

# HVAC PANEL



MARSZ has achieved great success in manufacturing of HVAC. First and foremost, HVAC stands for heating, ventilation, and air conditioning. This system provides heating and cooling to residential and commercial buildings. You can find HVAC systems anywhere from single-family homes to submarines where they provide the means for environmental comfort. Becoming more and more popular in new construction, these systems use fresh air from outdoors to provide high indoor air quality. The V in HVAC, or ventilation, is the process of replacing or exchanging air within a space. This provides a better quality of air indoors and involves the removal of moisture, smoke, odors, heat, dust, airborne bacteria, carbon dioxide, and other gases as well as temperature control and oxygen replenishment.

The three main functions of an HVAC system are interrelated, especially when providing acceptable indoor air quality and thermal comfort. Your heating and air conditioning system is often one of the most complicated and extensive systems in your home, but when it stops working you'll know soon enough! There are nine parts to your HVAC system that you should be familiar with the air return, filter, exhaust outlets, ducts, electrical elements, outdoor unit, compressor, coils and blower.

## Air Return

Your air return is the part of your system that marks the starting point of the ventilation cycle. This return sucks in air, draws it through a filter, and then passes it into the main system. Pro tip: Make sure to dust your returns frequently as debris and dust can easily build up on your filters.

## Filter

Your filter is the second part of the air return in which the air is drawn through. Pro tip: Make sure to change your filters regularly to keep your system in tip-top shape.

## Exhaust Outlets

Another part of your system is the exhaust outlets where the

exhaust created by the heating system is expelled. Pro tip: Check your chimney flue or vent stack annually and tune it up if necessary.

## Ducts

Your ducts are the channels in which the heated or cooled air passes through. Pro tip: Get your ducts cleaned every 2 to 5 years in order to keep everything in working condition.

## Electrical Elements

This part of your system can be a bit trickier, but often problems originate here first. Pro tip: If something isn't working right check for a tripped breaker or dead batteries in your thermostat.

## Outdoor Unit

This is likely the part of your system you think of when someone mentions an HVAC system. The outdoor unit houses the fan which provides air flow. Pro tip: Keep your unit clear of debris and vegetation as it can cause serious problems if plants are sucked into your fan.

## Compressor

As a part of the outdoor unit, the compressor is responsible for converting refrigerant from a gas to liquid and sends it to the coils. Pro tip: If something isn't working quite right, check your compressor. It is often the cause of many system failures.

## Coils

Usually another part of the outdoor unit, coils cool the air as it passes through with a little help from the refrigerant. Pro tip: Check your coils annually. If they freeze up you may want to check your filter and/or refrigerant levels.

## Blower

The blower draws in warm air through the main section of the unit. Pro tip: The more efficiently this air moves through, the more durable your system will be.