



Heating & Air Conditioning

Retrofit Heat Pumps

Replacement Solutions

Retrofit Heat Pump Solutions

Arcadian provides a turnkey solution for owners of heat pumps that have reached the end of their useful life or are experiencing significant failure rates. We create unique heat pump replacement chassis to replace all aging heat pumps with the least amount of disruption to the suite.

About Us

Specializing in high-rise residential applications such as condos and apartments, Arcadian is one of the largest manufacturers of heat pumps in North America. We manage each project from inspection, to quote, to a completed install, ensuring quality control every step of the way.

Common Problems with Aging Heat Pumps

Heat pumps, like a lot of HVAC equipment, are built to have an expected useful life of 20 years. Since heat pumps became very popular in North American high-rise construction during the 1980s, there are many heat pumps which are well past their useful life. Common issues include:

- Poor heating and cooling performance
- High noise levels
- Excessive energy use
- Water damage both inside the unit and to the suite walls and floors
- Poor indoor air quality

Heat pumps are designed to be built into the walls of suites in order to save space, which makes them challenging to replace. Varying designs from multiple manufacturers over the past 40 years have made it even more difficult to build a product that meets all customer needs.

Replacing In-suite Heat Pumps

Arcadian manufactures custom-engineered replacement heat pump chassis for a number of different makes and models. Install the retrofit unit through the original heat pump opening. The replacement heat pump will provide the homeowner with many years of trouble-free operation:

Reduced noise with use of new motor and compressor technology

Improved air quality

Greatly improved cooling and heating performance

Access to latest thermostat technologies including Wi-Fi connectivity

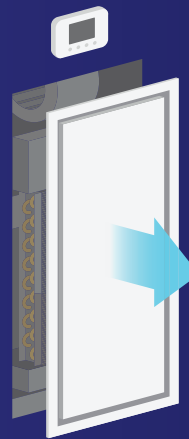
A technician will:

1. Access Heat Pump
2. Remove the current access panel
3. Remove the existing chassis, motor/blower and controls
4. Insert Retrofit - install the components into the cavity, make water and electrical connections
5. Install your access panel & start up your brand new heat pump
6. Clean Up Area

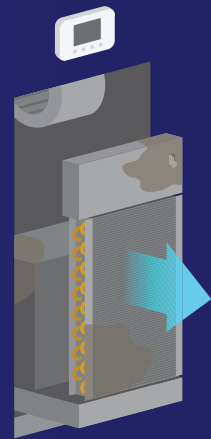
Step 1



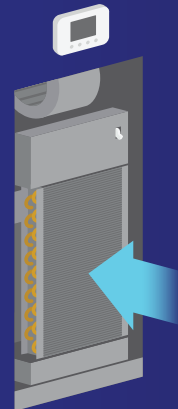
Step 2



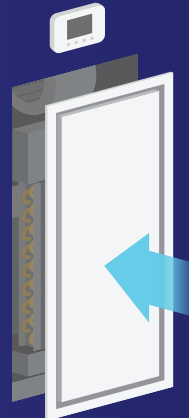
Step 3



Step 4



Step 5



Step 6



Standard Features

- 1. Fan Assembly** – A thermally-protected, multi-speed ECM motor is mounted to a centrifugal fan which has a galvanized steel forward curved DWDI wheel in a painted housing.
- 2. Refrigeration Chassis** – A completely removable, floating-design chassis minimizes vibration and allows easy access for service. The chassis is complete with a rotary or scroll compressor enclosed in a sound dampening and isolated box, coax heat exchanger, TX valve, 4-way reversing valve, balancing valve, 2-way valve and motorized actuator, DX coil and R410A refrigerant piping.
- 3. Water Hoses** – Used to connect chassis to supply and return water pipes. Isolates compressor noise from the building's pipe system.
- 4. Cabinet Insulation** – Fiberglass or closed-cell ½-inch insulation.

Optional Equipment

- 1. Grilles & Registers** – Double deflection supply grilles and registers have adjustable vertical or horizontal louvers. Registers constructed with light-gauge steel complete with adjustable opposed blade dampers.
- 2. Filters** – Multiple filter options available.
- 3. Stainless Steel Drain Pan & Overflow Sensor** – Drain pan assembly is fully TIG welded to ensure the pan never rusts or leaks. The pan includes an overflow sensor to detect rising water levels and turns off the unit to prevent flooding.



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