# Keeping it Cool: How Big Should an AC Unit Be?

A lot of people have the perception that a bigger unit is better for the heating and cooling system in their house," Eric Newhouse, systems integration designer at IBACOS, said. "And that's really not the case. A properly sized piece of equipment that's not too large is going to work much more efficiently in maintaining better and more even comfort in your home."

**Alert**: Don't get oversold about systems that are much more expensive than they need to be simply due to their size.

"Sizing" means to literally find the right size or cooling capacity of the air-conditioning system for your home. Unfortunately, many homes have systems that are too big or too small for them. This can lead to a loss of cooling efficiency and high electricity bills.

Components of Air Conditioner Size

There are several components that impact the proper sizing for an air-conditioning unit:

* Geography
* Heating and Cooling Hours
* Windows in the House

There are compressor and other component failures that have nothing to do with the equipment, but with improper sizing or installation of the air conditioning unit.

"If you oversize the cooling system in your house, what will happen is that it will only operate in short little bursts," Newhouse said. "And since it's operating for a short period of time, it doesn't have the opportunity to dehumidify the air in your home."

When the cooling system is the proper size, it runs a little bit longer every time it turns on, and during this longer period of running, it provides cooling – and it will dehumidify and provide better comfort in the home. So the bottom line is, bigger is not always better.

Even the orientation of the house can have a big effect on sizing of the cooling system. The way the windows are laid out, for example. Do they face north or south? This will certainly increase either the heating or cooling load.

Because sizing is so important in a home's air conditioning, how that size is determined is crucial.

**Construction Advice**: When sizing a cooling system for a home, keep in mind that it's better to undersize than to oversize. A smaller system may run a bit more often, but it will cost less to operate. A larger system will cost more to operate, in addition to being inefficient, which will cost more money in the long run.

From: https://www.diynetwork.com/how-to/skills-and-know-how/electrical-and-wiring/keeping-it-cool-how-big-should-an-ac-unit-be