

What is the Best Radiator for Heat Pump?





Which radiators function best with heat pumps?

In recent years, there has been a growing interest in incorporating low-temperature heat pump systems in homes as a means of efficient heating. One key aspect that plays a crucial role in the effectiveness of these systems is the choice of radiator. While there are different options available, this article will delve into the advantages of using aluminium radiators in such systems, highlighting their high thermal conductivity, low water content, cost-effectiveness, and overall energy efficiency.

Can I use my home's existing radiators to power my heat pump systems?

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It is feasible to use existing radiators with your ground source or air source heat pump; however, this isn't always the best option. in order to get the most out of a heat pump system, you'll probably need to purchase new radiators if your current ones were made for a gas boiler (for a flow temperature that surpasses 55 °C). the reason is, the flow temperature for heat pump radiators must reach up to 55°C. A heat pump typically needs a flow temperature of between 40 and 50 °C. The high flow temperature of gas boiler radiators, which frequently ranges between 65 and 70 degrees Celsius. In order to adequately heat your home, the hot water generated by gas boilers needs to be heated to a much higher temperature.

Radiators made to work with gas boilers will have a high flow temperature of 65 to 70°C. The Coefficient of Performance (CoP) of your heat pump system will decrease at this flow temperature, significantly decreasing the efficiency of your heating system.

We advise spending money on Aluminium radiators with low airflow temperatures to make the most of your heat pump.

Why Anit radiator considered the perfect choice to work with heat Pumps?

Anit Radiator is a Brilliant Choice to use with Heat Pumps and Solar Panels.

Anit has developed several features that made our product compatible to work efficiently with Heat Pumps:

1. Anit is made from pure (99 %) Aluminium and is the Fast Response Radiator: One of the main reasons why aluminium radiators are considered the perfect choice for those seeking to integrate a low-temperature heat pump system in their homes is due to their high thermal conductivity. Thermal conductivity refers to the ability of a material to transfer heat efficiently. Aluminium, as a metal, possesses exceptional thermal conductivity properties, which allows it to reach desired temperatures much more quickly compared to its steel counterparts. This means that homeowners can experience rapid heating in their living spaces, creating a comfortable environment in less time with Anit Radiator.



2. Anit has more surface Area compare to Stain less steel and any other decorative radiators in the market:

In order to maximize the thermal output of radiator, Our R&D department developed a technology called "**Micro Fin**" that could increase the surface area of each column. The larger the surface area, the higher the potential heat output. Surface area will be greatly increased by fins and the special shape of columns.



3. Low H2O (Low Water Content) Radiator:

Anit radiator has very high ratio of thermal output- to- water content. it means our radiators need small amount of hot water to be supplied by the source to generate maximum heat output. Furthermore, Anit radiators have the advantage of containing lower water content. Unlike traditional steel radiators, which require a larger volume of water to generate sufficient heat, Anit radiators are designed to operate with minimal water. This not only reduces the overall energy usage, but also decreases the labor and installation costs associated with such systems. Consequently, homeowners can save significant amounts of money in the long run, making Anit radiators a cost-effective solution for heating needs.

4. A++ Energy efficiency:

Aside from the monetary benefits, Anit radiators are also highly efficient in terms of energy usage, making them ideal for comfort and practicality. Due to our low water content, less energy is required to heat the water in our radiator. As a result, the overall energy consumption of the low-temperature heat pump system is decreased, contributing to a more sustainable and eco-friendly approach to heating. By utilizing Anit radiators, not only are homeowners able to reduce their carbon footprint, but they also enjoy long-term savings on their energy bills.

5. Low Temperature radiator:

all Anit radiators could generate high thermal output even with low temperature input water. In conclusion, Anit radiators serve as an excellent choice for those looking to incorporate a low-temperature heat pump system in their homes. With their high thermal conductivity, Anit radiators efficiently reach desired temperatures in a shorter time frame compared to steel radiators. Not only does their low water content contribute to reduced labor and installation costs, but it also leads to lower overall energy usage, leading to long-term savings. By opting for Anit as an Aluminium radiator, homeowners can achieve a speedy and highly efficient heating solution that promotes both comfort and practicality while providing substantial financial benefits.

