

<b>Type of Appliance</b>	Direct vent wall furnace suitable for homes including mobile and manufactured homes; forced combustion, forced convection	
<b>Rinnai Model Number</b>	RHFE-431FAIII-N (Natural gas)	RHFE-431FAIII-P (Propane)
<b>Gas Rate Input (BTU/hour)</b>	Low - 8,200 High - 16,700	Low - 8,200 High - 16,700
<b>Gas Rate Output (BTU/hour)</b>	Low - 6,640 High - 13,400	Low - 6,640 High - 13,400
<b>AFUE Rating</b>	80.8%	81.0%
<b>Minimum Gas Supply Pressure</b>	3.5 in (89 mm) W.C.	8 in (203 mm) W.C.
<b>Maximum Gas Supply Pressure</b>	10.5 in (267 mm) W.C	13 in (330 mm) W.C.
<b>Electrical Connection</b>	AC 120V, 60 Hz, 40 watts	
<b>Gas Connection</b>	1/2 inch FNPT	
<b>Combustion System</b>	Stainless steel inshot burners	
<b>Ignition System</b>	Direct spark	
<b>Fan CFM Output:</b>	Low: 110.5	High: 141.3
<b>Temperature Settings</b>	Low (LO): minimum combustion 60° - 80° F in 4° increments High (HI): maximum combustion	
<b>Temperature Control</b>	Electronic thermostat	
<b>Humidifier Tray</b>	Enameled tray with capacity of 3 pints (1.3 liters)	
<b>Weight</b>	Approximately 51 lbs (23 kg)	
<b>Clearance from Combustibles</b>	Side: 2 inches (50 mm) Front: 40 inches (1 m)	Top: 10 inches (250 mm)
<b>Noise Level</b>	32 - 38 dB(A)	
<b>Warm Air Outlet</b>	Bottom front louvers	

### FEATURES

<b>Linear function modulation:</b>	provides precise gas flow
<b>Negative coefficient thermistor:</b>	detects temperature change in 1/2 of a degree
<b>Variable speed inducer motor :</b>	monitors and controls combustion fan
<b>Quiet operation:</b>	reduces noise through use of swept blades in convection fan; and through the design of the combustion chamber and heat exchanger which silently expand or contract due to temperature changes
<b>Self diagnostic electronics:</b>	continually monitors functions; provides auto shutdown codes; indicates when air filter needs cleaning

### Safety Devices

- Flame rod detects flame failure; results in auto shutdown to prevent escape of gas
- Bi-metal switch, thermal fuse, and thermistor detect overheat condition; results in auto shutdown
- 3 amp fuse protects against power surge; results in auto shutdown
- Abnormal spark at time of ignition results in auto shutdown
- Combustion fan purges any gas from the combustion chamber before ignition
- Convection fan continues to run after burner shutdown to cool internal parts
- Function lock prevents inadvertent operation
- Appliance shuts down if room reaches 104° F (40° C)

### Venting

#### Maximum Vent Length

concentric; 3 1/8 inch (80 mm) wall hole

13 feet (4 m) with a maximum of 2 bends; maximum 8 feet (2.4 m) vertically

#### Wall Thickness and Flue Manifold Kits (the "A" vent kit is included with the appliance)

Name	Kit No.	fits walls
S Vent Kit	FOT-150	3 - 4 1/2 in (75 - 115 mm)
A Vent Kit	FOT-151	4 1/2 - 9 1/2 in (115 - 240 mm)
B Vent Kit	FOT-152	9 1/2 - 15 3/4 in (240 - 400mm)
C Vent Kit	FOT-153	15 3/4 - 23 5/8 in (400 - 600 mm)
D Vent Kit	FOT-154	23 5/8 - 31 1/2 in (600 - 800 mm)

### Warranty

Labor: 2 years; Parts: 5 years; Heat Exchanger: 10 years with years 6-10 prorated

*Rinnai is continually updating and improving products; therefore, specifications are subject to change without prior notice. Local, state, provincial and federal codes must be adhered to prior to installation.*

### DIMENSIONS

