

What’s in your standard log package?

Our standard log packages consist of log walls, exterior doors and windows, log 2nd floor system, log roof systems, full log gable ends, log siding for skirts & dormers, full log garages, log porch posting, plates and rafters. All log components are pre-cut. Unlike some companies, we provide all log framing components. In other words, many of my competitors will provide 4 log walls, and the rest of the structure, including 2nd floor, roof, garage, and gable ends will be dimensional lumber (2x8’s, etc). Even the 4 log walls, many times, will not be pre-cut. So in that case, it would not be a log package we are talking about, but a package of materials, mostly conventional, that you must cut and install on site as you would a conventional home. This type of home cannot be compared to ours for price or quality.

What does it cost to build a log home?

This is probably the most common question. The answer is really not that simple, though. While shopping for log homes, you will here many different answers, for instance, “2 to 3 times the kit price”. That is a very vague answer, usually given by a trained sale person that will not be building your home. Think about it this way; if the kit price is \$90,000, you have just been told the home will cost \$180,000 to \$270,000. That is a BIG variation, don’t you think?

The real answer is that the cost to build a log home will vary depending upon the style of home, size in square footage, whether or not there is a garage attached, and the finishes you choose for the roofing, log style, flooring, kitchen, etc. AND, of course, the region of the country you are building in.

Remember the “What’s in your standard log package?” question? The cost of your log home will also be dependant upon how the home will actually be built, and to what quality, and with what amenities.

We offer free estimates after meeting with our customers to determine what they are looking for in a home. Budgets will vary widely, as will size and style of homes. We will work within your budget to show you what we can do for you, with no prior obligations.

What is the cost difference between log homes and conventional homes?

The cost difference, given the same style, finishes and floor plans, will be approximately 10 - 15% higher for the log home, using our 8” Interlock profiles, in our area (the Northeast). Normally, though, people tend to want different finishes in a log home than they would put into a conventional home.

Who builds your log homes?

Most of the log home packages that we sell are built by my company. We offer “weathertight shell” construction and “turn-key” construction services. Occasionally, a customer will build their own home. In that case we provide on-site technical assistance to ensure the proper installation practices for the log specific items. We also make ourselves available for interpretation of the blueprints and construction details to help ensure the home is built properly.

Where do your logs come from?

Our white pine logs are harvested mainly from Vermont and New Hampshire. They are milled into log home packages in Hartland, VT. Hartland is where Real Log Homes started in 1963. Our

western red cedar logs are harvested in the Western U.S. and milled in Missoula, Montana, (the second Real Log Home manufacturing facility).

What brand windows and doors do you use?

Real Log Homes offers Andersen windows and patio doors. They offer Therma-Tru entry door systems. My company also offers Marvin windows and doors as an option.

How do you build your roof system?

Over the top of our log or timber roof systems, we use what we call a “Sandwich-Pack” roof. This is a layered system built over pine decking, using a vapor barrier and two layers of high-R foil-faced rigid insulation. We use two layers so that we may lap and taped the joints. Over the insulation, we install 5/8” “Advantech” sheathing and fasten through the insulation into the roof framing with panel fasteners. Over the sheathing, underlayment and finish roofing is applied. This system is closed and not vented. The air infiltration rate into the home is essentially zero. I have been using the same methods for more than 20 years (except we upgraded to “Advantech” over plywood, when that came available).

What kind of roofing do you recommend?

There are a lot of good types of roofing out there. We like to use a 30 or 50 year Architectural style asphalt shingle. Another roof we use often is standing seam metal with a baked enamel paint finish. The metal roof tends to be a minimum of twice the cost of the shingle roof. Given our attention to insulation and infiltration details in our roof systems, a metal roof is not necessary to prevent ice damming issues. Our roof systems are engineered to carry the snow loads of any given region. Therefore, using asphalt shingles that will hold the snow longer is perfectly fine and will add to the insulation factor of the roof with a blanket of snow on it.

What type of heating system do you use?

The most common system is radiant floor heating. We use a high efficiency cast iron boiler with computerized climate controls. We use PEX tubing in concrete floors, conventional floors and truss floor systems. When used on the second floor of a log home, we will add framing over the exposed decking (over the log or timber floor system) to provide a space for the in-floor heating.

For full time residences, the radiant floor heating is the most efficient and comfortable. For part time residences in a cold climate, it is not as practical to use the radiant heating due to the long time it takes to bring a home up to temperature.

We use both propane and oil fired systems with indirect-fired domestic hot water. Currently, oil is more efficient given the burner efficiencies and the fact that oil burns 30 to 35% hotter than propane, providing the system significantly more BTU’s per hour.

How do you do wiring and plumbing in log homes?

Wiring a log home requires more planning than in a conventional home. All wiring within the log walls will be drilled for while the logs are being installed. The chases will typically run from the basement, straight up through the logs to a box location for receptacles, switches, or wall light locations. The lighting and ceiling fan wiring in our roof systems is installed during the construction of the “sandwich-pack” roof system. Additional systems, such as security, roof window controls, etc., must also be drilled for and installed during construction of the shell.

Plumbing also requires more planning. Because our homes have log or timber second floor systems, upstairs plumbing must be carefully planned to allow piping to run within conventional partition systems, so that there is not a need to box out piping in the exposed beam ceiling. It is also

important to remember settling issues. Drainage lines and copper feed lines must be installed so that the settling of the log home will not damage pipes.

How often will I have to stain my log home?

A few factors to consider are; type of stain used, color of stain used, what the exposure is of the home to the elements, and the climate in which the home is built. Generally speaking, the following holds true in the Northeast: 1. Water based stains hold up to moisture longer than oil-based stains and oil based stains hold up to the ultra-violet light from the sun better than water-based stains. Therefore I prefer water-based stains. 2. The darker the stain, the more pigment and the better ultra-violet protection. The exception is a gray colored stain that has a lot of white pigment which provides excellent protection from the ultra-violet light. 3. Building responsibly by having adequate roof overhangs and installing rain gutters to prevent “splash-back” onto the logs will extend the life of the stain job. 4. Proper preparation of the log surfaces will improve stain adhesion. 5. *This is the most important.....*The log home must acclimate for an appropriate amount of time before it is stained. New logs are full of moisture (kiln-dried or not). If one stains their home too early, chances are the job will need to be re-done within a year or two.

When all is taken into account, you can expect to apply a maintenance coat of stain to your south and west exposures within 5 to 7 years after the initial application. The north and east sides usually will last a bit longer. Remember though, unless the conditions are just right, you cannot expect the very lightest colored stain to hold up quite as well.

What is your warrantee?

Real Log Home Products come with a 10 year structural warrantee. This warrantee is covered by a 3rd party insurance company. The policy is purchased by Real Log Homes on your behalf. In other words, you have security in knowing that your home is designed properly, and that the log and timber components going into your home meet grading standards.

Seven North Log Homes, Ltd. provides a comprehensive 1 year warrantee on workmanship. We obviously also provide a code compliant product in which we are bound to for the life of the home. Additional warrantees apply, such as windows, doors, etc. These are manufacturer’s warrantees that would be followed up by the supplier, in this case, Seven North Log Homes, Ltd.

How big are your logs?

Our logs range from 8” wide x 7” high, up to a 12” diameter cope style log. It is important to know that the wider the log, the more energy efficient the home. We get attacked by white cedar companies that say their logs have a greater “R” value per inch than white pine. Although that is true, the difference is only 0.1R per inch. What they fail to remind you is that their logs are 5 or 5 ½” wide. So the efficiency of their homes is significantly less than that of an 8” wide white pine log home.

Do your log homes settle?

All log homes settle. All conventional homes settle too. In a log home, the materials are installed horizontal which promotes more settlement over time due to compression and shrinkage. The amount of settling will vary due to the type of wood used, size of logs, and moisture content of the logs at time of construction, and the climate where the home is built. Close your eyes a minute and think about that milled log wall system and all of those horizontal joints. Now imagine each log shrinking just 1/16” of an inch, (that’s a minimum number), so approximately 1 inch in an 8 foot high wall. If the logs are inhibited from settling, where does that 1” go? Is it possible for each joint to just open up 1/16” (Possible, but not probable) What if

one joint opens ¼””? Is that enough to break the seal between the logs? What if the logs shrink 1/8” per course? Many log companies do not make provisions for settling anywhere. Some will leave spaces over windows and doors, but not allow for settling in other areas.

We allow for settling throughout the home including; around windows & doors, over partition walls, at post locations for 2nd floor & roof systems, at fireplaces and chimneys, and plumbing/heating systems. This ensures that over the course of the logs acclimating, the integrity of the tongue and groove seal between the logs is not compromised.

I’ve seen logs with 2 or 3 tongues and grooves on them. Why do you only use one?

Real Log Home Products use a single 2” wide x ¾” high tongue (or baffle) down the center of the log. On top of the baffle is placed a 3/8” x 1” closed cell polyurethane hybrid gasket. The single tongue in the middle allows for fastening on each side of the log without compromising the seal between the logs. Ask yourself a question.....if a single tongue and groove system does not keep out air and water, why would two be any better? Also, if the first baffle on the weather side fails, where does the water go? It sits between the tongues and you don’t know it. Real Log uses a 2” tongue with a larger and better gasket than you will find on a 2 or 3 tongue system. It is a substantial seal that works!

Do you use kiln-dried logs?

No, we do not. Our logs are air dried. One of the advantages of air dried is that there is less stress placed on the log material. When a log is kilned, the outside inch or so is dried to 12% (roughly). The middle of the log is still green. So the claim is that the kilned logs have an *average* moisture content of 19%. (Framing lumber has similar moisture contents.) When the kilned log is placed in the environment to be built with, it naturally absorbs moisture, in areas where the relative humidity is greater than 12%, (most places). The outer shell of the log, that was dried and shrunken to some degree, now absorbs moisture and swells again. Later, after the home is finished and the natural drying process begins again, the moisture from within travels through the outer grain, finally acclimating to the environment. The log then shrinks a second time. This creates more stress on the wood fibers, causing them to become “unglued”. Thus, they “check” (or split along the grain of the wood). During your shopping and educational process, take a look at the kiln-dried models. They will ALL be checked far beyond the normal checking you will find in an air dried product.

And please also note: kiln-dried log walls STILL shrink and settle!

Are your logs treated for bugs?

Our logs are dip-treated in a product called Tim-Bor, a borate product that is less toxic than table salt. Tim-Bor penetrates into the log through capillary action. The water carrier then evaporates leaving the fine borate crystals in the log itself. The Tim-bor kills bacteria. Without bacteria present, decay cannot happen, nor will wood digesting insects be able to survive in the log. As long as a stain is maintained on the exterior of the log home, the presence of the borates will be permanent in the logs.

Do you offer cedar logs?

Yes. We offer Western Red Cedar as an option to White Pine. We offer all of our profiles in either type of wood.

What is the “R” factor of log walls?

The “R” factor is a measurement of resistance to heat loss through a given material. Log material “R” factors will vary by type of wood or species, and the presence of heartwood (or not). The heart of the tree is denser than the outer, and therefore has a higher “R” value. If you simply look up the “R” value of pine wood in a table, you will find the measurement to be approximately 1 per inch.

In that case, the heart of the log is not taken into account. An 8” wide log with the heart of the tree within will have an “R” value of approximately 12.

The measure of thermal performance of a log wall is not limited to its’ “R” value. Because of the density of the log, thermal mass plays a significant roll in the overall efficiency of a log home. The other crucial component, of course, is the integrity of the seals between the logs. Air infiltration can significantly impact the heating and cooling performance of a log home. In order to maintain efficiency, the joinery of a log structure must be designed and constructed to accommodate the natural drying, shrinkage, and movements that all log structures go through over time.

Are log homes energy efficient? Are there building codes in Vermont?

I will best answer both questions in the same words.

Well built log homes ARE energy efficient. All log homes *should* be energy efficient considering the age in which we live. Think of it like the automobile industry. Due to various regulations, all cars and trucks meet certain standards. They will all run well, when new. The fuel economies will vary the comfort and safety levels will also vary. They all need to be maintained. But, they are all safe and efficient to a certain degree.

Unfortunately, not all new home regulations are enforced. In the United States, there are building codes that apply to EVERY state, county and town. Most states have adopted an energy code. The trouble is that these codes are not always enforced. So, poor products can be built for unknowing consumers in certain areas where the codes are not enforced. These homes are usually sold and built for less than that of a reputable company that follows the code requirements.

Are log homes considered “Green”?

A definition of “Green building” is as follows:

Green building is the practice of increasing the efficiency with which buildings use resources — energy, water, and materials — while reducing building impacts on human health and the environment during the building's lifecycle, through better siting, design, construction, operation, maintenance, and removal. – Wikipedia

Solid wood is the only building material that is renewable and energy efficient. When compared to a conventionally built home with milled lumber, fiberglass insulation, plywood (or OSB) sheathing, drywall, and exterior siding (particularly cement board or vinyl), the production of a log wall system from harvest to milled completion produces only a small fraction of the carbon dioxide emissions. Therefore, right from the start, building out of logs is a great head start to a “Green” home.

Not to mention the savings in energy consumption during the manufacturing processes.