



CSA INTERNATIONAL

# Certificate of Compliance

**Certificate:** 1257662 (113206)

**Master Contract:** 189893

**Project:** 1877609

**Date Issued:** 2007/02/16

**Issued to:** Rinnai America Corporation

103 International Dr  
Peachtree City, GA 30269  
USA  
Attention: Donald N. Emen

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



**Issued by:** Michael Sharkey

**Authorized by:** Richard Fort, Manager of Certification Services

## **PRODUCTS**

**CLASS 1512 81** - FURNACES (GAS) - WALL - Direct Vent - Certified to U.S. Standards  
**CLASS 1512 01** - FURNACES (GAS) - WALL - Direct Vent

1512-01 Direct Vent Wall Furnace

MODEL NUMBER

For Use With Natural Gas      Trade Name: Rinnai

RHFE-1004FA-N

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.



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RHFE-1004FA-(S,W)-N

For Use With Liquefied Petroleum Gases

RHFE-1004FA-P

RHFE-1004FA-(S,W)-P

For Use With Natural or Propane Gas

Fan Type for Manufactured Homes (Mobile Homes)

RHFE-1004FA-N

RHFE-1004FA-P

RHFE-1004FA-(S,W)-N

RHFE-1004FA-(S,W)-P

1512-81 Direct Vent Wall Furnace

MODEL NUMBER

For Use With Natural Gas                      Trade Name: Rinnai

RHFE-1004FA-N

RHFE-1004FA-(S,W)-N

For Use With Liquefied Petroleum Gas

RHFE-1004FA-P

RHFE-1004FA-(S,W)-P

For Use With Natural or Liquefied Petroleum Gas

Fan Type for Manufactured Homes (Mobile Homes)

RHFE-1004FA-N

RHFE-1004FA-P

RHFE-1004FA-(S,W)-N

RHFE-1004FA-(S,W)-P



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**APPLICABLE REQUIREMENTS**

ANSI Z21.86 – 2004 • CSA 2.32 – 2004, ANSI Z21.86a – 2005 • CSA 2.32a – 2005 Vented Gas-Fired Space Heating Appliances

**PRODUCTS**

**1512-01 Direct Vent Wall Furnace**

<u>MODEL NUMBER</u>	<u>ELECTRIC RATING</u>	<u>MAXIMUM INPUT (BTU/HR)</u>	<u>MINIUM INPUT (BTU/HR)</u>	<u>ALTITUDE</u>
<b>For Use With Natural Gas</b>				<b>Trade Name: Rinnai</b>
RHFE-1004FA-N	B	38,400	10,500	T
RHFE-1004FA-(S,W)-N	B	38,400	10,500	T
<b>For Use With Liquefied Petroleum Gases</b>				
RHFE-1004FA-P	B	36,500	10,500	T
RHFE-1004FA-(S,W)-P	B	36,500	10,500	T
<b>For Use With Natural or Propane Gas Fan Type for Manufactured Homes (Mobile Homes)</b>				
RHFE-1004FA-N	B	38,400	10,500	T
RHFE-1004FA-P	B	36,500	10,500	T
RHFE-1004FA-(S,W)-N	B	38,400	10,500	T
RHFE-1004FA-(S,W)-P	B	36,500	10,500	T

**1512-81 Direct Vent Wall Furnace**

<u>MODEL NUMBER</u>	<u>MAXIMUM INPUT (BTU/HR)</u>	<u>MINIUM INPUT (BTU/HR)</u>	
<b>For Use With Natural Gas</b>			<b>Trade Name: Rinnai</b>
RHFE-1004FA-N	38,400	10,500	
RHFE-1004FA-(S,W)-N	38,400	10,500	
<b>For Use With Liquefied Petroleum Gas</b>			
RHFE-1004FA-P	36,500	10,500	
RHFE-1004FA-(S,W)-P	36,500	10,500	
<b>For Use With Natural or Liquefied Petroleum Gas Fan Type for Manufactured Homes (Mobile Homes)</b>			
RHFE-1004FA-N	38,400	10,500	
RHFE-1004FA-P	36,500	10,500	
RHFE-1004FA-(S,W)-N	38,400	10,500	
RHFE-1004FA-(S,W)-P	36,500	10,500	

**STANDARDS**

ANSI Z21.86 – 2004 • CSA 2.32 – 2004  
ANSI Z21.86a – 2005 • CSA 2.32a – 2005  
CAN/CGA-2.17-M91  
CSA C22.2 No. 3-M1988  
CAN/CSA C22.2 No. 0-M91

Vented Gas-Fired Space Heating Appliances  
Vented Gas-Fired Space Heating Appliances  
Gas-Fired Appliances for Use At High Altitudes  
Electrical Features of Fuel-Burning Equipment  
General Requirements, Canadian Electrical Code, Part II

**CLEARANCES / INSTALLATION**

Minimum clearances to combustible construction:

A) Top	10.0 inches
B) Front	40.0 inches
C) Vent	0 inches
D) Rear	0 inches
EL) Left Side	2.0 inches
ER) Right Side	2.0 inches
F) Floor	<u>x</u> combustible <u>  </u> non-combustible

**Horizontal Venting:** (All models)

**Vent Terminal Intake**

Model 1004FA; 50.0 mm I.D. PVC flexible pipe

**Vent Material Exhaust**

Model 1004FA; 49.8 mm I.D. 304 stainless steel pipe

**Minimum Length:** 3 inches + Vent Terminal (Vent Kit S)

**Maximum Length:** Model 1004FA; 13 feet + 2 Elbows + Vent Terminal (Vent Kit D, 31.5 in. wall thickness)

**Wall Thickness:** 3 inches to 31.5 inches

**ELECTRICAL RATINGS**

120 Volts; Less than 12 Amps; 60 Hz; 1-Ph

**GAS PRESSURES**

**Manifold Pressure:**

	<b>RHFE-1004</b>
Natural Gas:	3.7 inches w.c.
Propane/LP Gases:	10.1 inches w.c.

**Minimum Supply Pressure:**

	<b>RHFE-1004</b>
Natural Gas:	5.0 inches w.c.
Propane/LP Gases:	11.0 inches w.c.

**GAS CONTROL ASSEMBLIES**

**DIRECT IGNITION SYSTEMS**

Read columns vertically  
for complete assemblies

Used on Models: RHFE-1004FA

<b><u>TYPE OF CONTROL</u></b>	<b><u>MFR. OF CONTROL</u></b>	<b><u>MFR. MODEL NUMBER</u></b>	<b><u>SIZE OF CONTROL</u></b>	
			<b><u>NATURAL</u></b>	<b><u>PROPANE /LP</u></b>
Valves	Rinnai	PC-112	1/2 x 3/8	1/2 x 3/8
Manual Valve	Jomar	T-204	1/2 x 1/2	1/2 x 1/2
Ignition Module	Rinnai	PC-112	X	X
Sensor	Rinnai	PC-112	X	X

**Note:** Gas ignition integrated temperature control system model PC-112 is accepted in application only. Refer to Report No. 189893-100502701 for details.

**ELECTRICAL EQUIPMENT**

**COMBUSTION MOTOR:**

<b>Furnace Model No.</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Ratings</b>
RHFE-1004FA	Shinanokenshi Corp.	308F-419	120V, 60Hz (3270 RPM)

**CIRCULATING MOTOR:**

<b>Furnace Model No.</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Ratings</b>
RHFE-1004FA	Shinanokenshi Corp.	ES02051	120V, 60Hz (850-500 RPM)

**RUN CAPACITOR:**

<b>Furnace Model No.</b>	<b>Manufacturer</b>	<b>Ratings</b>
RHFE-1004FA	Suzuki Electric	6.0 uf / 220 V

**TRANSFORMERS:**

<b>Furnace Model No.</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Ratings</b>
RHFE-1004FA	Power Electronics	ET-251	120V, 60Hz
RHFE-1004FA	Tamura Co.	ET-251	120V, 60Hz

**OVERHEAT SWITCH:**

<b>Furnace Model No.</b>	<b>Manufacturer</b>	<b>Location</b>	<b>Model No.</b>	<b>Ratings</b>	<b>Setting</b>
RHFE-1004FA	Mitsui Kinzoku Ashi Keiki Corp.	Heat Exchgr. Circulating Fan	1004F-2057	Thermistor	
			ES-01131	Bimetal	149 F

**FAN SWITCH:**

<b>Furnace Model No.</b>	<b>Manufacturer</b>	<b>Location</b>	<b>Model No.</b>
RHFE-1004FA	Mitsui Kinzoku	Heat Exchgr.	1004F-2057 Thermistor

**FUSEHOLDER:**

<b>Manufacturer</b>	<b>Model No.</b>	<b>Ratings</b>
Taiko Denki	TFH-530	part of transformer assembly

**FUSE:**

<b>Manufacturer</b>	<b>Model No.</b>	<b>Ratings</b>
Fuji Terminal	FGAO-2	250 V, 5 A, size 30mm x 6.4mm; part of transformer assembly

**TERMINAL BLOCKS:**

<b>Manufacturer</b>	<b>Model No.</b>	<b>Ratings</b>
Yukita Electric	YP-10	125 V, 13 A

**SURGE ABSORBER:**

<b>Manufacturer</b>	<b>Model No.</b>	<b>UL No.</b>
Teikoku Tsushin	DSAR3FS	E70785