

AC ALTERNATIVES

HOW TO MAKE YOUR HOUSE COOL
WITHOUT AC



Table Of Contents

2	Cool Your Home Naturally
6	Cooling With Fans
7	Ceiling Fans
8	Tower and Pedestal Fan Tips
13	DIY Air Conditioning
14	DIY Swamp Cooler
16	Heat-Proof Your House

01

Cool Your Home Naturally

Don't miss out on our latest updates and exclusive content! Head over to [Whatfans.com](https://www.whatfans.com) now for more guides and product reviews on appliances such as fans, heaters, and air purifiers.

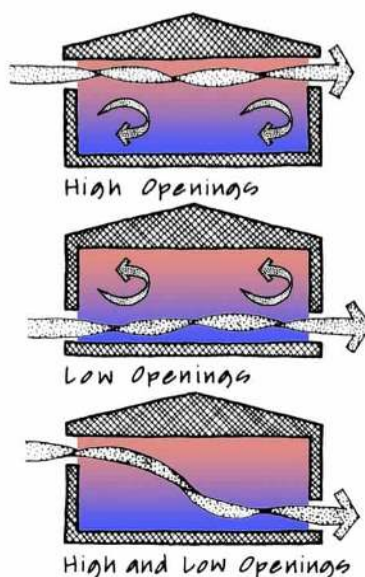
Save Money and Keep Cool With Our Guide to Cooling Without Air Conditioning!

Welcome! In this eBook, you'll discover practical tips on how to keep your house cool without relying on air conditioning. Whether you have AC installed or not, knowing alternative techniques to cool your home can save you money and ensure your comfort. In this eBook, we'll explore how to prevent overheating, improve your health, and create a comfortable living space. Let's dive in and explore the world of natural cooling methods.

The first technique to cooling your home without AC is the simplest—using natural ventilation. Natural ventilation refers to windows and exhausts where air can naturally flow in and out of the room without a mechanical item (a fan or AC unit) playing a part.

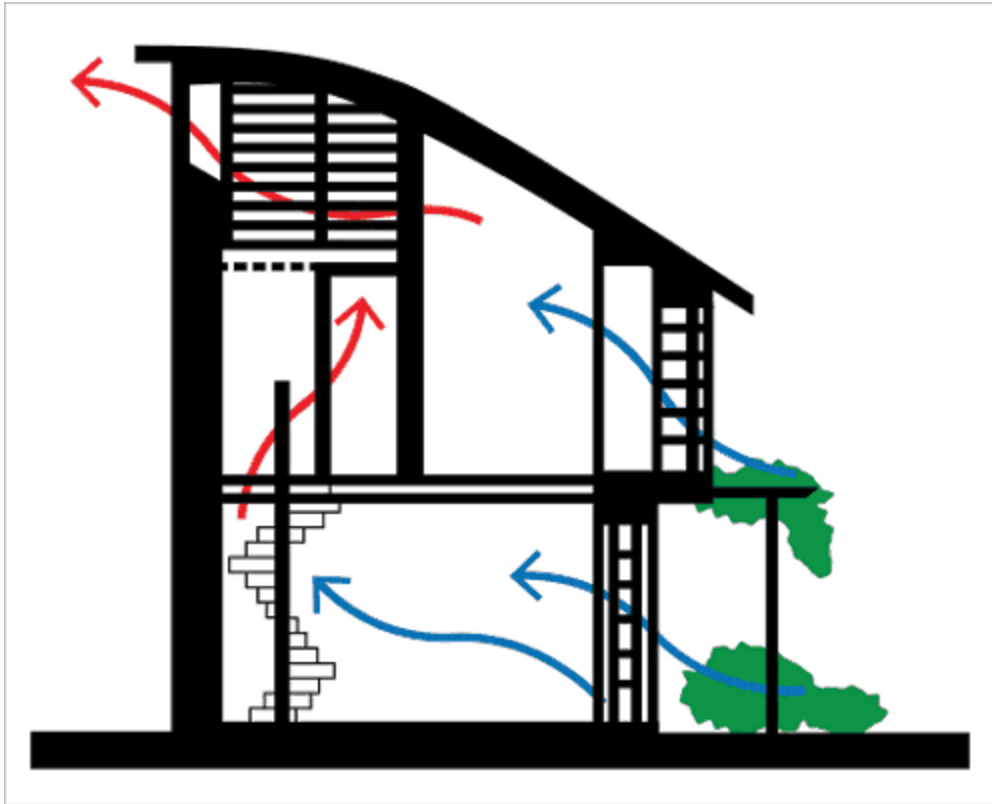
The Wonder of Windows

Our natural response to excess heat in our home is often to open the windows. However, did you know there are ways to maximize this tactic's efficacy? involves opening the top part of any window upwind.



the room you are trying to cool. This involves opening the top part of any windows situated

Your Attic Can Help



Attics are often overlooked regarding how people cool their homes, but they are vital. It has been shown that ventilation can actually reduce an attic's temperature by 10-25 degrees. This means heat won't transfer to your home's living space as quickly. You can also use convective air movement. Since hot air rises, this process gives hot air somewhere to escape, letting cool air enter from lower levels. You can do so by opening any hatches which are in your attic.

Attic Fan We Recommend –

[Cool Attic CX1500 Gable Mount Power Attic Ventilator](#)

- Galvanized steel
- Suitable for 1850 sq. ft. attic
- 10 Amp adjustable thermostat
- Easy installation

Ventilate When It Makes the Most Sense

Be smart about your ventilation when you open your doors and windows to let in air. Installing indoor and outdoor thermometers allows you to open up your windows only when the air outside is cooler than the air inside. Similarly, you should open your windows overnight to allow the cool night air to enter. If you have skylights or other windows in high areas of your home, open these to create convection currents and get rid of the hottest air.

Keep Unused Rooms Closed Up

There is no point in letting the air you've worked to cool permeate into spaces you're not going to be in. Close these up.

02

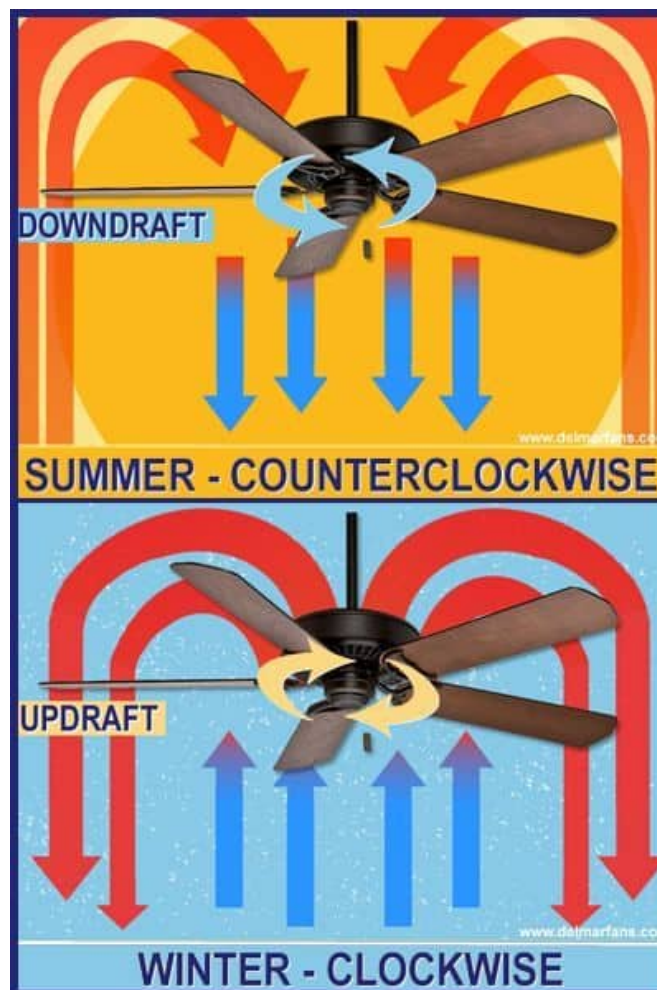
Cooling With Fans

How To Cool a Room With Fans – Fan Hacks for a Cooler House

Fans cool us down using the wind chill effect – evaporating sweat and cooling our bodies in the process. They're cheap to run and, for this reason, are one of the most efficient ways to cool yourself and your home. Fans are recommended to cool your home if you don't have an air conditioner. There are many types of fans, all with pros and cons. These include ceiling fans, table fans, tower fans, pedestal fans, and window fans. Fans don't just cool our bodies; fans also draw cooler air into your home in the evening when the temperature has dropped.

Ceiling Fans

Ceiling fans can create a lot of wind chill. If you have ceiling fans in your home, there are ways to optimize their efficacy. During warmer months, your ceiling fan should be rotating in the counterclockwise direction. That means that if you're standing directly underneath the ceiling fan, you should feel a cool breeze caused by a "wind-chill" effect, which makes you feel cooler.



Tower and Pedestal Fan Tips

Tower and pedestal fans are a popular choice for electric fans. There are ways you can utilize these fans to the best of their abilities, too, such as using the fan to create a cross breeze. This can be done by positioning the fan on the opposite side of the room to your window, facing the window. This will allow the wind from outside to combine with the fan and create a cross breeze to help you stay cool. Leave your fan on throughout the day to make the cool-down process quicker when the cooler evenings roll around. Use more than one fan to create powerful airflow. Ensure they're well positioned and furniture and curtains aren't in the way, restricting the airflow.

Box Fan Tips

Box fans are very good at directing air. Though the design of a box fan is straightforward, it can be advantageous, especially when used in conjunction with windows. Pointing a box fan out a window can direct hot air out of the room and create a cross breeze in the process. Likewise, when positioned in the window at night, a box fan can force cooler air to enter from any other windows you may have in the room. This air comes in to fill the space of the hot air that has been sucked out of the room by the box fan. Since hot air rises, box fans can be more effective in certain positions. You can suck the hot air out of your home by placing a box fan in a window on a higher floor. Likewise, if you have a basement, you can use a box fan to move the cooler air up into your living area.

Window Fan Tips – Strength in Numbers

A simple configuration of using more than one window fan can go a long way toward controlling the internal temperature. The constant movement of air is very effective at controlling room temperature and helps to maintain a cool breeze. This setup includes an equal number of fans blowing in and out. If you use an odd number of fans, make sure to configure the extra unit to blow air into the home. This will create positive pressure in the house to discourage flying bugs and insects from coming inside.

Prime placement

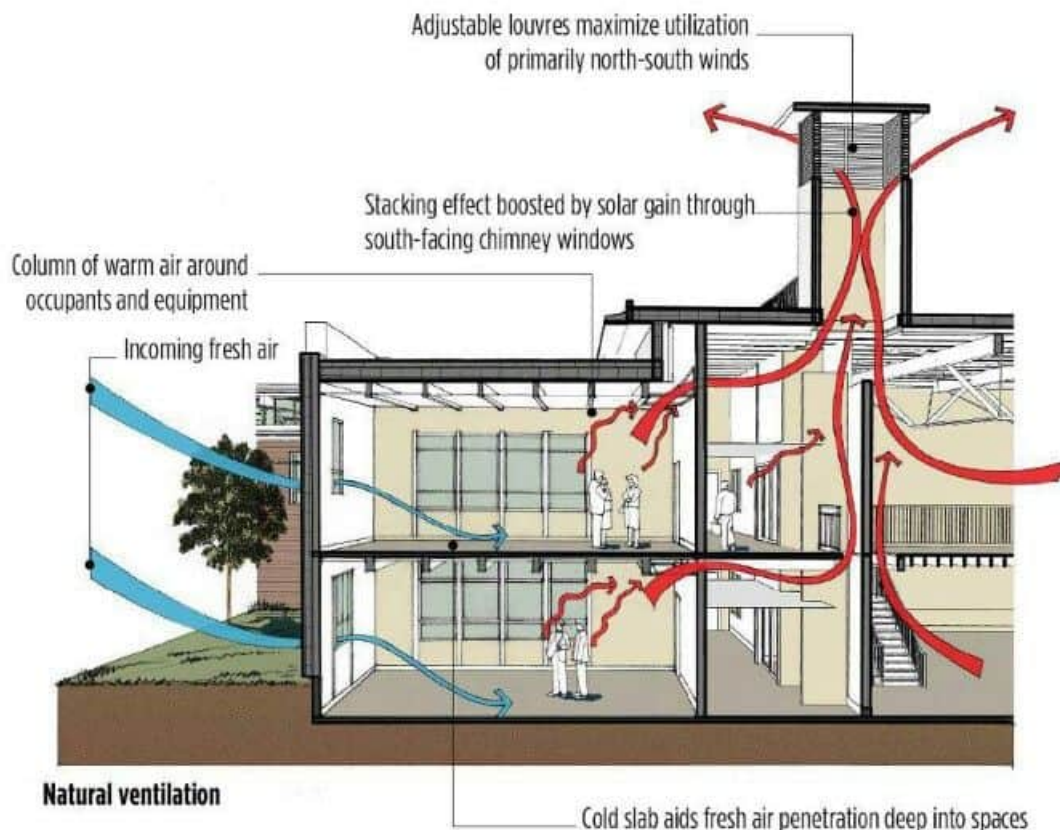
The actual placement of the fans can have a significant impact on the ability to cool the home. For the best results, use the following configuration:

- place the fans that blow outwards on the sunny side of your house (south side)
- place the fans that blow inwards on the shady sides of the house

This type of placement technique should apply no matter the number of floors your house has. But, if your home has multiple floors, the fans placed on the upper floors should push the hot air out, while the fans at ground level are preferred for pulling the cooler air in.

The stack effect

The stack effect is one of the many methods to cool a room in the house. Depending on the configuration of your house or apartment, you can use one of the following two ways to do it.

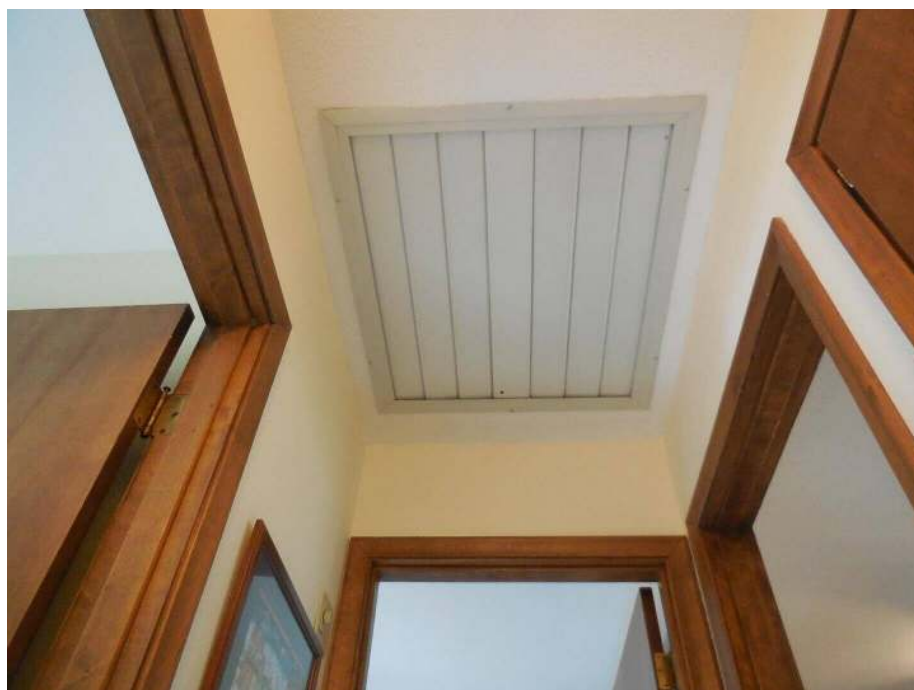


Once the sunset has passed, set up the fans at ground level to start bringing in the cool air while letting the fans on the upper floors push out the build-up of hot air. By the time the morning arrives, the rooms throughout the home should be cool. Then, remove the fans from the windows and close them. Most modern homes have good insulation, which should maintain the cool temperature inside for several hours. You can repeat these steps every evening to support your house's cool and comfortable environment without AC.

Additionally, you can place a window fan in a window in the room where you want to lower the temperature. Make sure the fan is set to blow into the room. Install a second window fan on the other side of the house or apartment and set it to blow out. This setup has the potential to pull in a lot of cool air while at the same time pushing out the hot, stuffy air. It will cool your room efficiently without AC.

Could a Whole House Fan Help?

A whole-house fan may or may not be ideal for you. According to [energy.gov](https://www.energy.gov), they are cheaper than using an air conditioner and they work by pulling air out through open windows to create airflow, then exhausting it out through your attic or roof.

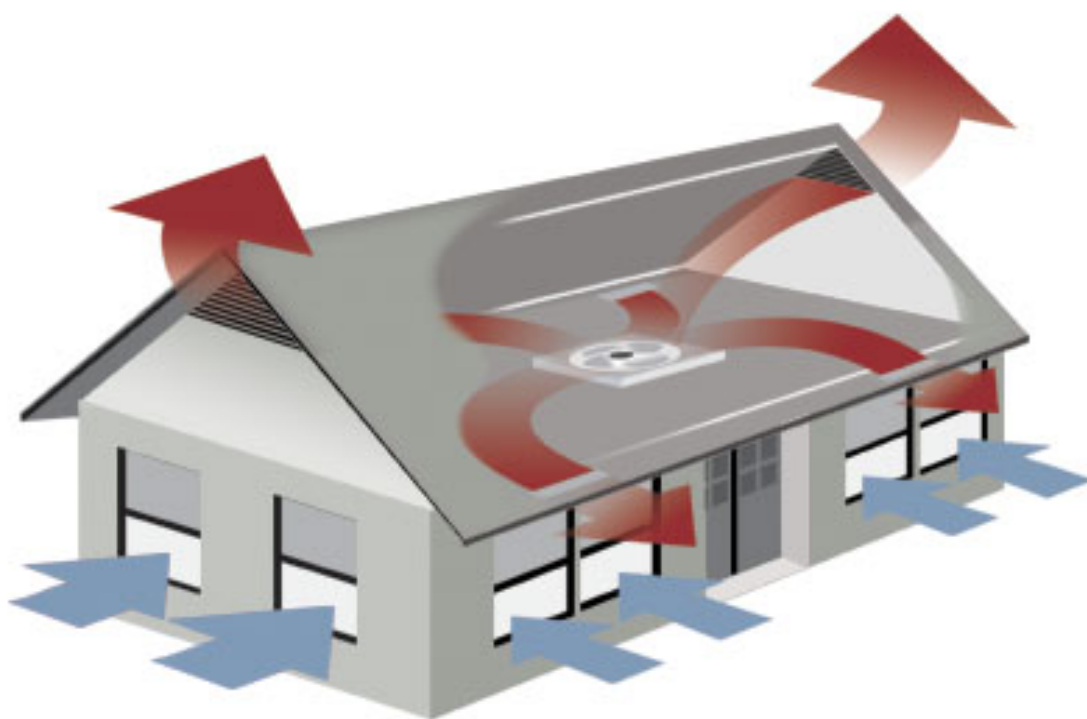


Whole House Fan We Recommend –

Cool Attic CX30BD2SPD Belt Drive 2-Speed Whole House Attic Fan with Shutter

- Made in AMERICA
- 30 in. belt drive
- 2-speed whole house fan designed for houses with 2,000 to 3,000 sq
- Quiet operation
- Powerful Whole House Fan

This method makes for good ventilation and can be controlled by shutting off different areas of the house at different times. For instance, you can let air flow only into your bedrooms in the evening by closing the other doors. A whole-house fan can provide up to 30 to 60 air changes an hour, which refers to how often the air in your home is replaced over an hour.



Use Fans Already Built Into Your Home

Many of us already have fans in our home that we think of more as exhausts than fans for cooling. However, you can make use of these exhaust fans to increase airflow and cooling.

Exhaust Fans

You probably have an exhaust fan in your kitchen — they remove the smoky air and odors from cooking, but they can also help remove humid air and regulate airflow in your house. Leave your exhaust fan on when it is hot.

Bathroom Fans

Designed to get rid of humid air after you've taken a hot shower, a bathroom fan can also be a good way to get hot air flowing out of your house on a hot day. Keep your bathroom fan on for a while after your shower to ensure that heat and humidity don't linger any longer than it has to.

Furnace Fans

A furnace fan should be set to "reverse" or "on," meaning it will bring colder air up into the home through the air ducts. Furnace fans don't cost too much to run, and if you get the settings right, they can make the room feel much cooler.

03

DIY Air Conditioning

DIY AC Unit Hack: Build Your Own AC!

If you wish to keep the cost of cooling a particular room to a minimum and have basic do-it-yourself skills, you can make a homemade air conditioner. This helps to skip the cost of running the expensive AC unit or investing in one or more freestanding or window fans. Additionally, they aren't that complicated to put together, and provided you already have the tools, the cost of the individual parts is relatively inexpensive. Building a DIY air conditioning system that runs on alternative energy, such as solar power, is possible. While the do-it-yourself AC unit is an excellent option for cooling a specific room, it may not be a practical solution to cool the whole house.

DIY Swamp Cooler

Here's what you need to build this cooling system:

- Hard sided or styrofoam cooler
- PVC pipe
- Ice or reusable ice packs



You can power the unit in one of three ways:

1. 12 V small battery
2. 12V socket in an automobile
3. Solar panel (solar panel setup is entirely optional)

Step-by-step instructions

1. Size and cut the holes in the ice chest lid. This includes one small and one large hole to fit the fan and PVC pipe.
2. Once these two parts are in place the unit is basically built and ready to be used.
3. Before activating the cooling system, it is necessary to place a block of ice (solid ice unenclosed is best, but 1 gallon bottles of frozen water still works) in the ice chest.
4. You can replace the ice with reusable coolers.

When the fan is running, it has the capacity to give great air flow at 42° Fahrenheit.

More DIY AC Inspiration



04

Heat-Proof Your House

Think About Window Treatments!

Too often, window treatments are ignored when people think of ways to keep their home cool, but they can be a useful way to tackle the heat and sunlight.

Close Drapes and Blinds

If your window is in an area where it gets lots of sunlight, block it out the best you can with blinds and drapes. Standard, medium-colored drapes can reduce the room's heat gain by up to one-third.

Use Heat-Blocking Curtains and Drapes

As you can imagine, some drapes are better than others at blocking out the sun. Basic, plastic-backed, medium-colored drapes can reduce heat gain by up to 33%. Attach the drapes in the corners and ensure they overlap in the middle so that heat can't creep in. Consider even making your own thermal curtains.

Use Window Films

Window film does an excellent job for a very low price and works similarly to blinds. Heat-reflecting window attachments should be placed on any windows that face the sun. They reflect the light and can work effectively to stop the heat from entering. If you live in an area that experiences cold winters, use a multi-ply combination film that is less likely to tear in cold conditions. If you apply this film to all windows that aren't south-facing, you can ensure you still get the benefits of warmth from the sun in the colder winter months when the sun is low in the southern sky.

Apply Water!

If you hang a wet sheet in front of a window with some breeze, you will maximize the cooling effect throughout your room. When the British went to India, long before air conditioners were invented, they would leave the bottom of their cotton or linen curtains in water. The curtains would soak up the water, and it felt much cooler when the window let in air. This still works well, providing there is some breeze.

Get the Colors Right

People often say that dark colors soak up heat. Colors such as red, orange, and yellow do an excellent job of deflecting infrared light, which radiates heat. The color of both the inward and outward-facing sides of any blinds or drapes is important. The outward-facing side is the one that will deflect the heat and rays away from the room.

No Curtains? Improvise!

If you don't have curtains, drapes, or blinds and your window lets in a lot of sunlight, you can improvise and use a different kind of covering. Using a car windshield shade can be a great way to stop your room from getting too hot, and you can often find them in various sizes or cut them to fit. They're also easy to remove.

Control the Humidity

Humidity and heat go hand in hand. Humid climates can make us feel hotter, so a dehumidifier can help amplify the cooling effects of fans and air conditioners. On humid days, the slow speed of a fan combined with a dehumidifier can remove more moisture from the air, creating a cooler environment.

Cook Outside

An outdoor grill is nice when the weather is hot, but it can also be a good way to avoid adding extra heat from cooking inside to an already stifling home. Heat can transfer from your stove to the rest of the room quickly, and by cooking outside, you can take this totally out of the equation.

Save Your Chores for Evening

Not only will you feel more like doing chores during the cooler evening, but appliances, like dishwashers and washing machines, can also throw off a lot of heat. Don't add to the heat in your home — save these chores for evening. You can even leave your dishwasher on overnight and wake up to it finished. If clothes are washed during the day is necessary, make sure any ventilating fans are on, as this will help pull the warmer air out of your home.

Long Term Home Alterations - Weatherstripping



Weatherizing is an excellent way to keep the home at the desired temperature. It is helpful in both hot and cold climate conditions, insulating the temperature you have created in your home and keeping the inclement weather out. Use caulk and weatherstripping around your windows and doors to properly weatherize your home. Fill in any cracks, which will stop air from transferring indoors to outdoors, and vice versa, when you don't want it to.

Radiant Barriers

A clever way to insulate your home is to use a radiant barrier. A radiant barrier is a building material with a reflective foil that deflects sunlight and heat. This can block cool air from transferring out of the house or hot air coming in through your attic. Florida Social Energy Center states that putting one in place can reduce the cost of cooling your home by up to 12%.



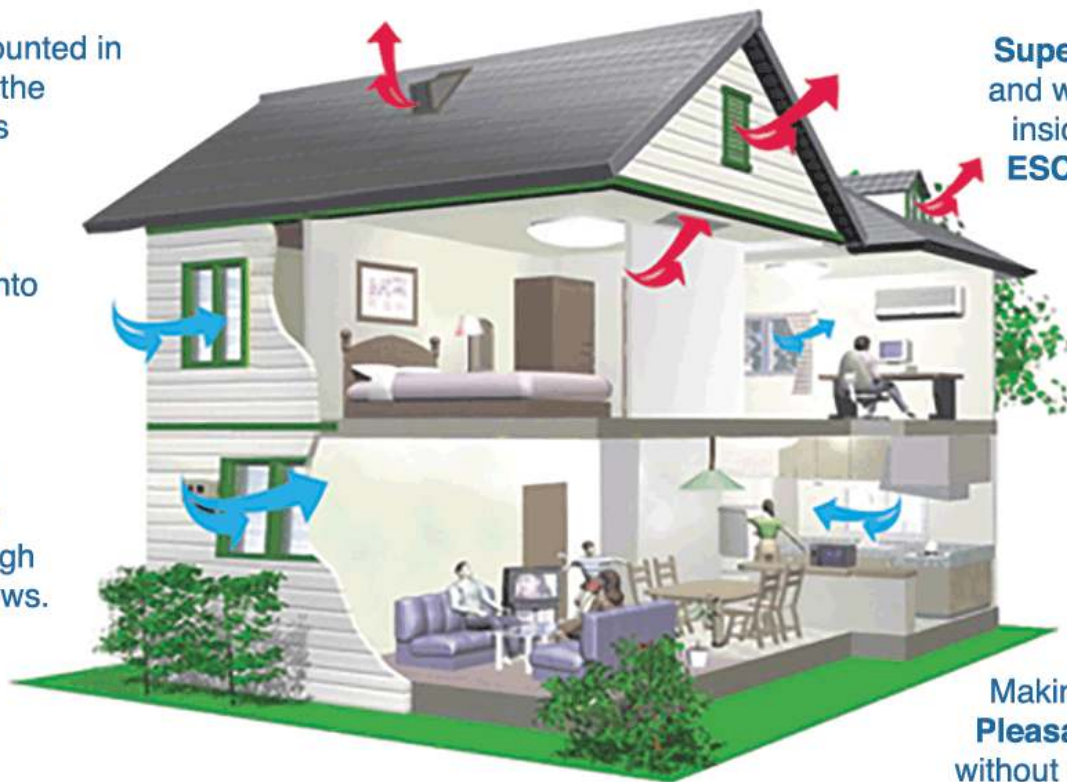
Extra Duct Fans or Vent Boosters

If one room is hotter than the rest of your home, no matter what you try, it is worth getting a vent booster fan or duct fan. It can increase the flow of cooler air into your room and keep the temperature more comfortable. If the rest of the house is at a comfortable temperature, a duct fan can be a way to cool that one stubborn room.

Whole House Fans

The fan, mounted in the attic on the ceiling, pulls **COOLER** outdoor air through the home and into the attic.

COOL AIR enters your home through open windows.



Superheated attic and warm air from inside your home **ESCAPE** through roof vents.

Making your home **Pleasant and Cool** without running your air conditioner.

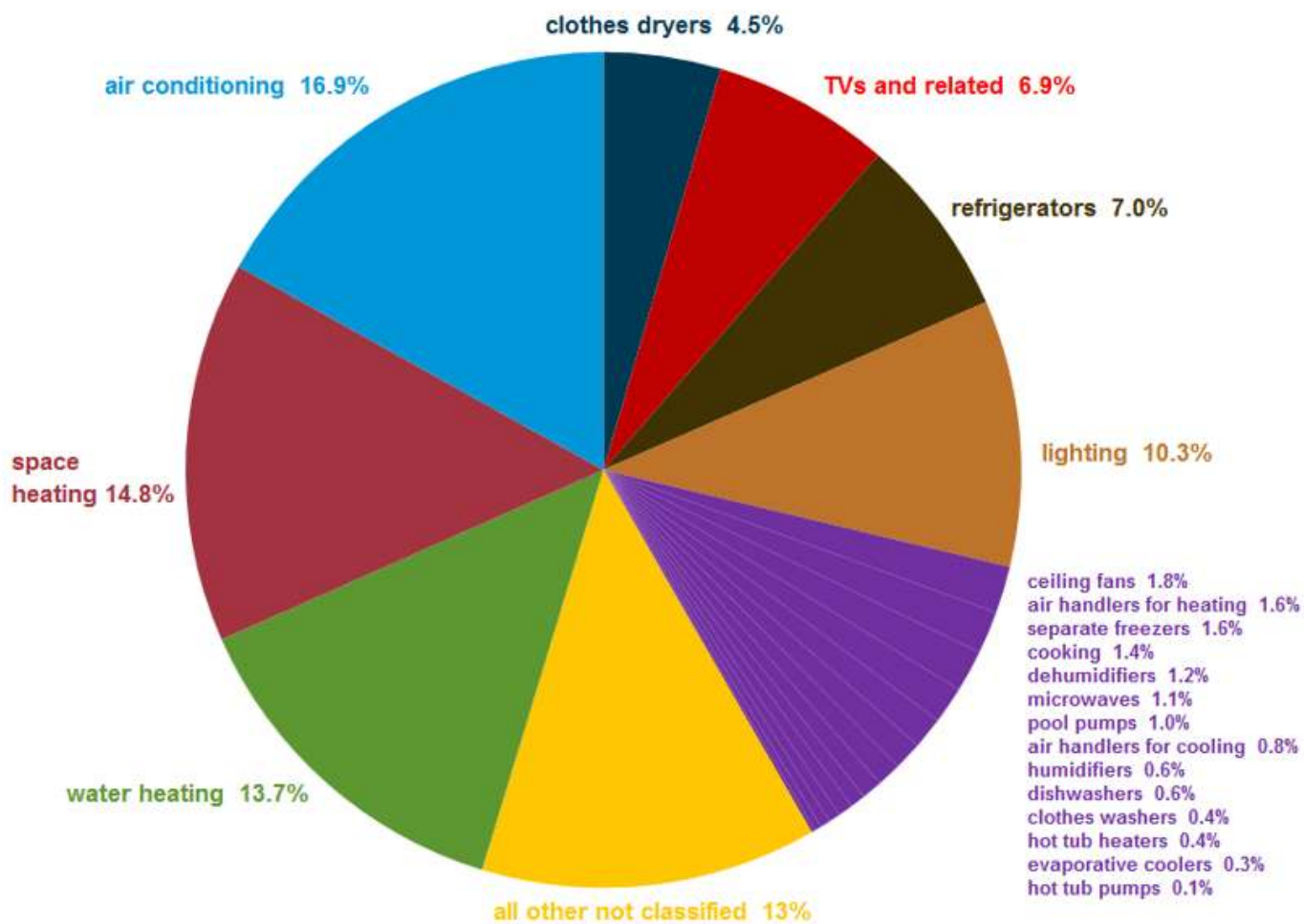
Some people ignore this as an option because you can buy a basic air conditioning unit for the price of a whole-house fan. However, the energy usage of an air conditioner is much higher, so a whole-house fan will cost less in the long term. These fans can be installed in the attic for maximum power and efficiency.

Clear Blockages

Attics are vital to cooling, as we've already mentioned. Any blocked vents could keep all the heat in, so make sure you haven't put anything in your attic in the way of essential vents to improve ventilation.

Here is a chart to show how much energy consumption is used for each household appliance.

Residential site electricity consumption by end use, 2015 percent of total



Source: U.S. Energy Information Administration, 2015 Residential Energy Consumption Survey



Thank you for taking this journey.

As we conclude our journey through the world of cooling your home without AC, you've gained valuable insights and practical strategies to transform your home into a haven of comfort and sustainability.

In our quest for a cooler indoor environment, we've explored the art and science of harnessing innovative alternatives to AC. From understanding the principles of passive cooling and strategic home design to implementing effective window treatments, you now possess a toolkit of knowledge to make informed decisions about keeping your home comfortably cool without AC.

Now, it's time for you to put this knowledge into action. We hope this eBook has provided valuable insights and practical tips to cool your home and beat the heat!

Ready to dive deeper? Visit whatfans.com for exclusive articles, guides, and reviews to help you pick the right fan, heater, or air purifier for your needs!