

## Top Three Things to Make Sure Your Design Team is On Top Of:

1. **Ventilation:** Have the design team put together a Ventilation System Strategy *before* you hire them. Make sure they give you detailed plans, don't accept "It's just 15% better than code." The system should be 1.5 sones (a sone is a unit of perceived loudness) or less and be rated for constant duty. Panasonic is generally considered to be the best, but NuTone and AirKing also make acceptable models. The ducting should be 4 inch rigid duct (to avoid duct collapse during the course of construction), and there should be an appropriate controller and termination kit. Please note that this type of ventilation is not required in every area of the country, however, we recommend it.

2. **Mechanical Equipment:** Right-size your mechanical equipment. Don't let the engineers push a larger system than you need. Use both their estimates and the HERS rater's to find the right size equipment for the space you have. The size is important because of cost issues, making room for equipment in the building plans, too-large equipment can cause "short-cycling" which counteracts other efficiency measures and wears out the equipment. Your HVAC contractors should be submitting load calculations as part of their bid submission.

3. **Air Sealing:** Know the Thermal Bypass checklist! Look at the ENERGY STAR Qualified Homes guide to the Thermal Bypass checklist, and do a walk-through with your design team to make sure the insulation is being installed correctly. Make sure the insulation being installed is rated higher than code. You can see the **Thermal Bypass Checklist** here:

[http://www.energystar.gov/ia/partners/bldrs\\_lenders\\_raters/downloads/Thermal\\_Bypass\\_Inspection\\_Checklist.pdf](http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/Thermal_Bypass_Inspection_Checklist.pdf); and a **presentation of how to perform a Thermal Bypass checklist** here:

[http://www.energystar.gov/index.cfm?c=bldrs\\_lenders\\_raters.ResESMktgSalesPresentation](http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.ResESMktgSalesPresentation).



