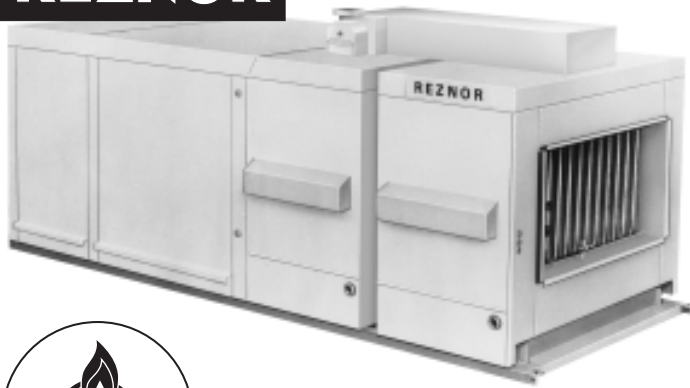


**REZNOR®**

**CGA 2.6**  
**A.G.A.14-97**

**DESCRIPTION**

Reznor® Model PGBL units are a unified assembly of one, two or three duct furnaces and a large-capacity Reznor blower cabinet. Three sizes are available with heating capacities of 400,000, 800,000 and 1,200,000 BTUH gas input. The standard packages are heating-only systems, but factory-installed gas and inlet air control options are available to meet makeup air or combination heating/makeup air specifications. These systems are designed for indoor installation and can be either suspended by rod hangers or mounted.

Model PGBL systems are available for use with either natural or propane gas, as specified. Each unit is equipped with all required limit and safety controls. Controls and wiring are accessible through lift-away side panels.

The blower cabinet has twin centrifugal blowers and is available with optional filter rack and filters and a variety of damper options. Open, drip-proof; energy efficient; totally enclosed; and two-speed motors from 1 to 20 HP are available. Optional filters available are either 1" or 2" disposable, permanent, or disposable pleated type.

Model PGBL units are equipped with a flue collection box and a motorized vent exhauster for connection to a field-supplied horizontal or vertical vent system. The vent system must terminate outside of the building with a vent cap.

Both the duct furnaces in the Series PGBL systems and the packaged systems are design-certified by the Canadian Standards Association for installation in the U.S. and Canada.

**STANDARD FEATURES**

- Orifices for natural gas
- Aluminized steel heat exchanger (When inlet air temperature is below 40°F or temperature rise is less than 40°F, optional stainless steel heat exchanger is recommended.)
- Aluminized steel burners with stainless steel insert
- Intermittent spark pilot
- 120-volt power supply
- 24-volt control transformer
- Single-stage combination gas valve on each furnace
- Fan and limit safety controls
- Power venter

**NOTES:**

- 1 Regulated combination gas valve consists of combination pilot solenoid valve, electric gas valve, pilot filter, pressure regulator, pilot shutoff, and manual shutoff, all in one body. Gas supply pressure must not exceed 0.5 PSI (8 oz. - 14" W.C.). Minimum inlet pressure for natural gas is 5" W.C. Minimum inlet pressure for propane gas is 11" W.C.
- 3 Not certified for residential use.

**MODEL PGBL**

**EXTENDED CAPACITY, GAS-FIRED, INDOOR  
PACKAGED DUCT FURNACE(S) / BLOWER  
UNITS FOR COMMERCIAL/INDUSTRIAL  
HEATING AND MAKEUP AIR**

- Air pressure switch to verify vent flow
- Reverse air flow limit
- Terminal block wiring
- Twin centrifugal blowers with adjustable belt drive
- Left side (facing airstream) access to burners and controls
- Blower cabinet (less optional insulation, filter rack and filters) with horizontal inlet air opening
- Curb cap base with hangers for suspension

**OPTIONAL FEATURES - FACTORY INSTALLED**

- Unit equipped for propane gas
- E-3 (409) stainless steel heat exchanger
- 321 stainless steel heat exchanger
- E-3 (409) stainless steel burners
- E-3 (409) stainless steel drip pan
- Intermittent spark safety pilot with timed lockout
- Two-stage gas control (unit-mounted or remote temperature selector)
- Three-stage gas controls (unit-mounted or remote temperature selector)
- Electronic modulation - 50%-100% turndown
- Mechanical modulation (sizes 400 - 800)
- Mechanical modulation with full bypass (sizes 400, 800)
- Makeup air controls/dampers
- 208/1, 230/1, 208/3, 230/3, 460/3, 575/3 supply voltages
- 1 HP through 20 HP open drip-proof, totally enclosed, or energy efficient; 2-speed motors available in 1-10 HP
- Burner air shutters (required for units equipped for propane gas)
- Firestat(s)
- Freezestat(s)
- Convenience outlet
- 1/2" O.D. BX cable (Chicago code)
- Motor starter (optional with motors having internal overload protection)
- Downturn plenum (insulated)
- Discharge damper, 2 position, with downturn plenum
- Blower cabinet insulation
- Filter rack with 1" or 2" disposable, pleated or permanent filters
- Double wall cabinet construction
- Manifold arrangement to comply with Illinois school code
- IRI, FM manifold arrangements
- High ambient burner cutoff
- Gas pressure safety switches
- Air flow proving switch
- Right side controls (facing airstream)
- Cooling coil cabinet with DX or chilled water coil - requires special handling (see cooling coil section)

**OPTIONAL FEATURES - FIELD INSTALLED**

- Remote control center
- Disconnect switch - UL Listed
- Single-stage thermostat
- Two-stage thermostat
- Electronic 7-day programmable thermostat
- Thermostat guard with locking cover
- Cooling coil cabinet with DX or chilled water coil (see RGBL in Packaged Heating Outdoor Catalog)
- Evaporative cooling module (see Evaporative Cooling Catalog)

# MODEL PGBL

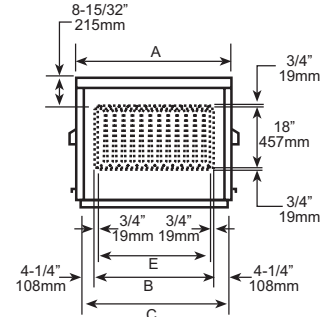
## EXTENDED CAPACITY, GAS-FIRED, INDOOR PACKAGED DUCT FURNACE(S) / BLOWER UNITS FOR COMMERCIAL/INDUSTRIAL HEATING AND MAKEUP AIR

### TECHNICAL DATA

Size		400	800	1200
Heating Input	BTUH	400,000	800,000	1,200,000
	kW	117.2	234.5	351.7
Thermal Output Capacity (80%) <sup>A</sup>	BTUH	320,000	640,000	960,000
	kW	93.8	187.6	281.4
Unit Amps (120V) less Blower Motor		1.5	5.5	5.5
Standard Control Amps (24V)		1.8	3.0	4.0
Air Volume	CFM	3,330-14,000	5,900-13,500	7,400-13,500
	m <sup>3</sup> /hr	5,657-23,785	10,024-22,936	12,572-22,936
Vent Outlet Diameter (inches)		6	8	8
Gas Connection (Natural or Propane) <sup>B</sup>		1"	1-1/4"	1-1/4"
Approx. Net Weight	lbs.	849	1,245	1,565
	kg	385	565	710
Approx. Ship Weight	lbs.	1,218	1,898	2,243
	kg	552	861	1,017
Package Arrangement	Furnace Section(s)			
Key: Blower Cabinet				

<sup>A</sup> In U.S.A. ratings are for altitudes to 2,000 feet. Above 2,000 feet derate by orifice change, 4% for each 1,000 feet above sea level. In Canada ratings are for altitudes to 2,000 feet. For high altitude units (2,001-4,500 ft. ) derate by 10% of maximum input.

<sup>B</sup> Sizes shown are for gas connection, NOT gas supply line size.

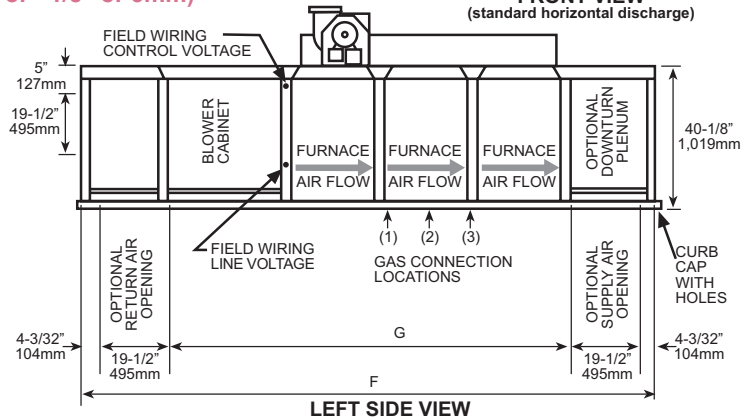


FRONT VIEW (standard horizontal discharge)

### Dimension Key:

	in.	mm	Description
A	58 7/8	1,495	Width of Cabinet
B	47 5/8	1,210	Width of Optional Downturn Plenum Discharge Air Opening*, Width of Standard Horizontal Air Inlet Opening, Width of Optional Return Air (Bottom) Opening
C	56 1/8	1,426	Width of the Inside of the Curb Cap Base
E	45 1/2	1,156	Width of Standard Horizontal Discharge Air Opening
F			Overall Length of the Inside of the Curb Cap Base
G			Distance between Optional Return Air Bottom Opening and Optional Downturn Plenum* Discharge Air Opening
N			Length of Flue Collection Box
P			Distance from Control Side to Vent Connection Centerline
R			Distance from the Discharge End of the Cabinet Top to Vent Connection Centerline

### DIMENSIONS (+ or - 1/8" or 3mm)

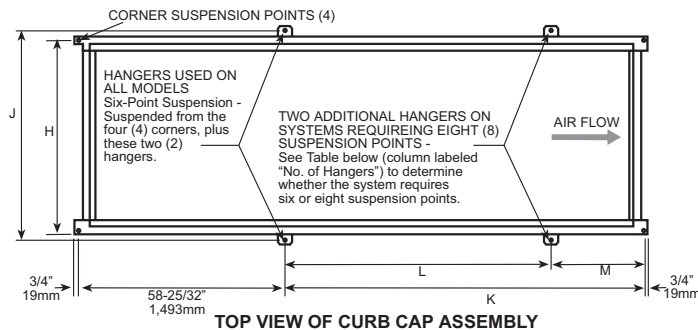


LEFT SIDE VIEW

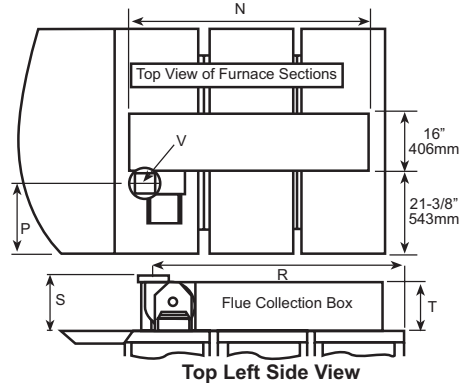
Size	Drawing Location	Approximate Distance from the End of the Curb Cap on the Blower End of the System		
		ft. in.	M	
400	(1)	7' 5-6"	2.26-2.28	The gas line is manifolded requiring only one supply connection. The gas connection is at curb cap "height" on the control side of the system.
800	(2)	8' 7-8"	2.62-2.64	
1200	(3)	9' 2-3"	2.79-2.82	

Air Openings:	Dimensions
Standard Horizontal Air Inlet	19 1/2" (495mm) x B
Optional Return Air Opening (bottom)	19 1/2" (495mm) x B
Standard Horizontal Discharge Air Opening	18" (457mm) x E
Optional Discharge Air Opening (with Downturn Plenum*)	19 1/2" (495mm) x B

Vent Outlet Diameter- V	Size	in.	mm
	400	6	150
	800	8	200
	1200	8	200



TOP VIEW OF CURB CAP ASSEMBLY



Top Left Side View

**\*Downturn Note:** To provide complete information, these drawings and dimensions illustrate the Model PGBL with and without an optional downturn plenum cabinet. Since Model PGBL is an indoor unit only, installation requiring a vertical discharge will most often have a field-fabricated downturn nozzle instead of the factory-installed plenum cabinet.

Size	Optional Downturn	Suspension Dimensions										No. of Hangers	Vent Dimensions									
		F	G	H	J	K	L	N	P	R	S		T									
400	No	83 1/2	2,121	-	54 3/8	1,381	59 1/2	1,511	27 1/8	689	-	6	14 1/16	357	17 15/16	456	7 15/16	202	8 7/8	225	8 3/4	222
	Yes	107 1/2	2,731	60 5/16	1,532	54 3/8	1,381	59 1/2	1,511	51 1/4	1,302	-	6	14 1/16	357	17 15/16	456	31 15/16	811	8 7/8	225	8 3/4
800	No	109 1/2	2,781	-	54 3/8	1,381	59 1/2	1,511	53 1/4	1,353	-	6	40 1/16	1,018	18 1/2	470	41 5/16	1,049	13 3/4	349	12 1/4	311
	Yes	133 1/2	3,391	86 5/16	2,192	54 3/8	1,381	59 1/2	1,511	-	50 1/4	1,276	8	40 1/16	1,018	18 1/2	470	65 5/16	1,659	13 3/4	349	12 1/4
1200	No	135 1/2	3,442	-	54 3/8	1,381	59 1/2	1,511	79 1/4	2,013	-	6	66 1/16	1,678	18 1/2	470	67 5/16	1,710	13 3/4	349	12 1/4	311
	Yes	159 1/2	4,051	112 5/16	2,853	54 3/8	1,381	59 1/2	1,511	-	27 1/8	689	8	66 1/16	1,678	18 1/2	470	91 5/16	2,319	13 3/4	349	12 1/4