, that island also can provide a dining surface accessible by wheelchair.

The first floor master suite provides easy access should the client's condition deteriorate over time. The judges felt the flex space on the first floor in the front of the home provided options as an office, studio or additional bedroom for a visiting or live-in caregiver. The sitting room upstairs provides an efficient work space for the client's digital photography hobby and a large wall space for a gallery feature. In addition, the judges indicated that the design team showed a thorough understanding of universal design by splitting the closet and bathroom in the master bedroom. Typically, bathrooms are very wet when someone is in a wheelchair and not a place for clothes and similar storage items. By separating the two functions, the water is isolated and the spaces much easier to manage.

The judges picked the design they thought best for this client, but they also said that all of the designs submitted were inspirational and well-thought-out.

Because of the success of the initiative, the NAHB Design Committee plans to continue with this outreach next year. For information later in the year on the 2014 BALA Design Live Competition, look to the Best in American Living Awards website, bestinamericanlivingawards.com.

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Learn more about the design competition, hear design team interviews and watch Laura Sellinger, a wounded war veteran, talk about how receiving a new home will impact her life.



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HE 4,900-SQUARE FOOT English Angel is this year's Best in American Living Awards (BALA) Home of the Year winner. The home celebrates the grandness of the old English countryside while creating a modern second-home lifestyle for its occupants.

English Angel is part of the 500-acre Cassique community, a private Kiawah Island Club community in South Carolina where the Kiawah River meets the Atlantic Ocean. The architecture of the Cassique area is influenced by Charles F.A. Voysey, one of the most renowned British architects of the early 20th century. The homes are inspired by both the majestic homes of the English Cotswolds and the comfortable Low Country homes serving generations of families along coastal rivers in the southeastern U.S.

The open floor plan of the home allows abundant light and views to the scenic exterior, but also provides a sense of connection within the home because of the visual connections between common spaces.

According to the BALA judges, the home's designers used that open feel to the best advantage. One judge commented that: "This is a finely crafted tribute to the arts and crafts tradition with beautiful oak interiors and exterior windows. It is easy to get carried away with interior details, but in this house it is done just right."

That kind of balance and connection is why English Angel also won the Platinum Award for a Single-Family, One-of-a-Kind Home, 4001-6500 square feet and the Best in Region Award for the South Atlantic Region.

Design Trends

BALA judges described English Angel as "including all of the trends we have seen this year." The intricate trim work, the warm and comfortable feel, and fine design detailing both inside and outside the home contributed to the judge's decision to present the top BALA award to the home.

BALA HOME OF THE YEAR ENGLISH ANGEL BEST IN AMERICAN LIVING | SPRING 2013 PHOTOGRAPHY BY DICKSON DUNLAP



HIGH QUALITY **DETAILING**

Attention to detail is evident both in the interior and exterior of the home. On the outside, accurate proportions are used to recreate the historical twostory bay of windows that is further emphasized by dark paint to match surrounding trim details color. Mullion patterns match proportionately on the first and second levels, and the introduction of transoms with a smaller mullion pattern highlight the grand scale of the interior room on the first floor. Cedar shakes were used on different faces of the exterior to provide relief and break up large wall expanses on several of the facades.

BATHROOM STYLE AND FEATURES

Bathrooms today are designed to be more compact while maintaining an open feeling. In the English Angel bathrooms, this is accomplished by eliminating extra walls and reducing the amount of unused floor space between fixtures. Both the master and guest bathrooms add to the openness and relaxed atmosphere, creating a spa-like setting through the use of natural light, airy colors and minimal clutter.

KITCHEN FEATURES

Kitchens remain at the top of home buyers' priority lists, which means this is a room where home owners splurge for additional features and details. In the English Angel home, stained glass reminiscent of Charles Rennie Mackintosh, an early leader in the arts and craft movement known for combining strong angles with decorative motifs, connects the kitchen and dining room. The range is on a peninsula that extrudes out into the room, with the rest of the kitchen wrapping around it, making this heart of the home even more distinctive.

INSERT SLIDESHOW

INSERT SLIDESHOW

MULTI-GENERATIONAL OPTIONS THAT LIVE ON

Multi-generational living is having a major impact on today's designs in both new and remodeled homes. Home owners are requesting dual master suites, with one of those suites located on the ground floor. The ground floor location as well as the large size of the master suite provides for easy maneuverability in both the bedroom and bathroom when it's needed. In addition, the homeowner has choices of a walk-in shower and stand-alone tub that provide the owner with options later on, as they age.

CEILING TREATMENTS

In the dining area, the designer chose to use wood on the ceiling that has the same color finish as the hardwood flooring and other trim work throughout the house. This use of color leads the eye upward emphasizing the ceiling treatment, which uses exposed beams. The placement of these beams is what make this detail and treatment successful. Looking at the beams, guests in the home cannot distinguish whether the beams are functional or decorative because the intersection point creates a seamless transition from ceiling to floor.

ROOMS WITH DIFFERENT SPECIALTIES

Home owners who can afford them are still splurging for specialty rooms, whether those rooms are located inside or outside the home. In English Angel, an outdoor living area opens up in the rear of the home off the living room. The outside room extends toward the river, almost doubling the common living area size. In addition, there is a screened porch that is just off the kitchen, creating an outdoor eating area. This outdoor eating nook is tucked to the side of the house to avoid blocking the spectacular views of the lake from the rest of the rooms.

PAUL EMRATH, PH.D. THE SUPPLY

LTHOUGH THE FACE OF THE HOUSING CRUNCH WAS THE PAIN FELT BY consumers and the construction industry in general, a good indication of how deep the problem went is falling availability of lots. A look at National Association of Home Builders (NAHB) figures gathered on that indicator show where the nation stands.

Record Lows

In the latter part of 2007, production of new housing in the U.S. started on a downward path toward the lowest point since World War II. From 1946 through 2007, the U.S. had never produced fewer than one million housing starts in any calendar year. By 2008, the market had plummeted to 905,000; in 2009, starts fell to 554,000. The market didn't begin to recover in earnest until 2012.

This drop in new construction rippled back up the production chain: many developers virtually stopped acquiring land and developing lots. NAHB started to collect some information on this event in 2008 as part of a survey that was new at the time: the Acquisition, Development and Construction financing study. Each quarter since then, the survey asks a representative panel of NAHB builders and developers to address a number of issues, including whether they are putting projects on hold until the financing climate improves. From late 2008 to the end of 2010, over 70 percent of developers consistently reported putting both land acquisition and development on hold until the financing climate improved (Figure 1). Even though the percentages have since declined, nearly half of developers were still putting projects on hold as recently as the fourth quarter of 2012.

The preliminary estimates for how 2012 shaped up is that housing starts increased to 780,000 for the year—which may seem modest compared to the one-million-plus sustained over the previous six decades, but is a large improvement compared to 2009, 2010 and 2011.

As the production of new housing improves, questions arise about whether the supply of the inputs needed to produce a new house-such as land, labor and construction materials—can keep pace. For example, in the case of the land input, after putting land development on hold for many years, can new lots be brought online quickly enough in desirable locations to meet demand or will shortages emerge?

Information on the supply of lots and possible shortages is available from builders responding to the monthly NAHB/Wells Fargo Housing Market Index (HMI) survey. Although the main purpose of the survey is to generate the HMI itself (a widely cited measure of the strength of the new single-family housing market), the survey often includes a set of special questions on a topic of current interest to the housing industry. Periodically, the HMI panel of builders is asked to characterize the supply of developed lots in their market areas as "Very High to High," "Normal" or "Low

to Very Low." Figure 2 plots the share of builders reporting, in the same month, a low to very low supply of lots against starts (at a seasonally adjusted annual rate).

The chart begins with data from August of 2005, when the share of builders reporting a low supply of lots reached an all-time high of 53 percent. This was during a boom period for housing, when the starts rate was nearly 2.1 million, well above its long-run average. When housing starts dropped to under 500,000 in 2009, the "low lot" percentage also plummeted, all the way down to 7 percent.

Starts subsequently recovered to an annual rate of over 800,000 by September of 2012, roughly 75 percent higher than the low point but still far below historical averages. At the same time, the share of builders reporting a low lot supply increased 500 percent to 42 percent—not as high as during the 2005 housing boom, but starting to approach that level. In Figure 2, this shows up as a widening gap between the rate of housing starts and the low-lot percentage.

In other words, in 2005, when over half of builders were reporting a low supply of lots, the situation could be attributed to a high demand for lots fueled by an annual rate of housing production in excess of 2 million. In 2012, however, when the share of builders reporting a low lot supply was at 40 percent, the rate of housing production was still under 1 million. This indicates that developers in some markets are having trouble acquiring land and bringing lots online fast enough to meet what historically

would be considered a relatively modest level of demand. Possible reasons for this situation include credit constraints, lags in obtaining appropriate zoning changes and approvals, and increasing regulatory requirements, as well as concerns about making deals work in markets where costs are higher and appraised property values are lower than several years ago.

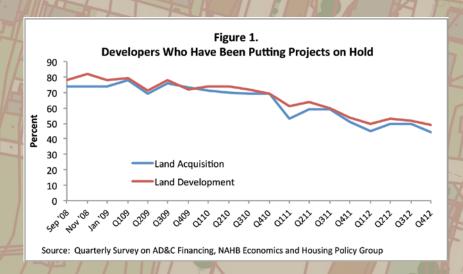
The HMI questions on lot supply also indicate that prices of developed lots are rising, although this trend emerged later than supply issues and hasn't been quite as extreme as lot availability. Nevertheless, between March of 2010 and September of 2012, the share of builders reporting that the price of developed lots had increased somewhat or substantially over the past year jumped from 8 to 36 percent.

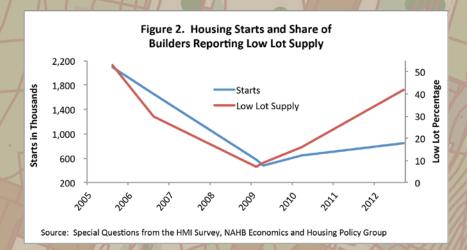
The last time the lot supply series of questions was featured in the HMI survey was September of 2012. Because the shortage of lots is a relatively recent problem that is emerging while the housing recovery is in its early stages, it is worthwhile to look forward. In January of 2012 and 2013, the HMI survey asked builders the most significant problems they faced in the previous year—and the problems they expect to face in the coming year.

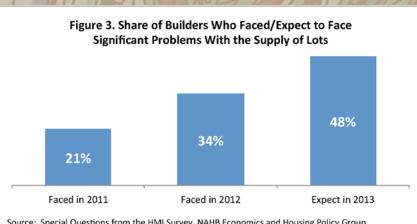
Figure 3 summarizes the number of builders that think the cost and availability of developed lots is, or is likely to become, a significant problem. Only 21 percent of builders said the cost/availability of developed lots was a significant problem for them in 2011. But this increased to 34 percent who reported facing the problem in 2012 and 48 percent who expect to face a shortage of lots in 2013.

The tendency for shortages of inputs to become more widespread as residential construction recovers from its historic trough is something many industry analysts have expected to see. Based on reports from NAHB builders and developers, a shortage of lots in some markets has already begun to emerge as one of the barriers to a stronger housing recovery.

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Source: Special Questions from the HMI Survey, NAHB Economics and Housing Policy Group



Lumens. Lamps. Kelvins. CFLs. LED. How did the world of lighting come to be so complicated when all we used to do is flip a switch?

The answer is, like most things in design, lighting is more sophisticated and offers more options and choices than ever. It is computerized, integrated and vastly more interesting for designers and consumers alike.

Lighting is vital to our homes and our well being, making it one of the most important elements in design. Lighting decisions made for a space can influence all future experiences within that space including how colors are perceived, what furniture can be used, and perhaps most importantly, what mood will be created for its occupants.

Plan Ahead

A good lighting plan will set the stage for the design of a space. It begins with a simple checklist of the lighting that is available and the lighting that is needed for the uses of the space. ceiling can spotlight a piece of artwork. Wall washers can highlight a gallery. Under-cabinet halogen lights in the kitchen or on a large bookshelf can counteract cabinet shadows and also provide task lighting at the same time. Cove lighting in a ceiling design provides soft mood lighting.

It's Everything.

When designing for the best use and most comfortable ambiance, there are generally three broad categories of lighting that are considered. Using one of these is a necessity; using two or all three can layer a room with depth of color and a visual comfort.

Natural sunshine is usually the most desired lighting. Homeowners love to capture the warm feeling that sunlight provides, making it a natural resource for builders. To capitalize on this and maximize its effect, architects can conform rooms to an orientation that allows maximum sun. Interior designers also can ensure that windows are unobstructed by heavy draperies or large pieces of furniture that would intrude into the sunlit world.

Ambient or general room lighting is the next layer for room illumination. It will compensate when natural light is insufficient or supplement the natural light where and when it might be needed. There are many attractive overhead fixtures that provide ample room light. For example, a chandelier or pendant or a series of halogen-lighted recessed cans will provide different options. If an overhead isn't possible, lamps or wall fixtures with floodlighting for ambient lighting provide good general lighting.

Task or specialty lighting is used to illuminate specific items or specialty areas and leads to some of the most creative lighting designs. For example, a pin light from the

Style and Scale Matter

While the initial lighting plan considers the type of the lighting needed, the next step of that plan should consider the finishing touches. Too often lighting fixtures are treated as an afterthought when in reality decorative finishes are as integral to the overall design of a room as the sofa style, paint color or cabinet designs.

When walking through model homes, we too often see many of the same dated fixtures that have been in builder lineups for decades. Not only are these passé, they often are under-scale for today's home and large lighting styles. Builders who expand vendor sources to find more current lighting options soon realize that there are many inexpensive and attractive options available. It is unfortunate to see an attractive, well-built home cheapened by the use of small, dated or unimaginative light fixtures whose only redeeming quality is low price.

In addition to finding better vendor sources, builders should be aware of new trends in lighting design such as bold, oversized lights, drum chandeliers, eclectic styling such as incorporating antlers and recycled materials, industrial-influenced styles, large oblong or oval pendants, and pieces that are jeweled and brightly colored. These are just a few of today's new design options.

Better lighting does not have to break the bank, and it lets buyers know a builder is paying attention to the trends and details of today's homes.

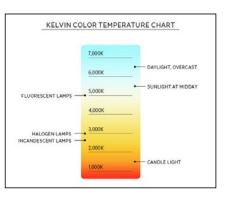
LIGHTING IS EVERYTHING

The Light Bulb Race

While the level of lighting and look of fixtures are important to design, so are the color and quality of the light cast by these fixtures. For generations, we have been accustomed to the warm glow of the incandescent bulb emitting color in the range of 2,700 degrees kel-

vin (see chart). Unfortunately, 90 percent of the energy produced by incandescents is used to generate heat. Only 10 percent actually produces the light. Recent changes in the law aimed at improving lighting efficiency, coupled with improvements to alternative bulbs, have shaken the foundation of the inefficient incandescent.

The closest alternative bulb to the incandescent is the halogen. This bulb looks and acts like an incandescent with the low price and warm light that consumers are accustomed to, but uses much less energy. Still, halogen bulbs produce significant heat making them less energy efficient than the newer alternatives, such as fluorescents.

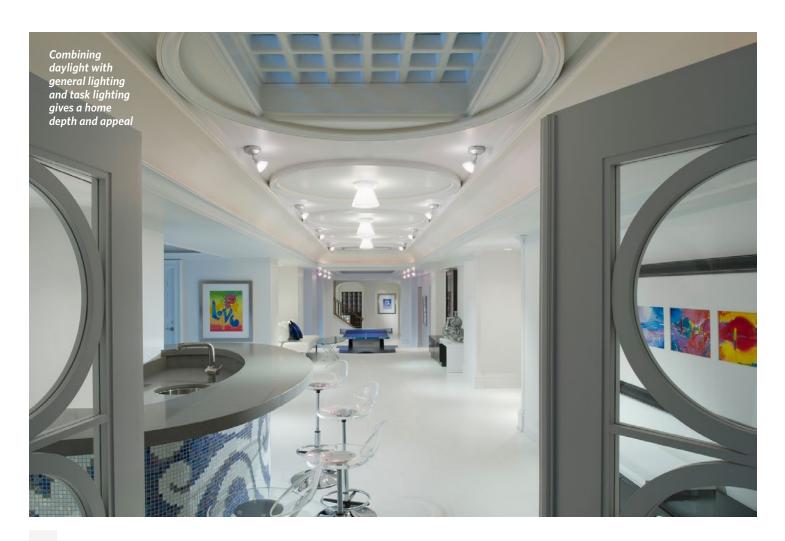


Fluorescents are one of the most available and easy-to-use new bulbs. In many situations compact fluorescent light bulbs (CFLs)—screw-in fluorescent light bulbs-can take the place of incandescent bulbs. They cast light across a wide space, which is why they are traditionally used in office

settings. They last up to 10 times longer than standard incandescent bulbs and use 20 to 40 percent less electricity, making it easy to see why they are so appealing.

However, fluorescent lighting in home applications has a long way to go before it will win over designers. The color and quality of the light from fluorescent bulbs—in the range of 4,000 - 6,500 kelvin—create a cool, blueish white cast. While these lights are improving, most designers still favor the warm light and color cast by incandescent or halogen bulbs.

LED lights also are in the race for the next, best light source. These bulbs come in long flexible strips for use in small spaces or across curves, such as for cove lighting. In





light bulb form, they are mainly used in recessed cans. They can be dimmed and have the longest life span of the any type of bulb. LEDs also have the advantage over fluorescents of being available in smaller and flexible strip formats. Like fluorescents, LEDs' efficiency and longevity are remarkable, but so is the price tag at \$20 or more per bulb. Currently, the light cast by LED is very bright with a cool, blue tint, but manufacturers are quickly refining this, getting ever closer to natural lighting.

Integrated Lighting

Designers talk about integrated, whole house lighting, and while we think of

these systems as high end, they are offered today at lower price points. Several large builders also are testing them out in mid-range communities as upgradable features.

Whole house packages feature a variety of ways to control lighting throughout the home, and often are part of an integrated audio, temperature and security system. Buyers are drawn to the ease of use and the high-end feel of such systems.



Properly scaled lighting fixtures make those fixtures part of the interior design.

On a smaller scale, simple programmable scene controllers allow users to create different settings of lighting and dimming options for single rooms. These controllers turn on and off at the push of a button. It is only a matter of time before the price drops even further on integrated systems, and they become a standard feature in most homes.

Conclusion

The intricate field of lighting design is going through interesting changes, offering new possibilities for uses, sources and styles, and allowing us to get the most for our lighting dollars.

The American Lighting Association's website (www.americanlightingassoc.com) is one of many good sources offering technical advice and details on specific lighting needs. Interior designers and lighting designers are another good source for information and ideas.

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Does Your State Encourage Innovation?

HOUSANDS OF LOCAL GOVERNMENTS ACROSS THIS COUNTRY are faced with a critical question: how to pay for the infrastructure so critical to growth during a time when resources are scare.

The roads, schools, parks, water and wastewater services, and other public facilities that this nation relies on so heavily to move forward need to be funded, but financial backing is as scarce in government as it is in private industry. Municipal budgets remain tight at the same time the need for new and expanded infrastructure intensifies. Fortunately, viable options exist ranging from alternative financing tools to innovative methods of delivery and operation.

To assist members in navigating a bewildering collection of state statutes and ordinances, the National Association of Home Builders (NAHB) has just updated a series of reports highlighting what states allow the use of which infrastructure finance alternatives. NAHB believes this research will provide valuable up-to-date information for both the private and public sectors at a time when financing and revenues are more constrained and limited than ever. The association most recently announced an update to part II of the series.

The Series

Part I of NAHB's infrastructure series, which was produced in 2003, is entitled *Building for Tomorrow: Innovative Infrastructure Solutions*. This report explains the different types of strategies available to local governments to finance current and long-term infrastructure needs along with case studies of where they have been used successfully.

Many of the strategies identified in that first report require state legislation that authorizes local governments to use the financing tools. To assist builders, developers and policymakers with understanding where these tools can be used, NAHB identified 11 of the infrastructure finance strategies that appear to provide the greatest opportunities for local governments to meet current and long-term infrastructure needs most cost effectively. NAHB then

retained the National Conference of State Legislatures (NCSL) to catalog the extent to which these tools were authorized across the states, along with links to the enabling statutes. NCSL's full research report was highlighted in NAHB's second in the infrastructure series, which is entitled, Infrastructure Finance: Does Your State Encourage Innovation? It was first published in 2005, updated in 2007, and was updated for this most recent research report.

A third NAHB publication, called *Infrastructure Solutions: Best Practices from Results-Oriented States*, was also published in 2007. In that publication, NCSL explored the best examples of state-enabling legislation for the 11 key finance strategies.

For the most recent revisions to part II, NAHB, with the help of NCSL, updated the body of work on which states authorize key tools, and highlighted the findings in a user-friendly matrix that shows the financing options available in each state.

This second of the series has been one of NAHB's most popular resources on infrastructure financing because it shows at a glance which states allow the tools as well as which of those states is the most progressive in usage.

NCSL also reports that it found that many states have added new authority to use these financing methods over the course of the recession, an indication that they are retooling for what lies ahead. The latest findings also show that some key tools are also now widely authorized across the U.S. The tools with the largest increase in use were Design-Build, Municipal Lease Finance, Grant Anticipation Revenue Vehicle (GARVEEs), Special Districts and State Revolving Loans/Infrastructure Banks. The fact these tools are now the mostly widely used is encouraging for the building industry because they've been found to be among the most useful to builders and developers.



New Methods

For the 2012 update to Part II of the series, NCSL altered its methodology for researching state statutes. This step, combined with improved legal and state research tools, allowed NCSL to capture significantly more statutes than in the 2007 report.

The largest increase that can be seen under this new methodology relates to state revolving loan funds and state infrastructure banks (SRLFs/SIBs). There are now a total of 96 SRLFs/SIBs authorized in 48 states. Of that amount, 17 states offer both types of financing, which is up from 12 in 2007. Both types of tools make low-cost loans available to jurisdictions for infrastructure improvements. The money generated from loan repayment is then put back into the SRLF or SIB to fund additional projects.

Another change from previous reports is that financing for small-scale water and wastewater systems was reported in five states in the latest update compared to 2007, when no states were using this finance tool. Small-scale water and wastewater systems allow developers to provide water and wastewater facilities directly to their developments without going through public systems. The cost of installing these systems is usually added to the cost of the homes. This allows developers to establish new developments despite public sewer and water capacity restrictions. These small-scale water and wastewater systems and school partnerships most likely are done under design-build and SRLFs/SIBs, rather than through explicit statutes.

There was also growth in the number of states that offer certificates of participation, electronic tolling and special districts, and large gains seen in the number of states that authorize the use of GARVEE bonds and municipal lease financing plans. GARVEEs, which are bonds secured by anticipated federal funds, are now used in 29 states, up from 14 states previously reported. Municipal lease financing jumped from eight states to 23.

What to Expect

Many builders and developers wonder how many of these tools are available within their community and whether their states encourage local governments to find innovative ways to finance, build and manage infrastructure. They can find answers in all three NAHB infrastructure publications as well as NCSL's full research report. The research, with statutory citations and summary analysis, can be found online at www.nahb.org/infrastructurefinance.

In today's financial environment, both the public and private sectors need all of the tools reported in this series. The added capacity across the states that NCSL uncovered in its latest research is a good indication states recognize this need.

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Legend

Legislative Authority as of 2007

Legislative Authority as of 2012

No Legislative Authority



Exterior Shutters

RIGINALLY, exterior shutters were used to protect windows from the weather, allow for privacy and reduce the amount of light into a home. Today, they can also add curb appeal and character to a home without adding a heavy burden to the budget. However, they also are a common design element that too often are designed and applied incorrectly. Selecting the right shutters is not difficult if a few simple rules are applied:

RULE #1 STYLE. When specifying shutters, be sure to select the style that fits the house—paneled, louvered or board and frame. When possible, align panel and louvered configurations with the paired window muntins or sash.

RULE #2 SIZE. There are many aspects about design that are subjective. Shutter size is not one of them. Shutter height should be equal to the window height excluding trim and casing. Shutter width is exactly one-half the width of the window to which the shutters are paired, excluding trim and casing.

the shutters are functional or fixed, they should be placed in a way that makes them appear operable. They should overlap with the window casing and align with the top of the sill. Under no circumstances should the shutters be separated from the window jamb.

RULE #3 PLACEMENT. Regardless of whether

the window to which it is paired. For instance, rectangular windows should have rectangular shutters. Windows with arched tops should have shutters with a similar shape. Window radius and shutter radius should be equal. If a window has a transom above it, shutters should be designed to cover the entire composition.

mistake that occurs when installing louvered shutters. In the open position, louvered shutters should slant toward the exterior wall, not away from it. This is because in the closed position, the louvers would drain water away from the window.

be used for single windows. Grouped windows in banks of two or more do not receive shutters. If there is a single, narrow window, a single shutter the same width as the window should be used and can be placed on whichever side of the window looks best.

As with other design elements, shutters should be well-thought-out and carefully considered: Do they add to or detract from the style of the home? If they add to the home's design, are they being used in the right way? It is better to eliminate shutters altogether than to design and apply them incorrectly.

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