

LCG ALASKA HOME

FEATURES & OPTIONS

Building Insulation: We provide an R30 Arctic wall in our standard package. The walls consist of a nominal 6-inch outer wall with batt insulation and a nominal 2-inch inner wall with 1½ inches of rigid insulation. The inner wall allows plumbing and electrical systems to be easily installed and provides for a tight vapor barrier system with no penetrations. The ceilings and floor (for elevated houses) are insulated with R38 batt insulation. This results in a very well insulated and energy efficient house. We offer R24 or R34 foam core panel exterior walls as an option. The advantage of these walls is that the ease of construction can save valuable construction time during the short construction season prevalent in many areas of Rural Alaska.

Siding and Roofing: We provide metal roofing and vinyl siding in our standard house packages. Metal roofing is the standard for dependability and life expectancy for Rural Alaskan houses. Vinyl siding has the advantages of lower cost and it is easier to ship and install than metal siding. Painted metal siding is offered as an option.

Heating & Ventilating: Our standard package includes a Weil-McLain Gold boiler system with an Amtrol hot water maker. Boilers provide the most cost efficient heating for homes in cold climates and require less electricity to operate than furnaces and other systems. We also provide secondary or backup heat with either fuel oil pot stoves or wood stoves as an option. Our standard ventilation package includes a Panasonic bath exhaust fan, kitchen range exhaust fan and Fresh 80's Ventilators for fresh air supply. The system is designed to meet the requirements of the Alaska Building Energy Efficiency Standards (BEES). We also have a floor plan that is entirely heated by Toyo stoves.

Cabinetry: We provide the Merrilat Oak cabinets in our standard package. These are high quality cabinets and will provide years of excellent service.

Floors: Armstrong Translations vinyl flooring in our standard package. It is a high quality and durable flooring material rated for heavy use.

Doors and Windows: We supply Best Built vinyl casement windows in our standard package. These windows are designed for the cold regions, have excellent operators and seal very tightly when installed. Exterior doors are insulated metal and interior doors are solid core oak for durability. Schlage furnishes all door hardware.

Foundations: We provide foundation systems appropriate for the conditions at your site including piling, post and pad or concrete foundations with crawl spaces. The concrete foundations are used in temperate locations where soils conditions allow. The post and pad or piling systems are used where permafrost or difficult soils prevail. The following is a description of the piling and post and pad systems.

Steel Post & Treated Timber Pad: The post and pad system is often the most economically feasible system for permafrost where the remoteness or lack of equipment makes the installation of piling too costly. The post and pad system provides a good foundation when properly designed and installed. The primary problems with post and pad systems is movement due to frost heaves or thawing permafrost and the difficulty of re-leveling and making adjustments after movement has occurred. Our design utilizes an adjustable post system that makes any future adjustment easy to accomplish. Our adjustable system does not require digging up post bases or refitting braces to make an adjustment. It is as simple as lifting the main beams under the house with jacks, removing the steel pins, adjusting the house to the desired level and replacing the pins. The long-term headaches and high costs of maintenance are minimized. Our system, when properly installed, has proven to be very stable and the need for adjustments has been minimal.

Steel Piling: Piling are generally the most stable foundations for use in permafrost; however, the cost can be prohibitive for remote locations where the equipment necessary to install them is not available. Another problem is that driven steel piling frequently "jack up" over time due to the frost heaving near the ground surface. Our solution is to use a steel pile (typically 6-inch) in conjunction with a bracing system that gives the system the strength to resist heavy wind loads. These smaller diameter piles can be driven with light equipment that can be mobilized to and from remote locations at far less cost than conventional piling systems, which require heavy equipment including cranes, large diameter augers or diesel hammers. We also solved the problem of jacking by an innovative design that allows a flexible bond breaker (to prevent jacking) to be installed with the driven pile. To further improve this system, we provide the same adjustable post system that is used for our post and pad design. That means if you have any movement on the piles they can still be easily adjusted. (Note: We have a patent pending for this system.)

