

BETTER EFFICIENCY. BETTER COMFORT. BETTER PLANET.



# **Single Family Homes**

You have high expectations for comfort in the home. You want to be warm during cold weather. You want ample hot water availability. And you want to save money where you can but still be kind to the earth. All of those expectations can be met with the Anesi Forced Air Heat Pump System with optional water heating. Previously, the only replacement options for an existing gas heating system were a similar efficiency option or an expensive switch to an electric heat pump. Now, another option exists. Anesi's Residential Forced Air Heat Pump System uses the existing natural gas, propane, or other gas fuel source. With superior operating efficiency, the Anesi system cuts fuel consumption up to 50% without sacrificing performance or comfort. By using less fuel with the Anesi Residential Forced Air Heat Pump System, you can save money and the planet at the same time.

# **BENEFITS**

- Consumes up to 50% less gas to provide the same levels of comfort so you save money and reduce carbon emissions.
- Uses existing 120V / 15A circuits.
- All combustion and refrigerant remain outdoors; only warm water enters the home.
- Lowest cost of delivered heat compared to traditional furnaces or electric heat pumps.
- Simple installation when replacing an existing furnace system.
- Thermally-driven by an ammonia-water gas absorption cycle means no mechanical compressor and fewer moving parts.
- Operates in temperatures as low as -40°F/C without any backup.
- No changes needed for existing ductwork and any existing A/C system.
- Remote system monitoring for homeowners and installation professionals.

# **COMPONENTS**



The Heat Pump sits outside, adjacent to your home, where all combustion and refrigerant remains outdoors.



Air Handler

Anesi AH1400

The Air Handler is located indoors in a mechanical or utility room. It replaces and operates like a traditional gas furnace but has no combustion or need for exhaust ventilation.



The Indirect Storage Tank resembles a gas-fired, storage tank water heater but has no gas line and needs no venting.

Indirect Storage Tank Anesi IST80



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# **HOW IT WORKS**

The Anesi Residential Forced Air Heat Pump System uses existing ductwork and electrical service, when possible. The Anesi Gas Heat Pump, located outside, connects to the Anesi Air Handling Unit (AHU), located inside, by a pair of 1" Copper or PEX pipes. These pipes carry warm water with food-grade glycol to the AHU. The warm liquid flows through a heat exchanger in the AHU and the modulating ECM blower moves the warm air throughout the home.



## Location

In all scenarios, the Anesi Gas Heat Pump is located

outside along with all combustion and refrigerants. The AHU and optional Indirect Storage Tank (IST) are inside where the old furnace and water heater were located.

### **Optional Domestic Hot Water**

An indirect storage tank replaces the old gas water heater. The Anesi Indirect Storage Tank (IST) uses the warm liquid heated by the Gas Heat Pump to create ample hot water within the IST. This option can be added during the initial Anesi system installation or at a later date.

#### **Existing Infrastructure**

The home's existing ductwork, gas, and electric utilities should support the Anesi Residential Forced Air Heat Pump System without significant modification, provided an installation professional verifies they are sufficient. Additionally, existing A/C systems may be accommodated by the AHU.

#### **Remote Monitoring**

The Anesi Residential Forced Air Heat Pump System may be monitored remotely to provide valuable performance data. This data enables your contractor and Stone Mountain Technologies to work together on support for any system issues that may arise. Proactive response is a key feature of the Anesi Residential Forced Air Heat Pump System that sets us apart.

## **ENVIRONMENTAL**

The ultra high efficiency Anesi Gas Heat Pump can reduce gas consumption and associated carbon emissions up to 50% beginning the moment it's installed. The Anesi Gas Heat Pump captures heat from the outdoor air which contributes to its efficiency. Because the heat pump relies on an ammonia-water, gas absorption cycle and NOT a mechanical compressor, it operates with a very low power requirement in temperatures down to -40°F/C. Unlike other heat pumps, the Anesi Gas



Heat Pump uses ammonia - a safe and natural refrigerant (R717) with zero global warming potential (GWP) and no PFAS. The Anesi system is designed for use with natural gas or propane. As the carbon composition of this gas fuel is reduced by research and development within the gas utilities, the Anesi system will continue to outperform. Decarbonization is the goal for everyone and through the combined innovation efforts across all industries, sectors, and geographies great strides can be made.

## **INSTALLATION**

Your contractor or specifying engineer will assess the residential home site and advise on feasibility. The Anesi Residential Forced Air Heat Pump System can be customized for certain individual site requirements based on a professional assessment.

Find a local Anesi-trained installation professional at: AnesiComfort.com



