In the News

Energy Star Raises the Bar With Tough New 2011 Specs

In an effort to stay ahead of advancing model energy codes, the EPA Energy Star for Homes program released its draft of a proposed new specification this spring. Slated to take effect in 2011, the new spec goes beyond previous Energy Star upgrades. While earlier moves to toughen the program focused on lowering the Home Energy Rating System (HERS) score required to earn the label, the draft 2011 standard takes a different approach, introducing a new set of prescriptive checklists for particular building components and systems.

Program director Sam Rashkin says the new prescriptive rules are intended to build on the program's existing success in transforming building industry practices. In markets like Houston, he says, where as many as 40 percent of new homes have received Energy Star labels in recent years, building trades have improved their practices even on non-Energy Star projects. "Once Energy Star comes on the scene and the hvac contractors visually see the difference from doing better ductwork, they just start doing good ducts everywhere. Trades don't want to do inferior work, so the duct systems in all the homes start getting better. The air-sealing in all the homes starts getting better. People start expecting low-e windows on all the homes, so builders don't order low-e windows for the Energy Star subdivisions and lower-quality windows for the non-Energy Star subdivisions."

System checklists. The program already includes one detail checklist: The "Thermal Bypass Checklist" was introduced in 2006 and requires energy raters to verify quality insulation and air barrier installation at specific locations (such as behind tubs and showers, or in attic kneewalls). Now program managers are proposing five more lists: a framing checklist calling for 2-foot on-center stud spacing, two-stud corners, single top plates, and reductions in window and door stud and header framing; a "water managed construction" checklist encompassing items like exterior flashing, wall drainage plane details, and site grading; an air-quality checklist for the home's ventilation system; and two checklists relating to hvac installation quality (one for the hvac contractor to complete and one for the home energy rater). The spec calls for special attention to air-sealing details, including a requirement to caulk behind drywall at the top of wall plates beneath unconditioned attics (intended to minimize air leakage into the attic from conditioned space below). But the air-sealing inspection can be skipped if a blower-door test is conducted instead.

According to Rashkin, the comprehensive attention to critical details will significantly improve the quality as well as the energy performance of buildings. Instead of relying on a HERS index target to ensure high performance, he says, "we want a complete building science approach that delivers complete systems. The thermal envelope system will be complete, and therefore it will work. The hvac system will be complete, and therefore it will work, at

■ Construction on the New American Home 2010, a model home scheduled to debut at the 2010 International Builders' Show in Las Vegas, has slowed while the builder struggles to obtain financing to complete the project. News reports indicate that Las Vegas builder Domanico Custom Homes can't find a bank willing to finance the final draw needed to finish the 6,000-square-foot house, which is about 60 percent complete.

■ Among window and patio-door manufacturers, Pella earned the highest grades in the 2009 Windows and Patio Doors Satisfaction Study. The consumer survey is conducted by J.D. Power and Associates. Rounding out the top five are Andersen, Milgard, Marvin, and Weather Shield.

■ About 3,000 Ridgid model R4511 10-inch table saws sold through The Home Depot between January and July 2009 have been recalled because the arbor shaft can fail when used with a stacked dado set. For a free on-site repair or for more information on the recall, contact the distributor, One World Technologies (866/539-1710, ridgid.com), or the Consumer Product Safety Commission recall hotline (800/638-2772).

Energy Star
continued from page 1

rated levels. The water-managed construction system will be 100 percent complete, and therefore the homes will be protected. The ventilation systems will be complete and tested, and so we will be assured of proper air exchange in high-performance homes. And the energy-efficient components will be comprehensive."

Critical reception. Initial reaction to the new approach from builders and energy raters already working with Energy Star, however, has been sharply negative. In formal comments submitted to the EPA, raters complain that they lack the expertise to take responsibility for framing details or exterior components and finishes. By the same token, they argue, third-party raters should not have to try to supervise or overrule licensed trade contractors such as hvac installers. For their part, builders worry about the cost of the required practices. And raters and builders alike wonder who will pay for all the trips to the job site needed for multiple inspections of various building systems.

Rather than accelerating market transformation, critics argue, the new changes will set progress back. "The timing of these changes is not right," commented one rater. "With the economy in a downturn and builders going out of business, additional requirements and costs will cause builders to say the heck with the Energy Star program." Non–energy-related issues like water management are better left to other programs, say such detractors. Another rater said, "I can see that all of these new items have very good intent. However, many far exceed energy as an overriding factor, and all of them drive the cost of the program up. Is Energy Star trying to become Sustainability Star?"

A worthwhile risk. By the time 2011 rolls around, of course, the home-building economy may no longer be in such dire straits. And with energy efficiency high on the current administration's priority list, budgets may include financial incentives for builders who embrace programs like Energy Star and for the rating industry that supports them. Sam Rashkin, at any rate, seems unperturbed so far by the outcry provoked by his agency's new spec. "We will lose numbers, initially," he acknowledges. "But the value proposition is so superior for what we're doing, I think the growth on the back end will be much greater. It's quite a risk we're taking — but you know, the quote I'm using in all my presentations is from Wayne Gretzky: 'Great skaters skate to where the puck is going to be, not where it is.' And we're just convinced that where you have to be if you're going to be a relevant builder in the next four or five years is where these specs are going." — *Ted Cushman*

Asphalt Roofing Prices Defy Downturn

While the slowdown in the construction industry and declining fuel costs have lowered the cost of most building materials, prices for asphalt shingles continue to rise. Back in 2008, Atlanta-based KTM Roofing reported that its cost per square for three-tab asphalt shingles rose from $30 to $46 between January and June. By February 2009 — as gas prices fell from more than $4 per gallon at midsummer to less than $2 per gallon — KTM's shingle prices had climbed to more than $60 per square. Nationally, asphalt shingle prices rose almost 60 percent from March 2008 to March 2009, according to the Producer Price Index.

And they're unlikely to drop any time soon, says KTM president Tim McLoughlin — even though higher shingle prices have led to a drop in demand for asphalt roofing. "Unlike the price of oil, once the cost of shingles goes up, it historically stays at that level," said McLoughlin in a recent company statement. "Asphalt shingle prices do not fluctuate like oil prices do."

According to Jim Haughey, chief economist with Reed Construction Data, asphalt shingle prices are more closely tied to the price and availability of asphalt — which he calls an "inconvenient by-product" of the refining process — than they are to the price of crude oil and other primary petroleum products. Oil companies have learned to squeeze more high-value products like gasoline, jet fuel, and diesel from the bottom of the crude-oil barrel, he notes, so when those products are in demand, refineries produce less asphalt, driving up its price. However, when demand for gasoline and other light products falls and asphalt supplies rise, shingle prices don't necessarily start to drop — a phenomenon Haughey attributes to delays in price adjustments along the supply chain; a complicating factor this year is that the economic stimulus package — with its emphasis on road construction and infrastructure repair — places yet another competing demand on asphalt supplies.

Haughey expects refinery production to increase as the economy recovers, yielding more asphalt and steadying asphalt shingle prices through next year. But other analysts point out the impact that weather can have on shingle prices: Hurricanes, tornadoes, and hailstorms can drive demand up rapidly. Bill Good of the National Roofing Contractors Association says he doesn't expect any big increases in the cost of asphalt shingles in the coming months. "But we're also not seeing any big price drops," he says. — *Andrew Wormer*