

# Steffes Corporation

## Hydronic Air Handler

for 5100 Series Furnaces

### NEW and IMPROVED DESIGN

#### FEATURES:

- ◆ Heavy duty insulation provides maximum sound control for quieter operation
- ◆ Durable design with urethane exterior paint finish
- ◆ Automatically recovers the static heat that would otherwise radiate from the outer panels of the Comfort Plus Hydronic furnace and directs it into the ductwork
- ◆ Operation is automatically regulated through the Comfort Plus Hydronic furnace's microprocessor control system
- ◆ 5-Year Limited Manufacturer's Warranty

#### GENERAL:

The Steffes Air Handler is an optional device designed to interface to the Comfort Plus Hydronic (5100 Series) furnace to allow it to provide forced air heating as a stand alone furnace or as a supplement to other ducted heating systems such as a heat pump. When used with a heat pump, it allows the Comfort Plus Hydronic furnace to serve as the back-up heat source and to provide comfort modulation. Heat pumps

can be operated to much lower temperatures allowing for full utilization of its efficiency and optimizing system performance. A duct sensor constantly monitors outlet air temperature and modulates the precise amount of stored off-peak heat needed to eliminate cool and uncomfortable discharge air temperatures typically associated with heat pump systems during cool outdoor temperatures. The air handler will also direct the heat lost statically through the furnace's outer panels into the ductwork for delivery to the living space (automatic static heat recovery). The internal controls of the Comfort Plus Hydronic furnace automatically regulate the operation of the air handler.

#### OPERATION:

A heat call from the room thermostat will energize the pump to circulate heated water through the air handler's water coil where the heat is extracted and then delivered to the living space through the ductwork.

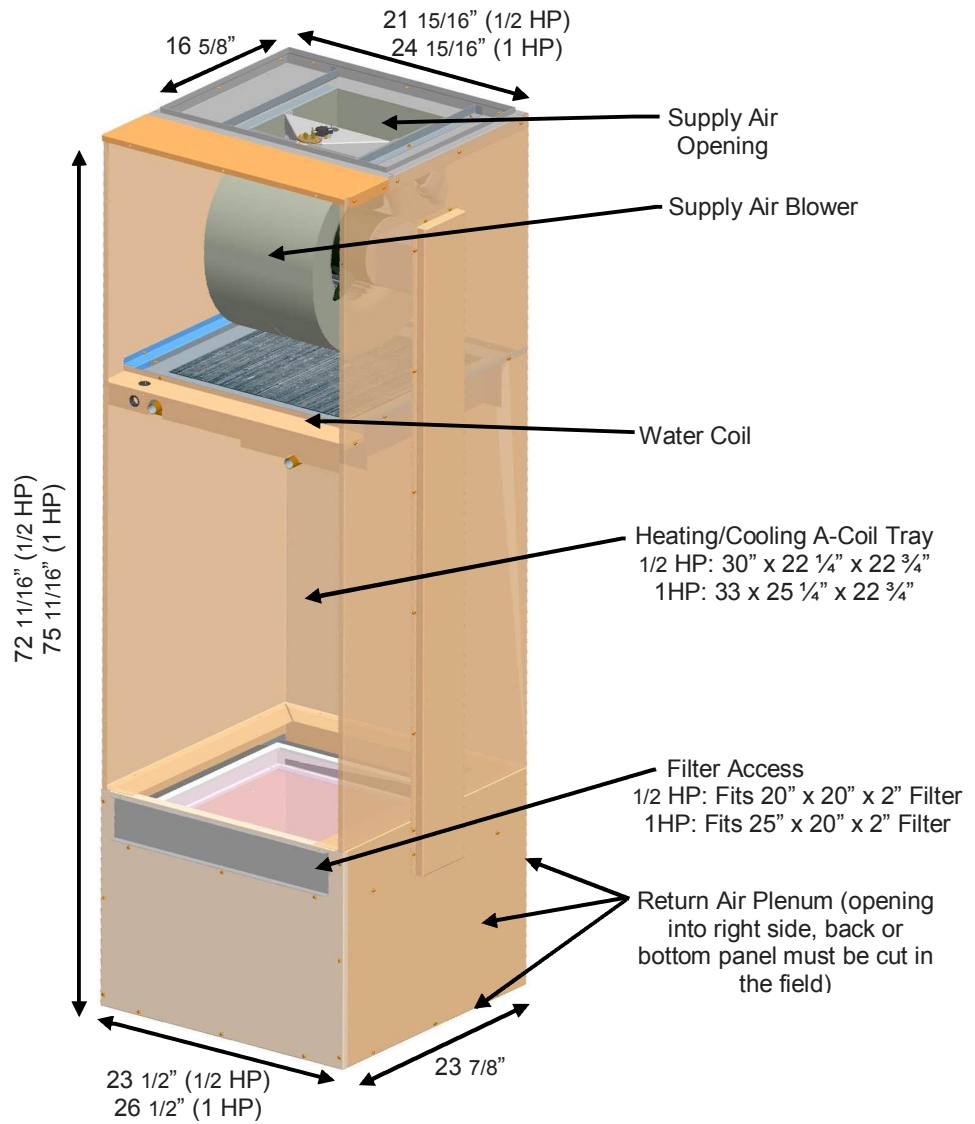


The Steffes Air Handler includes a return plenum, supply air blower, water coil, and air filter.

The air handler's variable speed blower incorporates an ECM motor that automatically adjusts its speed to achieve the appropriate CFM for the thermostat input received. Benefits include:

- ◆ Quieter operation
- ◆ Better dehumidification
- ◆ Offers greater operating efficiency by consuming 25% less energy during normal operating mode which provides for operating cost savings to the consumer. In continuous fan mode, low speed energy savings can be greater than 70% in comparison to a standard fixed motor speed.
- ◆ Interfaces with single or multi-speed air conditioner or heat pumps. With multi-speed systems, it operates at the lower speed most of the time. Only on extremely hot and cold days does it operate at a higher speed. This staged heating and cooling eliminates temperature swings, enhances comfort and optimizes efficiency.
- ◆ Improved air filtration in continuous fan mode
- ◆ Constant air flow over a wide range of static conditions, even if filters are dirty or registers are closed.

## DIMENSIONAL DIAGRAM:



## SPECIFICATIONS:

	1/2 HP, 60 HZ Variable Speed ECM Air Handler	1 HP, 60 HZ Variable Speed ECM Air Handler
Order Item Number	1302132	1302134
Approximate Weight	200 lbs	228 lbs
Maximum Static Pressure (inches water column)	.75 inches H <sub>2</sub> O	.75 inches H <sub>2</sub> O
Maximum Water Coil Output	60,000 BTU/hr	90,000 BTU/hr
Maximum Outlet Temperature	120°F	120°F
A-Coil Tray Dimensions (HxWxD)	30" x 22 5/16" x 22 3/4"	33" x 25 5/16" x 22 3/4"
Voltage	240/208 VAC	240/208 VAC
Wattage	560W	1,050W
CFM ratings	1000, 1200, 1400, 1600	1200, 1400, 1600, 2000

- ◆ 1/2 HP variable speed accommodates most 1.5 to 4 ton heating/cooling systems
- ◆ 1 HP variable speed accommodates most 3 to 5 ton heating/cooling systems