

# GAS FURNACES



## **ACHIEVER® SERIES SUPER QUIET 80™ 80% A.F.U.E.† DOWNFLOW GAS FURNACES w/ECM MOTOR**

The Ruud *Achiever® Series Super Quiet 80™* line of down-flow gas furnaces is designed for installation in closets, alcoves, utility rooms, or attics. The design is certified by CSA International.

### **Features**

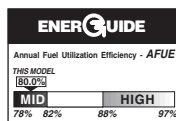
- Innovative design results in reliable, efficient operation at sound levels which provide distinct competitive advantage.
- Patented heat exchanger, constructed of both stainless and aluminized steel for the maximum in corrosion resistance.
- Low profile "34 inch" [864 mm] design is lighter and easier to handle, and leaves room for optional equipment.
- Left or right side gas and electric inlet connections with quick, simple change.
- Direct Spark ignition.
- Integrated board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment helps to reduce jacket loss and noise.
- Pre-paint galvanized steel cabinet.
- Molded permanent filter.
- Grab-holes in doors to aid in easy door removal and replacement.
- ECM X-13 Blower Motor.

A variety of cooling coils and plenums designed to use with Ruud *Achiever® Series Super Quiet 80™* gas furnaces are available as optional accessories.

†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

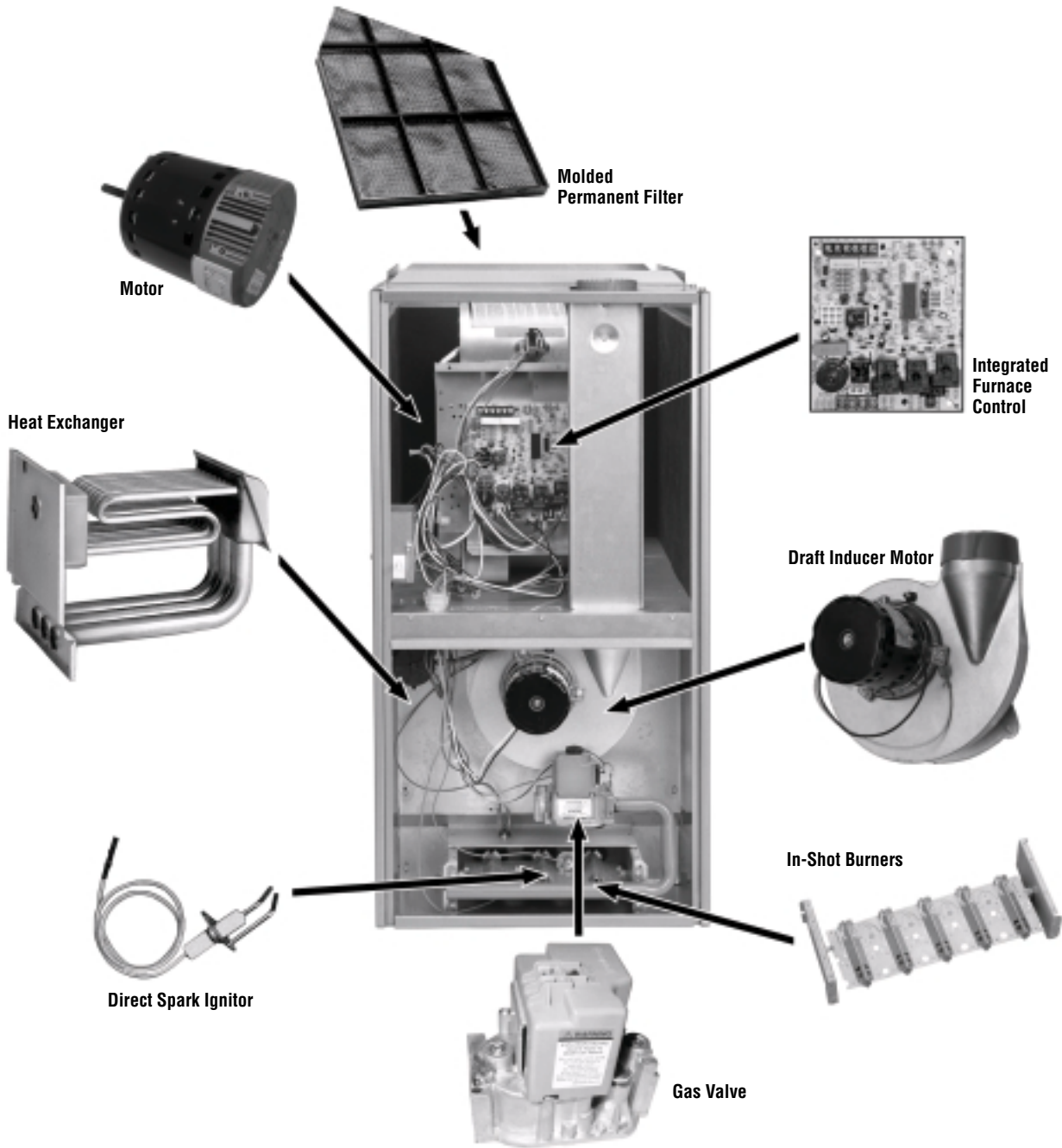
### **RGLT- SERIES**

**Models with Input Rates from  
75,000 to 125,000 BTU/HR  
[22 to 37 kW]  
(U.S. & Canadian Models)**





# ACHIEVER® SERIES SUPER QUIET 80™ DOWNFLOW GAS FURNACE



## STANDARD EQUIPMENT

Completely assembled and wired; induced draft; pressure switch; redundant main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; manual shut-off valve, pressure regulator for natural and L.P. (propane) gas; transformer; direct drive multi-speed blower with Regal Beloit X-13 Motor. Furnaces are equipped with cooling/heating relay and transformer (40VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.) Flame sensor diagnostics; on-board twinning; fused-protection (secondary), **3rd speed option for continuous fan; common heat/cool terminal.**

NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

The complete terms of limited and other warranties are available at our sales office, or through local installer.

All models can be converted by a qualified Ruud distributor or local service dealer to use L.P. (propane) gas without changing burners. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as optional accessories from a Ruud parts distributor.

For L.P. (propane) operation, refer to Conversion Kit Index Form.

NOTE: For natural and L.P. (propane) gas models, direct spark ignition is 100% lockout type.

**WARNING**  
THIS FURNACE IS NOT APPROVED  
OR RECOMMENDED  
FOR USE IN MOBILE HOMES

**BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.**

## PHYSICAL DATA AND SPECIFICATIONS

MODEL NUMBERS RGLT- SERIES	07EAMKR 07NAMKR	07EBRQR 07NBRQR	10EBRMR 10NBRMR	12EARMR 12NARMR
Input in BTU's/Hr [kW] ②	75,000 [22]	75,000 [22]	100,000 [29]	125,000 [37]
Heating Capacity in BTU's/Hr [kW] ①	60,000 [18]	60,000 [18]	81,000 [24]	99,000 [29]
High Altitude Input in BTU's/Hr [kW]*	67,500 [20]	67,500 [20]	90,000 [26]	112,500 [33]
High Altitude Output Capacity in BTU's/Hr [kW]*	53,500 [16]	53,500 [16]	72,500 [21]	89,000 [26.1]
Heat Ext. Static Pressure in "wc [kPa]	0.12 [0.029]	0.12 [0.029]	0.15 [0.037]	0.2 [0.05]
Blower (D x W) in inches [mm]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Motor H.P.-Speeds - Type [W]	1/2hp, 5spd, X-13 [373]	1hp, 5spd, X-13 [746]	1hp, 5spd, X-13 [746]	1hp, 5spd, X-13 [746]
Motor Full Load Amps	6.8	10.9	10.9	10.9
Heating Speed (factory setting)	MED-HIGH	MED	MED-HIGH	MED-HIGH
Cooling Speed (factory setting)	HIGH	HIGH	HIGH	HIGH
Cooling in CFM [L/s] @ 0.5"wc [0.12 kPa] E.S.P. (nominal)	1200 [566]	2000 [944]	2000 [944]	2000 [944]
Rated E.S.P. in "wc [kPa]	0.5 [0.12]	0.5 [0.12]	0.5 [0.12]	0.5 [0.12]
Temperature Rise Range in °F [°C]	30-60 [17-33]	25-55 [13.9-30.6]	30-60 [17-33]	35-65 [19.4-36.1]
Max Outlet Air in °F [°C]	165 [73.8]	165 [73.8]	190 [87.7]	185 [85.0]
Standard Filter Dimensions in inches [mm]	12 x 20 [305 x 508]	14 x 20 [356 x 508]	14 x 20 [356 x 508]	14 x 20 [356 x 508]
Approx. Shipping Weight in Lbs. [kg]	105 [48]	120 [54]	120 [54]	140 [63]
Return Air Cabinets (Opt.) RXGR-?? Filter Size in inches [mm]	C17B (2) 12 x 16 [305 x 406]	C21B (2) 20 x 16 [508 x 406]	C21B (2) 20 x 16 [508 x 406]	C24B (2) 24 x 16 [610 x 406]
AFUE - Electronic Ignition Modules ①	80.0%	80.0%	80.0%	80.0%

NOTES: All models are 115VAC, 60HZ, Single Phase. Gas connection size for all models is 1/2" [12.7 mm] N.P.T.

① In accordance with D.O.E. test procedures.

② See Conversion Kit Index Form for high altitude derate in U.S. applications. For Canadian applications, reference the furnace installation instructions.

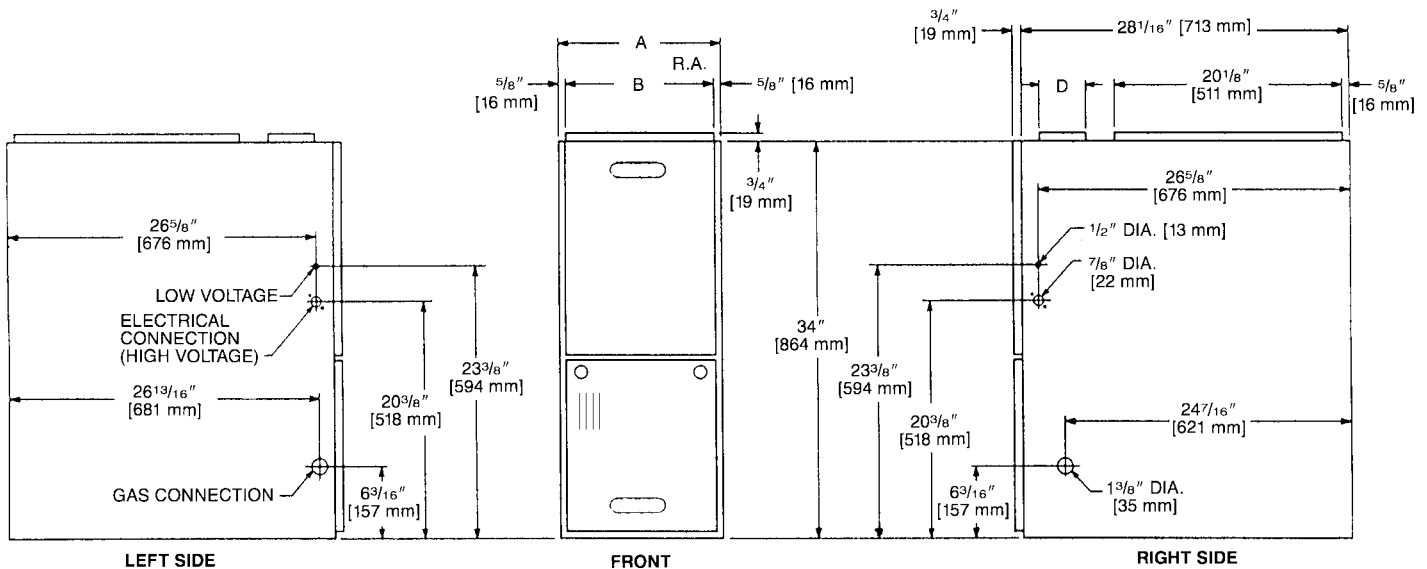
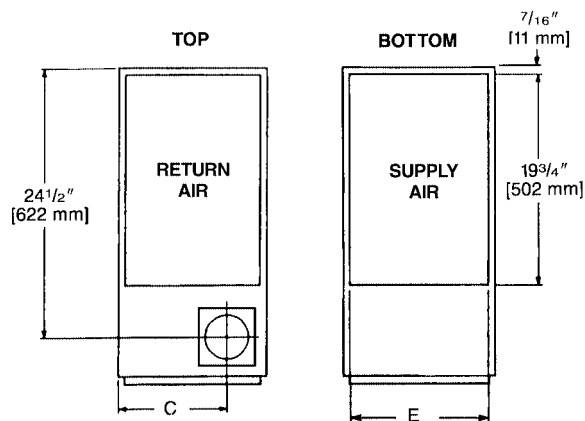
\* Data references Canadian applications only.

## MODEL IDENTIFICATION—DOWNFLOW MODELS

R	G	L	T	—	07E	A	M	K	R		
Ruud	Gas Furnace	Downflow	Design Series		Heating Input Designation	Variations	Blower Designation	Heating & Cooling Designation	Fuel Type		
					Electric Ignition	NO <sub>x</sub> Model	Input BTU/HR	A = Std. Cabinet B = Wide Cabinet	M = 11 x 7 [279 x 178 mm] R = 11 x 10 [279 x 254 mm]	K = 600-1200 CFM [283 x 566 L/s] Q = 1000-1600 CFM [472 x 755 L/s] M = 1200-2000 CFM [566 x 944 L/s]	R = Natural Gas, U.S. and Canadian Standard Furnace
					07E	07N	75,000 [22 kW]				
					10E	10N	100,000 [29 kW]				
					12E	12N	125,000 [37 kW]				

[ ] Designates Metric Conversions

# DOWNFLOW DIMENSIONS



## DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES) [mm]

MODEL RGLT-SERIES	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTS. (LBS.) [kg]
07 (A)	17 <sup>1</sup> / <sub>2</sub> [445]	16 <sup>11</sup> / <sub>32</sub> [415]	12 <sup>1</sup> / <sub>8</sub> [308]	①	16 <sup>5</sup> / <sub>8</sub> [422]	0	3 ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
07 (B)	21 [533]	19 <sup>27</sup> / <sub>32</sub> [504]	13 <sup>7</sup> / <sub>8</sub> [352]	①	20 <sup>1</sup> / <sub>8</sub> [511]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
10	21 [533]	19 <sup>27</sup> / <sub>32</sub> [504]	13 <sup>7</sup> / <sub>8</sub> [352]	①	20 <sup>1</sup> / <sub>8</sub> [511]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	24 <sup>1</sup> / <sub>2</sub> [622]	23 <sup>11</sup> / <sub>32</sub> [593]	15 <sup>5</sup> / <sub>8</sub> [397]	①	23 <sup>5</sup> / <sub>8</sub> [600]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.

② May be 0" [0 mm] with type B vent.

③ May be 1" [25 mm] with type B vent.

Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and/or Can/CGA-B149 Installation Codes and in accordance with local codes.

[ ] Designates Metric Conversions

# BLOWER PERFORMANCE DATA—DOWNFLOW MODELS

MODEL NUMBER RGLT-SERIES	BLOWER SIZE in INCHES [mm] (D x L)	MOTOR H.P. [W]	BLOWER SPEEDS	WIRE COLOR	MOTOR OUTPUT NUMBER	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES [kPa] WATER COLUMN					
						.1 [.02]	.2 [.05]	.3 [.07]	.5 [.12]	.6 [.15]	.8 [2.0]
07EAMKR, 07NAMKR	11 x 7 [279 x 178]	1/2 [373]	LOW	RED	1	916 [432]	803 [379]	669 [315]	561 [264]	504 [237]	421 [198]
			MED-LO	YELLOW	2	993 [468]	952 [449]	910 [429]	827 [390]	793 [374]	706 [333]
			MED	PURPLE	3	1205 [568]	1158 [546]	1124 [530]	1056 [498]	1024 [483]	950 [448]
			MED-HI*	BLUE*	4*	1367 [645]	1333 [629]	1300 [613]	1236 [583]	1203 [567]	1140 [538]
			HIGH	BLACK	5	1475 [696]	1444 [681]	1416 [668]	1354 [639]	1329 [627]	1264 [596]
07EBRQR, 07NBRQR	11 x 10 [279 x 254]	1 [746]	LOW	RED	1	1198 [565]	1105 [521]	1093 [515]	931 [439]	901 [425]	791 [373]
			MED-LO	YELLOW	2	1411 [665]	1358 [640]	1317 [621]	1227 [579]	1196 [564]	1093 [515]
			MED*	PURPLE*	3*	1608 [758]	1564 [738]	1529 [721]	1451 [684]	1416 [668]	1340 [632]
			MED-HI	BLUE	4	1918 [905]	1877 [885]	1840 [868]	1767 [834]	1706 [805]	1636 [772]
			HIGH	BLACK	5	2122 [1001]	2083 [983]	2054 [969]	1977 [933]	1945 [918]	1874 [884]
10EBRMR, 10NBRMR	11 x 10 [279 x 254]	1 [746]	LOW	RED	1	1240 [585]	1120 [528]	1073 [506]	974 [459]	917 [432]	799 [377]
			MED-LO	YELLOW	2	1405 [663]	1364 [643]	1317 [621]	1232 [581]	1181 [557]	1083 [511]
			MED	PURPLE	3	1600 [755]	1561 [736]	1526 [720]	1445 [682]	1403 [662]	1325 [625]
			MED-HI*	BLUE*	4*	1903 [898]	1877 [885]	1833 [865]	1766 [833]	1711 [807]	1631 [769]
			HIGH	BLACK	5	2072 [977]	2028 [957]	2006 [946]	1940 [915]	1908 [900]	1840 [868]
12EARMR, 12NARMR	11 x 10 [279 x 254]	1 [746]	LOW	RED	1	1225 [578]	1073 [506]	988 [466]	864 [407]	795 [375]	697 [328]
			MED-LO	YELLOW	2	1302 [614]	1240 [585]	1191 [562]	1074 [506]	1027 [484]	932 [439]
			MED	PURPLE	3	1553 [733]	1503 [709]	1455 [686]	1370 [646]	1313 [619]	1237 [583]
			MED-HI*	BLUE*	4*	1902 [897]	1859 [877]	1822 [859]	1722 [812]	1686 [795]	1602 [756]
			HIGH	BLACK	5	2403 [1134]	2369 [1118]	2332 [1100]	2246 [1060]	2190 [1033]	2059 [971]

NOTES: \* = FACTORY HEATING SPEED  
 = NOT TO BE USED AS HEATING SPEED

[ ] Designates Metric Conversions

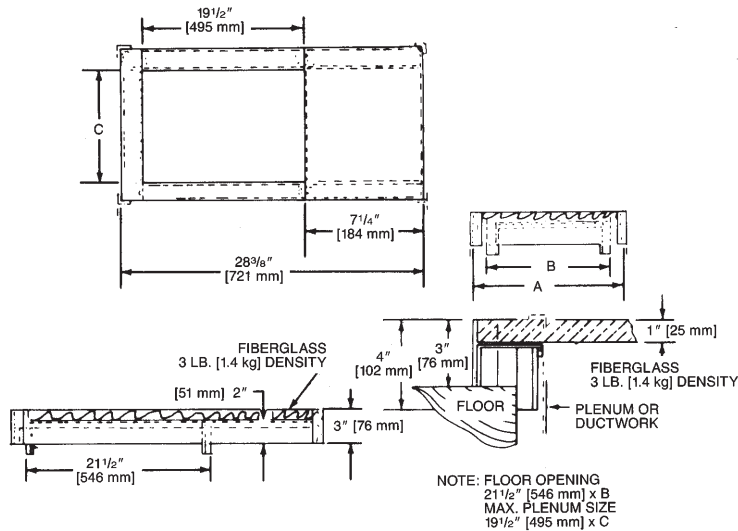
# ACCESSORIES—DOWNFLOW

**DOWNFLOW WARNING:** Unit design is certified for installation on non-combustible floor. A special factory supplied combustible floor sub-base is required when installing on a combustible floor. Failure to install the sub-base may result in fire, property damage and personal injury.

## COMBUSTIBLE FLOOR BASE DIMENSIONS

COMBUSTIBLE FLOOR BASE	USE WITH FURNACE SIZES	A IN. [mm]	B IN. [mm]	C IN. [mm]
RXGC-B17	RGLT-07B	18 [457]	16 <sup>3</sup> / <sub>4</sub> [425]	14 <sup>3</sup> / <sub>4</sub> [451]
RXGC-B21	RGLT-10 & RGLT-07B	21 <sup>1</sup> / <sub>2</sub> [546]	20 <sup>1</sup> / <sub>4</sub> [514]	18 <sup>1</sup> / <sub>4</sub> [464]
RXGC-B24	RGLT-12	25 [635]	23 <sup>3</sup> / <sub>4</sub> [603]	21 <sup>3</sup> / <sub>4</sub> [552]

[ ] Designates Metric Conversions



## RXPF-F01 and F02

**FOSSIL FUEL KITS**—are for use with Ruud Heat Pumps and Super Quiet 80 warm air furnaces. The RXPF-F02 meets TVA requirements.

## RXGF-CC\*

**FILTER RACK**—Downflow top return mount.  
**NOTE:** Filter racks are shipped without filters.

\*Filters available through PROSTOCK®.

## FOR HIGH ALTITUDES:

**HIGH ALTITUDE OPTION CODE:** U.S. & Canada – None required for high altitudes.

**HIGH ALTITUDE CONVERSION KITS:** U.S. & Canada – None required for high altitudes.

### 80+ HIGH ALTITUDE INSTRUCTIONS

Caution: Always follow National Fuel Gas Code (NFGC) guidelines when converting for high altitudes.

High altitude option codes are not required for these models. However, the burner orifice size needs to be recalculated and verified at elevations above 2000 ft. See Installation Instructions for more information.

**NOTE:** For Canadian installations only, an optional derate (manifold gas pressure reduction) method may be used to adjust the furnace for altitude. See Installation Instructions for more information. This optional method may **NOT** be used for U.S. installations.

## GENERAL TERMS OF LIMITED WARRANTY

Ruud will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

\*For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Manufacturer for a Copy.

Gas Heat Exchanger Limited Warranty .....Twenty (20) Years  
Conditional Parts\* (Registration Required) .....Ten (10) Years

# NOTES

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

**Ruud Heating,  
Cooling and  
Water Heating**

P.O. Box 17010, Fort Smith, AR 72917



*"In keeping with its policy of continuous progress and product improvement, Ruud reserves the right to make changes without notice."*