



Gas Furnaces



DR80UHAW*2**

80% A.F.U.E.†

Heating Stages: Two-Stage

Motor Type: Constant CFM

Input Rates: Upflow/Horizontal: 50-150 kBTU [14.7-44.0 kW]

Configuration Options: Upflow/Horizontal



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

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Features and Benefits

- **Diagnostics:** With the Durastar Contractor App & Bluetooth®¹ technology makes monitoring, troubleshooting and repairing the product easier than ever before
- **Dip Switch Free Installation Commissioning via Bluetooth® Technology:** Seamless final install step without DIP switch configuration using the Durastar Contractor App
- **Ignition System:** Proven Direct Spark Ignition (DSI) for reliability and longevity
- **Two-Stage Heating:** Furnace operation mainly stays at low capacity around 60-65%, but will switch to high capacity to deliver stable heat distribution
- **Constant CFM Motor:** Truly variable speed technology allows for ultimate humidity control, quieter sound levels and year-round energy savings

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Gas Furnaces

<u>DR</u>	<u>80</u>	<u>UH</u>	<u>A</u>	<u>W</u>	<u>050</u>	<u>2</u>	<u>3</u>	<u>14</u>	<u>S</u>	<u>A</u>	<u>B</u>
Brand	Furnace Efficiency	Position	Major Series	Motor Type	Heating Input	Stages of Heating	AC Max. Capacity	Width	NOx	Minor Series	Controls
DR - Durastar	80 - 80% AFUE	UH - Upflow Horizontal	A - 1st Design Series	W - PWM Variable Speed Premium	050 - 50,000 [14.7 kW] 075 - 75,000 [22.0 kW] 100 - 100,000 [29.3 kW] 125 - 125,000 [36.6 kW] 150 - 150,000 [44.0 kW]	2 - Two-Stage	3 - 3 ton drive 4 - 4 ton drive 5 - 5 ton drive	A - 14" Width B - 17.5" Width C - 21" Width D - 24.5" Width	S - Standard N - Low NOx	A - 1st Series	B - Communicating, Bluetooth®

[] Designates Metric Conversions

AVAILABLE MODELS
DR80UHAW0502314*AB
DR80UHAW0502417*AB
DR80UHAW0752417*AB
DR80UHAW0752521*AB
DR80UHAW1002417*AB
DR80UHAW1002521*AB
DR80UHAW1252524*AB
DR80UHAW1502524*AB

* S = Standard, N = Low NOx

STANDARD EQUIPMENT	
100% Safety Lock Out	Limit Controls
2 Stage Induced Draft Motor	Low Speed Continuous Fan Option
Adjustable Cool Fan Off Delay	Manual Shut-Off Valve
Adjustable Humidifier On/Off Delay (App Only)	On Demand Dehumidifier Connection
Aluminized Steel Heat Exchanger Design	One Hour Automatic Retry
Blower Compartment Door Safety Switch	Power and Self-Test Diagnostics
Bluetooth® Diagnostics and Setup	Pressure Switches
Completely Assembled and Wired	PWM Controlled Variable Speed Electrically Commutated Blower Motor
Direct Drive Motor	Redundant 2 Stage Main Gas Control
Thermostat Connections	Single Speed Option for Heating and Cooling Applications
Electronic Air Cleaner Connections	Solid Bottom
Electronic On/Off Blower Time Control	Two Plus* Stage Cooling Thermostat Connection
Humidifier Connections	Two Speed Heating
Humidistat Terminal Connection	

NOTE: A thermostat is not included as standard equipment
 *When Connected to Three Speed or Modulating AC/HP Product

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

Physical Data and Specifications—Upflow Models

MODEL NUMBERS DR80UHAW***2 2 stg VS UP/HZ SERIES	DR80UHAW 0502314*AB	DR80UHAW 0502417*AB	DR80UHAW 0752417*AB	DR80UHAW 0752521*AB	DR80UHAW 1002417*AB	DR80UHAW 1002521*AB	DR80UHAW 1252524*AB	DR80UHAW 1502524*AB
Input-BTU/Hr [kW]	50,000 [15]	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	100,000 [29]	125,000 [37]	150,000 [44]
Heating Capacity BTU/Hr [kW] ①	40,000 [12]	40,000 [12]	60,000 [18]	60,000 [18]	80,000 [23]	80,000 [23]	100,000 [29]	120,000 [35]
Low Input BTU/Hr	35,000 [10]	35,000 [10]	52,000 [15]	52,000 [15]	70,000 [21]	70,000 [21]	87,500 [26]	105,000 [31]
Low Heating Capacity BTU/Hr	28,000 [8]	28,000 [8]	42,000 [12]	42,000 [12]	56,000 [16]	56,000 [16]	70,000 [21]	84,000 [25]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	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. [W] Type	1/2 [373] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	1 [746] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	1 [746] VS-CT(ECM)
Min. Circuit Ampacity	9	13	9	15	12	12	12	16
Min. Overload Protection Device	15	15	15	15	20	15	15	20
Max. Overload Protection Device	15	20	20	20	25	20	20	25
Motor Full Load Amps	6.1	9.6	9.6	12.4	9.6	9.6	9.6	12.4
High Heating CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1425 [673]	1380 [651]	1900 [897]	1680 [793]
Low Heating CFM [L/s]	750 [354]	775 [366]	1150 [543]	1100 [519]	1225 [578]	1200 [566]	1400 [661]	1500 [708]
MAX Cooling CFM [L/s]	1240 [585]	1650 [779]	1650 [779]	1980 [934]	1650 [779]	1980 [934]	1980 [934]	1980 [934]
MIN Cooling CFM [L/s]	300 [142]	500 [236]	500 [236]	500 [236]	500 [236]	500 [236]	500 [236]	500 [236]
Fan CFM [L/s]	600 [283]	800 [378]	800 [378]	1000 [472]	800 [378]	1000 [472]	1000 [472]	1000 [472]
Max. E.S.P. (In. W.C.) [kPa]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]
Temperature Rise Range °F – High Input	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	45-75 [25-41.7]
Temperature Rise Range °F – Low Input	20-50 [11.1-27.8]	20-50 [11.1-27.8]	20-50 [11.1-27.8]	20-50 [11.1-27.8]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	30-60 [16.7-33.3]	35-65 [19.4-36.1]
Approx. Shipping Weight (Lbs.) [kg]	104.5 [47]	110 [50]	117.5 [53]	135 [61]	131.5 [60]	140 [64]	143.5 [65]	155.5 [71]
AFUE ②	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%

NOTES: All models are 115V, 60HZ, 1 Ph. Gas connection size for all models is 1/2" [13 mm] N.P.T.

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

② See Conversion Kit Index Form for high altitude derate.

*S=Standard, N=Low NOx

This furnace does not meet air district requirements of 14 ng/J NOx emissions limit, and thus is subject to a mitigation fee of up to \$450.

This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

[] Designates Metric Conversions

Upflow Application

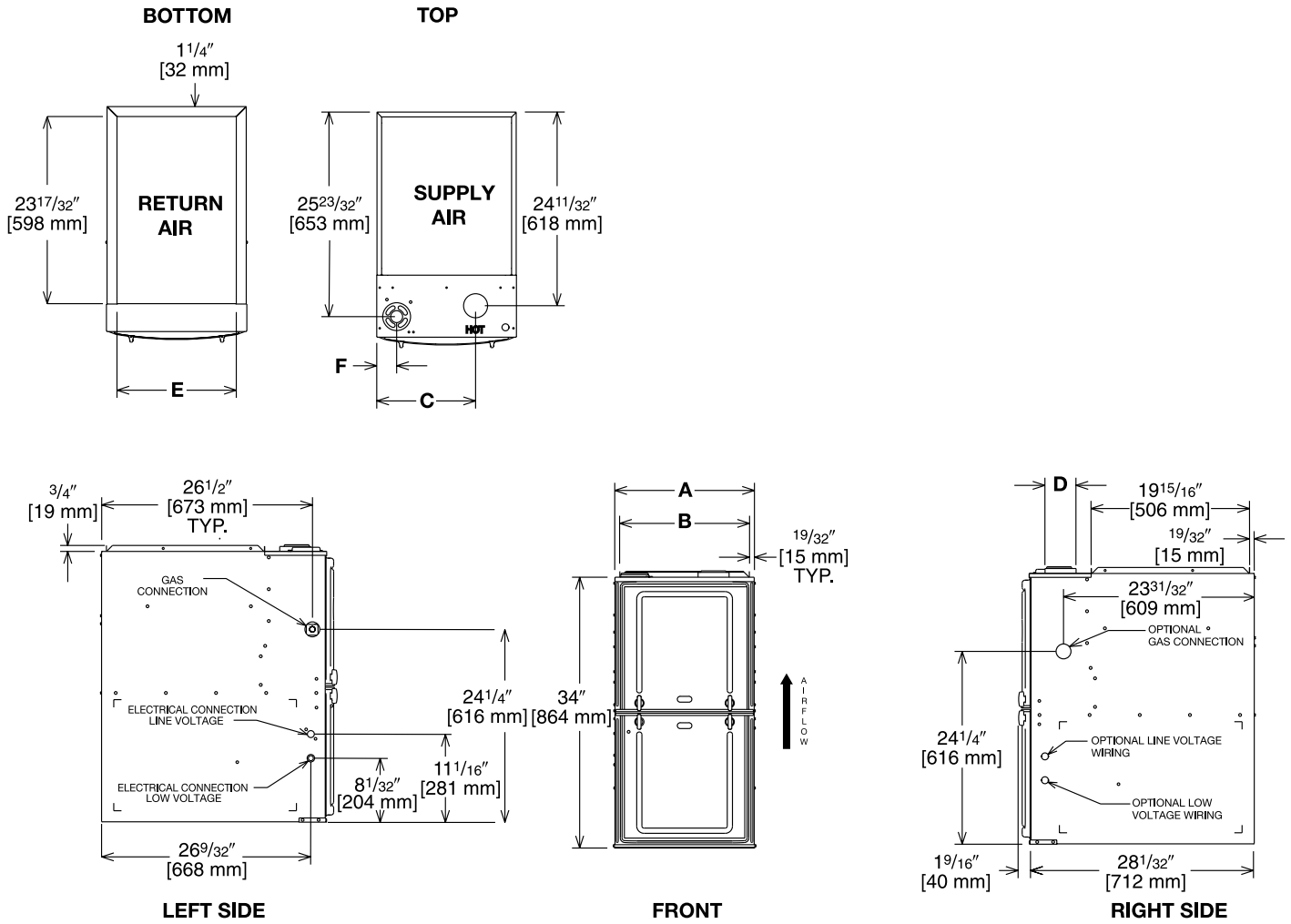


Illustration
ST-A1220-04-00
FIGURE 1

Dimensional Data: Upflow Model

MODEL DR80UHAW***2	A	B	C	D	E	F	MINIMUM CLEARANCE (IN.) [mm]					
							SUPPLY AIR SIDE	RETURN AIR SIDE	BACK	TOP	FRONT	VENT
050314	14 [356]	$12\frac{27}{32}$ [326]	$10\frac{5}{8}$ [270]	①	$11\frac{1}{2}$ [292]	$1\frac{7}{8}$ [48]	4 [102] ②	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
050417/75417	$17\frac{1}{2}$ [445]	$16\frac{11}{32}$ [415]	$12\frac{3}{8}$ [314]	①	15 [381]	$2\frac{1}{2}$ [64]	3 [76] ②	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③
075521/100	21 [533]	$19\frac{27}{32}$ [504]	$14\frac{1}{8}$ [359]	①	$18\frac{1}{2}$ [470]	$2\frac{1}{2}$ [64]	0	0	0	1 [25]	3 [76]	6 [152] ③
125	$24\frac{1}{2}$ [622]	$23\frac{11}{32}$ [592]	$15\frac{7}{8}$ [403]	①	22 [559]	$2\frac{1}{2}$ [64]	0	0	0	1 [25]	3 [76]	6 [152] ③

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

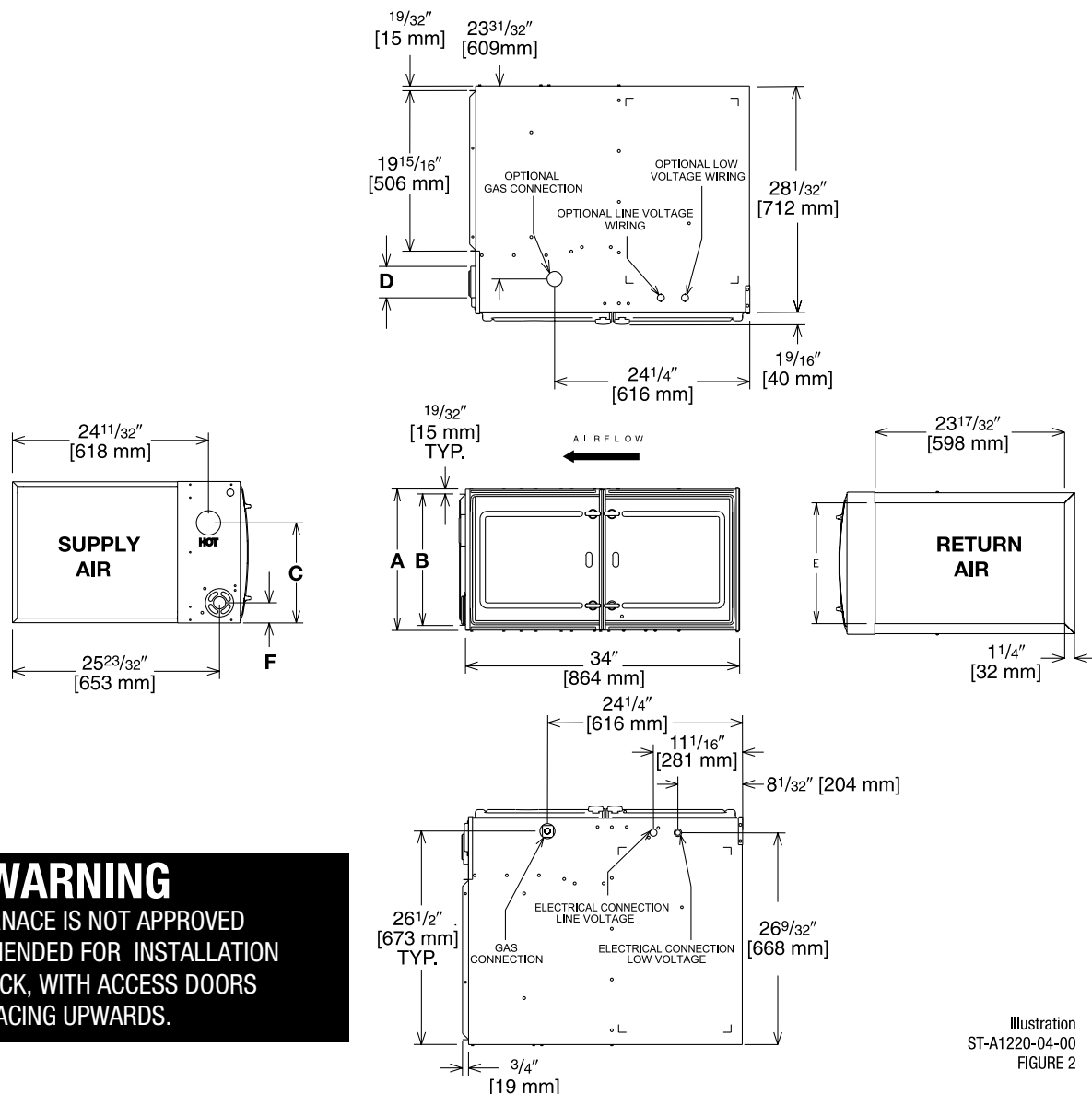
② May be 0" [0 mm] with type B vent.

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 in accordance with local codes.

[] Designates Metric Conversions

Horizontal Application



WARNING
THIS FURNACE IS NOT APPROVED
OR RECOMMENDED FOR INSTALLATION
ON ITS BACK, WITH ACCESS DOORS
FACING UPWARDS.

Illustration
ST-A1220-04-00
FIGURE 2

Dimensional Data: Horizontal Model

MODEL DR80UHAW***2	A	B	C	D	E	F	MINIMUM CLEARANCE (IN.) [mm]					
							SUPPLY AIR SIDE	RETURN AIR SIDE	BACK	TOP	FRONT	VENT
050314	14 [356]	12 ²⁷ / ₃₂ [326]	10 ⁵ / ₈ [270]	①	11 ¹ / ₂ [292]	17 ⁷ / ₈ [48]	4 [102] ②	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
050417/75417	17 ¹ / ₂ [445]	16 ¹¹ / ₃₂ [415]	12 ³ / ₈ [314]	①	15 [381]	2 ¹ / ₂ [64]	3 [76] ②	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③
075521/100	21 [533]	19 ²⁷ / ₃₂ [504]	14 ¹ / ₈ [359]	①	18 ¹ / ₂ [470]	2 ¹ / ₂ [64]	0	0	0	1 [25]	3 [76]	6 [152] ③
125	24 ¹ / ₂ [622]	23 ¹¹ / ₃₂ [592]	15 ⁷ / ₈ [403]	①	22 [559]	2 ¹ / ₂ [64]	0	0	0	1 [25]	3 [76]	6 [152] ③

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 in accordance with local codes.

[] Designates Metric Conversions

Blower Performance Data

TARGET GAS HEATING AIRFLOWS								
	DR80UHAW 0502314*AB	DR80UHAW 0502417*AB	DR80UHAW 0752417*AB	DR80UHAW 0752521*AB	DR80UHAW 1002417*AB	DR80UHAW 1002521*AB	DR80UHAW 1252524*AB	DR80UHAW 1502524*AB
Factory Low Heating CFM [L/s]	750 [354]	775 [366]	1150 [543]	1100 [519]	1225 [578]	1200 [566]	1400 [661]	1500 [708]
Low Heat Side Return CFM [L/s]	750 [354]	745 [352]	1100 [519]	1150 [543]	1260 [595]	1242 [586]	1480 [698]	1650 [779]
Low Heat Approx. ±7°F CFM [L/s]	660 [311]	698 [329]	1035 [488]	990 [467]	1078 [509]	1086 [513]	1260 [595]	1320 [623]
Low Heat Approx. ±12°F CFM [L/s]	608 [287]	644 [303]	955 [451]	913 [431]	993 [469]	996 [470]	1162 [548]	1215 [573]
Factory High Heating CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1425 [673]	1380 [651]	1900 [897]	1680 [793]
High Heat Side Return CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1539 [726]	1380 [651]	1900 [897]	1815 [857]
High Heat Approx. ±7°F CFM [L/s]	864 [408]	837 [395]	1305 [616]	1283 [506]	1283 [606]	1245 [588]	1710 [807]	1512 [714]
High Heat Approx. ±12°F CFM [L/s]	797 [376]	772 [364]	1204 [568]	1183 [558]	1183 [558]	1146 [541]	1577 [744]	1394 [658]

* S = Standard, N = Low NOx

[] Designates Metric Conversions

SIDE RETURN FILTER RACK: RXGF-CD
BOTTOM RETURN FILTER RACK FOR
UPFLOW APPLICATION: RXGF-CB

FILTER RACK FILTER SIZES* INCHES		
MODEL	RXGF-CB (UPFLOW/ HORIZONTAL)	RXGF-CD (UPFLOW) SIDE RETURN
DR80UHAW050	12 ¹ / ₄ x 25	15 ³ / ₄ x 25
DR80UHAW075/ DR80UHAW0752521	15 ³ / ₄ x 25	15 ³ / ₄ x 25
DR80UHAW10025	19 ¹ / ₄ x 25	15 ³ / ₄ x 25
DR80UHAW125	22 ³ / ₄ x 25	15 ³ / ₄ x 25
DR80UHAW150	22 ³ / ₄ x 25	15 ³ / ₄ x 25

Indoor Coil Casings

MODEL NUMBER
RXBC-D14AI
RXBC-D17AI
RXBC-D21AI
RXBC-D21BI
RXBC-D24AI

4" FLUE ADAPTER: RXGW-C01

WARNING: IMPORTANT NOTICE

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE AIR RETURN DUCTS. FAILURE TO INSTALL A BASE PLATE COULD CAUSE PRODUCTS OF COMBUSTION TO BE CIRCULATED INTO THE LIVING SPACE AND CREATE POTENTIALLY HAZARDOUS CONDITIONS.

FURNACE WIDTH IN.	SOLID BOTTOM KIT NO.	BASE PLATE NO.	BASE PLATE SIZE IN.
14	RXGB-D14	AE-61874-01	11 ⁵ / ₈ x 23 ⁹ / ₁₆
17 ¹ / ₂	RXGB-D17	AE-61874-02	15 ¹ / ₈ x 23 ⁹ / ₁₆
21	RXGB-D21	AE-61874-03	18 ⁵ / ₈ x 23 ⁹ / ₁₆
24 ¹ / ₂	RXGB-D24	AE-61874-04	25 ⁵ / ₈ x 23 ⁹ / ₁₆

For High Altitudes:

OPTION CODE FOR HIGH ALTITUDE: U.S.

None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS: U.S.

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.



GENERAL TERMS OF LIMITED WARRANTY*

Durastar 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.

Parts Five (5) Years
Heat Exchanger Ten (10) Years

***For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

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.



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