

Chapter 1 : Series - Homes Keep Us Warm

Visit our Product page to view the different models of Laser Heaters available.

Next There are many materials you can use to insulate your home. Fiberglass insulation is a cost-effective, energy-saving product that improves energy efficiency and reduces the fossil fuel combustion necessary to heat and cool a building. Cellulose insulation - another option -- is made mostly of shredded newspaper. Because it absorbs and retains moisture, it takes three times as much cellulose to be as efficient as fiberglass. Polyisocyanurate is made of plastic that contains a low-conductivity gas. Over time, gas may leak out and let air in, lowering performance. Polyisocyanurate insulation can be installed in liquid form, as a rigid board or laminated insulation panel, or sprayed as foam. Liquid foam can mold to any surface and also costs less than installing foam boards. Expanded polystyrene EPS is composed of small plastic beads that are fused together and typically made into concrete blocks. Molded expanded polystyrene MEPS insulation is difficult to control in its form of small foam beads. Extruded polystyrene XPS is made of a molten material that is pressed into sheets. It is resistant to moisture, mildew, corrosion and rot. Polyurethane foam is a plastic that is sprayed in liquid form and then expands. Radiant barriers are reflective surfaces that reduce heat loss in winter and heat gain in summer. Reflective insulation is made of metallic foil. It provides a radiant barrier, as well as insulation. A professional should install it because it conducts electricity. Cotton insulation from recycled clothing is treated with Boron, which is nontoxic and pest- and fire-repellant. In addition to insulating well, it also dampens sound. Finally, mineral wool comes in loose-fill and blanket form and is made of 75 percent recycled materials.

Chapter 2 : 10 Materials Keeping Your House Warm | HowStuffWorks

Get this from a library! Homes keep us warm. [Lee Sullivan Hill] -- A simple introduction to the variety and beauty of homes around the world.

In Britain, people typically switch their central heating on in October and use it daily until March or April. This coincides with the clocks going back, the drop in temperature and Winter Fuel Payments " to anyone who receives the state pension. So reducing this figure " while keeping homes warm enough " not only cuts energy bills, but helps meet the carbon reduction commitments that the UK government is legally required to deliver. The most recent figures show that 2. But while the scale of this problem is significant, not all the solutions need to be complex and costly. So here are 10 simple tips for keeping your home warm for little or no extra cost " just in time for that severe weather warning. Use your curtains Heat from the sun is free so make the most of it. Open your curtains and let the sunlight in during the day to make use of this free heat. When it gets dark, shut your curtains, which act as another layer of insulation and keep warmth in your rooms. Use timers on your central heating The Centre for Sustainable Energy advises that programming your boiler to turn the heating on a little earlier " such as 30 minutes before you get up in the morning " but at a lower temperature is cheaper than turning it on just as you need it at a higher temperature. By moving it away from the radiator, hot air can circulate freely. The same goes for your curtains or drying clothes " keep them away from the radiator so that you can get the most out of your heat source. This can be easily reduced by installing 25cm of insulation throughout your loft. Wrap up warm If you have a hot water tank, make sure it is properly lagged " or insulated. This will keep the water warmer for longer, and reduce heating costs. Turn down the dial This may seem a little counter-intuitive, but bear with me. This will do just fine, thank you. Block out the draughts Even a simple solution such as a making your own sausage dog draught excluder will help keep the warmth in your home. You can do this yourself for very little cost. Self-adhesive rubber seals around doors and windows and door draught excluders are relatively cheap and easy to install. These work by allowing you to programme your heating to come on at predefined times " so you only use energy when you need it. Upgrade your boiler If your boiler is more than 10 years old, it may be time to replace it with a new, more efficient model. Reflect the heat Radiator panels are relatively cheap, easy to install, and ensure that heat from your radiators warms up your room and not your walls. They work by reflecting the heat back into the room.

Chapter 3 : Keep Your Home Warm

Located in the Green Valley School district, 3 ½ miles to ASU. 2 bed /1 bath home in quiet family neighborhood. Beautiful views, very nice yard that is not on a main road adjoining approximately 7 acres of fenced pasture with water that is included if you would like for livestock.

Messenger If you live in a poorly insulated home, and many of us do, you could spend thousands this winter on energy bills. But our ancestors had many ways to keep snug at little or no cost. Now, thanks to modern infrared cameras and advances in environmental physics, we can understand how these methods work and measure how effective they are. The key to understanding how to keep warm is the fact you lose more heat by radiation to your surroundings than you do by convection to the air. What to do about those warm windows? Roland Ennos, Author provided In the same way, in poorly insulated houses the inside of the external walls can be several degrees colder than the air and the internal walls, making you feel chilly. Fortunately, there are five simple ways to overcome this and minimise your energy bills. Close your curtains at night During the day, your windows let in more radiant energy than gets out; sunlight can enter through the glass, but the window is opaque to the infrared radiation trying to escape. From inside, you can see the difference a curtain makes. This results in energy losses of watts per square metre, equivalent to running an old-fashioned light bulb. The best way to prevent this heat loss is to close your curtains and lower your blinds immediately after dusk. They provide an extra barrier to radiant heat loss, add insulation and reduce draughts. Cover your walls Solid brick or stone walls are better insulators than glass, but they still get cold and let out lots of heat. A framed picture hung on an external wall is around 1. Roland Ennos, Author provided Fortunately you can significantly reduce energy losses by covering them with picture or mirrors. Framed pictures or mirrors are better, if more expensive. Who needs Kindle when you have warm books? Roland Ennos, Author provided Best of all are bookshelves. My partner is an avid collector and her old books make superb insulators. The spines of the volumes in our book-lined study are raised almost to room temperature, making it snug and warm. Thermally at least, printed books are far superior to their electronic counterparts. Covering your door and the surrounding wall with a thick lined door curtain can eliminate pretty much all the heat loss. Our ancestors used to draw up wooden screens behind themselves and huddle up to the fire. Being at room temperature, the screens kept their backs warm, while radiation from the fire heated up their front. You could do the same, and you could even protect your face from the damaging effects of a roaring fire by using miniature fire screens, just like Georgian ladies. Position your furniture in the warm How warm you feel in a room depends on where you are, even though air temperature is the same throughout. You will feel warmer if you position yourself closer to the inside of the house because the cold external walls are further away. So try and place your furniture next to an internal wall. If your desk is up against an external wall so you can look out of the window your legs will tend to get cold, though you can reduce this effect by leaning a cardboard sheet against the wall. If the head of your bed is next to a cold external wall you will be prone to getting a stiff neck, though you can counter this somewhat by using a solid headboard. So knowing something about how heat moves can help you brave the cold winter. My experience has also shown that investigating the thermal properties of your house with an infrared camera will keep your kids amused for hours.

Chapter 4 : Consent Form | Popular Science

As one of the premier rare book sites on the Internet, Alibris has thousands of rare books, first editions, and signed books available. With one of the largest book inventories in the world, find the book you are looking for. To help, we provided some of our favorites. With an active marketplace of.

If you live in a region with weather extremes, how will you keep warm - or cool - if your home loses power? Source How prepared are you? If you rely on electricity to heat your home in the winter and to cool it in the summer, what happens in a power blackout? How do you keep warm in the winter without electricity? Can you keep cool without ac during a heat wave in the summer? What would happen to you and your family if a natural disaster or unexpected power black out robbed you of your electricity for more than just a few hours? There is every possibility that your entire area could be without power. If you live in the city and are suddenly confined within the four external walls of your home and forced to rely on your own resources for a week or more, what will you need? If suddenly you have no power for lights or cooking or heating your home, and you cannot access a local store, how will you cope? There have been enough natural disasters and extreme weather events globally in recent times to encourage us all to prepare for the worst. When it is freezing outside, the temperature within a home without power can drop dangerously low. Source Imagine ice inside your home My family and I experienced the frustration and anguish of losing our central heating for almost a week in the winter in the UK. There was snow on the ground outside and ice on many items inside our home. Fabrics became damp, some of them crispy. There was no way to effectively heat the huge rooms in our old stone building. A couple of the rooms still had original fire places, but we had no wood. With effective central heating, we had previously seen no need to light a fire for anything more than pleasure and effect. The air within our home became so cold, it hurt to breathe. Despite wrapping ourselves in the warmest clothes and bedding we could find, we were still suffering. Central heating and electric blankets had replaced old-fashioned blankets and bedding so we only owned quite thin bed covers and quilts. Our entire family had to climb into the same bed with all our bed covers plus extra clothing piled on top to stay warm. On the second day my husband fought his way through foul weather to buy blankets and thicker covers for the bed. We were lucky that stores were open. In some emergency situations that cause power outages, all stores could be closed. Functioning in the daytime was difficult. As soon as we sat up, we were cold. I distinctly recall how dreadful it was to be dressed like the Michelin man inside our home and not being able to stop my teeth from chattering. I will assume you have children. During my horror winter week, I dreamed of how nice it would be to have friends or family I could turn to for a night in their warm home - but I was new to the country and all my friends were an ocean away. It took me a while to come up with the idea I present to you here for keeping warm inside your home during a power outage. This, my friends is an idea worth remembering! No fire to keep you warm? Source How to stay warm in the winter when there is no electricity Most people who live in cold climates know the luxury and convenience of central heating. Even without central heating, there are many options to keep us toasty including gas heaters and simple bar radiators. If you cannot get a delivery of wood for your fire, what else can you use to stay warm? Are you really considering burning the legs of your chairs? You have no heating. What will you do? The simplest and most effective solution to coping with freezing temperatures inside your home is to clear some floor space then pitch a tent. A simple 3 person tent has plenty of room for a small family to sleep in. Erect your tent close to a window. The more sun the better. Move your furniture if necessary. To keep warm until the power comes back on Toss the fly sheet the second layer that comes with most tents over the top for extra insulation. You just need the extra layer to help exclude the cold. Keep the tent away from your fireplace or gas burner if it still works to avoid accidentally setting the tent on fire. Place mattresses from your beds on the floor of the tent and bring all your blankets and warm bedding into the tent along with your pillows. Your body heat will warm the smaller space within the tent. Place clothing and anything else you want to keep warm and dry into plastic bags just outside the door. If you have young children and will be needing supplies like diapers etc, keep them handy in bags outside the door as well. Remember to allow a small amount of air flow, particularly when you are sleeping. Most modern tents

have a small flap in the top of the tent to allow hot air to escape. Or you can leave the door unzipped a little at the top to allow a small amount of air to circulate. Without it, you might find you have a condensation problem. Even in freezing weather, a tent in your living room will keep your whole family warm. Tents are made to protect people from the harsh elements outdoors. It is surprising how warm the inside of a tent can become with a bit of body heat. Children can read and draw and play in comfort. Parents can take off their overcoats and relax. And at night, everyone is snug and warm. White lead in foreground connects the light to the solar battery just outside the tent door. Source Safety Warning Stay smart when keeping warm. Carbon monoxide poisoning can kill you. Here are some tips to avoid some common mistakes: Carbon monoxide poisoning Never burn coals indoors. Carbon monoxide poisoning Never start a fire indoors in anything other than a correctly installed fireplace with proper chimney and ventilation. Carbon monoxide poisoning Never burn a candle in a confined space - including a tent. Oxygen needs to find its way in. Leave a small ventilation point close to ground level, where carbon dioxide can escape. Carbon dioxide in your breath is heavy This is particularly important when you are sleeping. Tips when choosing a tent Measure the size of the space that your tent will need to fit into. You need room to get in and out of the door. What is the biggest area you could clear near a window to accommodate a tent? Look for dome-shaped tents that are quick and easy to erect. Tent poles in dome shaped tents are obviously long. They arc up and over. The good news is, they fold up into a small bag. But when you are erecting a tent indoors, you need enough space to extend the poles as you insert them. In other words, leave a bit of elbow room between your tent and at least one of the walls. Camping stores often have tents erected on display. Take your family and climb into one. Lie down in it, side by side. Sit in it, stand in it, see if you have enough head room. Remember, you will need mattresses on the floor not only for comfort when sleeping, but also to protect you from the cold that passes up from any floor when the temperature is very low. Measure everything that is relevant. Door size, floor size, mattress size, room size, cleared space size etc, and then make your decision about which tent to buy. Tents come with labels that give dimensions. However if budget is a problem, look for a second-hand tent on eBay, online or at local car boot sales. When you get your tent home, erect it outdoors a few times. Any tent is much easier to erect outdoors than indoors. How will you keep cool in a heat wave? Some people will go to any length to get cool in a heat wave. Source How to stay cool in the summer without electricity Again, we are assuming you have no power. It is stinking hot. I know a few people who have implemented it to good effect. But during a heat wave when the temperature is savage, there comes a time when you simply have to open the windows and hope for a breeze. To further complicate the issue, in many parts of the world houses are simply not built to cope with heat. I remember when there was a heat wave in Paris and hundreds of people died.

Chapter 5 : How to Keep Warm in Winter and Cool in Summer Without Electricity | Dengarden

Homes Keep Us Warm: A Building Block Book (Building Block Books) [Lee Sullivan Hill] on calendrierdelascience.com
**FREE* shipping on qualifying offers. A simple introduction to the variety and beauty of homes around the world.*

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Chapter 6 : Five ways to keep your home warm this winter

Rhyming text and illustrations of comical cats present numerous examples of verbs.

Even if your house is insulated well, it will eventually get dangerously cold if your heating system is off or the power grid goes down. Many homesteaders have fireplaces or wood-burning stoves in their homes, an idea that has plenty of merit, considering that wood has been the most common heating fuel throughout history. On the plus side, wood is a renewable resource that one can harvest on their own. On the minus side, a fireplace or wood-burning stove is limited as to the area that it covers. Our ancestors solved this problem in a variety of ways — many of which we can adapt to our own use. Knowing what they did and why they did it gives us some insight into how to keep our own homes warm without electricity, even in the midst of a winter storm. The average home size now is 2, square feet, which is large enough to be considered the home of someone wealthy years ago. Wealthy people could afford more than one fireplace and many of their homes had them. Some even had a fireplace in every room. It probably would be easier to build a new home designed for all-wood heating. A one-room home was much easier to heat and a single fireplace was enough to do the job. So most people lived in one-room homes. The fireplace became the focal point of the home, much like the television set is today. People would sit around the fire, talking and working on small tasks. Much of the handicrafts of the day were done sitting around the fire in the evening. As homes grew, one of the first rooms added was a separate kitchen. This helped keep the rest of the home warm, as well as providing a larger work area for processing food. It also helped to keep the rest of the home cooler in summertime, as the main fireplace would not have to be lit. Kitchens always had their own fireplace or a wood-burning cooking stove. Many homes had a loft where the children slept. Since heat rises, the loft would be the warmest part of the home. Thick bedding and curtains The classic down comforter was intended to allow families to sleep in comfort, holding in their body heat. Beds were piled high with quilts and comforters in an attempt to keep warm. While mom and dad usually had a bed to themselves, the children often slept all together. Warm night clothing was common as an additional layer of insulation against the cold. Most people even slept with stocking caps on, to protect themselves from losing heat through the tops of their heads. The idea of bed curtains also traces its roots to trying to keep warm in cold weather. Bed warmers Before retiring for the night it was always a good idea to warm up the bed. This was done with a bed warmer. These are covered copper or brass pans, with a long handle. Holes would be punched in the lid, forming a design. The pan was filled with rocks that had been heated at the edge of the fire and then slid between layers of bedding using the long handle. This would warm the bed quite effectively. Foot warmers Foot warmers are both similar to and different than bed warmers. Typically, they were a wood-framed tin box with a wire handle on it. Like the bed warmer, heated rocks were placed inside the foot warmer, which could then be placed by the feet, under a blanket. This was most commonly used as a heater in the family wagon, when going to the store or church. Wealthier churches had boxed-in pews, which allowed the families to bring in their foot warmer and lap blankets to keep warm in church. In many churches, this was the only heat to be found on a cold Sunday morning. Soapstones An alternative to the bed and foot warmer was a soapstone. Soapstones would be placed in the fire to heat and used directly, often wrapped in rags to prevent anyone from burning themselves on the hot stone. They could be used as bed warmers or foot warmers. Due to their mass, soapstones were often more effective than a foot warmer. The more massive the stone, the more heat it can hold. Have you heard of other ways our ancestors kept warm? Share your advice in the section below:

Chapter 7 : 14 low-tech ways to keep your house warm over the winter - BBC News

Keep Us Warm. 68 likes. I believe we are here on Earth to care for each other and offer hope. The Divine light in me, which I call Jesus, helps me to do.

Environment The cat approves. Michel Filion, CC BY If you live in a poorly insulated home, and many of us do, you could spend thousands this winter on energy bills. But our ancestors had many ways to keep snug at little or no cost. Now, thanks to modern infrared cameras and advances in environmental physics, we can understand how these methods work and measure how effective they are. The key to understanding how to keep warm is the fact you lose more heat by radiation to your surroundings than you do by convection to the air. What to do about those warm windows? Roland Ennos, Author provided In the same way, in poorly insulated houses the inside of the external walls can be several degrees colder than the air and the internal walls, making you feel chilly. Fortunately, there are five simple ways to overcome this and minimise your energy bills. Close Your Curtains At Night During the day, your windows let in more radiant energy than gets out; sunlight can enter through the glass, but the window is opaque to the infrared radiation trying to escape. From inside, you can see the difference a curtain makes. This results in energy losses of watts per square metre, equivalent to running an old-fashioned light bulb. The best way to prevent this heat loss is to close your curtains and lower your blinds immediately after dusk. They provide an extra barrier to radiant heat loss, add insulation and reduce draughts. Cover Your Walls Solid brick or stone walls are better insulators than glass, but they still get cold and let out lots of heat. A framed picture hung on an external wall is around 1. Roland Ennos, Author provided Fortunately you can significantly reduce energy losses by covering them with picture or mirrors. Framed pictures or mirrors are better, if more expensive. Who needs Kindle when you have warm books? Roland Ennos, Author provided Best of all are bookshelves. My partner is an avid collector and her old books make superb insulators. The spines of the volumes in our book-lined study are raised almost to room temperature, making it snug and warm. Thermally at least, printed books are far superior to their electronic counterparts. Covering your door and the surrounding wall with a thick lined door curtain can eliminate pretty much all the heat loss. Our ancestors used to draw up wooden screens behind themselves and huddle up to the fire. Being at room temperature, the screens kept their backs warm, while radiation from the fire heated up their front. You could do the same, and you could even protect your face from the damaging effects of a roaring fire by using miniature fire screens, just like Georgian ladies. Position Your Furniture In The Warm How warm you feel in a room depends on where you are, even though air temperature is the same throughout. You will feel warmer if you position yourself closer to the inside of the house because the cold external walls are further away. So try and place your furniture next to an internal wall. If your desk is up against an external wall so you can look out of the window your legs will tend to get cold, though you can reduce this effect by leaning a cardboard sheet against the wall. If the head of your bed is next to a cold external wall you will be prone to getting a stiff neck, though you can counter this somewhat by using a solid headboard. So knowing something about how heat moves can help you brave the cold winter. My experience has also shown that investigating the thermal properties of your house with an infrared camera will keep your kids amused for hours. Roland Ennos does not work for, consult to, own shares in or receive funding from any company or organisation that would benefit from this article, and has no relevant affiliations.

Chapter 8 : Keeping Warm for Less | This Old House

There are many materials you can use to insulate your calendrierdelascience.comlass insulation is noncombustible and doesn't retain moisture. Fiberglass insulation is a cost-effective, energy-saving product that improves energy efficiency and reduces the fossil fuel combustion necessary to heat and cool a building.

Chapter 9 : Five Ways To Keep Your Home Warm This Winter | IFLScience

This is particularly the case if the radiator is below a window with curtains, where warm air would be trapped between the window and the curtain. Shut up unused rooms, says Neuburg.