

MECHANICAL CODE DISCUSSION

NEW PRODUCTS Manufacturers' Installation Instructions



BRENT URSENBACH

BRENT URSENBACH

SALT LAKE COUNTY PLANNING
AND DEVELOPMENT

bursenbach@slco.org

385-468-6694

RECENTLY, DEAN DYATT AND I had an extended discussion regarding an inspection, where the inspector found a 95% efficient condensing furnace connected to the bottom of a B-vent. After several emails, text messages, and phone conversations, I realized the condensing furnace was vented using a

DuraVent

FasNSeal® 80/90

vent kit.

This is a Special Gas Vent system listed for its use, defined, and allowed per the IRC and IFGC. The issue with the

inspection was the installation instructions were not on site. This special gas vent system must be installed per the manufacturers installation instructions, and the instructions must be on the site for inspection. The images included here detail options for this vent system.

Probably many reading this have never seen this special vent system, which allows a 95% efficient Category IV condensing furnace to vent with a stainless-steel liner, up through a B-vent, with Category I 80% efficient furnaces and natural draft water-heaters also connected. Instructions/Tables must be followed, insuring there is

sufficient annular area between the inside special vent liner and the B-vent.

CODE TEXT:

IRC G2403, IFGC 202 – Definitions

LISTED. Equipment, materials, products, or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of *listed equipment* or materials or periodic evaluation of services and whose listing states either that the *equipment*, material, product, or service meets identified standards or has been tested and found suitable for a specified purpose.

VENT. A *pipe* or other conduit composed of factory-made components, containing a passageway for conveying combustion products and air to the atmosphere, *listed*, and *labeled* for use with a specific type or class of *appliance*.

Special gas vent. A vent *listed* and *labeled* for use with listed Category II, III and IV *gas appliances*.

Type B vent. A vent *listed* and

labeled for use with *appliances* with *draft hoods* and other Category I *appliances* that are listed for use with Type B vents.

IRC R303.2 – Installation.

Materials, systems, and equipment shall be installed in accordance with the manufacturer's instructions and the International Building Code or International Residential Code, as applicable.

IRC G2427.4.2, IFGC 503.4.2

- **Special gas vent.** Special gas vent shall be listed and installed in accordance with the special gas vent manufacturer's instructions.

It's unreasonable to expect an inspector to be familiar with every product on the market, especially new products. When you install a new product, such as this vent system, please insure the technical information, including the manufacturer's installation instructions are on site for the inspection. In fact, the installation instructions should be left on site for all installations. Consider having a staff meet the inspector on the first installation in a city/jurisdiction.

Next month we'll continue the discussion on load calculations, duct design, and equipment selection.

Thanks for your calls and questions, which give me ideas for future newsletters.—Brent ■

