



HEAT SMARTER WITH ELECTRIC BASEBOARD HEATERS

HOW TO GET THE MOST FROM YOUR ELECTRIC BASEBOARD HEATERS, AND PAY LESS ON YOUR ELECTRICITY BILLS.

If your home is heated by electric baseboard heaters, those heaters probably account for the largest chunk—about 44 per cent—of your total yearly BC Hydro bill. By contrast, your kitchen appliances probably only take up about 12 per cent, and your lighting about nine per cent.

In other words, if you want to reduce your energy bills, it pays to make sure you are using your baseboard heaters properly and that they are working efficiently.

TURN YOUR HEATERS DOWN WHEN YOU CAN

The biggest advantage of electric baseboard heaters is that you can control them room-by-room. Instead of a central system that heats all rooms in your home to the same temperature, you can decide to have one room warmer or cooler than another.

A thermostat—usually located on a nearby wall—controls the heater or heaters for each room. It turns on when the air temperature in the room falls below a set temperature, and off when the room reaches that temperature.

If you want to save energy, always turn your thermostats down when you can, at night when you're sleeping, for example, or all of the time in rooms you don't use or when you are away. (Please note: We don't recommend that you turn your heaters completely off in the winter, even when you are away. Your water pipes might freeze, and the cold from an unheated room could seep into another room you'd like to keep warm.)

CHOOSE THE COOLEST TEMPERATURE YOU CAN

Heating costs rise about five per cent for every degree above 20°C (68°F) that you set your thermostats.

HOW ELECTRIC BASEBOARD HEATERS WORK

An electric baseboard heater contains an electrical heating element inside a metal pipe. When the heater is turned on, an electric current flows through the heating element, which then causes cold air to be pulled into the bottom of the heater and warm air to rise out of the top of the heater.

Baseboard heaters are usually installed under windows, so that the heater's rising warm air will counteract falling cool air from the cold window glass.

Most people are comfortable:

- Sitting reading or watching TV at 21°C (70°F)
- Working around the house at 20°C (68°F), and
- Sleeping at 16°C (61°F).

Depending on where you live, simply turning the heat down from 21°C (70°F) to 16°C (61°F) at night can save you as much as 10 per cent on your energy bills.

Setting your thermostats to 16°C when you are at work or away will ensure that your plumbing won't freeze in the winter and provide you with even more energy savings.

SWITCH TO PROGRAMMABLE THERMOSTATS

Most baseboard heaters are fitted with manual thermostats, where you have to physically re-set the thermostat every time you want to change the temperature in a room. As you've probably discovered for yourself, it's easy to forget to turn down a thermostat at night or when you're away, especially if you've got four or five or more separate thermostats throughout your home.

The answer might be to switch to programmable thermostats, at least for your main rooms, such as the family room or living room.

A programmable thermostat works automatically: you set it once—for example, to turn down to 16°C every evening at 10:00 and turn back up to 21°C at 6:30 in the morning—and it will continue to automatically adjust the room temperature for you.

Programmable thermostats are also more precise than manual thermostats, and do a better job of keeping room temperature constant. By avoiding ups and downs in temperature, you will be more comfortable and you'll save more energy.

RESIST TEMPTATION

How often have you done this: you walk into a room and it feels cold, so you crank up the thermostat as high as it can go to heat it up really fast?

Resist that temptation, because it doesn't actually work. Turning your thermostat up to a temperature higher than you actually want it only increases your energy bill—especially if you forget to turn the thermostat back down quickly.

Your room will warm up in the same amount of time, no matter where you set the thermostat, so why use more energy than you have to?

KEEP YOUR HEATERS CLEAR OF OBSTRUCTIONS

The key to efficient baseboard heating is airflow: anything blocking the flow of air into or out of an electric baseboard heater will decrease its energy efficiency.

Your baseboard heaters should sit at least two centimeters (three-quarters of an inch) above the floor or carpet to allow the cooler air on the floor to flow under and through the electrical element. If your carpet is especially thick, trim it down around the base of your heaters.

Also move any furniture or draperies away from your heaters so air can circulate properly and to eliminate potential fire hazards.

The bottom of your drapes should end at least 10 centimetres (four inches) above your heaters or, if your drapes run floor-to-ceiling, make sure you have at least five centimetres (two inches) between the back of the drapes and the front of your heaters.

CLEAN YOUR HEATERS REGULARLY

Dust and dirt can decrease the amount of heat your baseboard heaters are able to produce, while at the same time increasing how much energy they consume.

At least once a year (the best time is before you first turn your heaters on in the fall) use your vacuum cleaner to remove as much dust as you can from each of your heaters.



PICK THE RIGHT NEW HEATER

Baseboard heaters come in various sizes and wattages to suit different rooms. We recommend you talk to a heating contractor or heating equipment supplier to help you determine which heater or heaters would be best for you.

There are two important things to keep in mind when you're talking to the professional:

- It's the number of watts a heater uses that indicates how efficient it is, rather than the volts (it doesn't matter if it's a 110V or 220V heater).
- While low-watt-density baseboard heaters of 460 to 770 watts per metre cost about 10 to 30 per cent more than standard-watt-density heaters of 820 watts, they will distribute the heat more evenly. This means you will be more comfortable and may be able to set your room temperatures even lower, which will help you save even more on your electricity bills.

Your heating contractor or supplier can also help you decide where best to install your heaters (usually in areas of maximum heat loss, such as below a window or in the centre of an exterior wall). And they can advise you on the best location for your thermostats (usually about 1.5 metres above the floor on an inside wall close to a doorway, where they will be easy for you to reach).

Remember, to ensure accurate temperature readings, never install a thermostat directly above a baseboard heater, near a refrigerator or other large appliance, or where it will be in direct sunlight.

POWER SMART IS YOUR SOURCE FOR ENERGY CONSERVATION IDEAS.

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