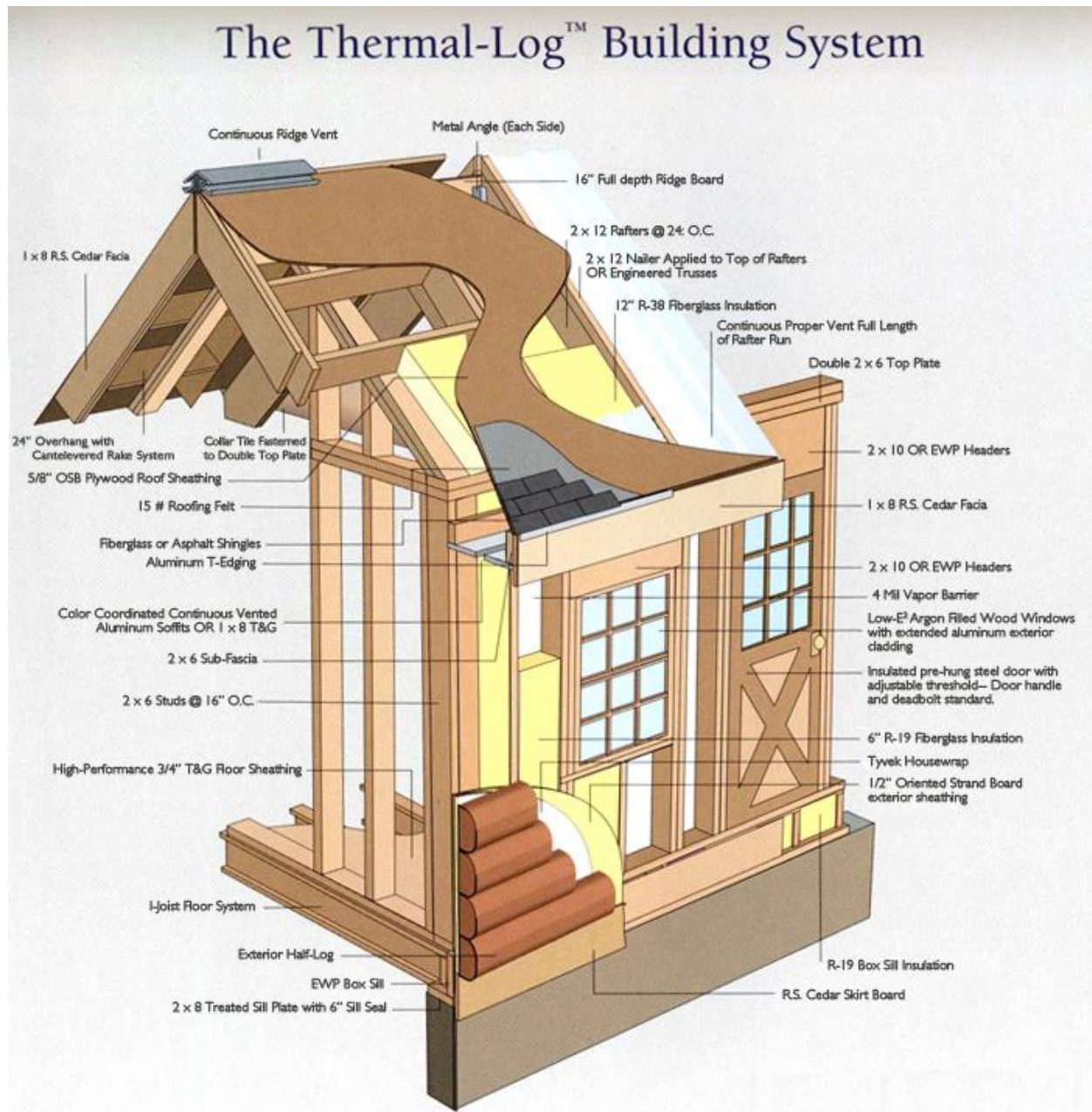


The following information is from the Wisconsin Log Homes© web site:



### Reasons Thermal-Log™ is Smarter than Solid-Log

1. Energy Efficiency - To ensure that every Wisconsin Log Home achieves the energy rating the owner chooses, our Thermal-Log Building System utilizes a 2x6 core wall to employ innovative insulation options and is 3 to 4 times more energy efficient than a solid-log wall.

2. High R-Values - Thermal resistance (or resistance to heat flow) is measured in R-value; the higher the R-value, the more thermal resistance. The average R-value for softwoods is 1.41 per inch and 0.71 for

most hardwoods. An average 10-inch thick solid-log wall provides an R-8.5 (R-14.1 across its full diameter, dropping to R-5.6 at each horizontal joint). Our Thermal-Log wall system with the same 10-inch log can provide you with up to an R-50+ in the walls and up to R-65+ in the roof. Higher R-values result in a more comfortable home and substantially reduced energy costs in every type of climate.

[View R-Value Chart](#)

3. Energy Code Compliance - Our Thermal-Log Building System meets national building codes and all current energy standards. Solid-log homes, however, often cannot satisfy most building codes or Energy Star standards. Some states have exempted solid-log homes from normal energy compliance while others require additional insulation in the home's roof to make up for the low R-value of the solid-log walls.

4. No Settling Adjustments - Unlike solid-log construction, our Thermal-Log is structurally maintenance free. Sure you'll need to stain and caulk your home every few years, but there are virtually no settling problems due to exterior log wall shrinkage. You won't have to worry about adjusting interior walls to accommodate for log settling around fireplaces, doors, windows, and support beams.

5. No Air Infiltration - Thermal-Log uses an energy smart insulated core wall wrapped in Tyvek, the most advanced air and water resistance house wrap in the industry, to ensure higher energy-efficiency by stopping air leaks, resulting in an extremely air-tight home. As a result, the Thermal-Log home's temperature is much more consistent, and the cold and costly drafts typical with solid-log construction are completely eliminated.

Since wood naturally absorbs moisture and expands in high humidity, it also releases moisture and contracts in low humidity. A traditional solid-log home is much more vulnerable to developing air leaks as the log walls expand or contract. Often during contraction or expansion, small 'gaps' will open between the logs, creating air leaks, which cause drafts and costly heating or cooling bills. If not properly maintained with seasonal caulking, natural settling throughout climate changes with most solid-log homes is inevitable.

6. Ease of Electrical Installation - With our Thermal-Log, all wiring can be done conventionally. Wiring is installed in the wall cavity and ceilings prior to interior finish materials or custom log work. Outlets, lights, and even security and sound systems can all easily be mounted on any wall you need without sacrificing beauty.

Wiring a solid-log home is very time consuming and costly because of the notching, chiseling, and drilling required to hide the wires. Wire installation can only be done along doorway trim or behind additional required baseboard so the wiring can be hid. This method requires outlets to be installed much closer to the floor than normal, which can make plugging things in a chore.

7. Trouble Free Construction - Our Thermal-Log Building System has overcome the natural inadequacies of solid-log construction. Professional builders find that our building system, detailed home plans, and

our knowledgeable support team brings certainty and simplicity to the job site. Because of all these advantages, the average Thermal-Log home can be built in approximately 1/3 less time than a solid-log home, saving you time and money.

Since solid-log construction often requires longer lead times and takes a longer time to build, your labor costs will always be more.

8. Design Flexibility - The flexibility of our Thermal-Log system permits an extensive range of architectural styles and the freedom to select and combine unique building materials of your choice. Both the interior and exterior of the home can be finished with an endless possibility of distinctive products. Log and timber accents are easily applied where the owner chooses without being overwhelmed by wood.

Solid-log structures consist of log exterior walls throughout the entire perimeter of the interior of the home. Besides the stain color, usually the only choice owners have is a round or flat log wall, and whether they want chinking or not.

9. Ease of HVAC Installation - Thermal-Log allows all HVAC applications to be installed conventionally and more efficiently in the core wall, or where needed without re-routing it to other walls within the house. Air ducts, diffusers, boots, etc can be installed with ease.

The exterior walls of a solid-log wall cannot be used for cold air returns or any type of duct work. All duct work must be re-routed, boxed out, or hid in closets or interior framed walls. This process requires more materials and more labor, dramatically increasing cost.

10. Ease of Plumbing - Thermal-Log permits conventional plumbing work to be installed and hid within the core wall or floor system, saving the owners time and money.

Seeing that all exterior walls are solid wood in a solid-log home, they cannot be used for plumbing (not even vent piping for sinks can be installed on the outer exterior walls).

11. Ease of Cabinet Installation - Thermal-Log allows for different types of wall finishes, which saves on installation costs and makes fastening cabinets and vanities to the core wall easy and fast.

Because solid-log walls aren't typically flat and shrink in height, problems arise when cabinets are directly mounted to them. To account for movement, the installer attaches cabinets to a sub-frame wall that's built against the log wall. In solid-log construction when cabinets are anchored directly to solid log walls, problems inherently accrue in time if the log wall settles or moves.

12. Ease of Onsite Changes - During construction when homeowners actually walk through and see their walls up; they occasionally realize that the location of a window or door would better serve their needs if it was moved. This adjustment is easily done with our Thermal-Log because the core wall can easily be disassembled or rebuilt as needed.

However, once a solid-log wall is up it is extremely expensive to relocate a window or door because the logs are all stacked on top of one another. Sadly, homeowners realize it's something they'll just have to live with.

13. Ease of Future Additions or Remodeling - The structural integrity of our Thermal-Log Building System gives owners total design freedom; they're limited only by their creativity, property lines and budget when considering remodeling.

Solid-log wall additions are susceptible to developing air leaks. It is very important that the builder constructs and correctly installs slotted anchors or spline boards to allow for movement between the existing structure and the new addition. These joints must be re-caulked as the movement will continue to break the seal.

14. Unlimited Artistic Architectural Styles - Thermal-Log Building System allows for a wide range of styles from Western Mountain, Pacific Northwest, Adirondack, Chalet, Appalachian, and Craftsman to French Country. Whether your style is elegant, rustic or contemporary, your design possibilities are infinite.

Some people feel that many of the solid-log homes built today are more frontier style, rather bland, and free of artistic details other than the log and stone materials used on them.