AC/Heating Sizing Guide

Portable AC/Heating sizing ensures the unit can effectively cool its intended room. A portable AC/Heaters BTU capacity should match the room's square footage. However, larger rooms or those with high ceilings may require more BTUs.

Square Feet	Capacity Needed (BTU)
100 to 150	5,000
150 to 250	6,000
250 to 300	7,000
300 to 350	8,000
350 to 400	9,000
400 to 450	10,000
450 to 550	12,000
550 to 700	14,000
700 to 1,000	18,000
1,000 to 1,200	21,000
1,200 to 1,400	23,000
1,400 to 1,500	24,000
1,500 to 2,000	30,000
2,000 to 2,500	34,000

The table below provides a sizing guide for portable AC/Heating based on room size:

It is essential to note that other factors, such as the number of people in the room, the amount of sunlight that enters the room, and the room's insulation, can also affect the required BTU capacity. Therefore, it is always best to consult with a professional to ensure you choose the correct size portable AC/Heater.

Question: How do we calculate the air conditioning required for a building?

Answer: Generally, if the building has A/C in it already that has failed this will give us guidance on what to supply. If we can use return air then whatever tonnage has failed can be matched by our units. If on the other hand, we cannot use return air and must cool outside air then the general rule of thumb is to double the tonnage of the failed system. This can be proved with the psychometric chart.

As a general rule of thumb, on conventional permanent A/C systems the CFM rating is 400 CFM per Ton. Because HVAC generally cools 100% outside air, the CFM rating on our units is 195 CFM per Ton or less.