



Chapter 8

Combustion Appliance Installer

Many Super Good Cents homes have fireplaces or wood stoves. Wood stove dealers usually install stoves themselves or contract with an experienced wood stove installer. Fireplaces may be constructed by a mason. Some homes have zero clearance or gas fireplaces.

Combustion appliances must meet Super Good Cents requirements that help minimize the potential for combustion byproducts to enter living spaces. Unvented combustion devices are not allowed in Super Good Cents homes.

FIREPLACES: SOLID FUEL-BURNING AND GAS

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Flue Dampers

Solid fuel-burning fireplaces must have tight-fitting flue dampers with accessible controls. Tight flue dampers for solid fuel fireplaces help minimize entry of flue odors into a home when the fireplace is not in use. Gas fireplaces do not have closeable flue dampers. They must meet venting requirements of the Uniform Mechanical Code.

Combustion Air Intake to Firebox

Super Good Cents specifications require that fireplaces draw combustion air from outside the building directly to the firebox. For manufactured fireplaces, the combustion air supply must be the size specified by the manufacturer, but must not be less than 4 inches in diameter or more than 20 feet in length. For site-built fireplaces, combustion air intake area must be at least 4 inches in diameter and not more than 20 feet in length. The combustion air inlet to a fireplace should be at the front of the firebox, but inside the glass doors.

Tight-Fitting Doors

Fireplaces must have closeable doors. Fireplace doors reduce the volume of heated room air (excess air) that is drawn up the chimney, providing significant energy savings. Doors also help prevent backdrafting of combustion byproducts into the room and keep flue odors out of the home when the fireplace is not in use.



Wood Stoves

Combustion Air Intake to Firebox

The stove must allow ducting of primary combustion air from outside the building directly to the firebox. Many stove manufacturers provide listed kits for direct combustion air. Mobile home-approved wood stoves are OK. They have the same combustion air requirement.

Wood stoves that draw primary combustion air from the room or from a hole in the floor near the front of the stove are not permitted in Super Good Cents homes.

PRESSURE DIAGNOSTICS ARE RECOMMENDED WHEN COMBUSTION DEVICES ARE INSTALLED IN TIGHT HOMES WITH OTHER MECHANICAL SYSTEMS

Many fireplace doors and flue dampers simply are not tight, and many wood stoves take secondary and tertiary combustion air from the home.

It is critical to occupant health and safety that mechanical systems in homes do not create negative pressure environments in the combustion appliance zone. Pressure diagnostics can be used to determine whether combustion appliances are subjected to environments where they become “make-up air vents” for other mechanical systems in tight Super Good Cents homes.

Pressure diagnostics require use of a digital manometer. The manometer is set up to read air pressure in the combustion appliance zone with reference to outside air pressure. Other house systems are turned on, one by one, to assess their individual and cumulative effects.

Contact your local utility or state technical assistance provider for more information on diagnosing negative pressure environments.