Thinking of clean heating? Instead of a furnace or boiler, think SOLAR!

Select Solar Systems introduces a new Solar Thermal Heating System consisting of

- → a custom manufactured solar collector, up to 1000 square feet in one piece
- → a large storage system, enough for days of heating
- → a very small heat pump, used only during the cooler months, around 1500 watts This large system is able to provide *both* space heating (heating a building) and domestic hot water (DHW or hot water for daily use) for residential and commercial purposes.

Why Solar?

Solar energy is free and reliable. In Canada, we receive plenty of sun for solar. Environmentally, it just makes sense to minimize our use of fossil fuels. As an example, 1 gigajoule saved = 50 kg carbon emission reduction. In our graph on the next page, one house using our system since 2003 saves on average 120 gigajoules natural gas annually. This represents 6 tonnes less carbon emissions annually or one complete car removed from our roads.

Yes, there are other heating methods but will you ever see your investment paid back? Our goal is to make solar an *affordable* alternative. We manufacture, we do not import. This means we can pass on the savings to you and you will see a complete payback sooner. With government incentives it's even more affordable.

What is solar thermal?

Solar Thermal uses the sun's energy to heat water. This hot water is used to heat a building, (provide space heating), provide hot water (domestic hot water), for pool and hot tub heating.

What is different about our system?

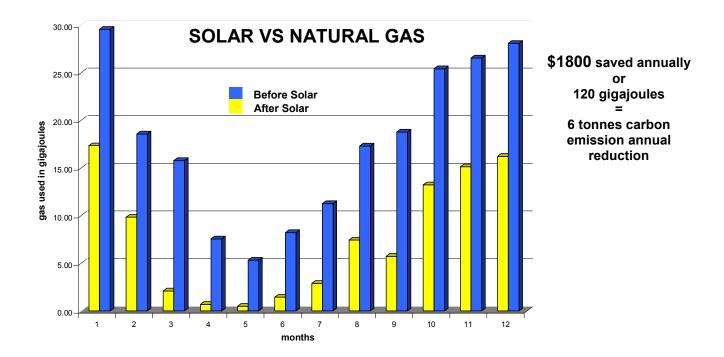
There are three major differences: size, price, and technology:

- Size: More collector = more hot water. We make our collector and storage system large enough to provide space heat, no just domestic hot water or pool heating. Our collector is all one piece varying in size from 32 square feet up to 1000 square feet, not a series of 4'x8' collectors installed side by side. By doing this, we can fit much more square footage of collector on the roof area. This directly impacts the amount of output. Even small amounts of sun are utilized.
- Price: our price per square foot is almost half the price per square foot of competitors. Our system is made right here in Canada, not imported. We've improved existing technology to bring you a higher energy producing, more affordable solar heating system. Every heating system is custom built and prices vary. Most residential systems are between \$10,000 and \$25,000 installed. Rebate offers change every year. Check with us for the most recent updates.
- Technology: our system combines a solar collector and a very small 1500 watt heat pump. This heat pump greatly improves performance in the cold months. During periods of little sun, our system automatically preheats stored water, helping your existing system.

Unlike other smaller standard sized flat plate solar collectors, we manufacture the thermal solar panels customizing them to fit the contours of the roof surface. We locally pre-fabricate and install the collector as a one-piece unit.

Select Solar Systems Ltd. has designed this system for **Residential**, **Commercial or Industrial** use.

- Residential: provides space heating and domestic hot water, as well as pool or hot tub heating.
- **Commercial**: provides space heating and hot water for businesses such as office buildings, schools, car washes, hotels, restaurants and pools.
- **Industrial**: limitless applications for business that require large amounts of hot water, such as manufacturing and food or dairy production.



This system has been developed to be affordable, an economical alternative to burning fossil fuel. Depending on the size of the system and how much hot water a customer would be able to use, some systems will pay back within 5 years.

Two Collector Format Options

Custom Designed: Flat Plate Unit and Rotating Sun Tracker

<u>Flat Plate Unit</u>, usually for residential or light commercial installations is our most commonly installed system. It is a one-piece design, less noticeable and more aesthetically pleasing than other systems, resembling an oversized skylight. The panels can be up to 25 feet long and as wide as required. It is designed to blend seamlessly into a roof replacing the roof in some cases. This offers even more cost savings as you do not have to install roofing material beneath it.

Rotating Sun-Tracker Unit, also a one-piece design that sits on an upright structure and automatically rotates to track the sun. Because it is always in optimum position to the

sun it produces up to 50% more energy than stationary panels. Ideal for commercial or industrial applications because of it's high productivity.

Both units are designed to allow easy access to the collector if maintenance is required. These are well-built, robust units that will provide many years of dependable performance.

Below are some samples of installations.













WILL SOLAR WORK FOR YOU?

If you can answer yes to most of these questions, then YES, YOUR HOME IS IDEAL FOR SOLAR!

- Do you have a sloped roof facing south? The steeper the slope the better.
- Is the roof area 20' x 20' or more?
- Is the roof unshaded by large trees or other buildings?
- Are you building a new home?
- If you are renovating, do you currently heat with either forced air or in-floor hot water heating?

FREQUENTLY ASKED QUESTIONS

Q. Does it work in the winter?

A. Yes, absolutely! We have very large storage tanks and a small heat pump to use every bit of sun. If the sky is bright but slightly overcast the solar will still run. If the weather is very dark and cloudy for many days, our system may not be able to completely heat your home but it will help preheat your domestic hot water so your existing system doesn't have to work as hard.

Q. What fluid is in the collector?

A. Our collector uses water. It is a drain-down system; meaning as soon as the collector is not circulating (i.e. when there is no sun or heat call) the water drains back down into the main storage tank.

Q. What about freezing in winter?

A. If the panels are not running due to lack of sun the water drains back into storage and the collector is completely empty.

Q. What about snow in the winter?

A. The panels for the most part are self-clearing. If more than 8" of snow falls all at once, the outside temperature is very cold (-25°C / -13°F or colder) and it has been very dark and cloudy for many days, 10 inches or so may have to be brushed off the lower edge of the collector. As soon as there is a cleared area, any small amount of sun will turn the panel on. Within a day the panel is normally clear. They do not have any problem self-clearing a few inches of snowfall daily.

Q. Do we get enough sun in Canada for solar to work?

A. Yes, definitely. For most of the year the sun's energy can be used to heat your home and produce all the hot water you'll need. For a few weeks of the winter it probably won't be enough to 100% heat your house but it will help. Usually by mid February solar will be the primary heating system in your home. You will see a 70% or greater reduction in your annual heating bills.

Q. What about maintenance?

A. There is very little maintenance required, other than checking to see if there is enough water in the tanks and that everything is running. (The digital control system supplied makes this very easy). Once every year or two we recommend spraying the collector with a hose to remove dust, especially if you do not receive much rain.

WHO ARE WE?

Gord and Janine Hogan have operated Select Solar Systems in Sorrento since 2005, but 15 years of research has gone into their patented heating system. Originally from the Vancouver area, Gord brings with him over 20 years experience in designing and installing high-end commercial and residential heating systems.

ASK US HOW SOLAR CAN WORK FOR YOU. WE WELCOME YOUR QUESTIONS.

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