Winterizing Your Home

Simple Steps to Money Saving Ideas!

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Introduction

When you are winterizing your home, you must think about all of the areas that will be affected. This is a task that will take some time to complete. You want to be able to save as much money as possible, so you have to work on finding all of the cracks and air pockets that need to be sealed up in your home.

In order to find out the basics about winterizing your home, this report will explain what you need to do in order to save money during the winter season. Here are some of the things that are in this report:

- Energy audits
- Checking for leaks
- Air sealing
- Insulation

ENERGY STAR products that can help you save money on your home by getting a hold of this report and reading it, you will be able not only how to stay comfortable in your home, but you will also learn how to save money in the process.

Conducting A Home Energy Audit

One of the first things that you can do before you start the winterizing process is to conduct a home energy audit. This can help you to figure out how much energy you are using in your home.

The results will help you to take measures to make your home more energy-efficient for the winter season. Even though the season lasts about four to six months, you can still save a substantial amount of money in that time frame.

With an audit, you will learn if the heating and cooling systems in your home are efficient. You will also learn how to save on hot water and electricity. You can do your own home energy audit, or pay a professional to do it for you. Either way you will find out some things that you probably never knew or thought about.

You need to conduct a walkthrough in your home. Once you start, you will find things that you probably did not pay attention to in the past. Make a list of the things that you find such as cracks in the walls, etc.

Professional Home Energy Audits

Professionals that conduct home energy audits are very detailed. They are supposed to examine each room of your home. They should also take a look of some of your utility bills from the past.

The auditor will conduct a blower door test and a thermographic scan. This kind of scan uses a special infrared camera that can detect hot spots in your home. They are usually combined with a blower door test. With this test, if there is an air leak, it will show up as a black streak in the viewing area of the camera.

You should list existing problems with your home that are related to your home not being energy efficient. The auditor will look at the energy bill to determine what he needs to focus on as they are conducting the audit.

The auditor will look at the outside of your home to see how big or small it is. They will also need to know if anyone stays home during the day and how many people live in the home. The auditor will also need to know if every room in the house is being used.

You will need to let the auditor know what the average temperature is that you set for the winter season. They may use other equipment to determine where the loss of energy is coming from in your home.

From your answers, the auditor will be able to help you find ways that you can cut back on your energy costs to save money. As they continue looking around, accompany them and don't be afraid to ask questions. After all, this is your house and you do want to save money during the winter months.

If you need to find a home energy auditor, check with your state or local government agency. They may be able to refer you to someone who is reputable. Check with your utility company to see if they can recommend someone. The utility companies also have people who can conduct home energy audits.

Before you make a decision on an auditor, get some references and make sure they pan out. Ask about the auditor's work. Contact the Better Business Bureau to see if they have any complaints against them.

Air Leaks

If you find any air leaks (drafts), note them on your list. You can save up to 30% or possibly more per year once you get those taken care of. Look for things such as baseboard gaps, gaps at the edge of the floor, gaps in walls and ceilings. Check those areas to see if you feel air coming through. You would be amazed at the items you may find that need repairing.

Other places where you should check for drafts include:

- Window frames
- Electrical outlets
- Doors that have weather stripping
- Attic hatches
- Fireplace dampers
- Air conditioners that are mounted to a wall or window
- Pipes and wires
- Seals in the foundation of the home

If you can rattle windows and doors, there may be a possible air leak. Daylight in a door or window frame can constitute an air leak. Use caulking or weatherstripping to seal up the air leaks. Make sure the storm windows in your home are not broken.

If your home has old doors and windows, you will eventually need to replace them with those that are of high-performance and are durable.

Water Heaters

If you have a water heater that is currently set at 140 degrees Fahrenheit, you can probably lower it by at least 20 degrees. You will still be able to take advantage of saving energy and money.

Have you ever thought about having a tankless water heater installed? The ones with water can be a victim to standby heat loss. Since the water tank is required to have hot water all of the time, it will wait until you are the one that needs it. When you are not using the hot water, there is a cycle with heating up the water and allowing it to cool until it's time to heat it up again.

Hot water that is used will cause cold water to come back into the tank. The cold water helps to keep the tank full. As long as the water stays cool, more energy will be used to heat it up.

With a tankless water heater, the water will heat up when you need it to. The pipes will heat up when you turn on the hot water at the sink. The water will continue to heat up until you turn it off.

Having this kind of heater can be very efficient and you won't be wasting water. You will save money in the long run. Even though it is a little more costly to install a tankless water heater, the benefits are even greater. Within a year, you will have made your money back. Plus you will be able to save up to 50% on your water heating bills.

Your water heater tank can be insulated using an insulating blanket. Doing this can save a lot of emissions from carbon dioxide fumes. You will also save money by doing this. You should also insulate the pipes.

The pipes have to be heated from the hot water prior to having hot water in the tank. The more areas of your water heater that are insulated, the better off you will be. You will have saved money and decreased CO2 emissions.

Window Treatments

You can use window treatments and covering to winterize your home. You will be able to save a lot of energy doing this. Here are some window treatments that can help you keep in more heat during the winter season:

- Insulated panels
- Storm panels
- Blinds
- Draperies
- Shades
- Shutters
- High reflectivity films

Even with these treatments, they cannot help to decrease air leakage or infiltration. Caulking and weather-stripping around the windows can help to decrease air leakage (draft). Using these two methods will help you save energy which in turn, is saving money. You will be able to keep drafts out of your home. So when it gets cold, your home will be warmer without the cool air.

Caulking

The purpose of caulking your home is to seal cracks and gaps that are no more than a quarter of an inch in width. Air leaks (drafts) can be closed by using a caulking compound. The process can be done around the windows and door frames. These are areas where you will find most of the drafts.

Caulking can keep water from seeping in and your home. The caulking compound can be applied on ceiling fixtures, water pipes, drains, faucets, bathtubs and other areas in relation to plumbing.

Before you start, make sure that you have found all of the air leaks in your home. You will also need to figure out how much ventilation you will need for the inside of your home.

You will need a caulking gun to start the process. A disposable cartridge with caulking compound goes in the half-barrel caulking fun. The best kind of caulking gun to have is one that has an automated release. However, there are some cartridges that are pressurized will not need a caulking gun. You can also purchase caulking compound that comes in squeeze tubes and aerosol cans.

There are different types of caulking compounds. They come in different strengths, properties and of course, prices. If you use caulking that is water based, you can just clean it up with water. However, if it is solvent-based, it has to be cleaned up with a solvent.

Weather-stripping

Weather-stripping is used to seal air leaks in your home. You will find many air leaks in windows and doors. You will have to measure the perimeters of the windows and doors that need to be weather-stripped.

Before you start the weather-stripping process, you must find all of the air leaks and see how much ventilation you will need in your home in order to have the best quality of air.

The weather-stripping that you use will be able to endure inclement weather, varied temperatures, and any wear and tear while it is installed. Whatever kind of weather-stripping that you get should remained sealed where it won't peel off.

Air Sealing

Air sealing is one of the ways to help keep heat in your home and also reduce your energy costs. You will be more comfortable in your home having more heat from doing this process. Prior to doing this, you should look for air leaks and determine your needs for ventilation in order to satisfy the air quality inside of your home.

The infiltration of air happens when air from the outside comes in your house and it cannot be controlled. This usually happens by the way of openings and cracks that you may not know about at the time.

Once you seal those openings and cracks in your home you can decrease your heating costs which will of course, reduce your heating bill. Doing this will also create a healthy environment inside your home.

Using ventilation for air leakage is not a good source to depend on because it is uncontrollable. When the weather is cold or windy, a lot of air can come through the home. The infiltration of air can also cause issues with the control of moisture. When that happens, mold can form inside of your home. Living with mold can eventually cause health issues, such as asthma.

Air Sealing An Existing Home

One of the best things that you can do when winterizing your home is air sealing. This can help you make the energy in your home more efficient. Not only will you have a decrease in your energy costs, but you will feel more comfortable in your home.

Prior to starting the air sealing process, make sure that you look for air leaks and check to see what your needs are for ventilation in your home.

Air Sealing With A New Home (Whole-House Systems Approach)

When a new home is being built, the plans and details have to be properly executed. With a whole-house systems approach, there will be a plan in place on how to make your new home energy efficient. With this new approach, the building of your new home and the climate are included in the process of energy efficiency.

You will also need to include these components in this approach for your new home:

- Appliances
- Air Sealing
- Insulation

- Lighting
- Water heating
- Doors
- Windows

The builders and designers know that it only takes one of these components to affect other components of this system. However, they all have a part to play with the energy efficiency of your new home.

You will greatly benefit from using a whole-house systems approach by:

- Being more comfortable in your home
- Dealing with less noise in your home
- Having an environment that is healthy and safe
- Having lower energy bills

The whole-house systems approach is made to work with all home designs. If you want to be more creative, you can have a home designed and built that creates its own electricity.

Where it's an old or new home, air sealing can't take the place of having proper insulation in your home. This is important because you need insulation in your home in order to keep the heat in your inside. To strengthen the work of air sealing, you can also include caulking and weather-stripping.

Insulation

In order to get and keep heat in your home, you will need insulation. When you get more heat flow in your home, you will see the costs of your heating bill decrease. The direction of heat starts from a warmer to a cooler area.

When you start the insulation process, you will need to install foam channels. These channels help the air to flow through certain vents. If you don't have the channels the insulation will go to the eaves and block those vents.

There is also a barrier that works to prevent moisture from seeping inside of the home. If you don't have the barrier, moist air enters through the drywall and the cavity of the insulated wall. The cavity gets cold and there is condensed moisture. When this happens, the insulation gets very wet. Having the barrier will prevent this from happening.

During the winter season, the heat leaves areas that are already heated to areas that are not heated. These areas would include basements, garages, attics and outside of the home.

If you want your home to stay comfortable, the heat that leaves in the winter needs to be replenished by your heating system. As you insulate your home, the flow of heat inside will be constant.

Insulation provides plenty of benefits for you and your home, including:

- A decrease in energy costs
- Less consumption of energy
- Keeps out condensation in your home
- Tax rebates from your government
- Better resale value of your home
- A healthier environment for your home
- Your home will be more comfortable, especially in the winter
- A soundproof home

R-Value

With insulation, you must factor in the R-value. The R-value determines the resistance to heat flow. If the R-value is high, the effectiveness of insulation is greater. The material type, how thick it is and dense factor all come into play in regard to the R-value of thermal insulation. With multi-layered insulation, separate layers of the R-values are included.

In order for an insulated ceiling, floor or wall to be effective in your home, you have to look at where the insulation will be placed.

If you have compressed insulation, your home will not get the entire R-value. If you include insulation that is extremely dense in addition to having lighter insulation, this will compromise getting the entire R-value.

If insulation is installed between rafters, studs and joists, the heat flow will not slow down in those areas. This process is called thermal bridging. When comparing the R-value of a wall, it will not be the same as the insulation that has an R-value. When it comes to insulating an attic, the insulation should cover the joist tops.

A joist is a support component that runs horizontal from wall to wall, or beam to beam. This component is used to provide support for a roof, floor or ceiling. A joist is manufactured from one of the following materials: concrete, wood and steel. The joist gets its support from a beam.

Labels

Regardless of what insulation you plan to use, take a look at the product label. Make sure that the insulation you are getting is compatible with the application. Check for the R-value label on the product.

Federal law requires this on all insulation products being used for a personal residence. The labels have R-value and other information in regard to safety, health and information regarding fire hazards.

You should read all of the information on the label prior to using the installation material. If someone else is doing the installation in your home, have them give you the labels from each product that was purchased.

Insulation Tools

There are some insulation products that you can install in your home. Others will have to be installed by a professional, preferably a licensed contractor. The insulation that you use will be determined by what kind of spaces you have in your home that need to be sealed. There are some areas where the insulation will have to be applied differently.

There can be a combination of the insulation that is used in your home. One thing to note is that you cannot place higher density material on top of lower density material. The thickness of the material on the bottom will be weakened.

Here are the different types of tools and materials that can be used to insulate your home:

- Tape measure
- Utility knife
- Straight edge
- Hammer tackler or lightweight stapler (secure insulation in place)
- Drywall compound
- Expanding foam sealer
- Putty knife
- Portable light (for crawl spaces and attics)
- Rake
- Supports for insulation
- Plywood

If you are residing in an existing home, it may or may not have been built for energy efficiency. However, you can still save money and energy by putting more insulation in your home. In fact, a lot of the older dwellings do not have that much insulation in them.

You will have to see how much you will need in your home and where it is to be installed. This can be done by conducting your own home energy audit or have a professional do it for you.

For newer homes, you can get this information from the builder or contractor. New homes will probably have more insulation in them, especially if they were made for energy efficiency.

Attic Insulation

If you have an attic in your home, you can reduce your energy bill if you insulate it. This is an easy process and can save you money. Make sure that you have enough insulation to cover the attic. You should also add insulation in the area of the access door of the attic.

If you have to replace siding on the outside of your home, it would be a good idea to include insulation at the same time.

After the installation, if the attic is still getting a draft, then you will need to add insulation to the walls on the outside. If you have a crawl space or a basement, insulation can be installed there as well. Contact a professional contractor to see how they can help you with the installation process.

Construction of New Homes

If you combine cavity insulation and insulative sheathing, you will save energy and money. You can find new insulation products that provide assistance with insulation and the structure of your new home. Insulating concrete and structural insulated panels (SIPs) are some of the new products that you can use for newly-built homes. Some walls for the new construction of homes are using straw bales.

Your contractor will be able to assist you with more information about insulation in new homes.

Insulating Your Windows

You can also get storm windows for your home. If you live in an older residence, you'll want to check for cracks. Use caulk to seal up any existing ones. Caulk come in rolls and can be purchased at any home improvement or hardware store. Use the rolls to place in gaps that are visible. This will help the cold air stay out.

The area around the window frame must be clean and dry in order for the tape to stay put for the winter season. If there is any dirt, residue or dust, use a sponge or a rag along with hot water. Allow it to completely dry.

You will also need a window insulation kit. It comes with tape that will stick to the concrete. The plastic is also tear-resistant. Tape around the frames and put pressure on the tape so that it will stick.

With the plastic film, you don't have to measure it. What you can do is place the roll of plastic on the top of the window. Unroll it and cut it to where it needs to end. Press the plastic film against the tape and stretching it so that the film will be tight. Even though the goal is not to have any wrinkles, keep in mind that you may have a few upon applying the film to the tape.

Get a blow dryer and start heating the plastic starting from the window's center out to the sides of the window. Put the blow dryer on the high temperature setting in order to get the best results. The film will contract and help to remove whatever wrinkles are left.

Whatever excess is left on the sides and the top of the windows, trim it off. When you're finished, you should have a tightly stretched film. As long as it stays that way, you will have plenty of insulation and you will also be saving money on heating for the next few months.

Other Tips For Insulating Your Home

When you are incorporating R-values for insulation in your home, think about the climate, design, and your budget. You don't want to spend a lot of money and then be in the hole later. You may have to individual areas at different times if money is an issue.

Use rigid foam boards for insulation that has a higher density for exterior walls.

When dealing with moisture control, use ventilation. If your home has an attic, install vents along the cavity of the ceiling. This helps to provide the right air flow and you will have a more energy efficient home which of course, leads to saving money on your heating bill. However, if the attic already has insulation under the roof, don't use ventilation in that area.

Read and study the instructions for installing insulation for your home. Also, you will need to wear protective apparel when you are doing this.

If you have recessed light fixtures, they can be a culprit with heat loss in your home. Don't install insulation so close to a light fixture unless it is for contact with direct insulation. You will know this if you see the letters IC.

If you are unsure about the installation process in general, contact a reliable contractor to assist you.

Miscellaneous Tips to Winterize Your Home

Thoroughly check your home prior to the start of the winter season. Doing this can save you plenty of frustration, time and you have time to make your home energy efficient and save money.

Inspect each door and window in your home for cracks prior to the start of the winter season. You want to keep all of the heat in your home. If you have weather stripping that is worn out, replace it and any caulk that has worn out as well. Use the right sealant to cover up cracks so the cold air and the bugs can stay out of your home.

Have you chimney thoroughly cleaned. Not cleaning out your chimney is a major fire hazard and it's one of the top reasons that people lose their homes to a fire during the winter months.

Always make sure you hire someone who is professional and knows what he's doing. If you are doing it yourself, make sure you clean it as good as the pros do. Remember to always use gates in front of log fireplaces so in case the logs roll around they won't roll onto your living room carpet. Also, never throw anything into the fireplace that can explode or cause a bigger fire.

The spring season is the best time to get your chimney in order. You need to do maintenance prior to using the fireplace. Have the chimney inspected every year before the winter season approaches. You would be amazed at what you could find in them. Get a professional to do a maintenance check along with a sweep.

You can also purchase a protective cap with a screen for your chimney. It will keep out objects that do not belong. When you are not using the chimney, close the damper to help keep the cold air out.

Have underpinning for your home if it is elevated from the ground. The pipes should be insulated and not naked to very cold temperatures. In order to prevent freezing, make sure that any faucets outside or your home are completely turned off.

Adjust your ceiling fans to operate clockwise. The room will feel warmer when the warm air circulates through the room.

Clean the gutters – When the fall season comes the leaves and other debris from your gutters will scatter all over the place. You will have to remove the leaves and debris. If you live in an area where there is snow and rain during the winter, make sure that the drains are clear.

The snow and rain will need a place to drain. If the drains of your gutters are clogged, water will back up and freeze. This can cause water to get in your home. While you are cleaning your gutters, check for leaks and pipes that are not aligned properly.

The water should be going away from the foundation of your home. If it's not, your house could flood and have additional water damage.

Check your furnace to make sure it is working properly. This should be done before the cold weather sets in. If there is a smell that last longer than usual when you turn it on, contact someone who can check it out.

Put on your calendar to have the furnace checked at least once a year by an inspector. Your furnace should go through a yearly maintenance check.

Check the filters every month. Having a dirty filter will stop the flow of air and will not be efficient for energy purposes. For better performance, use electrostatic or electronic filters. These are reusable and can be washed.

Preventing your pipes from damage is a very smart move. You don't want to be in your bed and all of a sudden, a pipe bursts and water gushes all over the place.

Before it really gets cold, the hose where the water comes from should be turned off and drain the lines. The pipes should be insulated. You can use fiberglass or pre-molded foam rubber sleeves. You can also wrap it up with heating tape.

The ductwork should be properly insulated and connected. If it's not, you will lose a lot of heated air. If you have an attic in your home, there will be some ducts that are exposed. You will also find some in the basement and crawlspaces.

If there are any gaps, use metal-backed tape to cover them up. Vacuum the ducts once every few years to get rid of dust and other particles that can get inside of them. If the ducts are not cleaned out, they can cause respiratory problems for those who live in the home.

Top of Form

You can purchase an energy monitor if you really want to know how much money you can save. It can measure how much electricity you use in your household. This device works in real time and can make projections regarding your monthly utility bill. This is a useful device because it can help consumers to reduce how much electricity that they use in their home.

With this device, it's possible that you can save up to 20% on your utility bill every month. This would add up to several hundred dollars every year. When you see the costs, you will implement other ways to cut waste and save even more money.

Not many people think about just wearing a long sleeved sweater. If you are concerned about your monthly utility bill cost increasing, wearing a sweater is definitely a cost cutting move you can do. If you live in an area where it gets cold, then have some sweaters to wear as the winter season approaches. Also, you should have some blankets available so that you can stay warm.

Saving Money With Energy Star Products

Another great way that you can winterize your home and save money is to use ENERGY STAR products. These products work just like regular ones, except they don't use as much energy. This is the key for you to be able to save money during the winter season.

For products to qualify as an ENERGY STAR product, they must meet certain guidelines mandated by the U.S. Department of Energy. Using these products can help you decrease your utility bill and be a friend to the environment at the same time. These products are made to use fewer emissions that could harm the environment.

ENERGY STAR Programmable Thermostat

One ENERGY STAR product that can help you save money is a programmable thermostat. In fact, this kind of thermostat is one of the easiest ways that you can save money on your utility bills. It can also help to fight global warming.

The thermostats have four settings that have already been programmed. They are programmed to regulate the temperature in your home during the summer and winter seasons. So this kind of thermostat will be beneficial to you during the winter months.

Once the thermostat is set properly, you can save at least $180 per year if those settings are not changed. The pre-programmed settings work to save you money on your energy bill and still be able to keep you and your family comfortable in your home.

The purpose of this thermostat is to keep a schedule where your cooling and heating is reduced automatically when your home is not in need of it.

Choosing A Programmable Thermostat

There are three models of programmable thermostats to choose from. In order to select the one that can better serve you, consider what you regular schedule is and how much you are not at home. This would include school, work and other activities that are involved in your day-to-day schedule.

The 7-day programmable thermostat model is best for those whose schedules change every day. It helps with those who need to be flexible. There are various programs for different days that include four temperature periods for each day.

The 5+2 programmable thermostat model is best for those who have a same, consistent schedule on the week days and use a different one on the weekends.

The 5-1-1 programmable thermostat model is best for those who want a schedule for the weekdays and a different one for Saturdays and Sundays only.

Features of An ENERGY STAR Programmable Thermostat

In addition to having different programmable settings, other features of this thermostat include:

- Programming using a touch pad screen
- Hold/vacation settings
- Backlit displays in digital format
- Air filter change indicator
- Programming of voice and phone
- Smart recovery – this feature is used to measure how much time it will be before the next set-point temperature.
- Malfunctioning heating and cooling system indicator

How To Install A Programmable Thermostat

Make sure to read the instructions thoroughly before you start. The installation does not require a lot of voltage. No more than 10 wires will be used; the number of wires needed will depend on the type of heating system in your home. When you are getting ready to replace your thermostat, the electricity should be shut off.

The thermostat should be installed on a wall inside your home. Do not install near heating vents, windows, doorways, skylights, direct sunlight or bright lamps.

If the process will involve more than just replacing the thermostat, you will need an HVAC certified professional to install it for you. They will also need to check out your heating and cooling system.

If your old thermostat has a mercury switch, keep the tube that the mercury is kept in intact. Mercury is toxic and hazardous. It will have to be disposed of when it is removed.

Tips On Using A Programmable Thermostat

When you are properly using a programmable thermostat with the pre-programmed settings, you will be able to save money. Here are some tips that you can use in order to make that happen:

Keeping the set-points temperature the same for a long time can help you save on energy. Allow it to last for at least eight hours per day in the daytime and through the evening and late night hours after you have went to bed.

Don't override the pre-programmed settings on the thermometer. Even though you are allowed to temporarily change the temperature while keeping the pre-set temperatures intact, it is only a temporary measure. Doing this can increase your energy bill. Overriding the original programmed settings defeats the purpose of having this thermostat.

When you are managing your temperature settings on a day-to-day basis, there are two kinds of "hold" components that are used, the temporary and the hold/permanent/vacation component.

If you are going to be away for a certain period of time that is the best time to use them. Make sure that the thermostat set at a temperature that is constant and will keep your home energy efficient if you will be away for a few days. Leaving it on hold will cause your energy bills to increase.

For the most part, most homes rely on a single thermostat to keep the home warm. If you have more than one heating section, get a thermostat that has a programmed setback function. This will keep your home comfortable during the winter season. It will also make it more convenient for you and you will save money on energy.

Just like anything else that runs on batteries, the batteries in your thermostat will need to be replaced every year. Having a battery replacement indicator can help remember to complete that task.

ENERGY STAR Solar Water Heater

You water heating bills can be cut down to size (at least half) when you have a solar water heater in your home. A solar water heater from ENERGY STAR solar water heating system can be used with a back-up water heater that is either gas or electric.

Here are some of the benefits of using an ENERGY STAR solar water heater:

The most obvious, of course, is to save money. This heater relies on the sun to heat the water in the heater. Your water heating bill can be half of what it has been when you use one of these water heaters.

Using it with a gas storage water heater with it as a backup can save you up to almost $200 per year if used properly. Using it with an electric tank water heater as a backup can save you around $50 more on your utility bills every year. The larger your family, the more money that you can save by using one of these water heating combinations.

It's a better fit when the sun heats the water. ENERGY STAR solar water heaters can decrease carbon dioxide in half. The load can be reduce to about 2,500 kWh yearly. Plus, you can get Federal tax credits and known that getting one of these is worth the financial investment that will eventually pay off.

Solar water heating systems can last up to about two decades, which is much more than a regular electric or gas heater can last.

Tips On Purchasing An ENERGY STAR Solar Water Heater

There are some things that you need to check out prior to getting an ENERGY STAR solar water heater:

- Your home has to be made to set up the solar water heater system. The roof is where these systems are set up and installed.
- Check your roof to see if faces south within a 15 degree angle.
- The shingles on your roof should be able to hold up when the heater is installed.
- Direct sunlight should be able to work on your roof from 10 am – 4 pm 365 days a year.

There are some roofs where the solar water heater cannot be installed. If that is the case, see if there is any land adjacent to your home that is not shaded. There are also solar water heater systems that are installed on the ground.

Each home is going to be different. You will need a water heating system that will meet the needs of your home. You will need to talk with a professional installer regarding what kind of solar water heater you will need to have installed in your home.

Research the heaters that are qualified as ENERGY STAR heaters. Read and study the information on the ones that you are most interested in and can be installed in your home.

Not all solar water heating systems are made the same. If you live in an area where winter is prevalent, you may want to choose a closed-loop system that includes antifreeze. The antifreeze serves as the fluid for the heat transfer.

This is usually for areas where the temperature can hover under 42 degrees Fahrenheit. If you live in an area where the temperatures are known to steadily drop and it gets too cold in your home, you should have a heating system that drains the fluid back on its own.

Figure out the capacity of the water heater that you will need to start with. Look at the capacity on the water heater that you have now in your home. You will have a better gauge of what you should get. The contractor will be able to assist you in this task.

Since this has to be done by a contractor, you will need to find one who can do the job right. They will need to look at your home, make suggestions, perform the installation and come back to perform regular maintenance on the solar water heater.

Since the installation requires pipes going through walls, the contract must be knowledgeable about what they are doing. Check the North American Board of Certified Energy Practitioners (NABCEP) if you need assistance in finding a contractor.

As you are looking for a contractor, you should do the following: get references, research the Better Business Bureau to see how they fare; get estimates in writing; and they will need to get a permit (locally). They will also need to know the codes for residential homes.

They must also be knowledgeable of other regulations in that area.

Using rebates or tax credits can help you to save even more money on your ENERGY STAR solar water heater. You can do this by using the Special Deals Finder. When you enter your zip code in the database, you will find out if there are any rebates available in your area.

With the Federal tax credits, every solar water heater that is qualified under ENERGY STAR can get up to a 30% credit from the cost of installation. The maximum for this is $2,000.

Maintenance is very important for a solar water heating system. It must be performed periodically to keep it running smooth and efficiently. A contractor will have to perform maintenance on the heater every year.

There are other things that have to be done that include:

- Keeping any holes on your roof sealed up
- Making sure that the connections for wiring and piping are solid, insulated and are basically intact without being damaged
- Keeping a clean collector
- Making sure the collector is sealed properly and not cracked or yellowing
- Collector fasteners are sound
- No mineral clogging up the pipes
- Valve for pressure relief is not stuck open or closed
- Making sure that pumps are working when the sun is out

There are areas where there is distribution of hard water. With this, de-scaling agents should be added every couple of years. Every three to five years, you can pour a vinegar solution in the collector or hot water loop.

There are different kind of collectors that are used for water heaters. Collectors are used to hold water. Here are two types that are used:

Flat-plate collectors – These are tubes made of copper that are made to use on flat absorber plates. The tubes are parallel and have two pipes that connect to them. The collectors also have a box that is insulated with tempered glass.

These collectors can hold up to 40 gallons of water. Two collectors are needed to hold at least half of the hot water. This amount can help up to four people have adequate heat in their home.

Evacuated tube collectors – These collectors are very efficient. These tubes are shaped like a thermos. A tube made from metal or glass has fluid for the heat transfer or water that is contained in another large glass tube.

Your home will be able to keep in the heat because there is a vacuum between the tubes. These are some of the best collectors to use in solar water heating systems because they work well when the temperatures get extremely low during the winter season.

Conclusion

Nowadays, more than ever, people are always looking for ways to save money. Heating your home can be one of the most costly things that affects homeowners. Being able to use the tips in this report can help you to save more money and bring relief to your pocketbook.

Just using one of these strategies alone can put a dent on your utility bill. You don't want to let another winter season pass and you not be able to save on heating your home. It will make a difference once you get that bill.

Resources

http://energysavers.gov/

http://www.energysavers.gov/your_home/insulation_airsealing/index.cfm/mytopic=11230

http://www.energysavers.gov/your_home/windows_doors_skylights/index.cfm/mytopic=13310

http://www.energysavers.gov/your_home/designing_remodeling/index.cfm/mytopic=10370

http://www1.eere.energy.gov/consumer/tips/insulation.html

http://www.energystar.gov/index.cfm?c=products.pr_what_makes_es

http://www.energystar.gov/index.cfm?c=thermostats.pr_thermostats

http://www.energystar.gov/index.cfm?c=solar_wheat.pr_solar_wheat