

Type of Appliance	Direct vent wall furnace suitable for homes, apartments, and condominiums; modular/mobile home approved; forced combustion, forced convection	
Rinnai Model Number	RHFE-433RFA-N (Natural gas)	RHFE-433RFA-P (Propane)
Gas Rate Input (BTU/hour)	Low - 8,200 High - 16,700	Low - 8,200 High - 16,700
Gas Rate Output (BTU/hour)	Low - 6,560 High - 13,4000	Low - 6,560 High - 13,400
AFUE Rating	81.0%	80.0%
Minimum Gas Supply Pressure	3.5 in (89 mm) W.C.	8 in (203 mm) W.C.
Maximum Gas Supply Pressure	10.5 in (267 mm) W.C	13 in (330 mm) W.C.
Electrical Connection	AC 120V, 60 Hz, 45 watts	
Gas Connection	1/2 inch FNPT	
Combustion System	Stainless steel inshot burners	
Ignition System	Direct spark	
Fan CFM Output:	Low: 110.5	High: 141.3
Temperature Settings	Low (LO): minimum combustion 60° - 80° F in 2° increments High (HI): maximum combustion	
Temperature Control	Electronic thermostat	
Humidifier Tray	Enameled tray with capacity of 3 pints (1.3 liters)	
Weight	53 lbs (24 kg)	
Clearance from Combustibles	Side: 2 inches (50 mm) Front: 40 inches (1 m)	Top: 10 inches (250 mm)
Noise Level	32 - 42 dB(A)	
Warm Air Outlet	Bottom front louvers	

FEATURES

Linear function modulation:	provides precise gas flow
Negative coefficient thermistor:	detects temperature change in 1/2 of a degree
Variable speed inducer motor :	monitors and controls combustion fan
Quiet operation:	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
Self diagnostic electronics:	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

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

Maximum Vent Length

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

