

Comments Via E-mail From Thomas H. Marston, Energy Services Group

I am writing to propose revisions to the thermal bypass checklist.

Generally, we support the items listed on the thermal bypass checklist. We have learned that these areas of the house should be sealed during construction to address convective losses and in some cases prevent pipes from freezing. In most cases, building leakage will not be significantly reduced unless the bypass is connected to a large portion of the interior surface of the home.

These items reflect the requirements in the 2004 supplement of the IECC. Section 402.4 Air Leakage clarifies many of the areas that must be sealed per the code. The code also includes common walls between dwelling units and this item is not addressed in your proposed list.

We have treated many townhomes and have learned through blower door testing that a common wall can significantly affect building leakage when the common wall connects to open-webbed floor trusses. If this floor system is not utilized, then convective losses at the party wall can reduce comfort and raise energy costs. The interior townhome, which has 2 common walls, has twice the problem as the end unit.

We recommend that you include common walls between dwelling units as an area that must be sealed in the thermal bypass checklist. This will improve occupant comfort, lower energy costs and ensure that the home has a significantly lower air leakage rate. In addition, the Energy Star Program will align with the minimum requirements of the 2004 IECC supplemental code.

We are willing to provide details how this should be treated during construction. We can provide test results that demonstrate improved performance when the common wall is sealed.

Thank you for considering this recommendation.