

Comments Received Via E-mail From Mark D. Tyrol, P.E., Battic Door Energy Conservation Products

Dear Mr. Passe,

We wish to comment on the Thermal Bypass Inspection Checklist ENERGY STAR Qualified Homes [DRAFTS 2/8/05 and 2/23/05]:

#1: Proposed wording:

Attic Hatch/Dropdown Stair:

Attic opening is fully gasketed for an air-tight fit.

Hatch is covered with insulation that is attached and fits snugly in framed opening.

Comment: In addition to fully gasketing the attic opening to provide an air-seal, attic dropdown stairs and attic hatches should be covered with insulation to a level not less than the remainder of the attic.

In order to insulate attic dropdown stairs, an attic stair cover is installed over the stairs. There are a number of techniques and products available in the marketplace that provide solutions to enable this to be done quickly, easily, and affordably.

An insulated cover should be required for attic dropdown stairs, as an insulated cover is required for Whole-house Fan Attic Penetrations (see below).

The benefit to insulating the attic hatch and the attic dropdown stair opening (which can be 10 square feet or larger) to a level not less than the remainder of the attic is justified by the rapid payback from reduced heating and cooling loss.

Furthermore, techniques for air-sealing and insulating the attic hatch and the attic dropdown stair are completely different.

Suggested Revised Wording:

Attic Hatch/Dropdown Stair:

Attic Dropdown Stair is provided with a fully gasketed insulated cover with the insulation level not less than the remainder of the attic.

Attic Hatch is fully gasketed for an air-tight fit and covered with insulation to a level not less than the remainder of the attic. The insulation is attached to the top of the hatch cover and fits snugly in framed opening.

#2: Proposed wording:

Whole-house Fan Attic Penetration:

An insulated cover is provided that is gasketed to the framed opening.

Comment: The Whole-house Fan Attic Penetration should be provided with an air-seal and covered with an insulated cover with the insulation level not less than the remainder of the attic.

The benefit to insulating the Whole-house Fan Attic Penetration (which can be 9 square feet or larger) to a level not less than the remainder of the attic is justified by the rapid payback from reduced heating and cooling loss.

The insulated cover should provide an air-seal. This can be achieved by providing a gasket between the cover and the perimeter of the Whole-house Fan.

Although this is the preferred treatment, in order to install and maintain a Whole-house Fan Cover, convenient attic access is required.

An alternative method to air-seal and insulate a Whole-house Fan where convenient attic access is not provided is to install a shutter seal. A shutter seal consists of insulation attached to the shutter from the inside of the house.

There are a number of techniques and products available in the marketplace that provide solutions to enable this to be done quickly, easily, and affordably.

Suggested Revised Wording:

Whole-house Fan is provided with a fully gasketed insulated cover with the insulation level not less than the remainder of the attic.

As an alternative where convenient attic access is not provided, the Whole-house Fan shutter is covered with a fully gasketed insulated cover attached to the shutter.