How to calculate the conditioning capacity in accordance with the room area

How to calculate the capacity of the air conditioner in accordance with the room area for the first time to buy air conditioner or air conditioner.

1. How to choose the appropriate air conditioner capacity

The North is entering the hot summer days. It can be seen that in recent days, Hanoi has had to go through record hot days, temperatures up to 41 degrees Celsius, hot and hot weather makes everyone feel uncomfortable, do not dare to go out. Street.

In this weather, everyone wants to sit in the room with air conditioning to relieve the heat, but to choose a air conditioner with a reasonable capacity, while saving electricity, many people do not have to apply. simple. In the following article, we will show you how to calculate the capacity of the air conditioner based on the size of your room.

When buying air conditioners, cooling capacity is often the data that is most interested by customers.

In order to determine and select the air conditioning capacity, buyers need to pay attention to the area, the volume of space needed to cool the room.

Currently, most of the air conditioner's capacity is horsepower (horse), also known as HP (Horese Power), in which people use numbers like 1 HP, 1.5 HP, 2 HP. , 2.5 HP. And 1 HP will be equivalent to 9,000 BTU, which means the higher the BTU, the stronger the cooling capacity of the conditioner.

The BTU (British Thermal Unit) is an energy unit used in the United States. BTU is used to describe the energy value of fuel and to accurately describe the capacity of heating and cooling systems.

A common formula that everyone needs to know when buying air conditioners is the length x width x room height. A normal bedroom needs 550-600BTU / m2 and a higher level of 700-900BTU / m2 for rooms with heat generation (dining room, living room).

With that formula, you can easily calculate the capacity needed for the air conditioner you plan to buy to suit the installation location.

For example: If the room has an area of ??less than 15m2 (equivalent to a volume of 45m3), just take 15m2 x 600 BTU = 9,000 BTU, so with a room area of ??15m2 we can choose air conditioner with a capacity of 9,000 BTU. This number is equivalent to a 1 HP power conditioner, or "1 horse". And similar to the formula for calculating that room, we can calculate rooms with larger areas such as:

Phòng 15m2 trở xuống (dưới 45m3)	**1 HP**	**9.000 BTU**
Phòng 15m2 đến 20m2 (dưới 60m3)	**1,5 HP**	**13.500 BTU**
Phòng trên 20m2 đến 30m2 (dưới 80m3)	**2 HP**	**18.000 BTU**
Phòng trên 30m2 đến 40m2 (dưới 120m3)	**2,5 HP**	**22.500 BTU**

Besides, there is also a note that the capacity of air conditioning also affects quite a lot of factors: construction materials, heat sources affecting the room, number of users, frequency of use. .

Therefore, not every room has the same standard. The condition of air conditioning is not cold enough frequently in families with large population, the space is too wide and not closed; Or in offices, cafes, hotels where there are many people, many types of machines and heating equipment or too many people regularly come in / out.

To avoid this situation, before buying air conditioners, buyers can add / subtract about 5 - 10m3 / capacity.

In the case of using the room, the outside surface is exposed to direct sunlight, connected to another room, with ventilation fan . please add from 0.3 to 0.5 Hp, depending on the degree of heat, causing a loss of cold capacity.