Comments Via E-mail From Bill Hill, Air By Design

Remarks Concerning the ENERGY STAR Proposals

BUILDER OPTION PACKAGE

- Cooling and Heating equipment: Clarify Right Sized- who is to judge whether it is done correctly or not? Most HERS raters are not qualified. Don't get me wrong – I definitely agree with this requirement. However, it could add another 1 hour and a half to an average house to truly determine if it is done correctly. Why is a 13 SEER AC acceptable in cold climates, and the heat pump requirement the same? – the HSPF should be the dictator – often times you can get a higher HSPF with a lower SEER.

- Thermostat: I believe a programmable stat is poor criteria. What is the chance someone is actually going to use it?

- Ductwork: 4 cfm <u>what?</u> Clarify or give an example. At 9 cfm25/100 sq ft, you might as well not have criteria. Ex.: 9/100 x 1600 (let's say 2 ton system) = 144 allowed. At 6% of 800 cfm the allowance is only 48 cfm.

- Lighting and appliances: What about computers that get left on all day long? I realize that this is homeowner driven, but it is more likely that this occurs than a programmable stat operated for energy reduction.

- The map: shouldn't this map distinguish between each climate zone vs. two separate classes?

- Under NOTES:

    - What benefit is a tankless gas water heater, normally installed outside, if the pipes are not insulated? And what if they have it on a continuous run loop for instantaneous hot water?

    - Thermal bypasses should be in the education process to the builder. To require raters to verify is asking the rater to do the work of the builder. If the builder has not done his job in preventing these, then the house will probably not pass the envelope test. The envelope test tells it all. Let's not require verification where the bottom line of testing will tell the story. These criteria are not only a waste of a rater's time, they will also increase the cost of certification. Presently, the poor marketing and certification cost are the biggest hang-ups in the industry. This will simply make it worse, with little benefit.

- Strange - a house in region 4 can have 35% WFA and still pass. .Region 4 needs criteria when windows exceed 21% wfa also.

- Why can't a compact fluorescent count in a storage, laundry, and garage room? These appear to be places where they most likely get left on for lengthy duration.

PERFORMANCE PATH

- Envelope: See remarks above for the BOP. Rather than address this issue, which is basically a requirement to meet the envelope test, there should be stricter guidance on the installation of insulation. I have been behind other raters and cannot understand how they can consciously accept some of the insulation jobs provided. Also, another way to greatly improve ENERGY STAR homes is to have a requirement on zonal cavity pressures, which not only affects energy efficiency, but also health and safety.

- Duct Leakage: Less than 6 is a farce. This is the one area where ENERGY STAR had a bite, but it won't at this rate. I do agree with changing the standard to square feet of conditioned space. See also remarks under BOPS.

- Under NOTES:

    - The HERS standard should be easily accessed on a website (without cost) – this may already be the case and I am ignorant, but if it is, it should be tested here.

    - For the HERS approach, shouldn't this say that programmable stats with ramp up technology <u>only</u> can be counted. Surely this is not saying that all heat pumps must have such. This would be ridiculous – see remarks under BOP above.

    - Why are there not any criteria for gas fireplaces – is this an oversight or are the gas lobbyist preventing a criterion on this matter? This is a serious problem!

THERMAL BYPASS INSPECTION CHECKLIST

This should be changed to address the builder, such that these are items he needs to verify if he wants to be assured that the envelope test will pass. The checklist can be an excellent tool for the builder. It really is a good list, and it

also makes a great tool for educating the builder. However, it is redundant for the rater if an envelope test is to be performed and will require much more inspection time, travel time, and cost to the homeowner without a real advantage.