

# 2011 - Masonry Heater Design House - FAQs

**(1) What is a Tulikivi?** - A Tulikivi is a masonry wood burning fireplace that uses soapstone to store heat and radiate it back into the room. Tulikivi's come in a variety of shapes and sizes and can be see-through, have bake ovens and cook-tops, and designed to go in a corner. Tulikivi is the largest manufacturer of heat storing fireplaces and their fireplaces are UL listed. For more information visit [www.TULIKIVI.com](http://www.TULIKIVI.com).

**(2) What makes a Tulikivi different from other types of wood-burning fireplaces and stoves?** - Tulikivi's do not have temperature swings like steel or cast iron wood stoves, and they don't pull all the heat out of the home like an open hearth fireplace. A Tulikivi provides a gentle warm radiant heat, similar to how the sun feels on your skin on a cool sunny day. They use less wood and burn it cleanly, resulting in less ash to empty and chimney flue system maintenance. Typically a 1-3 hour fire using 20-75 lbs of wood will produce heat for 12-24 hrs. Larger Tulikivi's are rated for more wood and heat output than smaller Tulikivi's. From a safety point of view there is no safer fireplace available when installed and operated properly. It is not necessary to have a fire burning during the night while you are sleeping. The heat stored from the evening's fire will be there all through the night and into the next day.

**(3) Are they easy to operate?** Yes, follow the instructions provided by the Tulikivi dealer for "break in firings" and normal use and follow these simple rules: (1) Know that you have established a proper draft before lighting a fire by opening the proper dampers and priming if necessary (2) Use the driest wood you have available and plan ahead to keep a good supply of dry wood on hand for future fires. Damp or wet wood will produce less than favorable results. (3) Do not choke the fire down, keep a bright clean flame burning. Practice the art of the "top down" burn where the kindling goes to the top, middle or front of the wood. Just as a candle can burn from the top down, so can your fireplace. (4) When the fire is out and the coals are no longer visible, close your dampers as instructed by the company that provided the Tulikivi. Depending on your project this may include ash and fire door dampers, start up and bake oven dampers and also the main flue exit damper. When in doubt, keep the main exit dampers open to allow residual flue gases to escape.

**(4) What kind of wood is best to burn?** Split, dry, seasoned hardwood is the best wood to burn in a Tulikivi or any other wood burning appliance, however other woods can also be burned if they are dry. Pound for pound all wood has about the same BTU's. You will just have to burn more volume of pine than oak to get the same BTU's. Combining less favorable wood with hardwoods is acceptable and can produce a pleasing fire. Less than 20% moisture content and a maximum diameter of 4" is recommended, however larger cordwood pieces can be used if the firebox is large enough. Burning green or wet wood is bad for efficiency, flue systems and produces more pollution.

**(5) Do I need a blower?** - No, just like the sun does not need a blower to heat the earth, a Tulikivi does not need a blower to warm you, family, friends, pets, plants or your home. If you have ever been warmed by the sun on a cool, windy, sunny day, then you know the effect of radiant heat. Blowers and fans may actually reduce the effectiveness of your Tulikivi. In many cases owners use ceiling fans or natural convection to gently circulate the air in the home.

**(6) What about clearances?** Tulikivi's can be placed as close as 3" to combustible walls with an approved heat shield and built on wood floors with proper insulation and support. A minimum of 18" of non-combustible hearth protection in front of the fireplace doors and 8" to either side. Larger hearth areas are better and if you can centralize the heater away from combustible walls this will help avoid clearance issues. In most cases a heat shield can be constructed for situations which cannot be solved otherwise. Try to construct walls near fireplace out of masonry or steel studs and concrete board.

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**(7) What about outside air?** If required, make up air should be planned for in advance. A door conversion is required for air that is controlled from the outside. Contact your local Tulikivi dealer.

**(8) What kind of support structure do I need?** For new construction on main floor areas with a basement, Tulikivi's are typically built on an engineered concrete and steel footing, foundation and hearth slab. The same applies to remodels and additions when it is convenient and cost effective. For slab on grade and basement applications only the hearth slab is necessary. Structural steel can be used where concrete and steel are not practical. With proper insulation and support a Tulikivi can be built over an existing wood floor

**(9) What type of chimney do I use?** Tulikivi's are typically top or base vented in to a new or existing metal or masonry flue. You need a 6", 7", or 8" round UL-103HT metal flue system or properly sized and approved masonry flue. Consult with the manufacturer, heater builder and chimney professionals for proper flue sizing, specifications and clearances. In many cases existing masonry flues or open hearth fireplaces can be re-lined with stainless steel. In some cases the existing flue system is located on the wall at about eye level.

**(10) What is the difference between a top vent and a base vent Tulikivi?** While a top vent heater makes sense to most North Americans a base vent heater sometimes takes a little explaining. With a properly sized flue system, a Tulikivi, has enough draft to vent the flue gases at the base of the heater going either out the back or side of the heater before going up. In fact a number of unique options like heated benches can be considered when base venting.

**(11) Can I install it myself?** There are varying degrees of participation for people who want to learn the process. Some clients take responsibility for most aspects of the project and call in experienced professionals as needed. Taking responsibility for the support structure, clearances, hearth protection, flue connection, and installation of flue system all need to be taken into consideration when installing a Tulikivi.

**(12) I am on a budget, what can I expect to pay for the entire project?** For small to medium sized projects, budgets start around \$10,000 and easily climb to \$15,000 or more depending on your project. If the support structure, flue system and hearth are already in place, the total cost is only the heater and installation. For projects involving larger Tulikivi's with customizations, a budget of \$20,000-\$40,000 is more common. Contact your local Tulikivi dealer for pricing.

**(13) Can they be electrically heated?** Yes, with approved 2KW and 3KW electric elements.

**(14) Can they be faced with a different material other than soapstone?** Tulikivi's can be veneered with a rough face soapstone, a green serpentine, other stone types or any durable dense masonry material. There are many opportunities for the creative use of soapstone or other masonry materials when designing the outside of the heaters.

**(15) What about a natural gas, propane, coal, pellet or corn burning Tulikivi?** Tulikivi's are design to burn wood, however Tulikivi now has a fireplace that will burn both wood and pellets with a simple grate change. The question about other fuel types comes up often and research is ongoing in the industry. As more information becomes available it will be listed.

**(16) How about hot water coils?** First consider that the Tulikivi may provide the necessary heating requirements in the room without having to heat and move water. That being said, water coils have been successfully integrated into Tulikivi's. The important part is that you plan this ahead of time and design a system that integrates the coils with the heater in a safe and easily accessible way. Consult with plumbing professionals and heater builders familiar with this practice.