Residential Framing Revised

I was reading the article "Solving the Uplift Puzzle" in your July/August 2007 issue, and I could not agree more [with the new approaches]. We are a residential framing contractor in Jacksonville, Fla. We frame approximately 1,200 houses a year in northeastern Florida. Recently, we partnered with a lumber company, Panel Tek, and a local residential engineer to put together a very aggressive style of engineering that has eliminated 90% of the steel connectors in the houses we frame. We've been incorporating this style of engineering in our framing for about a year now and have found that the savings to the builder, and ultimately the consumer, are substantial. The combined use of uplift and shear in the wall sheathing panels is the basic ingredient to this new style of engineering.

Mark Bedford
Vice President of Construction, S.A. Robinson Construction
Jacksonville, Fla.

Backdrafting Reminder

I think that this magazine is highly worthwhile. In the last issue (July/August 2007), however, there is a slight yet very important oversight in the article "Air Leaks: Hidden Moisture Movers." Depressurization due to improper air movement can, and often does, cause backdrafting of combustion appliances, which introduces carbon monoxide (CO) into the building. The lack of understanding of this issue ranges from improper CO detector placement (remember CO is lighter than air) to tightening a house without calculating required air exchanges. We strongly support building science and looking at what it takes to build a whole, interconnected unit. It would be nice to see a follow-up article that includes the testing guidelines from the Building Performance Institute.

Jerritt Gluck
Bonded Building & Engineering
Oyster Bay, N.Y.

Information about the Building Performance Institute's technical standards can be found online at www.bpi.org/contractor/standard.htm.

No Free Lunch

Aaron Hoover's article on so-called "zero energy" homes ("Extreme Green," *Breakline*, July/August 2007) was well written and informative. Advancing the energy efficiency of homes should be a goal of builders throughout the United States and particularly in the South and South Central regions, where household energy consumption leads the nation. But I'm disappointed that your magazine continues to promote the "zero energy" fallacy. This term suggests a kind of perpetual motion machine that's not really possible. While the technology exists for homes to generate their own power, the net result will never be zero energy. Even the NAHB Research Center, in its wildly optimistic assessment of the potential impact of zero-energy homes, concludes that only a partial reduction of energy usage is deemed possible:

> By 2050, ZEH with a tax incentive for solar technologies can reduce the energy consumption of all single-family homes by 19%, while over the same time, the stock of single-family homes increases by 39%.

Homes will always require more energy to operate than they can feasibly produce. To suggest otherwise sets unrealistic expectations.

Robert O'Keefe
Charleston, S.C.

The often cited definition of a zero-energy home is one that can return as much energy to the utility as it takes on an annual basis. However, net savings are tabulated in different ways. Some argue, as you do, that the net energy provided on site should equate to 100% savings on total energy used, while others factor in the total efficiency of the home to arrive at a net savings compared to the usage of a conventional home. Still others claim that if the home runs on energy from renewable sources, regardless of where this energy is produced, it qualifies as net zero energy.

It's worth noting that the report you cite from the NAHB Research Center is advancing a claim about the energy usage "of all *single homes" (our emphasis), not of ZEH homes only. However great the reduction of reputed ZEH homes, even these cannot account for the energy usage in all none-ZEH homes.*

Your point is still well taken. Regardless of how the savings are accounted for, the more precise term now preferred by the U.S. DOE's Building America team is "near zero energy" (which is also used by Mr. Hoover in his article). This would have been the better term to use throughout.

We want to hear from you!

E-MAIL
coastal-editorial@hanleywood.com

MAIL
Coastal Contractor Magazine
Attn: Letters, 186 Allen Brook Ln.
Williston, VT 05495

Please include the city, state, and a daytime phone number with your correspondence.