

# **ENGINEERING DATA**



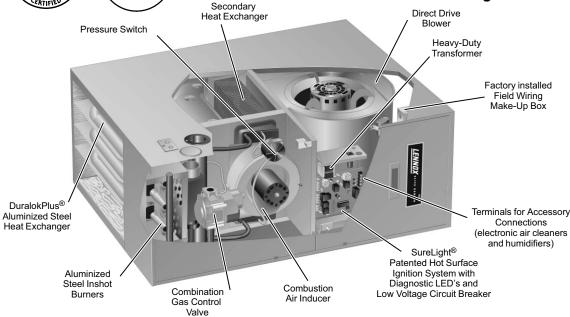




Stainless Steel

**ELITE 90™ DIRECT VENT SERIES** Horizontal/Down-Flow Gas Furnaces **Horizontal Unit Heaters AFUE - Up to 92.0%** Input - 50,000 to 120,000 Btuh (14.7 to 35.2 kW)

Add-on Cooling - 2 to 5 Tons (7.0 to 17.6 kW) Bulletin No. 210093



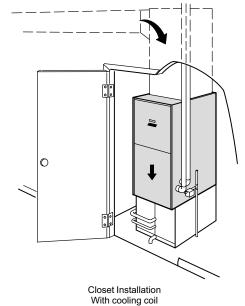


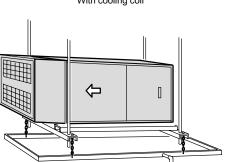
September 2001

Supersedes May 1998

Down-Flow Configuration

## **Typical Applications**

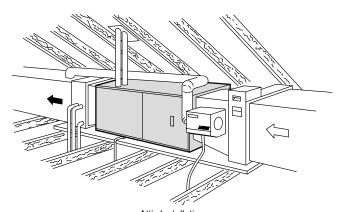




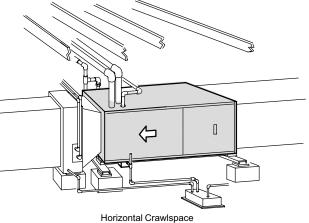
Suspended Horizontal

Unit Heater Installation

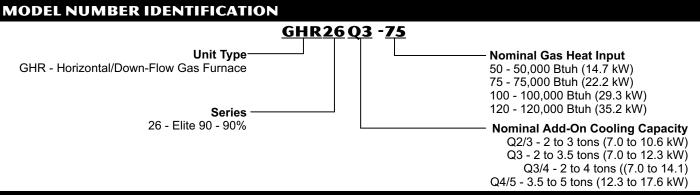




Attic Installation With cooling coil, electronic air cleaner and humidifier



Installation



## **FEATURES**

#### Applications

- High fire input capacities of 50,000, 75,000, 100,000 and 120,000 Btuh (14.7, 22.0, 29.3 and 35.2 kW).
- Energy efficiency (AFUE) of up to 92.0%.
  Utility room, alcove, closet, crawl space or attic installation.
- Lennox add-on evaporator coils, electronic air cleaners and power humidifiers can be added to furnace.
- Approved for use as unit heater.
- Shipped factory assembled with all controls installed and wired.
- Shipped for down-flow and horizontal left hand air discharge, easily converted to horizontal right hand air discharge.
- Each unit factory test operated to insure proper operation.

#### Approvals

- Units certified by CSA International (formerly AGA/CGA) and ratings are certified by GAMA.
- Units tested and rated according to U.S. DOE test procedures and FTC labeling regulations.
- Approved by California Energy Commission and meet California Seasonal Efficiency requirements and California Nitrogen Oxides (NO<sub>x</sub>) Standards.
- Blower data from unit tests conducted in Lennox Laboratory air test chamber.
- Units approved for conventional or horizontal venting.
   Developed in accordance with ISO 9002 quality standards.

## **Equipment Warranty**

- "DuralokPlus™", ArmorTuf™ Aluminized Steel Heat Exchangers limited lifetime warranty.
- All other covered components limited five years (residential applications), one year (non-residential applications).
- Refer to Lennox Equipment Limited Warranty certificate included with equipment for details.

## Lennox DuralokPlus™ Aluminized Steel Primary and Stainless Steel Secondary Heat Exchanger Assembly

- Heavy gauge, ArmorTuf™, aluminized steel primary heat exchanger.
   Crimped seam clamshell type design.
- Minimum resistance to air flow.
- Secondary stainless steel condenser coil heat exchanger with aluminum fins fitted to stainless steel tubes.
- Heat exchanger assembly has been laboratory life cycle tested.
- Combined flue vent / condensate drain header box.
- Secondary condenser coil factory tested for leaks.

## Inshot Burners

- Aluminized steel inshot burners.
- Burners completely enclosed.
- Heavy gauge steel burner box.
- Burner sight glass furnished on burner box.
- Burner assembly removeable from unit.

## Intake, Exhaust and Condensate Connections

- Connects to either side of unit.
- Inlet air pipe connects with no-hub connector clamp (provided).
- Exhaust pipe connects to outside of cabinet.
- Quick connect, low profile condensate trap provided for field installation.
- Condensate hose re-routing not required if unit position changed.

## SureLight<sup>®</sup> Hot Surface Ignition

- Tough, reliable, long-life, trouble-free performance.
   Tungsten heater element sandwiched between two plates of silicon nitride.
- Cemented to steatite block for protection against current leakage.
- Ignition leads constructed of nickel plated copper enclosed in high temperature Teflon insulation for dependable operation.
- No electrical noise.

## SureLight<sup>®</sup> Integrated Control Board

- Solid-state board contains all necessary controls and relays to operate furnace.
  Combustion air inducer is controlled by board. Prior to ignition, a pre-purge cycle for 15 seconds is initiated. After the main burners are turned off, a post-purge cycle for 5 seconds is run.
- Adaptive technology of ignition control board continuously monitors and adjusts the ignitor voltage to operate at minimum igniter temperature required for ignition, prolonging ignitor life.
  - Electronic flame sensor control assures safe and reliable operation.
- Should loss of flame occur, flame sensor controls will initiate 4 attempts at re-ignition before locking out unit operation for 60 minutes.
- Watchguard type circuit automatically resets ignition controls after one hour of continuous thermostat demand after unit lockout, eliminating nuisance calls for service.
- Fan control consists of adjustable blower timed-off delay (60 to 180 seconds) and fixed blower timed-on delay (45 seconds).
- For air-conditioning applications, blower is automatically energized on thermostat demand for cooling.
   Provisions for additional power supply requirements for 120 volt (less than 4 amps) power humidifiers and electronic air cleaners.
- Ignition control has two LED's to indicate status and as an aid in troubleshooting.

#### FEATURES

#### Automatic Gas Control

- 100% safety shut off.
- 24 volt redundant combination gas control valve.
- Manual shut off option (On-Off).
- Automatic electric valve (dual).
- Gas pressure regulation.
- Dual valve design provides double assurance of 100% close off of gas to main burners on each off cycle.
- Gas valve automatically regulated to maintain even gas flow regardless of venting installation.
   Design compensates for variations in altitude.

#### **Combustion Air inducer**

- Combustion air inducer prepurges heat exchanger and safely vents combustion products.
- Shaded pole motor has ball bearings and is thermally protected.
- Operates only during heat demand cycle.
- Pressure switch prevents unit operation in case of blockage of combustion air inlet, flue outlet or condensate drain.

#### **Limit Controls**

- Automatic reset, primary and secondary limits are accurately located.
- Primary limit factory installed on vestibule panel, secondary limit factory installed on blower housing.

#### Flame Rollout Switch

- Manual reset.
- Factory installed on top of burner box.

#### 24 Volt Transformer

- Furnished and factory installed in control box.
- 40VA transformer has circuit breaker wired in series.

- Multi-speed direct drive blower.
- Statically and dynamically balanced.
- Resiliently mounted.
- Blower speeds are easily changed on blower motor. See blower performance tables.

- Low profile, narrow width cabinet allows easy installation.
- Heavy gauge cold rolled steel constructed.
- Baked-on enamel paint finish.
- Fully insulated cabinet with complete service access and easy blower removal.
- Safety interlock switch automatically shuts off power to unit when blower compartment access door is removed.
   Gas piping and electrical inlets are provided in both sides of cabinet.

## Field Wiring Make-up Box

- Furnished for line voltage wiring.
- Box may be installed internally or externally on either side of furnace.
  Contains plug-in connection for power supply wiring, wire for 120 volt accessory connection and all necessary hardware for installation.

## OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

## **Condensate Drain Heat Cable Kits**

- Self-limiting wattage heat cable prevents condensate drain from freezing in unconditioned areas. Heat cable kits are available in the following lengths: 50 ft. (15.2 m) LB-88643C **(26K70)**, 24 ft. (7.3 m) LB-88643B **(26K69)** or 6 ft. (1.8 m) - LB-88643A (26K68)
- Also available Heat Cable Tape: 66 ft. (20 m) length, 1/2 in. (13 mm) wide fiberglass (39G04) or 60 ft. (18 m) length, 2 in. (51 mm) wide aluminum foil (39G03).

## **Down-flow Additive Base**

- Required for heating only units installed on combustible floors.
- Not required in add-on cooling applications.
- See Specifications table for order number.

## Filter

- Washable or vacuum cleanable polyurethane frame type air filter available for field installation.
- Secured by one rear filter clip and two side filter clips.
- Filter easily removed for servicing by pushing up filter clips on each side of cabinet.
- See Specifications table for order no.

## **Horizontal Support Frame Kit**

- Provides support of unit in horizontal applications. Consists of (2) 1 x 1-1/2 x 32-5/8 in. (25 x 38 x 829 mm) and (2) 1 x 3 x 53-7/8 in. (25 x 76 x 1368 mm) painted heavy gauge cold rolled steel support channels with assembly and suspending holes.
- Bolts and nuts furnished for field assembly.
- Suspending rods must be field provided.
- See Specifications table

### LPG/Propane Conversion Kit

- For LPG/propane models a conversion kit is required for field changeover from natural gas.
- See specifications table for order number.

## Concentric Termination Kit

- Facilitates installation of combustion air intake pipe and flue exhaust pipe.
- 1-1/2 inch (38 mm) kit LB-49107CE **(60G77)** or 2 inch (51 mm) kit (**33K97**) contains concentric termination assembly, mounting clamp, roof flashing, reducer bushing and 45 degree elbow.
- Kit requires single hole penetration of roof or wall for installation.
- CSA certified.
- See Specifications table and dimension drawings.

## **OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA**

## **Roof Termination Kit**

- Facilitates installation of combustion air intake pipe and flue exhaust pipe.
- 2 inch (51 mm) kit, LB-49107CC (15F75), or 3 inch (76 mm) kit, LB-65678A (44J41), contains two neoprene rubber roof flashings.
- See Specifications table and dimension drawings.
- Refer to venting tables in this bulletin to determine pipe size needed and proper termination kit required.

#### Twinning Kit

- Field installed kit (15L38) is required to operate two furnaces simultaneously.
- Kit consists of twinning control and two fan sensors.

## **Wall Assembly Termination Kits**

- Facilitates installation of combustion air intake pipe and flue exhaust pipe.
- Refer to venting tables in this bulletin to determine pipe size needed and proper termination kit required.
- See Specifications table and dimension drawings.

#### Close Couple Kits

- (22G44) 2 inch (51 mm) or (44J40) 3 inch (76 mm) consists of close-couple side-by-side PVC piping with galvanized steel wall cover plate for sealing and isolating piping penetration of the wall.
- Piping spacing and length is sized for proper wall installations.
- AGA/CGA certified.

## WTK Close Couple Kits

- 2 in. (51 mm) (30G28) or 3 in. (76 mm) (81J20) contains one insulated faceplate, one insulated exhaust pipe, elbow and fittings.

## Wall Ring Kit (15F74)

- 2 inch (51 mm) contains 2 stainless steel outside seal caps, 2 galvanized steel inside seal caps, 4 seal rings for the caps and 18 inch (457 mm) insulation sleeve for sealing and isolating intake and exhaust piping penetration of wall.
- Maintain a maximum of 6 inches (152 mm) between the inlet and outlet openings in the installation of the pipes.
- See dimension drawings.

#### WTKX Entension Riser Kit (30G79)

- 2 inch (51 mm) is used where extended grade line clearance is required.
- Includes 3 ft. (1.0m) extension riser containing both vent lines (exhaust vent insulated) and wall securing bracket.
- See dimension drawings

### Thermostat

- See Thermostats bulletin in Thermostats and Controls section and Lennox Price Book for a complete list of thermostats.

## **INSTALLATION CLEARANCES**

DOWN-FLO	W
Sides	0 inches (0 mm)
Rear	0 inches (0 mm)
Тор	1 inch (25 mm)
*Front	*0 inches (0 mm)
Floor	†Combustible
Exhaust Pipe	0 inches (0 mm)
Exhaust Pipe (service)	6 inches (152 mm)
Service Clearance (front)	30 inches (762 mm)
Service Clearance (condensate side)	4 inches (102 mm)

NOTE—Air for combustion and supply air ventilation must conform to the methods outlined in American National Standard (ANSI-Z223.1) National Fuel Gas Code or National Standard of Canada CAN/CGA-149.1

national ruler ass code in National Standard of Calauda CAN/CGA-149.1 and CAN/CGA-149.2 "Installation Code for Gas Burning Appliances".

NOTE—In the U.S. flue sizing must conform to the methods outlined in current GAMA/A.G.A. venting tables, American National Standard (ANSI-Z223.1) National Fuel Gas Code or applicable provisions of local building codes. In Canada flue sizing must conform to the methods outlined in National Standard of Canada CAN/CGA-149.1 and CAN/CGA-149.2.

†Clearance for installation on combustible floor if optional additive base is installed between furnace and combustible floor. Not required in add-on cooling applications if installed in accordance with local codes or National Fuel Gas Code ANSI-Z223.1.

\*Front clearance for alcove installations is 30 inches (762 mm).

HORIZONTA	AL
Sides	0 inches (0 mm)
Rear	0 inches (0 mm)
Тор	0 inches (0 mm)
*Front	*0 inches (0 mm)
Floor	Combustible
Exhaust Pipe	0 inches (0 mm)
Exhaust Pipe (service)	6 inches (152 mm)
Service Clearance (front)	30 inches (762 mm)
Service Clearance (condensate side)	4 inches (102 mm)

NOTE—Air for combustion and supply air ventilation must conform to the methods outlined in American National Standard (ANSI-Z223.1)

National Fuel Gas Code or National Standard of Canada CAN/CGA-149.1 and CAN/CGA-149.2 "Installation Code for Gas Burning Appliances".

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\*Front clearance for alcove installations is 30 inches (762 mm).

SPECIFICA	ATIONS									
Gas	Model No.	GHR26Q2/3-50	GHR26Q3-75	GHR26Q3/4-100	GHR26Q4/5-100	GHR26Q4/5-120				
Heating Performance	Input - Btuh (kW)	50,000 (14.7)	75,000 (22.0)	100,000 (29.3)	100,000 (29.3)	120,000 (35.2)				
	Output - Btuh (kW)	47,000 (13.8)	70,000 (20.5)	92,000 (27.0)	93,000 (27.2)	111,000 (32.5)				
	□A.F.U.E.	92%	92%	90%	92%	90%				
	California Seasonal Efficiency	85%	84%	84%	85%	84%				
	Temperature rise range - °F (°C)	30-60 (17-33)	30-60 (17-33)	50-80 (28-44)	40-70 (22-39)	45-75 (25-42)				
	High static certified by (CSA) - in wg. (Pa)	.50 (125)	.50 (125)	.50 (125)	.50 (125)	.50 (125)				
Connec-	②Exhaust pipe (PVC) diameter- in. (mm)	2 (51)	2 (51)	2 (51)	2 (51)	2 (51)				
tions	2 Intake pipe (PVC) diameter- in. (mm)	2 (51)	2 (51)	2 (51)	2 (51)	2 (51)				
	Condensate drain (PVC) - in. (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)				
	Gas Piping Size I.P.S in. (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)				
Indoor Blower	Blower motor output - hp (W)	1/3 (249)	1/2 (373)	1/2 (373)	3/4 (560)	3/4 (560)				
blower	Wheel nominal diameter x width - in.	10 x 8	10 x 8	10 x 10	11-1/2 x 9	11-1/2 x 9				
	mm	254 x 203	254 x 203	254 x 254	292 x 229	292 x 229				
	Add-on Cooling - Tons	2 to 3	2 to 3.5	2 to 4	3.5 to 5	3.5 to 5				
	kW	7.0 to 10.6	7.0 to 12.3	7.0 to 14.1	12.3 to 17.6	12.3 to 17.6				
Shipping Data	Weight - lbs. (kg) 1 package	147 (67)	155 (70)	183 (83)	196 (89)	205 (93)				
Electrical			120 volts - 60 h	ertz - 1 phase less	than 12 amps					
OPTIONAL A	ACCESSORIES (MUST BE ORDE	RED EXTRA)								
Condensate Dra	ain Heat Cable	26K	<b>68</b> 6 ft. (1.8 m) - <b>26</b>	<b>K69</b> 24 ft. (7.3 m) -	<b>26K70</b> 50 ft. (15.2	! m)				
Condensate Dra	ain Heat Cable Tape	39	<b>G04</b> 1/2 inch (13 m	m) wide or <b>39G03</b>	2 inch (51 mm) wic	de				
Down-Flow Add	litive Base Shipping Weight - lbs. (kg.)	32K52	32K52	32K53	32K53	32K53				
③Filter kit - Nur	mber and size of filters - in. (mm)	31、 (1) 14 x 25 x 1 (		(1) 20 3	<b>59436</b> x 25 x 1 ( 508 x 63	55 x 25)				
Horizontal Supp	oort Frame Kit - Ship. Wt Ibs. (kg.)	<b>56J18</b> 18 lbs. (8 kg)	<b>56J18</b> 18 lbs. (8 kg)	<b>56J18</b> 18 lbs. (8 kg)	<b>56J18</b> 18 lbs. (8 kg)	<b>56J18</b> 18 lbs. (8 kg)				
LPG/Propane ki	t	30K44	30K44	30K44	30K44	30K44				
Termination Kit -	Concentric	<b>60G77</b> 1-1/2 inch (38 mm)	<b>60G77</b> 1-1/2 inch (38 mm)	<b>33K97</b> 2 inch (51 mm)	<b>33K97</b> 2 inch (51 mm)	<b>33K97</b> 2 inch (51 mm)				
2Termination Ki	its - Roof 2 inch (51 mm)	15F75	15F75	15F75	15F75	15F75				
	3 inch (76 mm)	44J41	44J41	44J41	44J41	44J41				
②Termination Ki Wall Assembly	its - 2 inch (51 mm)	15F74 (wall ring kit) - 22G44 (close couple) 30G28 (WTK close couple) 30G79 (WTKX close couple with extension riser)								
	3 inch (76 mm)	mm) 44J40 (close couple) - 81J20 (WTK close couple)								
Twinning Kit		15L38	15L38	15L38	15L38	15L38				

<sup>☐</sup>Annual Fuel Utilization Efficiency based on U.S. DOE test procedures and FTC labeling regulations. Isolated combustion system rating for non-weatherized furnaces. ② Determine from venting tables proper intake and exhaust pipe size and termination kit required.
③ Cleanable polyurethane frame type filter.

## **HIGH ALTITUDE DERATE**

GHR26 units do not require a derate at altitudes of 0 to 7500 ft. (0 to 2286 m).

# BLOWER/WATTS DATA

GHR26Q2/3-	50 BLOWER	PERFOR	MANCE	<b>=</b>									
Externa	al Static				Air Volu	ıme and	Motor Wat	ts at Spe	cific Blo	wer Taps			
Pres	sure		High		М	edium-H	igh	Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0	0	1480	700	640	1330	630	520	1070	505	435	900	425	355
.10	25	1430	675	615	1290	610	500	1050	495	420	880	415	346
.20	50	1380	650	595	1240	585	480	1040	490	400	870	410	330
.30	75	1320	625	570	1200	565	455	1010	475	380	850	400	320
.40	100	1260	595	545	1140	540	430	980	460	370	820	385	300
.50	125	1200	565	520	1080	510	410	930	440	320	790	375	280
.60	150	1100	520	500	1000	470	385	860	405	300	740	350	265
.70	175	1000	470	470	890	420	370	750	355	290	660	310	250
.80	200	800	380	440	700	330	340	590	280	280	550	260	240

NOTE — All air data is measured external to unit with air filter in place.

Extern	al Static				Air Volu	ıme and	Motor Wat	ts at Spe	cific Blo	wer Taps			
Pres	sure		High		М	edium-H	igh	Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0	0	1650	780	720	1540	725	585	1450	685	540	1230	580	450
.10	25	1590	750	660	1490	705	550	1400	660	505	1200	565	420
.20	50	1520	715	645	1430	675	520	1350	635	485	1170	550	405
.30	75	1440	680	630	1370	645	490	1300	615	450	1130	535	390
.40	100	1370	645	610	1300	615	470	1240	585	430	1090	515	370
.50	125	1300	615	590	1240	585	450	1170	550	410	1040	490	330
.60	150	1210	570	560	1170	550	430	1100	520	375	970	460	320
.70	175	1120	530	540	1080	510	410	1020	480	350	890	420	280
.80	200	1020	480	515	980	460	380	900	425	325	750	355	260
.90	225	880	415	500	820	385	350	750	355	300	600	285	240

NOTE — All air data is measured external to unit with air filter in place.

Externa					Air Volu	ıme and	<b>Motor Wat</b>	ts at Spe	cific Blo	wer Taps	_			
Pres	sure		High		М	Medium-High			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	
0	0	2020	955	870	1780	840	700	1620	765	635	1320	625	500	
.10	25	1950	920	830	1720	810	650	1580	745	580	1300	615	470	
.20	50	1870	880	785	1680	795	610	1520	715	560	1260	595	440	
.30	75	1780	840	760	1600	755	585	1460	690	540	1220	575	425	
.40	100	1690	800	740	1520	715	570	1400	660	500	1180	555	410	
.50	125	1590	750	695	1430	675	525	1310	620	460	1110	525	385	
.60	150	1480	700	650	1330	630	485	1220	575	430	1040	490	350	
.70	175	1350	635	615	1220	575	445	1120	530	390	950	450	320	
.80	200	1210	570	580	1100	520	420	1000	470	370	850	400	310	
.90	225	1050	495	560	960	455	390	880	415	350	720	340	300	
1.00	250	900	425	540	800	380	370	700	330	330	600	285	290	

NOTE — All air data is measured external to unit with air filter in place.

Externa			•			Air Vo	lume and	d Motor	Watts	at Specifi	c Blowe	er Taps	1			
Pres	sure		High		Ме	Medium-High		Medium			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
0	0	2530	1195	1360	2300	1085	1210	2030	960	1050	1780	840	885	1540	725	745
.10	25	2460	1160	1290	2250	1060	1140	2010	950	1010	1760	830	850	1530	720	730
.20	50	2380	1125	1270	2200	1040	1100	1990	940	990	1740	820	830	1520	715	720
.30	75	2310	1090	1250	2150	1015	1080	1950	920	970	1720	810	805	1510	715	710
.40	100	2250	1060	1200	2090	985	1060	1910	900	950	1690	800	790	1500	710	690
.50	125	2180	1030	1150	2020	955	1020	1870	880	910	1660	785	780	1480	700	670
.60	150	2100	990	1100	1960	925	980	1810	855	870	1620	765	760	1430	675	650
.70	175	2010	950	1070	1880	885	940	1750	825	855	1570	740	730	1380	650	630
.80	200	1910	900	1040	1800	850	920	1680	795	840	1500	710	710	1320	625	615
.90	225	1800	850	1010	1700	800	890	1580	745	800	1420	670	690	1240	585	600
1.00	250	1700	800	980	1600	755	870	1500	710	780	1320	625	670	1120	530	590

NOTE — All air data is measured external to unit with air filter in place.

## **BLOWER/WATTS DATA**

Externa	l Static				_	Air Vo	lume and	d Motor	Watts a	at Specifi	c Blow	er Taps	i	_			
Pres	sure		High		Me	edium-H	ligh		Medium			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	
0	0	2400	1135	1250	2270	1070	1140	2060	970	1010	1800	850	860	1560	735	720	
.10	25	2350	1110	1220	2220	1050	1100	2040	965	980	1780	840	830	1550	730	705	
.20	50	2290	1080	1200	2170	1025	1080	2000	945	960	1750	825	815	1540	725	685	
.30	75	2220	1050	1180	2120	1000	1060	1960	925	940	1720	810	800	1520	715	675	
.40	100	2150	1015	1130	2050	965	1020	1900	895	920	1680	795	770	1500	710	660	
.50	125	2080	980	1100	1980	935	980	1850	875	880	1640	775	750	1460	690	650	
.60	150	2000	945	1050	1910	900	940	1780	840	840	1590	750	720	1420	670	630	
.70	175	1900	895	1010	1830	865	920	1710	805	810	1530	720	690	1380	650	610	
.80	200	1800	850	980	1740	820	900	1630	770	790	1460	690	675	1320	625	595	
.90	225	1700	800	960	1630	770	860	1540	725	770	1380	650	660	1250	590	580	
1.00	250	1600	755	940	1530	720	840	1430	675	750	1300	615	640	1150	545	560	

NOTE — All air data is measured external to unit with air filter in place.

	t Pipe imum			1	num Vent Pipe	Diameter Req	uired	1	
Equivale	ent Length	50,000 Btu	h (14.7 kW)	75,000 Btu	h (22.0 kW)	100,000 Btu	h (29.3 kW)	120,000 Btu	h (35.2 kW)
Feet	Meters	in.	mm	in.	mm	in.	mm	in.	mm
15	4.6	1-1/2	38	2	51	2	51	2	51
20	6.1	2	51	2	51	2	51	3	76
25	7.6	2	51	2	51	2	51	3	76
30	9.1	2	51	2	51	3	51	3	76
40	12.2	2	51	2	51	3	51	3	76
50	15.2	2	51	2	51	3	51	3	76
55	16.8	2	51	2	51	3	76	3	76
60	18.3	3	76	3	76	3	76	3	76
70	21.3	3	76	3	76	3	76	3	76
80	24.4	3	76	3	76	3	76	3	76
90	27.4	3	76	3	76	3	76	3	76
100	30.5	3	76	3	76	3	76	3	76
110	33.5	3	76	3	76	3	76	3	76
120	36.6	3	76	3	76	3	76	3	76
130	39.6	3	76	3	76	3	76		

MINIMUM PIPE LENGTHS FOR FURNACES — GHR26-50 — 5 feet (1.5 m) with two 90° elbows of 1-1/2 inch (38 mm) diameter pipe. (15 equivalent feet (4.6 m) total).

GHR26-75 — 5 feet (1.5 m) with two 90° elbows of 2 inch (51 mm) diameter pipe. (15 equivalent feet (4.6 m) total).

GHR26-100 — 5 feet (1.5 m) with two 90° elbows of 2 inch (51 mm) diameter pipe. (15 equivalent feet (4.6 m) total).

GHR26-120 — 5 feet (1.5 m) with two 90° elbows of 2 inch (51 mm) diameter pipe. (15 equivalent feet (4.6 m) total).

VENTING NOTES — One 90° elbow is equivalent to 5 feet (1.5 m) of straight vent pipe.

Two 45° elbows are equal to one 90° elbow.

One 45° elbow is equivalent to 2.5 feet (.75 m) of straight vent pipe.

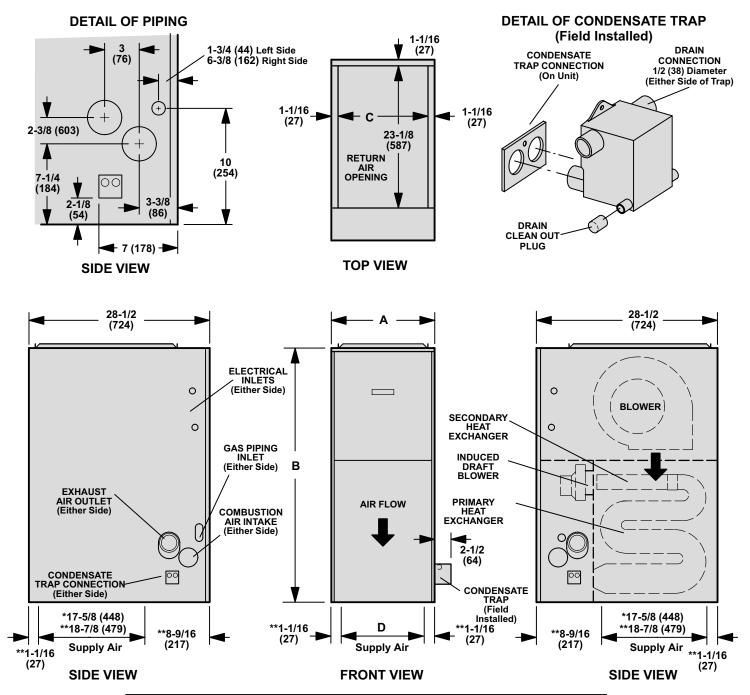
One foot (305 mm) length of 2 in. (51 mm) diameter pipe is equivalent to 8 feet (2.4 m) of 3 in. (76 mm) diameter pipe.

Intake and Exhaust pipes must be the same diameter.

Exhaust pipe must terminate with 1-1/2 inch (38 mm) diameter pipe for furnaces using1-1/2 (38 mm) or 2 inch (51 mm) diameter pipe runs.

Exhaust pipe must terminate with 2 inch (51 mm) diameter pipe for furnaces using 3 inch (76 mm) diameter pipe runs.

See pages 10 thru 12 for Termination Kits available.



NOTE — Supply air opening is equipped with a 5/8 inch (16 mm) flange that may be bent 90° for plenum connection on conventional down-flow furnace applications or to help in alignment with cooling coil.

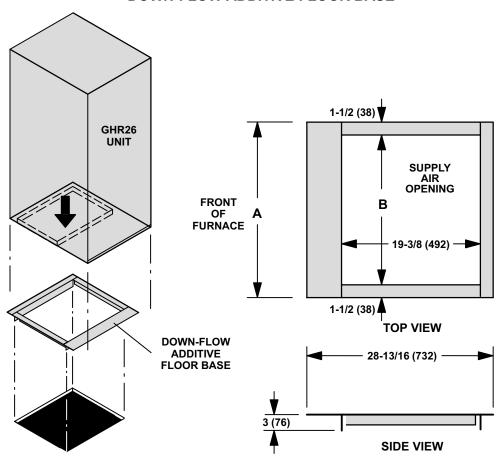
<sup>\*\*</sup>Dimensions after both flange are bent.

M. J.IN.	Α			В			*D		**D	
Model No.	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
GHR26Q2/3-50 GHR26Q3-75	16-1/4	413	40	1016	14-1/8	305	12-7/8	327	14-1/8	359
GHR26Q3/4-100	21-1/4	540	40	1016	19-1/8	457	17-7/8	454	19-1/8	486
GHR26Q4/5-100 GHR26Q4/5-120	21-1/4	540	46	1168	19-1/8	457	17-7/8	454	19-1/8	486

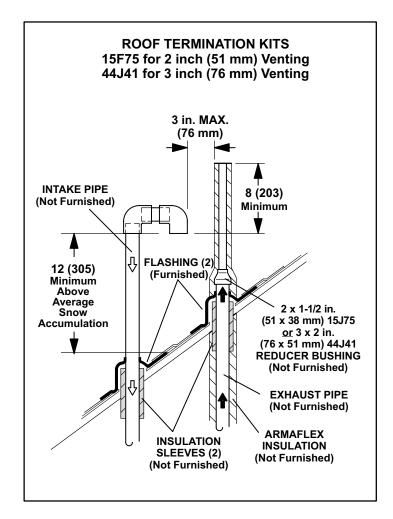
<sup>\*</sup>Dimensions before both flanges are bent.

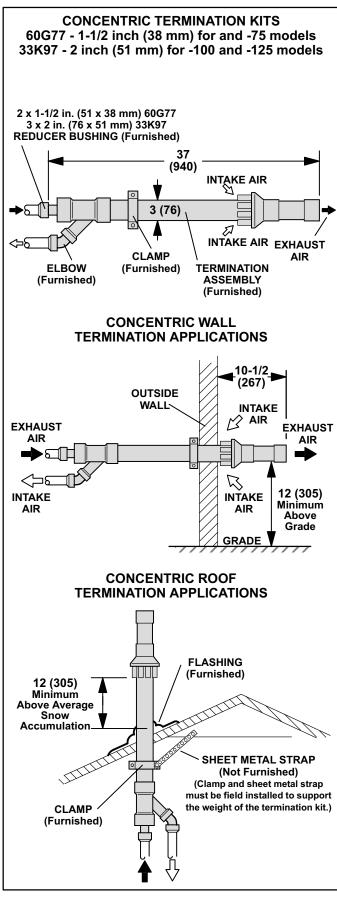
# **OPTIONAL ACCESSORY DIMENSIONS - INCHES (MM)**

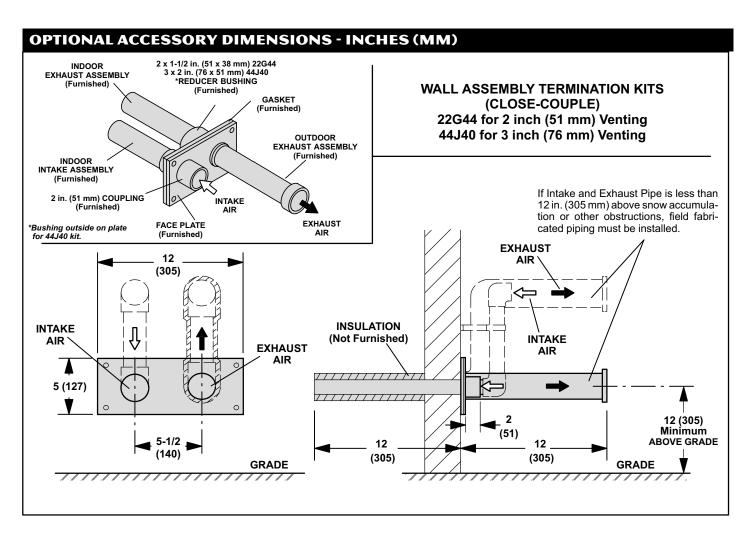
## **DOWN-FLOW ADDITIVE FLOOR BASE**

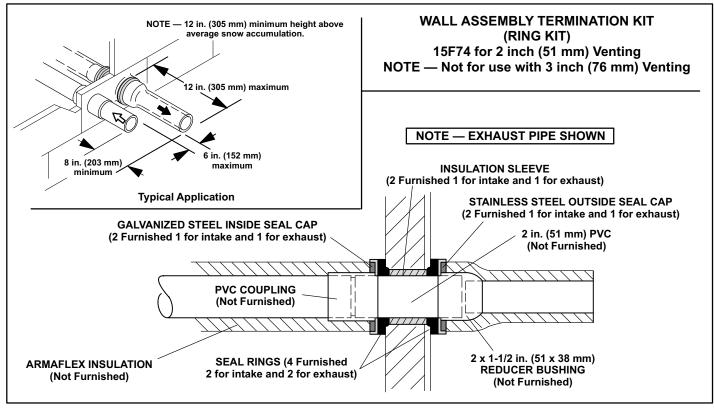


Furnace	Α		В		
Model No.	in.	mm	in.	mm	
GHR26Q2/3-50 GHR26Q3-75	17-3/8	302	14-3/8	207	
GHR26Q3/4-100 GHR26Q4/5-100 GHR26Q4/5-120	22-3/8	501	19-3/8	375	









## **OPTIONAL ACCESSORY DIMENSIONS - INCHES (MM)**

