EXCLUSIVE RESEARCH

Builders and architects plan to certify more high-performance homes, but there's a limit as to how green they will go

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By Mike Beirne, Senior Editor

he majority of builders, designers, and architects who completed Professional Builder's Green Survey plan to have the bulk of their projects certified green, and most indicated that clients are paying a premium, though small, for an energyefficient home. Yet this year's survey revealed a sentiment against "extreme green" as builders are sticking primarily with more familiar products in windows, appliances, HVAC systems, insulation, and sealing practices to deliver a high-performance house.

As far as the newer bells and whistles. respondents wrote that the lack of demand, higher costs, and the inability to measure whether some green features really work kept them from delving much beyond building a tight envelope and installing Energy Star appliances. As one Arizona custom home builder wrote, "I need to be in the black. When you mix green into it, most of the time you get mud." See the charts for more results.

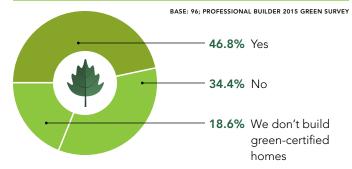
METHODOLOGY & RESPONDENT INFORMATION This survey was distributed between September 10 and October 13 2015, to a random sample of Professional Builder's print and digital readers. No incentive was offered. By closing date, a total of 100 eligible readers returned completed surveys. Respondent breakdown by discipline: 38 percent custom home builder; 21 percent diversified builder/remodeler; 15 percent production builder for move-up/move-down buyers: 11 percent architect/designer engaged in home building: 6 percent multifamily; 2 percent luxury production builder; 1 percent production builder for first-time buyers; and 6 percent other. Approximately 53.9 percent of respondents sold one to five homes in 2014, and 15.4 percent sold more than 50 homes.

Approximately how many of your new home projects include the following features?

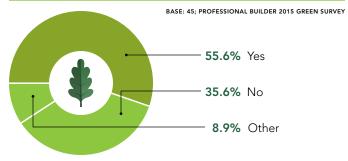
	All	Most/ Some
Energy-efficient windows	90.2%	8.7%
High-efficiency HVAC system	83.5%	15.4%
Energy-efficient appliances	84.4%	14.4%
Enhanced insulation	75.6%	19.9%
Air sealing package to reduce infiltration	70.3%	20.8%
Moisture-management products and methods	67.0%	28.5%
Energy-efficient lighting	65.9%	31.7%
Improved indoor air ventilation	62.9%	31.6%
Zero-VOC paints/sealants	52.3%	34.9%
WaterSense-certified plumbing fixtures and fittings	50.6%	40.0%
Low off-gassing products (e.g., formaldehyde-free cabinetry)	44.2%	47.6%
Construction waste reduction	43.0%	45.3%
Landscape designed with drought-tolerant plants and minimal site/soil disturbance	29.3%	50.0%
Tankless water heaters	29.2%	47.1%
Photovoltaics/solar panels	10.9%	18.0%
Rainwater harvesting system	8.5%	30.5%
Insulated concrete forms/structural insulated panels	6.0%	40.4%
Geothermal heating/cooling	4.7%	30.5%
Graywater reuse system	2.4%	21.9%

No surprises here as the most-used green products have been in the top five since the 2013 Green Survey. BASE: 92; PROFESSIONAL BUILDER 2015 GREEN SURVEY

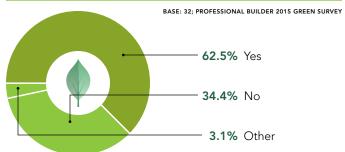
When you market your high-performance homes, do you include any reference in your messaging about healthy living?



If yes, would you say the healthy-living message carried as much or more impact in closing the sale as the energy-efficiency benefits?



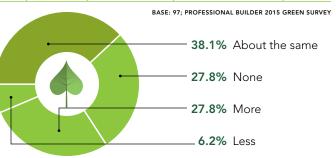
If no, are you aware of any documentation or studies that could show buyers a link between green/high-performance homes and the health benefits for occupants?



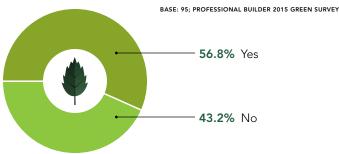
Collaboration of builders with public health experts is in its nascent stages, but there is a growing body of building science research that shows the impact of a dwelling on well-being and how improvements can enhance respiratory health. One such study from the National Center of Biotechnology Information supported the beneficial effect of a LEED-certified housing complex in New York's South Bronx on decreasing asthma symptoms. For more details, see http://www.ncbi.nlm.nih.gov/pubmed/23543019.

green-certified

In the past 12 months, has your company built more or fewer green/high-performance homes (certified by self or a third party) compared with the previous 12-month period?

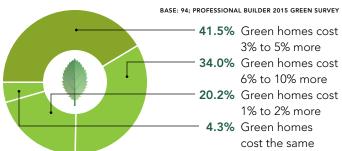


In the next 12 months, do you plan on certifying (through yourself or a third party) any of your new home projects as green/energy-efficient using a green rating program?



About two-thirds of respondents built more or the same number of green houses during the past year, and the majority intend to certify their homes as green during the next 12 months.

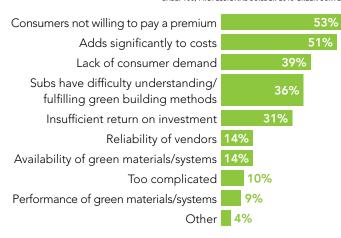
How does the initial cost of building/designing a green/highperformance home compare to the initial cost of building/ designing a home that does not use these features?



Building green is more expensive, and though the majority of builders indicated that clients will pay some sort of a premium, many builders wrote in open text comments that their buyers either want green features without paying for them or, per a New York builder, are no longer asking for green features since the recession.

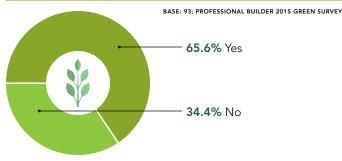
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What are the primary barriers you encounter with building/ designing and selling a green/high-performance house?

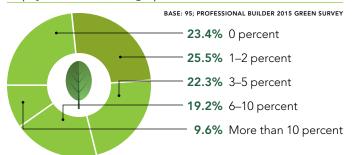


Other barriers mentioned included solar-panel maintenance and educating consumers about green benefits beyond those offered by windows and doors.

With all other factors being equal, do you believe certified green/high-performance homes capture a premium over standard homes?

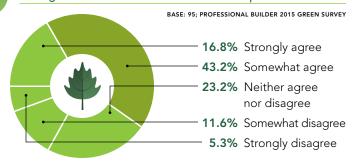


How much of a premium are homebuyers willing to pay for a certified/high-performance home?



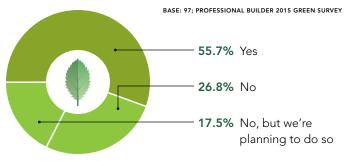
The majority of respondents see the profit-generating potential of green and report seeing customers pay a premium, though tiny, for it. BASE: 95; PROFESSIONAL BUILDER 2015 GREEN SURVEY

Please indicate the extent to which you agree or disagree with this statement: Green helps sell homes.



Most respondents indicated that green helps sell the house, but going "extremely green," not so much. A California builder wrote that there is a lack of consensus about how valuable it is doing certain green things over others, and added that green "experts" are not up front about the increase in the price of their services for going extremely green.

Do you currently provide prospective buyers with a checklist of energy/sustainable benefits your homes provide as a means to sell the homes?



Even though the majority of respondents try to educate customers about benefits such as savings on utility bills, many builders noted in open text comments that consumers don't have much interest in green homes and that the added costs are a hard sell.

Which program(s) have you used to certify your homes?



The Environmental Protection Agency's Energy Star program is the most popular. Certification programs mentioned in the "other" category were state or municipal affiliated standards such as California Advance Home and City of Austin (Texas) Green Building.