



The Whole House System

“The Whole House System” is a term used to describe modern building techniques incorporated simultaneously into a home, creating a structurally sound... *and* healthy... *and* energy efficient home.

Different climates across the United States require drastically different home designs to achieve this goal. A poorly designed home, especially in Alaska, can quickly create an unhealthy living environment (a “sick house”), may be overly expensive to own and operate (high utility bills), or rapidly create structural problems that reduce the life of the home (mold, dry-rot, etc.).

Homes built *without* using “The Whole House System” may effectively address a single issue, but inadvertently avoid the others. For example, a naturally drafty home may provide fresh air through natural penetrations in the floor, walls and roof deck (the building envelope), but in turn will create excessive heating and/or cooling costs. If priority is given exclusively to air-tight construction, the home, in essence, becomes a plastic bag and both the health of the occupants and the longevity of the structure are jeopardized. Even introducing mechanical ventilation with air-tight construction can be inadequate if the ventilation system is “unbalanced.” An unbalanced system can either “push” humid household air into the building envelope or pull harmful gases such as radon gas or appliance combustion exhaust back into the home.



Using “The Whole House System,” Falcon Homes are designed to function as a *system*. With a balanced ventilation strategy to complement air-tight construction techniques, each Falcon Home is deliberately designed towards being maintenance free, energy efficient, healthy and comfortable.