

REZNOR[®]

HIGH CAPACITY AIR HANDLER CATALOG

COMMERCIAL/INDUSTRIAL HVAC AIR HANDLERS

CAPACITIES

400 - 1,600 MBH Heating
130 - 511 MBH Cooling - CW
105 - 510 MBH Cooling - DX
3,300 - 22,000 CFM Air

INSTALLATION

Indoor
Outdoor

FUEL

Natural Gas
Propane

Visit www.ReznorHVAC.com for
more information.

Form C-AH-0315

BACKGROUND

Reznor was founded in 1888 to manufacture the "Reznor" reflector heater, which used a luminous flame gas burner developed by George Reznor. This technological breakthrough was an immediate success and hastened the expansion of gas heating in residential and commercial applications. Technological development and innovation have been the hallmark of Reznor products through the years. The development of the forced air gas unit heater, the modular Thermocore® heat exchanger, and the high-efficiency, sealed-draft Venturion® unit heater have kept Reznor products at the forefront of technological advances in commercial and industrial gas heating. As a result of this pioneering role in the heating, makeup air, and ventilating equipment field, the products offered today are the most advanced in engineering design to satisfy a wide variety of applications.

FACILITIES

Reznor heaters were first manufactured and sold in Mercer, Pennsylvania (70 miles north of Pittsburgh) in 1888. Over the years, the company has grown and expanded. Today, with sales worldwide, Reznor products are being manufactured in facilities throughout North America and Europe.

PRODUCT SCOPE

Well-equipped engineering laboratories for both product development and testing can be found at many of the manufacturing sites. All domestic lab sites are agency approved.

Reznor Products include a complete line of heating, makeup air and ventilating systems, using gas, oil, hot water/steam, or electric heat sources. Reznor heater catalogs are designed to aid the engineer, architect or contractor in specifying the correct equipment for all standard and special applications. Technical data is presented on unit heaters, duct furnaces, infrared heaters, makeup air systems, pre-engineered custom-designed systems, energy recovery units, packaged cooling, and evaporative cooling modules. Consult your local Reznor Sales Representative for further assistance in specifying Reznor Equipment for your specific application.

SERVICES

Product service requirements are handled through contractors and/or distributors, with backup from local representatives and factory-based service team. Replacement parts inventories for both warranty and non-warranty requirements are maintained at service centers throughout the country and at the manufacturing facilities.

For the Reznor Representative in your area call 800-695-1901 or go to our web site www.ReznorHVAC.com.

REZNOR®



Model RPBL with Cooling Coil

IMPORTANT: Specifications are subject to change without notice. This guide is intended to provide specifications and technical information only.

This guide is not intended to be an instruction manual. When installing heating and ventilating equipment, you must check and conform to all local and national building codes. Improper installation of heating and ventilating equipment could be dangerous. Consult manufacturer’s installation manual for instructions and important warnings.

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Model PXH

Additional Air Handlers can be found in the Split System Catalog (form number C-SS). These include Model PXH (indoor) and Model RXH (outdoor/rooftop). Each unit is capable of delivering up to 7,000 cfm. Both units are available with

- DX coils
- Chilled water coils
- Hot water coils

MODEL SSCBL EXTENDED CAPACITY, GAS-FIRED, SEPARATED-COMBUSTION, INDOOR, PACKAGED DUCT FURNACE(S)/BLOWER COMBINATION FOR COMMERCIAL/INDUSTRIAL USE



ANSI Z83.8
AGA14-94



CGA 2.6



DESCRIPTION

Reznor® Model SSCBL is a unified assembly of one, two, or three separated-combustion duct furnaces and a large-capacity Reznor blower cabinet. Sizes are available with heating capacities from 400,000 through 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 in areas with negative pressure and/or extremely dirty or mildly corrosive atmospheres.

Model SSCBL is available for use with either natural or propane gas, as specified. All units are equipped with required limit and safety controls.

Each of the duct furnaces in these packaged systems are designed to separate combustion air from the air in the heated space. The furnaces are engineered and manufactured in accordance with the ANSI definition of "separate combustion." While discharging exhaust air, the power venter draws in combustion air from the outside atmosphere. Exclusive outside combustion air prevents dirt, lint, dust or other contaminants in the heated space from entering the combustion zone of the furnace. A specially designed combustion-air inlet/vent terminal assembly is required for each duct furnace in a Model SSCBL packaged system. Each furnace section must have a separate terminal assembly. The specially designed terminal assembly requires only one building penetration per furnace section.

Both the separated-combustion duct furnaces and the packaged system are design-certified by the Canadian Standards Association for installation in the U.S. and Canada.

STANDARD FEATURES

- Orifices for natural gas
- Aluminized steel burners with stainless steel insert
- 208-volt power supply
- 24-volt control transformer
- Redundant single-stage combination gas valve on each furnace (see Note 1)
- Intermittent spark pilot
- Fan and limit safety controls
- Reverse air flow limit
- Fan and limit safety controls
- Pre-wired to terminal blocks
- Power venter
- Twin centrifugal blowers with adjustable belt drive
- Galvalume steel cabinet with interlocking joint construction
- Horizontal discharge air opening with duct flanges
- Curb cap base with hangers for suspension
- Blower cabinet (less optional insulation, filter rack and filters) with horizontal inlet-air opening
- Left side controls (facing air stream)
- 1/2" O.D. BX cable (Chicago code)

NOTE 1: Regulated combination redundant gas valve consists of combination pilot solenoid valve, electric gas valve, pilot filter, pressure regulator, pilot shut-off, and manual shut-off, 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.

NOTE 2: Not certified for residential use.

OPTIONAL FEATURES - FACTORY INTALLED

- Unit equipped for propane gas
- E-3 (409) stainless steel heat exchanger
- E-3 (409) stainless steel burners
- E-3 (409) stainless steel drip pan
- Intermittent spark safety pilot with timed lockout
- Individual single-stage gas control on each furnace section
- Two-stage gas control on each furnace section - effective 2 to 6 stage gas control (see Gas Control Option page for more detailed description)
- Electronic modulation 50%-100% turndown or 20%-100% turndown
- Variable frequency drive with open dripproof or totally enclosed motor
- VFD control options
 - ◆ Soft start
 - ◆ Two speed control
 - ◆ DDC signal from remote device
- 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 or totally enclosed motors available (motors meet EISA specifications for efficiency)
- 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)
- Blower cabinet insulation
- Filter rack with 2" disposable, pleated or permanent filters
- Double wall cabinet construction
- FM, GAP 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 cabinet section
- Extended heat exchanger(s) warranty; five (5) or ten (10) year
- Horizontal or vertical combustion-air inlet/vent terminal assembly (one per furnace section; installation requirement)
- Remote control center
- Disconnect switch - UL Listed
- Single-stage thermostat
- Two-stage thermostat
- Electronic 7-day programmable thermostat
- Cooling coil cabinet with DX or chilled water coil
- Evaporative cooling module (see Evaporative Cooling Catalog)

OPTIONAL FEATURES - FIELD INTALLED

TECHNICAL DATA

| SIZE | | 400 | 500 | 600 | 700 | 800 | 1050 | 1200 |
|--|---------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|
| Heating Input | BTUH | 400,000 | 500,000 | 600,000 | 700,000 | 800,000 | 1,050,000 | 1,200,000 |
| | (kW) | (117.2) | (146.6) | (175.9) | (205.2) | (234.5) | (307.8) | (351.7) |
| Thermal Output Capacity ^A | BTUH | 320,000 | 400,000 | 480,000 | 560,000 | 640,000 | 840,000 | 960,000 |
| | (kW) | (93.8) | (117.2) | (140.7) | (164.1) | (187.6) | (246.2) | (281.4) |
| Unit Amps (120V) Less Blower Motor | | 3.1 | 3.3 | 3.3 | 3.6 | 4.5 | 5.0 | 5.9 |
| Standard Control Amps (24V) | | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 | 1.67 |
| Air Volume | CFM | 3,300-14,000 | 3,700-12,000 | 4,450-12,500 | 5,200-13,500 | 5,900-13,500 | 6,500-13,500 | 7,400-13,500 |
| | (m³/hr) | (5,607-23,785) | (6,286-20,387) | (7,560-21,237) | (8,835-22,936) | (10,024-22,936) | (11,043-22,936) | (12,572-22,936) |
| Net Weight ^B | lbs. | 849 | 1,104 | 1,104 | 1,184 | 1,245 | 1,476 | 1,565 |
| | (kg) | (385) | (501) | (501) | (537) | (565) | (670) | (710) |
| Ship Weight ^B | lbs. | 1,218 | 1,588 | 1,588 | 1,668 | 1,898 | 2,148 | 2,243 |
| | (kg) | (552) | (720) | (720) | (757) | (861) | (974) | (1017) |
| Gas Connection—Natural or Propane ^C | | 1" | 1-1/4" | 1-1/4" | 1-1/4" | 1-1/4" | 1-1/4" | 1-1/4" |
| Maximum Vent Length ^D | 6" Pipe | 30' | 50' | 50' | 30' | 30' | 30' | 30' |
| | 7" Pipe | 70' | 70' | 70' | 70' | 70' | 70' | 70' |
| Number of Furnace Sections | | 1 | 2 | 2 | 2 | 2 | 3 | 3 |

^A In the U.S. 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 for altitudes to 2,000 feet. For high altitude units (2,001-4,500 ft.) derate by 10% of maximum input.

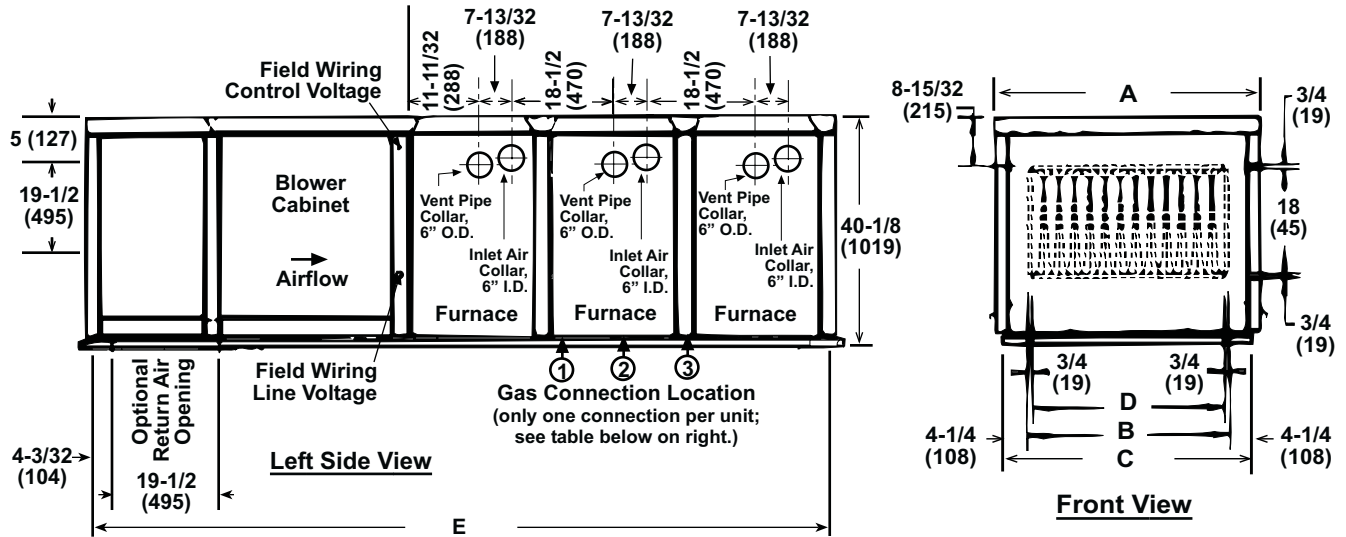
^B Weights shown are for standard packaged furnace(s) and blower

^C Sizes shown are for natural gas connections, NOT supply line size.

^D Minimum vent length is 5 feet. Seven inch pipe requires four field-supplied tapered reducers per furnace section. See Separated Combustion Arrangement Section.

DIMENSIONS

+ or - 1/8" (3mm)



| SSCBL Size | A | | B | | C | | D | | E ^A | |
|------------|--------|---------|--------|---------|--------|---------|--------|---------|----------------|---------|
| | inches | (mm) | inches | (mm) | inches | (mm) | inches | (mm) | inches | (mm) |
| 400 | 58 7/8 | (1,495) | 47 5/8 | (1,210) | 56 1/8 | (1,426) | 45 1/2 | (1,156) | 83 1/2 | (2,121) |
| 500, 600 | 47 7/8 | (1,216) | 36 5/8 | (930) | 45 1/8 | (1,146) | 34 1/2 | (876) | 109 1/2 | (2,781) |
| 700 | 53 3/8 | (1,356) | 42 1/8 | (1,070) | 50 5/8 | (1,286) | 40 | (1,016) | 109 1/2 | (2,781) |
| 800 | 58 7/8 | (1,495) | 47 5/8 | (1,210) | 56 1/8 | (1,426) | 45 1/2 | (1,156) | 109 1/2 | (2,781) |
| 1050 | 53 3/8 | (1,356) | 42 1/8 | (1,070) | 50 5/8 | (1,286) | 40 | (1,016) | 135 1/2 | (3,442) |
| 1200 | 58 7/8 | (1,495) | 47 5/8 | (1,210) | 56 1/8 | (1,426) | 45 1/2 | (1,156) | 135 1/2 | (3,442) |

| Air Opening Descriptions & Dimensions | inches | mm |
|---------------------------------------|----------|-------|
| Horizontal Air Inlet | 19-1/2xB | 495xB |
| Optional Return Air Opening (bottom) | 19-1/2xB | 495xB |
| Horizontal Discharge Air Opening | 18xD | 457xD |

^A Dimensions E and H listed here do not apply to a system with a field-attached cooling coil cabinet (Option AU2 or AU3); see NOTE in FIGURE 4.

CLEARANCE FROM COMBUSTIBLES

- Furnace Bottom - 6"
- Control Side - 56"
- Top, flue connections, side opposite controls - 6"

| APPROXIMATE Gas Connection Locations | | | | |
|--------------------------------------|------------------|---|-----------|--|
| Size | Location Drawing | Approximate Distance from Inside Curb Cap to BLOWER END of System | | |
| | | ft., in. | M | |
| 400 | (1) | 7' 5-6" | 2.26-2.29 | This connection is at curb cap "height" on the control side of the system. |
| 500, 600, 700, 800 | (2) | 8' 7-8" | 2.62-2.64 | |
| 1050, 1200 | (3) | 9' 2-3" | 2.79-2.82 | |

| Key for FIGURE 2 (Codes A-E): | |
|-------------------------------|--|
| A | Width of Cabinet |
| B | Width of Horizontal Air Inlet Opening; Width of Optional Return Air (Bottom) Opening |
| C | Width of the Curb Cap |
| D | Width of Horizontal Discharge Air Opening |
| E | Overall Length of Inside of Curb Cap |

MODEL RPBL

EXTENDED CAPACITY, POWER-VENTED, GAS FIRED, OUTDOOR, PACKAGED DUCT FURNACE(S) / BLOWER COMBINATION FOR COMMERCIAL/INDUSTRIAL HEATING AND MAKEUP AIR



ANSI Z83.9 &
A.G.A. 14-94



CAN/C.G.A.
2.8 & 2.6



DESCRIPTION

Reznor® Model Series RPBL is factory-designed assembly of one, two, or three duct furnace(s) and a large-capacity blower cabinet and a variety of control options for heating, makeup air or a combination of these functions. Pre-engineered design allows for single unit installation, provides unified appearance, and saves customer engineering time and assembly costs.

Models are available for outdoor use in heating capacities from 400,000 through 1,200,000 BTUH gas input. Model RPBL systems are available for use with either natural or propane gas, as specified. Each unit is equipped with all required limit safety controls.

Controls and wiring are accessible through lift-away side panels.

Model RPBL systems are completely weather sealed. No additional protective covering is required. Each packaged unit is designed for installation on a full roof curb or field supplied supports.

RPBL units feature an integral power vented system for use where environmental conditions pose a problem for gravity-vented units.

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
- 208-volt power supply
- 24-volt control transformer
- Redundant single-stage combination gas valve on each furnace (see Note 1)
- Intermittent spark pilot
- Fan and limit safety controls
- Reverse air flow limit
- Twin centrifugal blowers with adjustable belt drive
- Pre-wired to terminal blocks
- Power venter
- Weatherized, galvalume steel cabinet with interlocking joint construction for outdoor mounting
- Horizontal discharge air opening with duct flanges
- Curb cap base
- Horizontal inlet air opening
- Insulated blower cabinet (less optional filter rack and filters)
- Left side access to burner(s) and controls (facing airstream)
- 1/2" O.D. BX cable (Chicago code)

NOTE 1: Regulated combination redundant gas valve consists of combination pilot solenoid valve, electric gas valve, pilot filter, pressure regulator, pilot shut-off, and manual shut-off, 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.

NOTE 2: Not certified for residential use.

- Unit equipped for propane gas
- E-3 (409) stainless steel heat exchanger
- E-3 (409) stainless steel burners
- E-3 (409) stainless steel drip pan
- Intermittent spark pilot with flame supervision and timed lockout
- Individual single-stage gas control on each furnace section
- Two-stage gas control on each furnace section - effective 2 to 6 stage gas control (see Gas Control Option page for more detailed description)
- Electronic modulation (50-100% turndown) (20-100% turndown, size 400)
- Variable frequency drive with open dripproof or totally enclosed motor
- VFD control options
 - ♦ Soft start
 - ♦ Two speed control
 - ♦ DDC signal from remote device
- Makeup air control/dampers
- 208/1, 230/1, 208/3, 230/3, 460/3, 575/3 alternate supply voltages
- 1 HP through 20 HP open drip-proof or totally enclosed motors available (motors meet EISA specifications for efficiency)
- Burner air shutters (required for units equipped for propane gas)
- Firestat(s)
- Freezestat
- Convenience outlet
- 1/2" O.D. BX cable (Chicago code)
- Motor starter (optional with motors having internal overload protection)
- Filter rack with filters (2" disposable, permanent or pleated)
- Downturn plenum cabinet (insulated)
- Discharge dampers, 2-position, with downturn plenum
- Double wall cabinet construction
- GAP, FM manifold arrangements
- High ambient burner cutoff
- Gas pressure safety switches
- Air flow proving switch
- Right side controls (facing airstream)
- Extended warranty on heat exchanger(s); five (5) or ten (10) years
- Full perimeter roof curb
- Cooling coil cabinet with DX or chilled water coil with or without downturn plenum
- Remote control console
- Disconnect switch
- Single-stage thermostat
- Two-stage thermostat
- Electronic 7-day programmable thermostat
- Thermostat guard with locking cover
- 100% outside air hood (requires assembly)
- Evaporative cooling module

OPTIONAL FEATURES - FIELD INTALLED

TECHNICAL DATA

| SIZE | | 400 | 500 | 600 | 700 | 800 | 1050 | 1200 |
|--|---------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| Heating Input | BTUH | 400,000 | 500,000 | 600,000 | 700,000 | 800,000 | 1,050,000 | 1,200,000 |
| | (kW) | (117.2) | (146.6) | (175.9) | (205.2) | (234.5) | (307.8) | (351.7) |
| Thermal Output Capacity (80%) ^A | BTUH | 320,000 | 400,000 | 480,000 | 560,000 | 640,000 | 840,000 | 960,000 |
| | (kW) | (93.8) | (117.2) | (140.7) | (164.1) | (187.6) | (246.2) | (281.4) |
| Unit Amps (120V) Less Blower Motor | | 3.1 | 3.3 | 3.3 | 3.6 | 4.5 | 5 | 5.9 |
| Standard Control Amps (24V) | | 0.95 | 1.9 | 1.9 | 1.9 | 1.9 | 2.85 | 2.85 |
| Air Volume Range | cfm | 3,300 - 14,000 | 3,700 - 12,000 | 4,450 - 12,500 | 5,200 - 13,500 | 5,900 - 13,500 | 6,500 - 13,500 | 7,400 - 13,500 |
| | (m³/hr) | (5,607 - 23,785) | (6,286 - 20,387) | (7,560 - 21,237) | (8,835 - 22,936) | (10,024 - 22,936) | (11,043 - 22,936) | (12,572 - 22,936) |
| Net Weight ^B | lbs. | 849 | 1,104 | 1,104 | 1,184 | 1,245 | 1,476 | 1,565 |
| | (kg) | (385) | (501) | (501) | (537) | (565) | (670) | (710) |
| Ship Weight ^B | lbs. | 1,218 | 1,588 | 1,588 | 1,668 | 1,898 | 2,148 | 2,243 |
| | (kg) | (552) | (720) | (720) | (757) | (861) | (974) | (1,017) |
| Gas Connection—Natural ^C | | 1" | 1-1/4" | 1-1/4" | 1-1/4" | 1-1/4" | 1-1/4" | 1-1/4" |

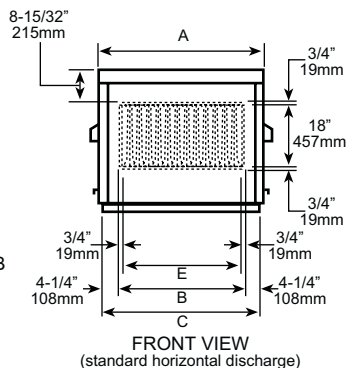
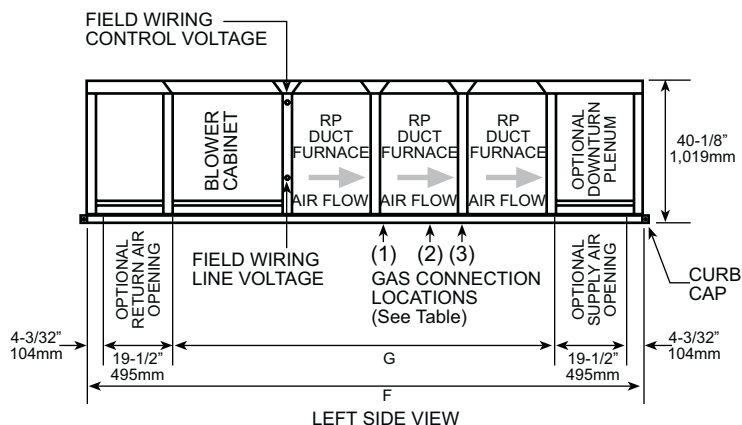
^A In the U.S. ratings are for altitudes to 2000 feet. Above 2000 feet derate by orifice change, 4% for each 1000 feet above sea level. In Canada ratings are for altitudes to 2000 feet. High altitude units (2001 to 4500 ft.) are derated by 10% of maximum input.

^B Weights shown are for packaged furnace and blower. For weights of accessories, see below.

^C Gas connection for optional propane is 1/2" for all sizes. Sizes shown are for gas connection to single stage gas valve, NOT gas supply line size.

DIMENSIONS

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



NOTES:

1. Reznor designed optional outside air hood or evaporative cooling module is required to ensure complete weather resistance. See Outside Air Hood Option Section for dimensions.
2. Burner and control access shown left side (facing airstream). Specify right side (Option AJ2) for opposite side access and connections.
3. For overall dimension with Cooling Coil Cabinet with or without downturn plenum, see Cooling Coil Cabinet Section. For complete Curb dimensions, see Roof Curb Option Section.

| Key - RPBL Dimensions: | |
|--|--|
| A = | Width of Cabinet |
| B = | Width of Optional Downturn Plenum Discharge Air Opening Width of Standard Horizontal Air Inlet Opening Width of Optional Return Air (Bottom Opening) |
| C = | Width of Inside of the Curb Cap |
| E = | Width of Standard Horizontal Discharge Air Opening |
| F = | Overall Length of Inside of Curb Cap (with or without downturn plenum) |
| G = | Distance between Optional Return Air Cabinet Opening and Optional Downturn Plenum Discharge Air Opening |
| Air Openings | |
| Dimensions | |
| Standard Horizontal Air Inlet | 19 1/2" x B (495mm x B) |
| Optional Return Air Opening | 19 1/2" x B (495mm x B) |
| Standard Horizontal Discharge Air Opening | 18" x E (457mm x E) |
| Optional Discharge Air Opening (w/Downturn Plenum) | 19 1/2" x B (495mm x B) |

| APPROXIMATE Gas Connection Location | | | |
|-------------------------------------|------------------|---|----------------------|
| Size | Drawing Location | Approximate Distance from inside Curb Cap on Blower End of System | |
| 400 | (1) | ft., in. (M) | 7' 5-6" (2.26-2.29M) |
| 500, 600, 700, 800 | (2) | ft., in. (M) | 8' 7-8" (2.62-2.64M) |
| 1050, 1200 | (3) | ft., in. (M) | 9' 2-3" (2.79-2.82M) |

| Size | | A | B | C | E |
|----------------|------|---------|---------|---------|---------|
| 500, 600 | in. | 47 7/8 | 36 5/8 | 45 1/8 | 34 1/2 |
| | (mm) | (1,216) | (930) | (1,146) | (876) |
| 700, 1050 | in. | 53 3/8 | 42 1/8 | 50 5/8 | 40 |
| | (mm) | (1,356) | (1,070) | (1,286) | (1,016) |
| 400, 800, 1200 | in. | 58 7/8 | 47 5/8 | 56 1/8 | 45 1/2 |
| | (mm) | (1,495) | (1,210) | (1,426) | (1,156) |

CLEARANCE FROM COMBUSTIBLES

1. Furnace bottom - 0". (When installed on a roof curb on a combustible surface, the roof area enclosed within the curb must be either ventilated, left open, or covered with non-combustible material which has an "R" value of at least 5.0).
2. Control Side - 56" (1,422mm).
3. Top Overhangs - 36" (914mm).

| SIZE | No. of Furnace Sections | | F | G |
|--------------------|----------------------------|------|---------|----------|
| 400 | 1 (without downturn) | in. | 83 3/4 | -- |
| | | (mm) | (2,127) | -- |
| | 1 (with optional downturn) | in. | 107 3/4 | 60 5/16 |
| | | (mm) | (2,737) | (1,532) |
| 500, 600, 700, 800 | 2 (without downturn) | in. | 109 3/4 | -- |
| | | (mm) | (2,788) | -- |
| | 2 (with optional downturn) | in. | 133 3/4 | 86 5/16 |
| | | (mm) | (3,397) | (2,192) |
| 1050, 1200 | 3 (without downturn) | in. | 135 3/4 | -- |
| | | (mm) | (3,448) | -- |
| | 3 (with optional downturn) | in. | 159 3/4 | 112 5/16 |
| | | (mm) | (4,058) | (2,853) |

| | 400, 800, 1200 | 500, 600 | 700, 1050 |
|---------------------|--|--|---------------------------------|
| 1" or 2" Disposable | (2) 16x16, (4) 12x25, (1) 16x25, (4) 12x30 | (1) 16x25, (4) 12x20, (1) 16x20, (4) 12x25 | (2) 16x25, (4) 12x20, (4) 12x30 |
| 1" or 2" Permanent | (2) 16x16, (1) 16x25, (8) 12x16, (4) 12x26 | (1) 16x20, (4) 16x25, (4) 12x20, (4) 12x26 | (2) 16x25, (8) 12x26 |
| 1" or 2" Pleated | (2) 16x16, (1) 16x25, (4) 12x25, (4) 12x32 | (1) 16x20, (4) 16x25, (4) 12x20, (4) 12x25 | (2) 16x25, (4) 12x20, (4) 12x32 |

| Weights of options shipped installed on the furnace: | | 400 | 500, 600 | 700 | 800 | 1050 | 1200 |
|--|---|-----------|-----------|-----------|-----------|-----------|-----------|
| AQ5 | Downturn Plenum Cabinet (wt. Includes additional crate) | lbs. (kg) | 271 (123) | 229 (104) | 253 (115) | 271 (123) | 253 (115) |
| | | | | | | | |
| Weights of options shipped separately for field assembly and installation: | | | | | | | |
| AS2 | Outside Air Inlet Hood | lbs. (kg) | 96 (44) | 87 (39) | 92 (42) | 96 (44) | 92 (42) |
| CJ1 | Roof Curb for Basic Unit | lbs. (kg) | 150 (68) | 167 (76) | 173 (78) | 179 (81) | 202 (92) |
| CJ2 | Roof Curb for Unit with Downturn Plenum Cabinet | lbs. (kg) | 177 (80) | 193 (88) | 199 (90) | 205 (93) | 228 (103) |



DESCRIPTION

The Reznor® Model RBL is a packaged air handling unit, consisting of a blower/filter cabinet and twin centrifugal blowers. This unit has been engineered for use with Reznor duct furnaces when design considerations do not permit the use of a Reznor packaged system. The cabinet is weatherized with an integral curb cap base for outdoor installation, but may also be installed indoors. The blower cabinet has a standard horizontal discharge air opening. A bottom discharge air opening is available with the addition of an optional downturn plenum. The blower cabinet has a standard horizontal inlet but is engineered to allow for the standard horizontal and/or an optional bottom air inlet with various optional damper control systems. To obtain the desired CFM, a selection of motor and drive combinations are available.

Optional horsepower/voltage motors are available in open dripproof, totally enclosed, energy efficient and two speed.

The optional filter rack will accommodate either 2" disposable, permanent or pleated filters. Pressure drops for each type of filter are listed on the following pages.

To meet a variety of installation requirements, the Model RBL blower cabinet is available with the addition of downturn plenum and/or an outside air inlet hood or evaporative cooling module. The downturn plenum cabinet is a factory-installed option; the outside air hood and evaporative cooling module are shipped separately for field installation. An optional 16" full roof curb is available for cabinets both with or without a downturn plenum.

STANDARD FEATURES

- Twin centrifugal blowers
- 1 HP, open dripproof motor
- Permanently lubricated ball bearings (1 - 5 HP)
- Pillow block bearings (7-1/2 - 20 HP)
- Adjustable belt drive
- 115-volt supply voltage
- 24-volt, 40 VA control transformer
- Weatherized, aluminized steel construction (Single wall uninsulated)
- Left side controls (facing airstream)
- Horizontal discharge and inlet air openings
- Curb cap base

OPTIONAL FEATURES - FACTORY INTALLED

- 208/3, 230/3, 460/3, 575/3 Volt
- 1 HP through 20 HP open drip-proof or totally enclosed motors available (motors meet EISA specifications for efficiency)
- Motor starter (optional with motors having internal overload protection)
- Variable frequency drive with open dripproof or totally enclosed motor
- VFD control options
 - ◆ Soft start
 - ◆ Two speed control
 - ◆ DDC signal from remote device
- Downturn plenum
- Discharge damper, 2-position, and downturn plenum
- Makeup air controls and dampers
- Outside air hood
- Filter rack with filters (2" disposable, permanent, or pleated)
- Insulated cabinet
- Double wall insulated cabinet
- Convenience outlet
- Right side controls (facing airstream)

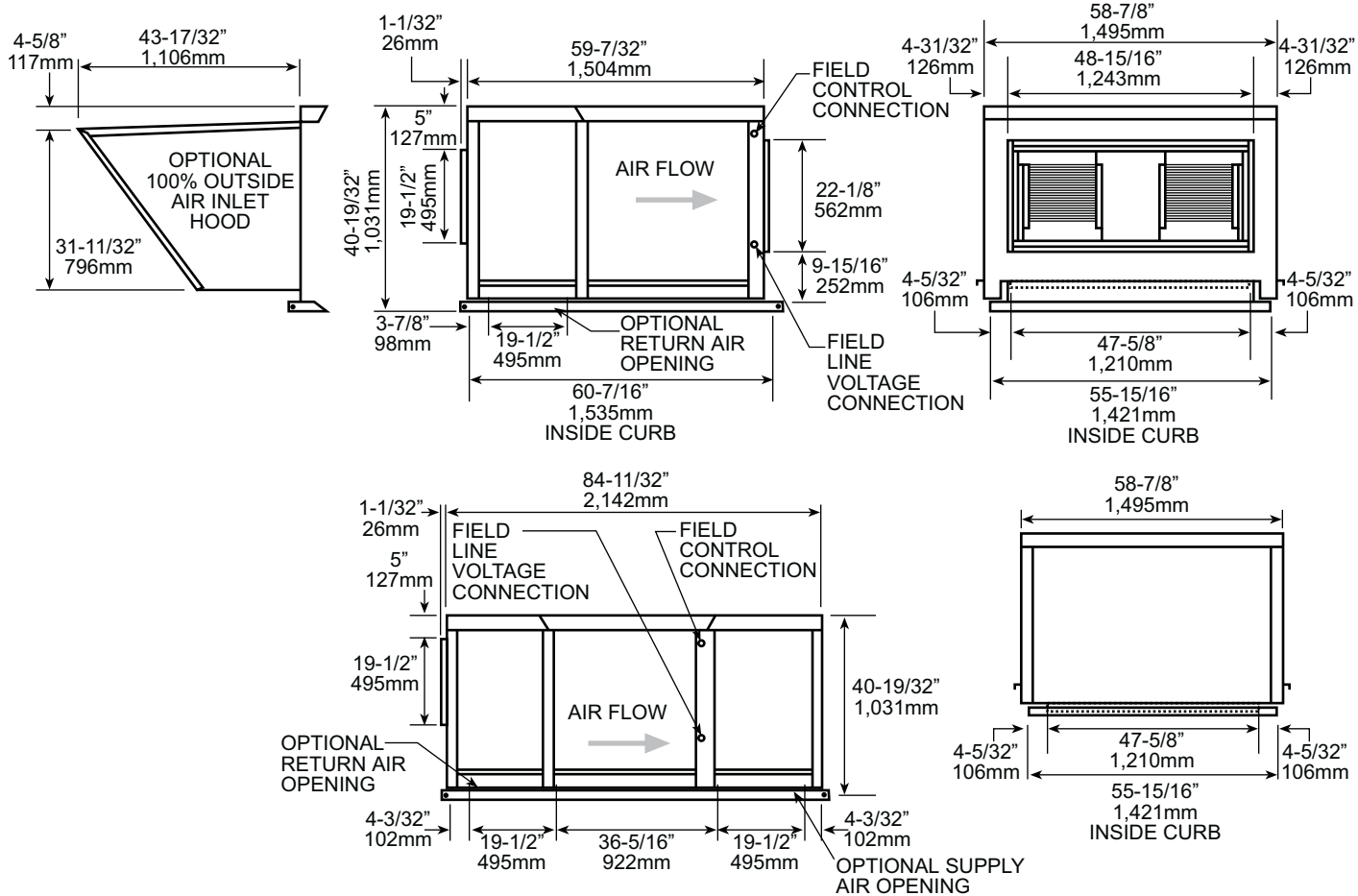
OPTIONAL FEATURES - FIELD INTALLED

- Roof curb
- Evaporative cooling module
- Disconnect switch - UL listed
- Fill and drain kit for evaporative cooling module



DIMENSIONS

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



FILTER DIMENSIONS

| Option | Description | 2" Filters |
|--------|---------------|----------------------|
| AW7 | 2" disposable | (4) 12x25, (4) 12x30 |
| AW9 | 2" permanent | (8) 12x16, (4) 12x26 |
| AW11 | 2" pleated | (4) 12x25, (4) 12x32 |

SHIPPING WEIGHTS

| Model Option | Description | Ship Weights | |
|-----------------|---|--------------|-------|
| | | Ibs. | kg |
| RBL | Blower Cabinet | 495 | (225) |
| AQ5 | Optional downturn plenum | 229 | (104) |
| AS2 | Optional 100% outside air inlet hood - shipped separately (requires field assembly) | 96 | (44) |
| CJ1 | Optional roof curb for blower cabinet without downturn - shipped separately (requires field installation) | 120 | (54) |
| CJ2 | Optional roof curb for blower cabinet with downturn - shipped separately (requires field installation) | 145 | (66) |

Option Code and Description**RATING PLATE (Models SSCBL & RPBL only)**

STD - U.S. installation

CGA - Canadian Installation

POWER

AK2 - 208/1

AK3 - 230/1

AK5 - 208/3

AK6 - 230/3

AK7 - 460/3

AK8 - 575/3

HEATING OPTIONS (Applies to Models SSCBL & RPBL)

AA1 - Natural gas

AA2 - Propane

AB1-8 - System elevation adjustment

AC1 - Aluminized steel

AC2 - 409 (E-3) stainless steel heat exchanger

AD1 - Aluminized steel burners

AD2 - Stainless steel burner

AE2 - Burner air shutters

AF1 - Aluminized steel burner bottom drip pan

AF2 - Stainless steel burner bottom drip pan

CC1 - Vent cap (Model RPBL only)

CC2 - Concentric adapter vertical vent terminal kit (Model SSCBL only)

CC6 - Concentric adapter horizontal vent terminal kit (Model SSCBL only)

XW2 - Extended five (5) year heat exchanger warranty

XW3 - Extended ten (10) year heat exchanger warranty

HEATING CONTROL & SENSOR OPTIONS (Applies to Models SSCBL & RPBL)

AG1 - Single stage space thermostat gas control

AG2 - Two stage space thermostat gas control

AG3 - Two stage ductstat control

AG4 - Two stage gas control with two stage, unit mounted ductstat

AG5 - Three stage gas control with two stage, unit mounted ductstat

AG7 - Electronic modulation with room thermostat

AG8 - Electronic modulation (2 to 1 turndown ratio)

AG9 - Electronic modulation (2 to 1 turndown ratio) with remote temperature selector

AG10 - Single stage heating gas control with single stage thermostat

AG11 - Two stage gas control with two stage digital thermostat

AG15 - Two stage gas control with electronic ductstat with remote temperature selector

AG17 - Two stage gas control with single stage valve and electronic ductstat with remote temperature selector

AG18 - Two stage gas control with electronic ductstat with remote temperature selector and display module

AG19 - Three stage gas control with electronic ductstat with remote temperature selector

AG20 - Three stage gas control with electronic ductstat with remote temperature selector and display module

AG21 - Electronic modulation (2 to 1 turndown ratio) with signal conditioner and modulating gas regulator

AG39, 41 - Electronic modulation (20%-100% firing rate) with duct probe and remote temperature selector

AG40, 42 - Electronic modulation (20%-100% firing rate) with signal conditioner and modulating gas regulator

AH3 - Intermittent spark pilot with timed lockout

BE4 - Froststat

BM14 - FM manifold

BN2 - High ambient burner cutoff

BP4 - High and low gas pressure safety switches

BW1 - Air flow across heat exchanger proving switch (makeup air only)

BLOWER SYSTEM OPTIONS

AL6-16 - Open dripproof motors, 1 hp thru 20 hp

AL23-35 - Totally enclosed motors 1 hp thru 20 hp

PC12 - Motor base isolation rails

AM__ - Motor drive options from 450 to 1650 rpm

AN10 - Motor starter

VFD1-2 - Variable frequency drive

VFCA - VFD control, soft start

VFCB - VFD control, two speed control

VFC2 - VFD control, DDC signal from remote device

AIR INTAKE & DAMPER OPTIONS

AR1 - Horizontal inlet air opening

AR4 - Outdoor cabinet with bottom air inlet openings

AR6 - 30% outside air inlet hood with manual locking damper (Models RPBL & RBL only)

AR7 - 30% outside air inlet hood with motorized locking damper (Model RPBL only)

AR8 - 100% outside air damper with motor on/off

AR15 - Modulating outside and return air mixing dampers with mixing air temperature control

AR17 - Alternating 100% outside or return air with 2 position damper motor

AR18 - Modulating 100% outside and return air mixing dampers with remote manual dial (potentiometer)

AR23 - 100% outside and return air dampers with modulating motor controlled by pressure null switch (Models SSCBL & RPBL only)

AR24 - Both horizontal and bottom inlet air openings

AR25 - Modulating 100% outside and return air mixing dampers with DDC control

AS2 - 100% outside air inlet screen hood with moisture eliminator louvers (Models RPBL & RBL only)

CABINET OPTIONS

AJ1 - Left side control panel (facing air stream) (Models SSCBL & RPBL only)

AJ2 - Right side control panel (facing air stream) (Models SSCBL & RPBL only)

AY2 - Single wall construction with insulation

AY3 - Double wall construction with insulation

FILTER OPTIONS

AW7 - Filter rack with 2" disposable filters

AW9 - Filter rack with 2" permanent filters

AW11 - Filter rack with 2" pleated disposable filters

COOLING OPTIONS (Models SSCBL & RPBL only)

AU2 - Cabinet for chilled water coils (cabinet only, no coils)

AU3 - Cabinet for DX cooling coils (cabinet only, no coils)

AU11 - Cabinet for chilled water cooling coils and downturn plenum (cabinet only, no coils) (Model RPBL only)

AU12 - Cabinet for chilled water cooling coils and downturn plenum with 2 position discharge dampers (cabinet only, no coils) (Model RPBL only)

AU13 - Cabinet for DX cooling coils and downturn plenum (cabinet only, no coils) (Model RPBL only)

AU14 - Cabinet for DX cooling coils and downturn plenum with 2 position discharge dampers (cabinet only, no coils) (Model RPBL only)

AUA1 - Galvanized casing for cooling coil

AUA3 - Stainless steel casing for cooling coil

AUB4 - ElectroFin™ coating for cooling coil

AUC_ - R410A hot gas bypass ports (Model RPBL only)

AUD1 - Single DX coil circuit

AUD2 - Dual DX coil circuit (50-50 split)

AUD3 - 1/3 - 2/3 DX coil split circuit

AUF1 - Copper tubing with aluminum fins coil material

AUF2 - Copper tubing with copper fins coil material

AUT1 - Turbo spiral chilled water coil configuration

LC26-64 - Chilled water cooling coils

LX66-84 - DX cooling coils

T4__ - Thermal expansion valves (Model RPBL only)



OPTIONAL FEATURE AVAILABILITY (cont'd)

Option Code and Description

EVAPORATIVE COOLING OPTIONS (Model RPBL & RBL only)

AS4 - Evaporative cooling module with 12" rigid cellulose media
AS8 - Evaporative cooling module with 12" rigid glass fiber media
ASA1 - Moisture elimination pad
CT - Fill and drain kits for various voltage supplies
ECB1 - Water hammer arrestor
ECC1 - Aluminized steel cabinet with stainless steel reservoir
ECC2 - Stainless steel cabinet and reservoir
ECD1 - AquaSaver® timed wetting cycle system

SUPPLY & DISCHARGE AIR OPTIONS (Model RPBL & RBL only)

AQ1 - Horizontal discharge opening
AQ5 - Downturn plenum cabinet
AQ8 - Downturn plenum cabinet with 2 position discharge dampers

OTHER OPTIONS

BC2 - 115V ground fault duplex convenience outlet (Model RPBL only)
BG - Various relays
CJ - Roof curb options (Models RPBL & RBL only)
CN - Remote switches (in lieu of remote console)
CL - Thermostats (Models SSCBL & RPBL only)
SA1 - Smoke detector (Models SSCBL & RPBL only)
CP - Disconnect switches from 30 amp to 100 amp for use in the U.S. or Canada
RC - Remote consoles (Models SSCBL & RPBL only)

BLOWER DATA

Air Flow Pressure Drops
Applies to Models RBL

| ACCESSORY AND EXTERNAL SYSTEM PRESSURE DROP ("W.C.) | | | | | | | | | | | |
|---|-----------------------------|----------------------------------|--------------------------|-------------------------|-----------|---------------|-------------|----------------------|---|------------------------------|---------|
| CFM | with Disposable 2" Filters* | with Permanent Alum. 2" Filters* | with Pleated 2" Filters* | with Evaporative Cooler | | with O/A Hood | with Damper | with Downturn Plenum | External Pressure Drop (Distribution Duct System) | Total Adjusted Pressure Drop | |
| | | | | 12" Media | Catch Pad | | | | | Heating | Cooling |
| 5000 | 0.04 | 0.08 | 0.10 | 0.06 | 0.04 | 0.15 | 0.02 | 0.05 | | | |
| 6000 | 0.06 | 0.12 | 0.14 | 0.08 | 0.05 | 0.23 | 0.02 | 0.07 | | | |
| 7000 | 0.08 | 0.16 | 0.19 | 0.10 | 0.07 | 0.31 | 0.03 | 0.10 | | | |
| 8000 | 0.10 | 0.21 | 0.25 | 0.14 | 0.10 | 0.40 | 0.04 | 0.13 | | | |
| 9000 | 0.13 | 0.26 | 0.31 | 0.18 | 0.12 | 0.50 | 0.06 | 0.17 | | | |
| 10000 | N/A | 0.33 | 0.39 | 0.22 | 0.15 | 0.62 | 0.07 | 0.21 | | | |
| 11000 | N/A | 0.40 | 0.47 | 0.26 | 0.18 | 0.76 | 0.08 | 0.25 | | | |
| 12000 | N/A | 0.48 | 0.56 | 0.30 | 0.21 | 0.90 | 0.10 | 0.30 | | | |
| 13000 | N/A | 0.56 | N/A | 0.36 | 0.25 | 1.05 | 0.12 | 0.35 | | | |
| 14000 | N/A | 0.65 | N/A | 0.42 | 0.29 | 1.22 | 0.14 | 0.40 | | | |

RPM/BHP Data
Applies to Model RBL

| Total System Static Pressure | CFM | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------|------|-------|------|-------|------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| | 5,000 | | 6,000 | | 7,000 | | 8,000 | | 9,000 | | 10,000 | | 11,000 | | 12,000 | | 13,000 | | 14,000 | | 15,000 | |
| | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| .2" w.c. | -- | -- | 550 | 1.30 | 620 | 1.90 | 700 | 2.80 | 770 | 3.80 | 850 | 5.00 | 940 | 7.30 | 1070 | 9.20 | 1140 | 11.50 | 1230 | 14.50 | 1320 | 17.50 |
| .4" w.c. | 570 | 1.15 | 610 | 1.56 | 700 | 2.20 | 750 | 3.00 | 810 | 4.00 | 890 | 5.20 | 970 | 7.50 | 1090 | 9.50 | 1180 | 12.00 | 1250 | 15.00 | 1340 | 18.00 |
| .6" w.c. | 650 | 1.30 | 700 | 1.80 | 740 | 2.50 | 800 | 3.30 | 870 | 4.30 | 940 | 5.70 | 1060 | 8.10 | 1130 | 10.00 | 1220 | 12.50 | 1300 | 16.00 | 1380 | 19.50 |
| .8" w.c. | 730 | 1.50 | 770 | 2.10 | 800 | 2.90 | 860 | 3.70 | 910 | 4.80 | 990 | 6.00 | 1100 | 8.50 | 1180 | 10.50 | 1250 | 13.00 | 1340 | 16.50 | 1410 | 20.00 |
| 1.0" w.c. | 775 | 1.75 | 800 | 2.30 | 840 | 3.10 | 900 | 3.90 | 940 | 5.00 | 1020 | 6.70 | 1120 | 9.00 | 1200 | 11.00 | 1270 | 14.00 | 1360 | 17.00 | -- | -- |
| 1.2" w.c. | 835 | 2.00 | 840 | 2.60 | 890 | 3.30 | 930 | 4.10 | 980 | 5.30 | 1050 | 7.50 | 1150 | 9.20 | 1220 | 11.50 | 1300 | 14.50 | 1380 | 17.50 | -- | -- |
| 1.4" w.c. | 900 | 2.40 | 900 | 3.00 | 940 | 3.60 | 980 | 4.50 | 1020 | 5.70 | 1110 | 8.00 | 1190 | 9.70 | 1260 | 12.00 | 1320 | 14.90 | 1400 | 18.00 | -- | -- |
| 1.6" w.c. | 960 | 2.80 | 980 | 3.30 | 990 | 3.90 | 1030 | 5.00 | 1070 | 6.10 | 1180 | 8.50 | 1240 | 10.40 | 1300 | 12.60 | 1360 | 15.50 | 1440 | 19.00 | -- | -- |
| 1.8" w.c. | 1030 | 3.10 | 1025 | 3.70 | 1040 | 4.20 | 1080 | 5.40 | 1110 | 7.30 | 1210 | 9.00 | 1270 | 11.00 | 1320 | 13.20 | 1390 | 16.00 | 1470 | 19.50 | -- | -- |
| 2.0" w.c. | 1060 | 3.20 | 1060 | 3.80 | 1080 | 4.70 | 1100 | 5.60 | 1140 | 7.50 | 1230 | 9.50 | 1290 | 11.50 | 1350 | 14.00 | 1410 | 16.50 | 1500 | 20.00 | -- | -- |
| 2.2" w.c. | 1100 | 3.40 | 1100 | 4.00 | 1120 | 4.90 | 1140 | 5.90 | 1210 | 8.00 | 1270 | 9.80 | 1320 | 12.00 | 1370 | 14.50 | 1440 | 17.00 | -- | -- | -- | -- |
| 2.4" w.c. | 1150 | 3.60 | 1150 | 4.20 | 1160 | 5.20 | 1180 | 6.20 | 1240 | 8.20 | 1290 | 10.00 | 1340 | 12.50 | 1400 | 15.00 | 1470 | 17.50 | -- | -- | -- | -- |
| 2.6" w.c. | 1190 | 3.90 | 1190 | 4.70 | 1200 | 5.50 | 1220 | 7.50 | 1290 | 9.00 | 1330 | 10.40 | 1380 | 13.00 | 1440 | 15.50 | 1500 | 18.10 | -- | -- | -- | -- |
| 2.8" w.c. | 1240 | 4.40 | 1230 | 5.00 | 1240 | 6.00 | 1290 | 8.00 | 1330 | 9.40 | 1370 | 11.00 | 1400 | 13.50 | 1470 | 16.00 | 1520 | 19.00 | -- | -- | -- | -- |
| 3.0" w.c. | 1250 | 4.50 | 1250 | 5.20 | 1260 | 6.90 | 1320 | 8.20 | 1350 | 9.60 | 1390 | 11.60 | 1420 | 14.00 | 1480 | 16.50 | 1560 | 19.50 | -- | -- | -- | -- |
| 3.2" w.c. | 1270 | 4.80 | 1275 | 5.80 | 1270 | 7.20 | 1380 | 8.80 | 1380 | 10.00 | 1410 | 12.00 | 1460 | 14.50 | 1510 | 17.00 | 1580 | 20.00 | -- | -- | -- | -- |
| 3.5" w.c. | 1320 | 5.30 | 1340 | 7.00 | 1300 | 7.50 | 1400 | 9.10 | 1430 | 11.00 | 1460 | 12.70 | 1500 | 15.00 | 1540 | 17.50 | -- | -- | -- | -- | -- | -- |
| 3.7" w.c. | 1350 | 6.50 | 1400 | 7.60 | 1420 | 8.00 | 1430 | 9.50 | 1460 | 11.50 | 1500 | 13.50 | 1530 | 16.00 | 1580 | 18.00 | -- | -- | -- | -- | -- | -- |
| 4.0" w.c. | 1430 | 8.10 | 1450 | 8.50 | 1470 | 8.70 | 1490 | 10.00 | 1500 | 12.00 | 1540 | 14.00 | 1570 | 16.50 | -- | -- | -- | -- | -- | -- | -- | -- |

BLOWER DATA (cont'd)

Air Flow Pressure Drops

Applies to Models RPBL & SSCBL

| ACCESSORY AND EXTERNAL SYSTEM PRESSURE DROP ("W.C.) | | | | | | | | | | | | | | |
|---|--------|--|---|---|---------------------------------------|--------------------------|-----------------------------|----------------------------|------------------------------------|--|-----|---|------------------------------|---------|
| Size | CFM | Pressure Drop with Disposable Filters ^A | Pressure Drop with Permanent Alum. Filters ^A | Pressure Drop with Pleated Filters ^A | Pressure Drop with Evaporative Cooler | | Pressure Drop with O/A Hood | Pressure Drop with Dampers | Pressure Drop with Downturn Plenum | Pressure Drop with Cooling Coil ^B | | External Pressure Drop (Distribution Duct System) | Total Adjusted Pressure Drop | |
| | | 2" | 2" | 2" | 12" Media | Moisture Elimination Pad | | | | Dry | Wet | | Heating | Cooling |
| 400 | 3,300 | 0.02 | 0.03 | 0.03 | 0.02 | 0.013 | 0.06 | 0.01 | 0.02 | | | | | |
| | 4,000 | 0.03 | 0.05 | 0.06 | 0.04 | 0.024 | 0.10 | 0.01 | 0.03 | | | | | |
| | 5,000 | 0.04 | 0.08 | 0.10 | 0.06 | 0.037 | 0.15 | 0.02 | 0.05 | | | | | |
| | 6,000 | 0.06 | 0.12 | 0.14 | 0.08 | 0.053 | 0.23 | 0.02 | 0.07 | | | | | |
| | 7,000 | 0.08 | 0.16 | 0.19 | 0.10 | 0.073 | 0.31 | 0.03 | 0.10 | | | | | |
| | 8,000 | 0.10 | 0.21 | 0.25 | 0.14 | 0.095 | 0.40 | 0.04 | 0.13 | | | | | |
| | 9,000 | 0.13 | 0.26 | 0.31 | 0.18 | 0.120 | 0.50 | 0.06 | 0.17 | | | | | |
| | 10,000 | N/A | 0.33 | 0.39 | 0.22 | 0.148 | 0.62 | 0.07 | 0.21 | | | | | |
| | 11,000 | N/A | 0.40 | 0.47 | 0.26 | 0.179 | 0.76 | 0.08 | 0.25 | | | | | |
| | 12,000 | N/A | 0.48 | 0.56 | 0.30 | 0.213 | 0.90 | 0.10 | 0.30 | | | | | |
| 500, 600 | 13,000 | N/A | 0.56 | N/A | 0.36 | 0.250 | 1.05 | 0.12 | 0.35 | | | | | |
| | 14,000 | N/A | 0.65 | N/A | 0.42 | 0.290 | 1.22 | 0.14 | 0.40 | | | | | |
| | 3,700 | 0.04 | 0.04 | 0.06 | 0.02 | 0.018 | 0.13 | 0.01 | 0.04 | | | | | |
| | 4,000 | 0.05 | 0.06 | 0.08 | 0.04 | 0.024 | 0.16 | 0.02 | 0.06 | | | | | |
| | 5,000 | 0.08 | 0.10 | 0.12 | 0.06 | 0.037 | 0.25 | 0.03 | 0.08 | | | | | |
| | 6,000 | 0.12 | 0.14 | 0.17 | 0.08 | 0.053 | 0.36 | 0.04 | 0.12 | | | | | |
| | 7,000 | 0.16 | 0.20 | 0.23 | 0.10 | 0.073 | 0.49 | 0.05 | 0.16 | | | | | |
| | 8,000 | N/A | 0.25 | 0.31 | 0.14 | 0.095 | 0.64 | 0.07 | 0.20 | | | | | |
| | 9,000 | N/A | 0.31 | 0.40 | 0.18 | 0.120 | 0.81 | 0.09 | 0.26 | | | | | |
| | 10,000 | N/A | 0.39 | N/A | 0.22 | 0.148 | 1.00 | 0.11 | 0.32 | | | | | |
| 700 | 11,000 | N/A | 0.46 | N/A | 0.26 | 0.179 | 1.21 | 0.13 | 0.40 | | | | | |
| | 12,500 | N/A | 0.60 | N/A | 0.34 | 0.231 | 1.57 | 0.14 | 0.52 | | | | | |
| | 5,200 | 0.06 | 0.08 | 0.10 | 0.06 | 0.037 | 0.19 | 0.02 | 0.06 | | | | | |
| | 6,000 | 0.06 | 0.10 | 0.15 | 0.08 | 0.053 | 0.28 | 0.03 | 0.10 | | | | | |
| | 7,000 | 0.08 | 0.14 | 0.20 | 0.10 | 0.073 | 0.38 | 0.04 | 0.14 | | | | | |
| | 8,000 | 0.10 | 0.18 | 0.27 | 0.14 | 0.095 | 0.50 | 0.05 | 0.16 | | | | | |
| | 9,000 | N/A | 0.24 | 0.33 | 0.18 | 0.120 | 0.63 | 0.07 | 0.22 | | | | | |
| | 10,000 | N/A | 0.30 | 0.41 | 0.22 | 0.148 | 0.77 | 0.09 | 0.28 | | | | | |
| | 11,000 | N/A | 0.36 | N/A | 0.26 | 0.179 | 0.94 | 0.10 | 0.34 | | | | | |
| | 12,000 | N/A | 0.42 | N/A | 0.30 | 0.213 | 1.12 | 0.12 | 0.40 | | | | | |
| 800 | 13,000 | N/A | 0.50 | N/A | 0.36 | 0.250 | 1.31 | 0.15 | 0.46 | | | | | |
| | 5,900 | 0.05 | 0.10 | 0.12 | 0.06 | 0.045 | 0.20 | 0.02 | 0.06 | | | | | |
| | 6,000 | 0.06 | 0.12 | 0.14 | 0.08 | 0.053 | 0.23 | 0.02 | 0.07 | | | | | |
| | 7,000 | 0.08 | 0.16 | 0.19 | 0.10 | 0.073 | 0.31 | 0.03 | 0.10 | | | | | |
| | 8,000 | 0.10 | 0.21 | 0.25 | 0.14 | 0.095 | 0.40 | 0.04 | 0.13 | | | | | |
| | 9,000 | 0.13 | 0.26 | 0.31 | 0.18 | 0.120 | 0.50 | 0.06 | 0.17 | | | | | |
| | 10,000 | N/A | 0.33 | 0.39 | 0.22 | 0.148 | 0.62 | 0.07 | 0.21 | | | | | |
| | 11,000 | N/A | 0.40 | 0.47 | 0.26 | 0.179 | 0.76 | 0.08 | 0.25 | | | | | |
| | 12,000 | N/A | 0.48 | 0.56 | 0.30 | 0.213 | 0.90 | 0.10 | 0.30 | | | | | |
| | 13,000 | N/A | 0.56 | N/A | 0.36 | 0.250 | 1.05 | 0.12 | 0.35 | | | | | |
| 1050 | 6,500 | 0.06 | 0.10 | 0.08 | 0.08 | 0.053 | 0.29 | 0.03 | 0.10 | | | | | |
| | 7,000 | 0.08 | 0.14 | 0.12 | 0.10 | 0.073 | 0.38 | 0.04 | 0.14 | | | | | |
| | 8,000 | 0.10 | 0.18 | 0.16 | 0.14 | 0.095 | 0.50 | 0.05 | 0.16 | | | | | |
| | 9,000 | N/A | 0.24 | 0.20 | 0.18 | 0.120 | 0.63 | 0.07 | 0.22 | | | | | |
| | 10,000 | N/A | 0.30 | 0.24 | 0.22 | 0.148 | 0.77 | 0.09 | 0.28 | | | | | |
| | 11,000 | N/A | 0.36 | N/A | 0.26 | 0.179 | 0.94 | 0.10 | 0.34 | | | | | |
| | 12,000 | N/A | 0.42 | N/A | 0.30 | 0.213 | 1.12 | 0.12 | 0.40 | | | | | |
| | 13,000 | N/A | 0.50 | N/A | 0.36 | 0.250 | 1.31 | 0.15 | 0.46 | | | | | |
| 1200 | 7,400 | 0.08 | 0.16 | 0.19 | 0.10 | 0.073 | 0.31 | 0.03 | 0.10 | | | | | |
| | 8,000 | 0.10 | 0.21 | 0.25 | 0.14 | 0.095 | 0.40 | 0.04 | 0.13 | | | | | |
| | 9,000 | 0.13 | 0.26 | 0.31 | 0.18 | 0.120 | 0.50 | 0.06 | 0.17 | | | | | |
| | 10,000 | N/A | 0.33 | 0.39 | 0.22 | 0.148 | 0.62 | 0.07 | 0.21 | | | | | |
| | 11,000 | N/A | 0.40 | 0.47 | 0.26 | 0.179 | 0.76 | 0.08 | 0.25 | | | | | |
| | 12,000 | N/A | 0.48 | 0.56 | 0.30 | 0.213 | 0.90 | 0.10 | 0.30 | | | | | |
| | 13,000 | N/A | 0.56 | N/A | 0.36 | 0.250 | 1.05 | 0.12 | 0.35 | | | | | |

^A Filter pressure drop is given for clean filters.

^B See cooling coil product submittals.



BLOWER DATA (cont'd)

RPM/BHP Chart

Applies to Models RPBL & SSCBL

| Size | Rise °F | CFM | Total Adjusted Pressure Drop ("W.C.) - from Air Flow Pressure Drop Table | | | | | | | | | | | | | | |
|------|------------|-----------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | | 0.2 | 0.4 | 0.6 | 0.8 | 1 | 1.2 | 1.4 | 1.6 | 1.8 | 2 | 2.2 | 2.4 | 2.6 | 2.8 | 3 |
| 400 | 90 | 3300 | 420/4 | 530/55 | 600/7 | 720/1.0 | 760/1.2 | 810/1.3 | 880/1.5 | 940/1.8 | 1000/2.0 | 1040/2.2 | 1090/2.7 | 1140/2.9 | 1190/3.1 | 1260/3.5 | 1270/3.6 |
| | 85 | 3500 | 440/5 | 550/65 | 610/80 | 730/1.1 | 770/1.25 | 820/1.4 | 890/1.8 | 950/1.9 | 1020/2.3 | 1050/2.5 | 1110/2.8 | 1150/3.0 | 1200/3.2 | 1270/3.6 | 1280/3.75 |
| | 74 | 4000 | 470/6 | 570/8 | 640/1.0 | 740/1.25 | 780/1.4 | 830/1.8 | 900/1.9 | 970/2.1 | 1030/2.6 | 1060/2.7 | 1120/3.0 | 1160/3.3 | 1205/3.6 | 1280/4.0 | 1290/4.2 |
| | 59 | 5000 | 540/1.0 | 610/1.25 | 700/1.5 | 780/1.8 | 810/2.0 | 880/2.2 | 950/2.6 | 1000/3.0 | 1060/3.3 | 1100/3.5 | 1140/3.8 | 1180/4.0 | 1220/4.3 | 1285/4.7 | 1300/4.8 |
| | 49 | 6000 | 600/1.5 | 690/1.75 | 740/2.0 | 820/2.5 | 860/2.7 | 900/3.0 | 970/3.2 | 1020/3.6 | 1080/4.0 | 1110/4.2 | 1150/4.5 | 1190/4.7 | 1230/4.9 | 1290/5.1 | 1310/5.5 |
| | 42 | 7000 | 710/2.3 | 770/2.7 | 820/3.0 | 890/3.5 | 920/3.7 | 960/4.0 | 1000/4.2 | 1050/4.6 | 1110/4.8 | 1140/5.0 | 1190/5.2 | 1210/6.0 | 1260/6.3 | 1300/7.0 | 1350/7.5 |
| | 37 | 8000 | 800/3.3 | 850/3.8 | 900/4.1 | 950/4.5 | 990/4.7 | 1020/5.0 | 1050/5.1 | 1110/5.6 | 1150/6.2 | 1180/7.0 | 1200/7.2 | 1250/7.5 | 1300/8.0 | 1350/8.2 | 1370/8.7 |
| | 33 | 9000 | 880/4.5 | 910/4.9 | 970/5.1 | 1010/6.0 | 1050/6.3 | 1080/7.0 | 1110/7.3 | 1200/7.8 | 1240/8.2 | 1260/8.6 | 1300/8.9 | 1320/9.1 | 1350/9.6 | 1400/10.0 | 1420/11.0 |
| | 30 | 10000 | 960/6.2 | 1010/7.0 | 1050/7.5 | 1120/8.0 | 1150/8.5 | 1200/8.8 | 1210/9.0 | 1260/9.1 | 1290/9.9 | 1310/10.1 | 1350/10.5 | 1380/11.0 | 1410/12.0 | 1450/12.5 | 1470/12.7 |
| | 27 | 11000 | 1100/8.7 | 1140/9.0 | 1180/9.5 | 1210/10.0 | 1240/10.2 | 1260/11.0 | 1300/11.5 | 1310/12.0 | 1360/12.5 | 1380/12.7 | 1400/13.0 | 1460/14.0 | 1480/14.9 | 1520/15.5 | 1530/16.0 |
| | 25 | 12000 | 1200/11.0 | 1240/11.5 | 1280/12.5 | 1300/13.0 | 1320/13.5 | 1350/14.0 | 1380/14.5 | 1400/14.7 | 1420/15.0 | 1450/15.2 | 1470/16.0 | 1500/16.5 | 1530/17.0 | 1560/17.5 | 1590/18.0 |
| | 23 | 13000 | 1300/14.5 | 1310/14.8 | 1350/15.2 | 1380/16.0 | 1400/16.2 | 1420/16.5 | 1450/17.0 | 1460/17.4 | 1500/18.0 | 1510/18.2 | 1530/19.0 | 1580/19.5 | 1600/20.0 | — | — |
| | 21 | 14000 | 1380/17.5 | 1410/18.0 | 1400/19.0 | 1480/19.5 | 1500/20.0 | — | — | — | — | — | — | — | — | — | — |
| 500 | 100 | 3700 | 560/8 | 610/9 | 680/1.1 | 770/1.3 | 810/1.5 | 880/1.6 | 940/1.9 | 990/2.0 | 1080/2.5 | 1110/2.6 | 1140/2.8 | 1180/3.0 | 1220/3.3 | 1280/4.5 | 1290/4.9 |
| | 93 | 4000 | 590/9 | 650/1.1 | 710/1.3 | 790/1.4 | 830/1.6 | 890/1.75 | 950/2.0 | 1000/2.2 | 1090/2.7 | 1120/2.8 | 1150/2.9 | 1190/3.2 | 1230/3.8 | 1290/4.9 | 1300/5.0 |
| | 74 | 5000 | 650/1.3 | 710/1.6 | 790/1.9 | 860/2.1 | 890/2.2 | 930/2.5 | 990/2.7 | 1030/3.0 | 1100/3.5 | 1130/3.8 | 1160/4.1 | 1200/4.5 | 1240/5.0 | 1300/5.5 | 1320/6.0 |
| | 62 | 6000 | 780/2.2 | 810/2.5 | 880/2.7 | 920/3.0 | 970/3.2 | 1000/3.5 | 1050/3.9 | 1100/4.2 | 1140/4.5 | 1180/4.9 | 1200/5.1 | 1250/5.7 | 1280/6.2 | 1320/6.6 | 1350/7.0 |
| | 53 | 7000 | 880/3.3 | 910/3.7 | 980/4.1 | 1020/4.4 | 1050/4.8 | 1100/5.0 | 1130/5.3 | 1160/5.6 | 1210/6.2 | 1250/6.9 | 1270/7.0 | 1300/7.4 | 1380/7.6 | 1410/7.9 | 1450/8.5 |
| | 46 | 8000 | 1000/5.0 | 1030/5.1 | 1070/5.5 | 1100/6.0 | 1150/6.2 | 1170/6.8 | 1200/7.2 | 1290/7.7 | 1320/8.0 | 1340/8.2 | 1370/8.6 | 1400/8.8 | 1440/9.2 | 1490/9.6 | 1510/10.0 |
| | 41 | 9000 | 1140/7.0 | 1160/7.2 | 1200/7.8 | 1230/8.0 | 1260/8.5 | 1290/8.7 | 1310/9.0 | 1360/9.5 | 1400/10.0 | 1420/10.2 | 1460/10.6 | 1480/11.0 | 1510/11.2 | 1540/12.0 | 1580/12.5 |
| | 37 | 10000 | 1240/9.5 | 1280/10.0 | 1310/10.5 | 1350/11.0 | 1380/11.5 | 1400/12.0 | 1420/12.3 | 1470/12.7 | 1510/13.0 | 1520/13.5 | 1550/14.0 | 1580/14.5 | 1600/15.0 | — | — |
| | 34 | 11000 | 1360/13.0 | 1400/13.5 | 1440/14.0 | 1470/14.5 | 1500/15.0 | 1520/15.1 | 1520/15.5 | 1570/16.0 | 1600/16.5 | — | — | — | — | — | — |
| | 31 | 12000 | 1480/16.0 | 1510/17.0 | 1550/17.5 | 1580/18.0 | 1600/18.5 | — | — | — | — | — | — | — | — | — | — |
| | 100 | 4450 | 620/1.1 | 680/1.3 | 740/1.6 | 820/1.7 | 850/1.9 | 910/2.1 | 970/2.5 | 1010/2.7 | 1090/2.9 | 1120/3.1 | 1150/3.5 | 1190/4.0 | 1230/4.8 | 1290/5.2 | 1310/5.5 |
| | 89 | 5000 | 650/1.3 | 710/1.6 | 790/1.9 | 860/2.1 | 890/2.2 | 930/2.5 | 990/2.7 | 1030/3.0 | 1100/3.5 | 1130/3.8 | 1160/4.1 | 1200/4.5 | 1240/5.0 | 1300/5.5 | 1320/6.0 |
| | 74 | 6000 | 780/2.2 | 810/2.5 | 880/2.7 | 920/3.0 | 970/3.2 | 1000/3.5 | 1050/3.9 | 1100/4.2 | 1140/4.5 | 1180/4.9 | 1200/5.1 | 1250/5.7 | 1280/6.2 | 1320/6.6 | 1350/7.0 |
| 63 | 7000 | 880/3.3 | 910/3.7 | 980/4.1 | 1020/4.4 | 1050/4.8 | 1100/5.0 | 1130/5.3 | 1160/5.6 | 1210/6.2 | 1250/6.9 | 1270/7.0 | 1300/7.4 | 1380/7.6 | 1410/7.9 | 1450/8.5 | |
| 56 | 8000 | 1000/5.0 | 1030/5.1 | 1070/5.5 | 1100/6.0 | 1150/6.2 | 1170/6.8 | 1200/7.2 | 1290/7.7 | 1320/8.0 | 1340/8.2 | 1370/8.6 | 1400/8.8 | 1440/9.2 | 1490/9.6 | 1510/10.0 | |
| 53 | 9000 | 1140/7.0 | 1160/7.2 | 1200/7.8 | 1230/8.0 | 1260/8.5 | 1290/8.7 | 1310/9.0 | 1360/9.5 | 1400/10.0 | 1420/10.2 | 1460/10.6 | 1480/11.0 | 1510/11.2 | 1540/12.0 | 1580/12.5 | |
| 44 | 10000 | 1240/9.5 | 1280/10.0 | 1310/10.5 | 1350/11.0 | 1380/11.5 | 1400/12.0 | 1420/12.3 | 1470/12.7 | 1500/13.0 | 1520/13.5 | 1550/14.0 | 1580/14.5 | 1600/15.0 | — | — | |
| 40 | 11000 | 1360/13.0 | 1390/13.5 | 1440/14.0 | 1470/14.5 | 1500/15.0 | 1520/15.1 | 1520/15.5 | 1570/16.0 | 1600/16.5 | — | — | — | — | — | — | |
| 39 | 11500 | 1420/15.0 | 1450/15.2 | 1500/16.0 | 1530/16.5 | 1550/17.2 | 1590/17.5 | 1600/18.0 | — | — | — | — | — | — | — | — | |
| 36 | 12500 | 1540/18.0 | 1560/18.6 | 1600/19.6 | — | — | — | — | — | — | — | — | — | — | — | — | |
| 700 | 100 | 5200 | 590/1.3 | 660/1.4 | 730/1.6 | 800/1.8 | 880/2.2 | 910/2.5 | 980/2.8 | 1040/3.2 | 1090/3.6 | 1120/3.8 | 1160/4.0 | 1200/4.2 | 1240/4.5 | 1290/4.8 | 1300/4.9 |
| | 86 | 6000 | 640/1.6 | 730/1.9 | 790/2.3 | 850/2.6 | 900/3.0 | 940/3.2 | 1000/3.7 | 1060/4.0 | 1100/4.2 | 1140/4.4 | 1180/4.6 | 1210/4.9 | 1250/5.2 | 1300/4.8 | 1320/6.0 |
| | 74 | 7000 | 760/2.6 | 800/3.0 | 860/3.2 | 920/3.7 | 960/4.0 | 1000/4.2 | 1050/4.6 | 1100/4.8 | 1140/5.0 | 1160/5.2 | 1200/5.5 | 1240/6.1 | 1280/6.6 | 1310/7.1 | 1340/7.3 |
| | 65 | 8000 | 850/3.7 | 900/4.0 | 950/4.5 | 1000/4.8 | 1030/5.0 | 1060/5.5 | 1100/6.0 | 1150/6.5 | 1200/7.0 | 1240/7.3 | 1260/7.5 | 1300/7.9 | 1340/8.4 | 1380/9.0 | 1410/9.3 |
| | 58 | 9000 | 950/5.0 | 980/5.3 | 1030/6.0 | 1070/6.5 | 1100/7.0 | 1130/7.5 | 1200/8.0 | 1240/8.3 | 1280/8.6 | 1300/9.0 | 1320/9.5 | 1360/9.8 | 1400/10.2 | 1440/11.0 | 1460/11.5 |
| | 52 | 10000 | 1040/7.5 | 1110/7.8 | 1150/8.0 | 1180/8.5 | 1200/8.7 | 1230/9.0 | 1280/9.8 | 1320/10.0 | 1350/10.5 | 1370/11.0 | 1400/12.0 | 1420/12.4 | 1470/12.6 | 1490/12.8 | 1500/13.0 |
| | 47 | 11000 | 1200/8.7 | 1220/10.0 | 1250/10.6 | 1290/11.3 | 1310/11.8 | 1330/12.0 | 1370/12.6 | 1410/13.0 | 1450/14.0 | 1460/14.5 | 1490/15.0 | 1500/15.5 | 1540/15.9 | 1570/16.4 | 1600/16.9 |
| | 43 | 12000 | 1300/12.7 | 1320/13.0 | 1360/14.0 | 1380/14.5 | 1400/14.9 | 1430/15.5 | 1470/16.8 | 1490/17.0 | 1540/17.3 | 1550/18.2 | 1570/18.5 | 1600/18.9 | — | — | — |
| | 40 | 13000 | 1390/16.2 | 1400/16.5 | 1440/17.0 | 1470/17.5 | 1500/18.0 | 1520/19.0 | — | — | — | — | — | — | — | — | — |
| | 38 | 13500 | 1440/17.0 | 1460/18.0 | 1490/19.0 | 1530/20.0 | — | — | — | — | — | — | — | — | — | — | — |
| | 100 | 5900 | 650/1.6 | 730/2.0 | 800/2.4 | 860/2.6 | 900/3.0 | 940/3.2 | 1010/3.6 | 1060/4.0 | 1110/4.2 | 1140/4.4 | 1180/4.6 | 1210/5.0 | 1260/5.6 | 1300/6.0 | 1330/6.3 |
| | 85 | 7000 | 770/2.6 | 800/2.9 | 890/3.4 | 930/3.8 | 960/4.0 | 1000/4.2 | 1050/4.5 | 1100/4.9 | 1150/5.2 | 1180/5.9 | 1210/6.1 | 1240/6.5 | 1290/7.0 | 1310/7.2 | 1340/7.5 |
| | 74 | 8000 | 860/3.7 | 900/4.0 | 960/4.5 | 1000/4.8 | 1030/5.0 | 1070/5.5 | 1100/6.0 | 1150/6.4 | 1190/6.9 | 1230/7.1 | 1280/7.5 | 1300/8.0 | 1340/8.7 | 1390/9.0 | 1410/9.3 |
| | 66 | 9000 | 950/5.0 | 990/5.5 | 1040/6.0 | 1080/6.8 | 1100/7.2 | 1180/7.6 | 1200/8.0 | 1240/8.3 | 1280/8.6 | 1300/9.0 | 1320/9.3 | 1360/9.9 | 1400/10.2 | 1440/11.0 | 1470/11.5 |
| | 59 | 10000 | 1100/7.8 | 1130/8.1 | 1190/8.8 | 1220/9.0 | 1240/9.6 | 1280/9.8 | 1300/10.0 | 1330/11.0 | 1370/11.4 | 1380/11.9 | 1420/12.4 | 1450/12.6 | 1480/13.2 | 1510/13.5 | 1540/14.4 |
| | 54 | 11000 | 1210/9.9 | 1220/10.1 | 1260/11.0 | 1300/11.5 | 1320/12.3 | 1350/12.5 | 1380/12.8 | 1410/14.0 | 1460/14.4 | 1490/15.2 | 1500/15.3 | 1510/15.5 | 1550/16.0 | 1600/17.0 | — |
| | 49 | 12000 | 1300/12.7 | 1340/13.0 | 1360/14.0 | 1400/14.8 | 1410/15.0 | 1450/15.5 | 1480/16.4 | 1500/17.0 | 1530/17.5 | 1540/17.9 | 1580/18.2 | 1600/18.8 | — | — | — |
| | 46 | 13000 | 1400/16.2 | 1420/16.5 | 1450/17.5 | | | | | | | | | | | | |

| CAPACITY OF PIPING - NATURAL GAS | | | | | | | | |
|--|--------|---------|------------------|-------|-------|--------|--------|--------|
| Cubic Feet/Meters per Hour Based on 0.3" W.C. Pressure Drop | | | | | | | | |
| Specific Gravity for Natural Gas - 0.6 (1,000 BTU/CU Foot) | | | | | | | | |
| Length of Pipe | | | Diameter of Pipe | | | | | |
| | | | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" |
| Ft | 20 | Ft³/Hr | 92 | 190 | 350 | 730 | 1100 | 2100 |
| (M) | (6.1) | (M³/Hr) | (2.6) | (5.4) | (9.9) | (20.7) | (31.1) | (59.5) |
| Ft | 30 | Ft³/Hr | 73 | 152 | 285 | 590 | 890 | 1650 |
| (M) | (9.1) | (M³/Hr) | (2.1) | (4.3) | (8.1) | (16.7) | (25.2) | (46.7) |
| Ft | 40 | Ft³/Hr | 63 | 130 | 245 | 500 | 760 | 1450 |
| (M) | (12.2) | (M³/Hr) | (1.8) | (3.7) | (6.9) | (14.2) | (21.5) | (41.1) |
| Ft | 50 | Ft³/Hr | 56 | 115 | 215 | 440 | 670 | 1270 |
| (M) | (15.2) | (M³/Hr) | (1.6) | (3.3) | (6.1) | (12.5) | (19.0) | (36.0) |
| Ft | 60 | Ft³/Hr | 50 | 105 | 195 | 400 | 610 | 1105 |
| (M) | (18.3) | (M³/Hr) | (1.4) | (3.0) | (5.5) | (11.3) | (17.3) | (31.3) |
| Ft | 70 | Ft³/Hr | 46 | 96 | 180 | 370 | 560 | 1050 |
| (M) | (21.3) | (M³/Hr) | (1.3) | (2.7) | (5.1) | (10.5) | (15.9) | (29.7) |
| Ft | 80 | Ft³/Hr | 43 | 90 | 170 | 350 | 530 | 990 |
| (M) | (24.4) | (M³/Hr) | (1.2) | (2.5) | (4.8) | (9.9) | (15.0) | (28.0) |
| Ft | 90 | Ft³/Hr | 40 | 84 | 160 | 320 | 490 | 930 |
| (M) | (27.4) | (M³/Hr) | (1.1) | (2.4) | (4.5) | (9.1) | (13.9) | (26.3) |
| Ft | 100 | Ft³/Hr | 38 | 79 | 150 | 305 | 460 | 870 |
| (M) | (30.5) | (M³/Hr) | (1.1) | (2.2) | (4.2) | (8.6) | (13.0) | (24.6) |
| Ft | 125 | Ft³/Hr | 34 | 72 | 130 | 275 | 410 | 780 |
| (M) | (38.1) | (M³/Hr) | (1.0) | (2.0) | (3.7) | (7.8) | (11.6) | (22.1) |
| Ft | 150 | Ft³/Hr | 31 | 64 | 120 | 250 | 380 | 710 |
| (M) | (45.7) | (M³/Hr) | (0.9) | (1.8) | (3.4) | (7.1) | (10.8) | (20.1) |
| Ft | 175 | Ft³/Hr | 28 | 59 | 110 | 225 | 350 | 650 |
| (M) | (53.3) | (M³/Hr) | (0.8) | (1.7) | (3.1) | (6.4) | (9.9) | (18.4) |
| Ft | 200 | Ft³/Hr | 26 | 55 | 100 | 210 | 320 | 610 |
| (M) | (61.0) | (M³/Hr) | (0.7) | (1.6) | (2.8) | (5.9) | (9.1) | (17.3) |
| NOTE: When sizing supply lines, consider possibilities of future expansion and increased heating requirements. Refer to National Fuel Gas Code for additional information on sizing supply line. | | | | | | | | |
| CAPACITY OF PIPING - PROPANE | | | | | | | | |
| Cubic Feet/Meters per Hour Based on 0.3" W.C. Pressure Drop | | | | | | | | |
| Specific Gravity for Propane Gas - 1.6 (2,550 BTU/CU Foot) | | | | | | | | |
| Length of Pipe | | | Diameter of Pipe | | | | | |
| | | | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" |
| Ft | 20 | Ft³/Hr | 56 | 116 | 214 | 445 | 671 | 1281 |
| (M) | (6.1) | (M³/Hr) | (1.6) | (3.3) | (6.1) | (12.6) | (19.0) | (36.3) |
| Ft | 30 | Ft³/Hr | 45 | 93 | 174 | 360 | 543 | 1007 |
| (M) | (9.1) | (M³/Hr) | (1.3) | (2.6) | (4.9) | (10.2) | (15.4) | (28.5) |
| Ft | 40 | Ft³/Hr | 38 | 79 | 149 | 305 | 464 | 885 |
| (M) | (12.2) | (M³/Hr) | (1.1) | (2.2) | (4.2) | (8.6) | (13.1) | (25.1) |
| Ft | 50 | Ft³/Hr | 34 | 70 | 131 | 268 | 409 | 775 |
| (M) | (15.2) | (M³/Hr) | (1.0) | (2.0) | (3.7) | (7.6) | (11.6) | (21.9) |
| Ft | 60 | Ft³/Hr | 31 | 64 | 119 | 244 | 372 | 674 |
| (M) | (18.3) | (M³/Hr) | (0.9) | (1.8) | (3.4) | (6.9) | (10.5) | (19.1) |
| Ft | 70 | Ft³/Hr | 28 | 59 | 110 | 226 | 342 | 641 |
| (M) | (21.3) | (M³/Hr) | (0.8) | (1.7) | (3.1) | (6.4) | (9.7) | (18.2) |
| Ft | 80 | Ft³/Hr | 26 | 55 | 104 | 214 | 323 | 604 |
| (M) | (24.4) | (M³/Hr) | (0.7) | (1.6) | (2.9) | (6.1) | (9.1) | (17.1) |
| Ft | 90 | Ft³/Hr | 24 | 51 | 98 | 195 | 299 | 567 |
| (M) | (27.4) | (M³/Hr) | (0.7) | (1.4) | (2.8) | (5.5) | (8.5) | (16.1) |
| Ft | 100 | Ft³/Hr | 23 | 48 | 92 | 186 | 281 | 531 |
| (M) | (30.5) | (M³/Hr) | (0.7) | (1.4) | (2.6) | (5.3) | (8.0) | (15.0) |
| Ft | 125 | Ft³/Hr | 21 | 44 | 79 | 168 | 250 | 476 |
| (M) | (38.1) | (M³/Hr) | (0.6) | (1.2) | (2.2) | (4.8) | (7.1) | (13.5) |
| Ft | 150 | Ft³/Hr | 19 | 39 | 73 | 153 | 232 | 433 |
| (M) | (45.7) | (M³/Hr) | (0.5) | (1.1) | (2.1) | (4.3) | (6.6) | (12.3) |
| Ft | 175 | Ft³/Hr | 17 | 36 | 67 | 137 | 214 | 397 |
| (M) | (53.3) | (M³/Hr) | (0.5) | (1.0) | (1.9) | (3.9) | (6.1) | (11.2) |
| Ft | 200 | Ft³/Hr | 16 | 34 | 61 | 128 | 195 | 372 |
| (M) | (61.0) | (M³/Hr) | (0.5) | (1.0) | (1.7) | (3.6) | (5.5) | (10.5) |
| NOTE: When sizing supply lines, consider possibilities of future expansion and increased heating requirements. Refer to National Fuel Gas Code for additional information on sizing supply line. | | | | | | | | |

IGNITION CONTROL OPTIONS

STANDARD EQUIPMENT INTERMITTENT SPARK PILOT: Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. Certified by the Canadian Standards Association for use in Canada with natural gas only. Certified for use in the U.S.A. on outdoor units with natural gas or propane.

OPTION AH3 INTERMITTENT SPARK PILOT WITH LOCKOUT: Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. This system also incorporates a lockout device which stops gas flow to the pilot if the pilot fails to light in 120 seconds. The lockout will automatically be reset after one hour, or it can be manually reset by interrupting the thermostat circuit. Approved for use with natural or propane gas.

GAS CONTROL OPTIONS

Option AG1 ONE-STAGE CONTROL: Single-stage gas valve which cycles on at 100% fire on a call for heat by a remote single-stage thermostat. Thermostat is not included.

Option AG10 ONE-STAGE CONTROL for units with one, two or three furnace sections: Each furnace is equipped with single-stage gas valve and relay. Each furnace cycles on at 100% fire on call for heat from remote single-stage thermostat. Thermostat is included.

Option AG2 TWO-STAGE CONTROL: Two-stage gas valve which fires at 100% or 50%, as required, on call by a remote two-stage thermostat. Thermostat is not included..

Option AG11 TWO-STAGE HEATING CONTROL for units with one, two or three furnaces: Each furnace is equipped with a two-stage gas valve and relay. Two-stage gas valves fire at 100% or 50% as required, on call from remote two-stage thermostat. Thermostat is included.

Option AG7 ELECTRONIC MODULATION (60°-85°F): Solid state control system, providing close temperature control via manifold pressure. On a call for heat from a remote electronic thermostat, controls modulate between 50% and 100%. Remote thermostat is included.

Option AG3 TWO-STAGE CONTROL FROM DUCTSTAT (60°-110°F): Two-stage gas valve which fires at 100% or 50% as required, on call from a unit-mounted, two-stage ductstat. For units with two furnace sections, Option AG3 includes a two-stage valve on each furnace and two ductstats which provide for FOUR-STAGE CONTROL. For units with three furnace sections, Option AG3 includes a two-stage valve on each furnace and three ductstats which provide for SIX-STAGE CONTROL*.

Option AG15 ELECTRONIC TWO-STAGE CONTROL USING DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT: Same type of control as Option AG3, but the setpoint of the ductstat is adjustable from a remote temperature-selector. Includes factory-installed sensor and field-installed temperature-selector module with an adjustable stage-adder module. For Model RPBL packages with two furnace sections, Option AG15 includes a two-stage valve on each furnace and ductstat which provides for FOUR-STAGE CONTROL. Includes factory-installed sensor and field-installed remote temperature-selector module with three adjustable stage-adder modules. For units with three furnace sections, Option AG15 includes a two-stage valve on each furnace and ductstat which provides for SIX-STAGE CONTROL. Includes factory-installed sensor and field-installed remote temperature-selector module with five adjustable stage-adder modules.*

Option AG4 TWO-STAGE CONTROL FOR UNITS WITH TWO (2) FURNACES: Each furnace is equipped with a single-stage gas valve. The gas valves are staged by a unit-mounted, two-stage ductstat (60°-110°F). The furnace nearest the blower is staged first and the downstream furnace is staged second. Applicable only to packaged systems with two furnace sections.*

*APPLICATION NOTE: If the installation of a packaged unit with more than one furnace section requires that any of the controls in this table be used in conjunction with an override thermostat, additional factory-installed relays are required. Since this application is not covered by "normal" control sequence, the additional relays (Option BG2) must be specified.

SPACE HEATING APPLICATIONS

MAKEUP AIR HEATING APPLICATIONS

Option AG17 ELECTRONIC TWO-STAGE CONTROL FOR RPBL WITH TWO (2) FURNACE SECTIONS USING A DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT: Same type of control as Option AG4, but the ductstat has a remote temperature selector. Includes factory-installed sensor and field-installed remote temperature-selector module with an adjustable stage-adder module.*

Option AG18 ELECTRONIC TWO-STAGE CONTROL FOR UNITS WITH TWO (2) FURNACE SECTIONS USING A DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT AND TEMPERATURE DISPLAY: Same as Option AG17, plus a digital (liquid crystal) temperature-display module that provides selectable set point display and continuous display of sensor reading.*

Option AG5 THREE-STAGE CONTROL FOR UNITS WITH THREE (3) FURNACES: Each furnace is equipped with a single-stage gas valve. The gas valves are staged in sequence by two (2) unit-mounted, two-stage ductstats (60°-110°F). The furnace nearest the blower is staged first, the center furnace is staged second, and the downstream furnace is staged last. Applicable only to packaged systems with three furnace sections.*

Option AG19 ELECTRONIC THREE-STAGE CONTROL FOR UNITS WITH THREE (3) FURNACE SECTIONS USING A DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT: Same type of control as Option AG5, but the ductstat has a remote temperature selector. Includes factory-installed sensor and field-installed remote temperature-selector module with two adjustable stage-adder modules.*

Option AG20 ELECTRONIC THREE-STAGE CONTROL FOR UNITS WITH THREE (3) FURNACE SECTIONS USING A DUCTSTAT (50°-130°F) WITH REMOTE TEMPERATURE ADJUSTMENT AND TEMPERATURE DISPLAY: Same as Option AG19, plus a digital (liquid crystal) temperature-display module that provides selectable set point and continuous display of sensor reading.*

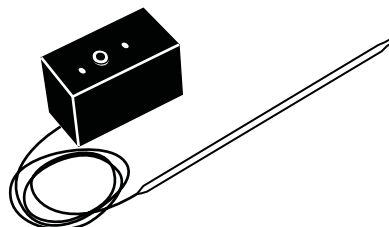
Options AG15, AG17, AG18, AG19, AG20

Options AG3, AG4, AG5

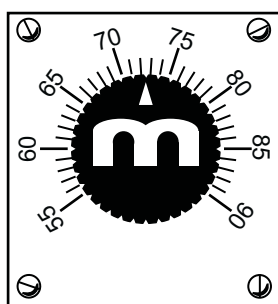
A = Ductstat Temperature Module P/N 115848

B = Stage Adder Module, P/N 115849 (quantity varies - see Option description)

C = Digital Temperature Display Module, P/N 115852 (Options AG18 and AG20 only)



Unit-Mounted Ductstat P/N 41700 (quantity varies - see Option description)

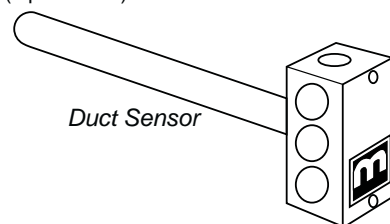


Maxitrol Signal Selector (AG9 Only)

Option AG8 ELECTRONIC MODULATION (55°-90°F) WITH DUCTSTAT: Solid state control system, providing close temperature control through regulated manifold pressure. On a call for heat from a unit-mounted ductstat, controls modulate between 50% and 100%, as required. Units with two or three furnace sections include an outside air controller. When setpoint temperature is reached, one or two furnaces will be shut down providing 25% minimum system firing rate with two furnaces and 16-2/3% minimum with three furnaces. A room override thermostat (Option CL9) is available for use with this system. Temperature range 55° - 90°F.

Option AG9 ELECTRONIC MODULATION (55°-90°F) WITH DUCTSTAT AND REMOTE TEMPERATURE SELECTION: Control is the same as Option AG8 except that the duct sensor setpoint may be reset from a remote selector. Units with two or three furnace sections include an outside air controller. When setpoint temperature is reached, one or two furnaces will be shut down providing 25% minimum system firing rate with two furnaces and 16-2/3% minimum with three furnaces. Remote temperature selector is included. A room override thermostat (Option CL9) is available for use with this system. (See illustration)

AG21 ELECTRONIC MODULATION WITH DDC CONTROL: Used with customer-supplied 4-20MA or 0-10V input signal. Includes Maxitrol A200/SC10C-B6S1 signal conditioner and special modulating gas regulator.



Duct Sensor

***APPLICATION NOTE:** If the installation of a packaged unit with more than one furnace section requires that any of the controls in this table be used in conjunction with an override thermostat, additional factory-installed relays are required. Since this application is not covered by "normal" control sequence, the additional relays (Option BG2) must be specified.

| MINIMUM QUANTITY OF RELAYS (Option BG2) REQUIRED WHEN: | Models | Size | AG3 | AG4 | AG5 | AG15 | AG17, AG18 | AG19 AG20 |
|--|--------|--------------------|-----|-----|-----|------|------------|-----------|
| | RPBL | 500, 600, 700, 800 | 4 | 2 | N/A | 4 | 2 | N/A |
| · Pkg Model w/2 or 3 furnaces · with AG Option Listed (right) · plus Override Thermostat | RPBL | 1050, 1200 | 6 | N/A | 3 | 6 | N/A | 3 |

Option AG39 ELECTRONIC MODULATION (SEE FIRING RATE TURNDOWN PERCENT IN TABLE BELOW): (Available with natural gas only on Models /RPBL & SSCBL Size 400)

Description

- Reznor® Option AG39 is an electronic modulation gas control that will provide precise control of discharge air temperature over an increased range of outside air conditions. It is now available on selected Models of Reznor gas furnaces.
- This option allows the furnace input ratio to be fully modulated between 100% and 28 to 20%.
- The part-load thermal efficiency of this system complies with and exceeds the current seventy-five percent minimum requirement of ASHRAE standard 90.1 for part-load efficiencies. This system offers an average thermal efficiency over the range of modulation that is equal to or exceeds the full input rate thermal efficiency.
- Furnaces with Option AG39 require stainless steel burners, a stainless steel heat exchanger, and a stainless steel bottom pan. The gas train includes a single-stage gas valve, a modulating valve, and two gas pressure switches. The burner rack is equipped with one flash carry-over and a regulated gas lighter tube system. The carry-over lighter tube receives its gas supply through the regulator, simultaneously with the gas to the burner. Control of the system is through a Maxitrol #A1092 amplifier with a corresponding remote temperature dial (Maxitrol® #TD92-0509).

Sensor Location

- The duct temperature sensor is factory installed in the cabinet leg. Although the sensor has a mixing tube, at this distance from the discharge it does not receive a true mix, so the temperature read by the sensor will be slightly higher than the actual air entering the ductwork. The system will provide comfort level heat if the selector is set slightly lower to compensate for this reading. The offset temperature will vary with the application. If a direct correlation of these two temperatures is required, move the duct sensor to a location in the ductwork about 10-12 feet from the furnace discharge.

Sample Specification

- The unit shall have electronic modulation offering at least full modulation to 28% of full fire (capacity) input rate.
- Modulating gas control shall be certified by CSA for use in The United States and Canada.
- The furnace shall maintain an average thermal efficiency over the range of modulation that is equal to or exceeds the full input rate thermal efficiency.
- The furnace shall ignite at any fire rate within its modulation range, not just high fire on start.

Option AG40 ELECTRONIC MODULATION (SEE FIRING RATE TURNDOWN PERCENT IN TABLE BELOW) WITH DDC CONTROL: Same system as AG39 but includes signal conditioner for use with customer-supplied 4-20MA or 0-10V input signal. (Available with natural gas only on Model RPBL & SSCBL Size 400)

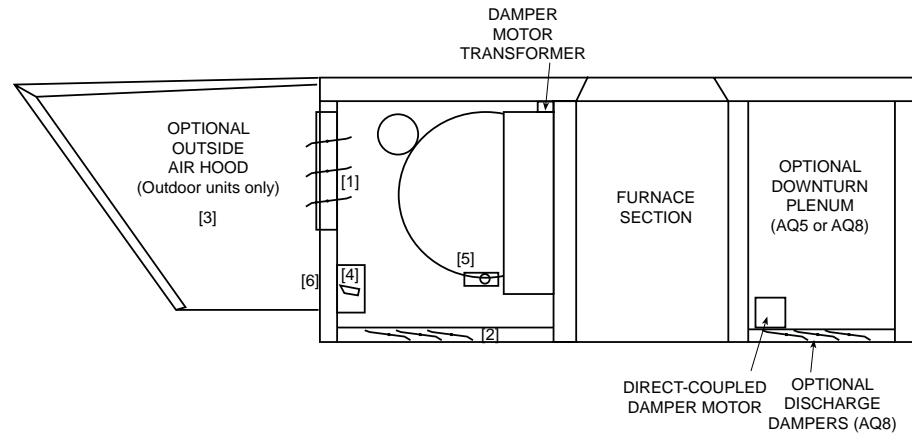
Option AG41 ELECTRONIC MODULATION (SEE FIRING RATE TURNDOWN PERCENT IN TABLE BELOW) FOR RPBL UNITS WITH TWO (2) OR THREE (3) FURNACES: Same system as AG39 (electronic modulation gas control on the first furnace) with a two-stage with outside air temperature control on the other(s). (Available on Models SSCBL & RPBL sizes 500 - 1200)

Option AG42 ELECTRONIC MODULATION (SEE FIRING RATE TURNDOWN PERCENT IN TABLE BELOW) WITH DDC CONTROL FOR RPBL UNITS WITH TWO (2) OR THREE (3) FURNACES: Same system as AG40 (electronic modulation gas control on the first furnace with signal conditioner for use with customer-supplied 4-20MA or 0-10V input signal) with a two-stage with outside air temperature control on the other(s). (Available on Models SSCBL & RPBL sizes 500 - 1200)

| Options AG39, 40, 41 and 42 are available on: | | Maximum Trundown Percent | Input Range | | Gas Supply Pressure Required | |
|---|------|--------------------------|-------------|--------------|------------------------------|-----------|
| Model | Size | | MBH | kW | | |
| RPBL/SSCBL | 400 | 25% | 100 - 400 | 29.3 - 117.2 | 6" w.c. | 14.9 mbar |
| RPBL/SSCBL | 500 | 14% | 70 - 500 | 20.5 - 146.5 | 5" w.c. | 12.5mbar |
| RPBL/SSCBL | 600 | 11.5% | 69 - 600 | 20.2 - 175.9 | 5" w.c. | 12.5mbar |
| RPBL/SSCBL | 800 | 12.5% | 100 - 800 | 29.3 - 234.5 | 6" w.c. | 14.9 mbar |
| RPBL/SSCBL | 1200 | 8.3% | 100 - 1200 | 29.3 - 351.7 | 6" w.c. | 14.9 mbar |

**APPLICATION NOTE: If the installation of a packaged unit with more than one furnace section requires that any of the controls in this table be used in conjunction with an override thermostat, additional factory-installed relays are required. Since this application is not covered by "normal" control sequence, the additional relays (Option BG2) must be specified.*

INLET AIR CONTROL SYSTEMS



| Option | [1] | | | | | [2] | | | [3] | [4] | | | | [5] | | | [6] | [7] | |
|-------------------|--------------------------|------------------------|--------------------------|--------------------|-------------------------------------|--------------------------|--------------------|-------------------------------------|--------------|--------------|---------------------|-------------------------|----------------------------------|----------------------|---------------|-----------------|-------------------------|----------------------|-----------------------------|
| | Horiz. Inlet Air Opening | 30% Horiz. O/A Opening | ...with 100% O/A Dampers | ...with O/A Damper | ...with Duct Flanges and Insulation | Bottom Inlet Air Opening | ...with R/A Damper | ...With Duct Flanges and Insulation | 30% O/A Hood | Damper Motor | 2 Pos. Damper Motor | Modulating Damper Motor | Modulating Damper Motor with DDC | Mixed Air Controller | Potentiometer | Warm-up Control | Optional O/A Changeover | Remote Potentiometer | Remote Pressure Null Switch |
| STD | X | | | | | | | | | | | | | | | | | | |
| AR4 | | | | | | X | | | | | | | | | | | | | |
| AR6 ^A | | X | | X | | X | | | X | | | | | | | | | | |
| AR7 ^A | | X | | X | | X | | | X | X | | | | | | | | | |
| AR8 | | | X | | | | | | | | X | | | | | | | | |
| AR15 | | | | X | | | X | | | | X | X | | X | X | X | X | | |
| AR17 | | | | X | | | X | | | | X | | | | | | | | |
| AR18 ^B | | | | X | | | X | | | | | X | | | | | | X | |
| AR23 ^C | | | | X | | | X | | | | | X | | | | | | | X |
| AR24 | | | | | X | | | X | | | | | | | | | | | |
| AR25 | | | | X | | | X | | | | | | X | | | | | | |

^A Outdoor units only.

^B Includes remote potentiometer - not shown.

^C Includes remote pressure null switch - not shown.

Standard Control - Outside Horizontal Air Inlet

Option AR4 - Bottom Return Air Inlet, 100% Return Air Inlet only - Designed for 100% recirculated heating system. **OUTDOOR UNITS ONLY.**

Option AR6 - 30% Outside Horizontal Air Inlet, Bottom Return Air Inlet, 30% Outside Air Hood, Outside Air Dampers: 100% Return Air Inlet, 30% Outside Air Inlet with Hood (see Outside Air Hood section) and Manual Outside Air Damper - Supplies constant 30% or less outside air to recirculating heating system. Outside air hood is shipped separately for field installation. **OUTDOOR UNITS ONLY.**

Option AR7 - 30% Outside Horizontal Air Inlet, Bottom Return Air Inlet, 30% Outside Air Hood, Outside Air Dampers, Damper Motor: 100% Return Air Inlet, 30% Outside Air Inlet with Hood (see Outside Air Hood section) and Motorized Outside Air Damper - Supplies 30% outside air to a recirculating heating system at specific times, as controlled by a time clock or switch. On shutdown, the outside air damper closes. Outside air hood is shipped separately for field installation.

Option AR8 - Outside Horizontal Air Inlet, Outside Air Dampers, Damper Motor (2-Position): 100% Outside Air Inlet, with Two-Position (open/closed) Motorized Damper - 100% outside air system which provides makeup air intermittently, usually in unison with a building exhauster. Outside air damper opens when unit is on; closes when units is off.

INLET AIR CONTROL SYSTEMS (cont'd)

- Option AR15 - Outside Horizontal Air Inlet, Bottom Return Air Inlet, Outside Air Dampers, Damper Motor (Modulating), Return Air Dampers, Mixed Air Controller, Potentiometer, Warm Up Control : 100% Outside Air and 100% Return Air Inlets with Dampers, Modulating Damper Motor, Potentiometer, Mixed Air Controller and Warm-up Control (ASHRAE Cycle II) - 100% return air on warm-up and automatically controlled mix of outside/return air to meet the temperature setting of the mixed air controller after warm-up. A minimum amount of outside air is allowed after warm-up as determined by the potentiometer setting. When used with mechanical cooling, optional air change over control may be added. An outside air change over control (not included in Option AR15 package) closes outside air dampers when the entering air reaches a set temperature (Usually 75 degrees F).
- Option AR17 - Outside Horizontal Air Inlet, Bottom Return Air Inlet, Outside Air Dampers, Damper Motor (2-Position), Return Air Dampers: 100% Outside Air and 100% Return Air Inlets with Dampers and a Two-Position Damper Motor - 100% return air or 100% outside air as controlled by a switch or time clock. ON shutdown, the outside air damper closes.
- Option AR18 - Outside Horizontal Air Inlet, Bottom Return Air Inlet, Outside Air Dampers, Damper Motor (Modulating), Return Air Dampers, Remote Potentiometer: 100% Outside Air and 100% Return Air Inlets with Dampers, a Modulating Damper Motor and Potentiometer - Mixture of return and outside air as controlled by a manually set remote potentiometer. On shutdown, the outside air damper closes.
- Option AR23 - Outside Horizontal Air Inlet, Bottom Return Air Inlet, Outside Air Dampers, Damper Motor (Modulating), Return Air Dampers, Remote Pressure Null Switch: 100% Outside Air and 100% Return Inlets with Dampers, a Modulating Damper Motor and Pressure Null Switch - Mixture of return and outside air as automatically controlled by a remote pressure null switch. On shutdown, the outside air damper closes.
- Option AR24 - Outside Horizontal Air Inlet, Bottom Return Air Inlet: 100% Outside Air and 100% Return Air Inlets, without Factory-Supplied Dampers - Designed for installation of field supplied damper system.
- Option AR25 - Outside Horizontal Air Inlet, Bottom Return Air Inlet ,Outside Air Dampers, Damper Motor with DDC, Return Air Dampers: Includes outside air damper and return air damper linked together with a modulating damper motor with an interface module to accept a 0 - 10 volt, or 4 - 20 mA signal from a D.D.C. system, to position the dampers for mixed air. Standard Discharge - Installation that requires connection to horizontal ductwork before turning downward or where immediate downturn ductwork with horizontal connection is field supplied.
- 3/4" Duct Flange designed for "U" channel top/bottom ductwork connection and "L" type on each side

DISCHARGE AIR OPTIONS

| | Horiz. Discharge Air Opening w/ Duct Flanges | Downturn Plenum for Vertical Discharge Air | Vertical Discharge Air Opening w/ Duct Flanges | 2-Position Dampers |
|-----|---|--|---|-----------------------|
| STD | X | | | |
| AQ5 | | X | X | |
| AQ8 | | X | X | X |

- Option AQ5 - Installation where vertical ductwork is attached and sealed directly to the duct flange on the bottom of the downturn plenum cabinet.
- Downturn Plenum Cabinet
 - 1" Duct Flange for slip-type connection (flange is perpendicular to the cabinet)
- Option AQ8 - Installation where vertical ductwork is attached and sealed directly to the duct flange on the bottom of the downturn plenum cabinet. The two-position (open/close) dampers in the discharge opening are designed to isolate the unit from the building atmosphere when the system is not operating. The damper motor is located inside the downturn plenum cabinet.
- Downturn Plenum Cabinet
 - Two-Position Dampers
 - Direct-Coupled Motor (rated for use in discharge airstream)
 - 1" Duct Flange for slip-type connection (flange is perpendicular to the cabinet)

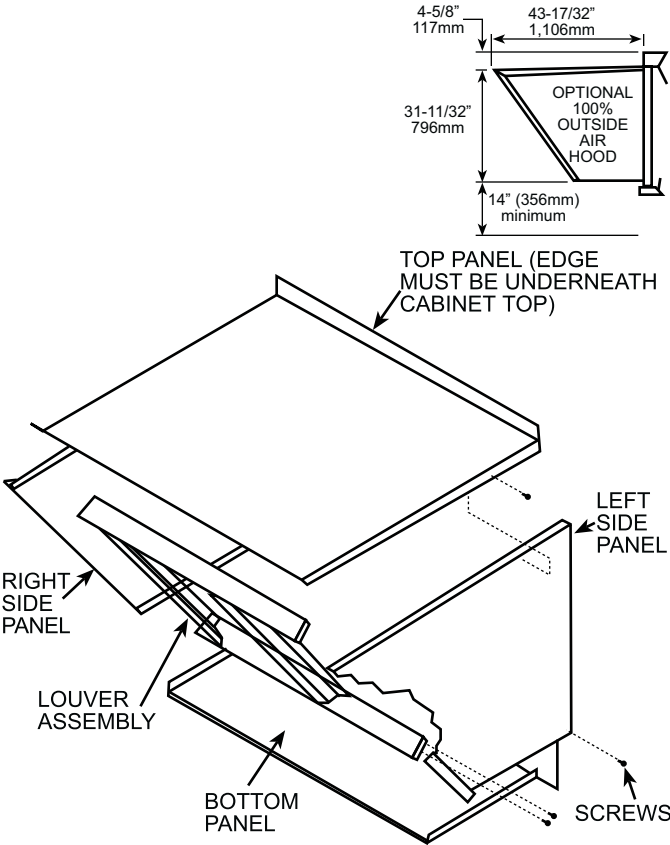
DESCRIPTION

Option AS2, Outside Air Hood, is a weatherized screened hood designed to be field assembled and installed around the horizontal inlet air opening of a Model RPBL or RBL. The air hood includes a pre-assembled louver assembly designed to help eliminate moisture from the inlet air.

| Cabinet Blowers | Models | Size | Width of Outside Air Hood | |
|-----------------|--------|----------------------|---------------------------|-------|
| | | | in. | mm |
| -- | RPBL | 500, 600, | 47 7/8 | 1,216 |
| -- | RPBL | 700, 1050 | 53 3/8 | 1,356 |
| RBL | RPBL | 400, 800, 1200, 1600 | 58 7/8 | 1,495 |

Note: The width of the outside air hood is the same as the width of the blower cabinet.

| MODEL | SIZE | 400 | 500, 600 | 700, 1050 | 800, 1200 |
|-------|------|------|----------|-----------|-----------|
| RPBL | lbs. | 96 | 87 | 92 | 96 |
| | (kg) | (44) | (39) | (42) | (44) |
| RBL | lbs. | 96 | -- | -- | -- |
| | (kg) | (44) | -- | -- | -- |

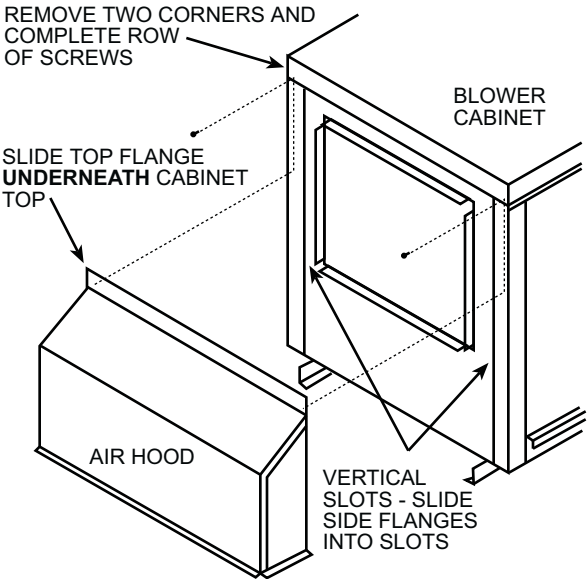


30% OUTSIDE AIR HOOD SUPPLIED WITH INLET AIR OPTIONS AR6 AND AR7
(see description in Air Control Option section)

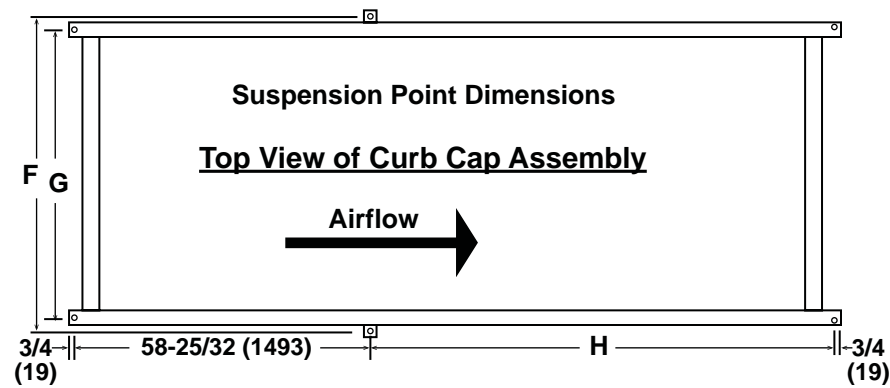
DESCRIPTION

The outside air hood included in the air inlet options that provide 30% outside air (Options AR6 and AR7) is shipped separately for field installation. The hood is factory assembled but requires field attachment to the blower cabinet. Illustrated instructions are provided.

| | RPBL | | Width of 30% Hood |
|-----|-----------|------|-------------------|
| -- | 400 | in. | 58 7/8 |
| | | (mm) | (1,495) |
| -- | 500, 600 | in. | 47 7/8 |
| | | (mm) | (1,216) |
| -- | 700, 1050 | in. | 53 3/8 |
| | | (mm) | (1,356) |
| RBL | 800, 1200 | in. | 58 7/8 |
| | | (mm) | (1,495) |



Suspension Points (Model SSCBL)

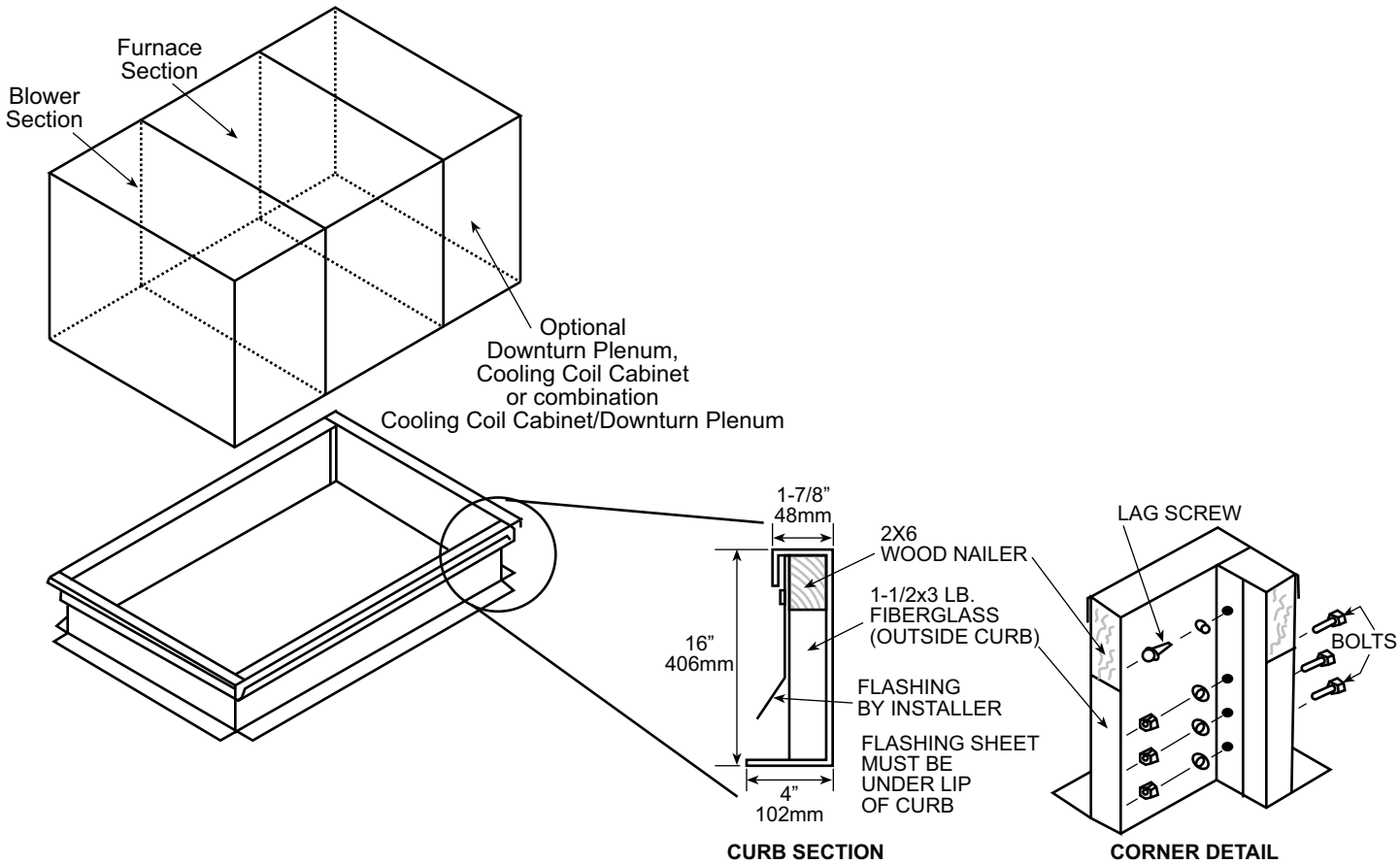


| SSCBL Size | Suspension Dimensions | | | | | |
|---------------|-----------------------|---------|--------|---------|----------------|---------|
| | F | | G | | H ^A | |
| | inches | (mm) | inches | (mm) | inches | (mm) |
| 400 | 59 9/16 | (1,513) | 54 3/8 | (1,381) | 27 3/32 | (688) |
| 500, 600 | 48 9/16 | (1,233) | 43 3/8 | (1,102) | 53 3/32 | (1,349) |
| 700 | 54 1/16 | (1,373) | 48 7/8 | (1,241) | 53 3/32 | (1,349) |
| 800 | 59 9/16 | (1,513) | 54 3/8 | (1,381) | 53 3/32 | (1,349) |
| 1050 | 54 1/16 | (1,373) | 48 7/8 | (1,241) | 79 3/32 | (2,009) |
| 1200 | 59 9/16 | (1,513) | 54 3/8 | (1,381) | 79 3/32 | (2,009) |

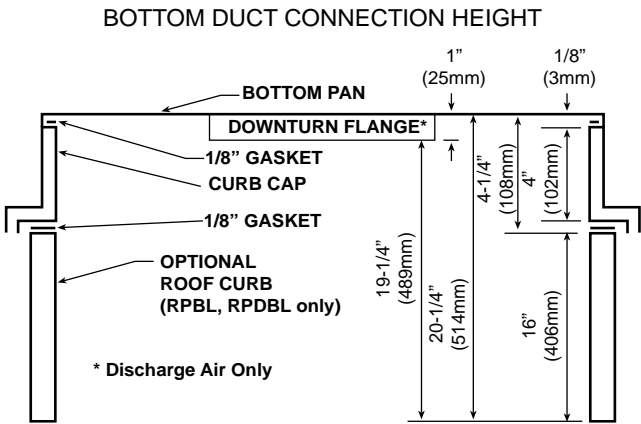
^A Dimensions E and H listed here do not apply to a system with a field-attached cooling coil cabinet (Option AU2 or AU3); see NOTE in **FIGURE 4**.

Curb Dimensions (Model RPBL & RBL)

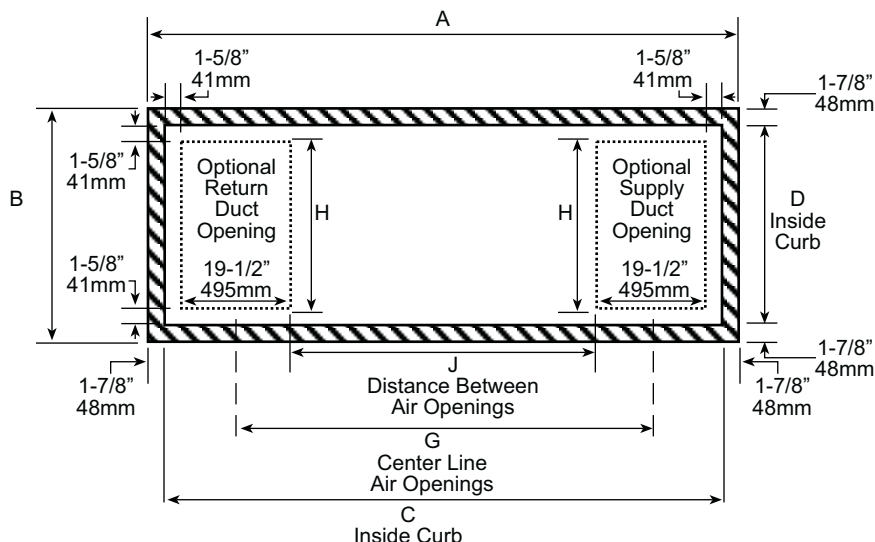
Reznor optional roof curbs are available in sizes to fit all Reznor packaged heating/makeup air systems. Roof curbs are shipped in pre-assembled sections constructed of 16 gauge aluminized steel, 2x6 wood nailers and 3# fiberglass insulation. Field assembly and installation are required.



Dimensions for Bottom Downturn Duct Flange



Curb Dimensions (Model RPBL)



Roof Curb Dimensions for Model RPBL

| Option CJ1 - Roof Curb for Heater Only | | | | | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|----------|---------|-----------|---------|--------|---------|-----------|
| SIZE | A | | B | | C* | | D* | | G | | H | | Weight |
| | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | lbs. (kg) |
| 400 | 82 1/4 | (2,089) | 54 1/2 | (1,384) | 78 1/2 | (1,994) | 50 13/16 | (1,291) | -- | -- | 47 5/8 | (1,210) | 150 (68) |
| 500, 600 | 108 1/4 | (2,750) | 43 9/16 | (1,106) | 104 1/2 | (2,654) | 39 13/16 | (1,011) | -- | -- | 36 5/8 | (930) | 167 (76) |
| 700 | 108 1/4 | (2,750) | 49 1/16 | (1,246) | 104 1/2 | (2,654) | 45 5/16 | (1,151) | -- | -- | 42 1/8 | (1,070) | 173 (78) |
| 800 | 108 1/4 | (2,750) | 54 1/2 | (1,384) | 104 1/2 | (2,654) | 50 13/16 | (1,291) | -- | -- | 47 5/8 | (1,210) | 179 (81) |
| 1050 | 134 1/4 | (3,410) | 49 1/16 | (1,246) | 130 1/2 | (3,315) | 45 5/16 | (1,151) | -- | -- | 42 1/8 | (1,070) | 202 (92) |
| 1200 | 134 1/4 | (3,410) | 54 1/2 | (1,384) | 130 1/2 | (3,315) | 50 13/16 | (1,291) | -- | -- | 47 5/8 | (1,210) | 208 (94) |
| Option CJ2 - Roof Curb for Heater Plus Factory-Installed Downturn Plenum (Option AQ5 or AQ8) | | | | | | | | | | | | | |
| SIZE | A | | B | | C* | | D* | | G | | H | | Weight |
| | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | lbs. (kg) |
| 400 | 106 1/4 | (2,699) | 54 1/2 | (1,384) | 102 1/2 | (2,604) | 50 13/16 | (1,291) | 79 13/16 | (2,027) | 47 5/8 | (1,210) | 177 (80) |
| 500, 600 | 132 1/4 | (3,359) | 43 9/16 | (1,106) | 128 1/2 | (3,264) | 39 13/16 | (1,011) | 105 13/16 | (2,688) | 36 5/8 | (930) | 193 (88) |
| 700 | 132 1/4 | (3,359) | 49 1/16 | (1,246) | 128 1/2 | (3,264) | 45 5/16 | (1,151) | 105 13/16 | (2,688) | 42 1/8 | (1,070) | 199 (90) |
| 800 | 132 1/4 | (3,359) | 54 1/2 | (1,384) | 128 1/2 | (3,264) | 50 13/16 | (1,291) | 105 13/16 | (2,688) | 47 5/8 | (1,210) | 205 (93) |
| 1050 | 158 1/4 | (4,020) | 49 1/16 | (1,246) | 154 1/2 | (3,924) | 45 5/16 | (1,151) | 131 13/16 | (3,348) | 42 1/8 | (1,070) | 228 (103) |
| 1200 | 158 1/4 | (4,020) | 54 1/2 | (1,384) | 154 1/2 | (3,924) | 50 13/16 | (1,291) | 131 13/16 | (3,348) | 47 5/8 | (1,210) | 234 (106) |
| Option CJ4 - Roof Curb for Heater Plus Field-Installed Cooling Coil Cabinet (Option AU2 or AU3) | | | | | | | | | | | | | |
| SIZE | A | | B | | C* | | D* | | G | | H | | Weight |
| | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | lbs. (kg) |
| 400 | 150 1/4 | (3,816) | 54 1/2 | (1,384) | 146 1/2 | (3,721) | 50 13/16 | (1,291) | -- | -- | 47 5/8 | (1,210) | 227 (103) |
| 500, 600 | 165 1/4 | (4,197) | 43 9/16 | (1,106) | 161 1/2 | (4,102) | 39 13/16 | (1,011) | -- | -- | 36 5/8 | (930) | 231 (105) |
| 700 | 170 3/4 | (4,337) | 49 1/16 | (1,246) | 167 | (4,242) | 45 5/16 | (1,151) | -- | -- | 42 1/8 | (1,070) | 243 (110) |
| 800 | 176 1/4 | (4,477) | 54 1/2 | (1,384) | 172 1/2 | (4,382) | 50 13/16 | (1,291) | -- | -- | 47 5/8 | (1,210) | 255 (116) |
| 1050 | 196 3/4 | (4,997) | 49 1/16 | (1,246) | 193 | (4,902) | 45 5/16 | (1,151) | -- | -- | 42 1/8 | (1,070) | 271 (123) |
| 1200 | 202 1/4 | (5,137) | 54 1/2 | (1,384) | 198 1/2 | (5,042) | 50 13/16 | (1,291) | -- | -- | 47 5/8 | (1,210) | 282 (128) |
| Option CJ5 - Roof Curb for Heater Plus Field-Installed Cooling Coil Cabinet WITH Downturn Plenum (Option AU11, AU12, AU13 or AU14) | | | | | | | | | | | | | |
| SIZE | A | | B | | C* | | D* | | G | | H | | Weight |
| | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | lbs. (kg) |
| 400 | 174 1/4 | (4,426) | 54 1/2 | 1,384 | 170 1/2 | (4,331) | 50 13/16 | (1,291) | 147 1/32 | (3,735) | 47 5/8 | (1,210) | 253 (115) |
| 500, 600 | 189 1/4 | (4,807) | 43 9/16 | 1,106 | 185 1/2 | (4,712) | 39 13/16 | (1,011) | 162 1/32 | (4,116) | 36 5/8 | (930) | 257 (117) |
| 700 | 194 3/4 | (4,947) | 49 1/16 | 1,246 | 191 | (4,851) | 45 5/16 | (1,151) | 167 17/32 | (4,255) | 42 1/8 | (1,070) | 269 (122) |
| 800 | 200 1/4 | (5,086) | 54 1/2 | 1,384 | 196 1/2 | (4,991) | 50 13/16 | (1,291) | 173 1/32 | (4,395) | 47 5/8 | (1,210) | 280 (127) |
| 1050 | 220 3/4 | (5,607) | 49 1/16 | 1,246 | 217 | (5,512) | 45 5/16 | (1,151) | 193 17/32 | (4,916) | 42 1/8 | (1,070) | 296 (134) |
| 1200 | 226 1/4 | (5,747) | 54 1/2 | 1,384 | 222 1/2 | (5,652) | 50 13/16 | (1,291) | 199 1/32 | (5,055) | 47 5/8 | (1,210) | 308 (140) |

* C and D are roof opening dimensions



DESCRIPTION/APPLICATION

Indirect-fired packaged Reznor heating/makeup air systems, Model Series, RPBL, and SSCBL, are available with an optional cooling coil cabinet that houses a large finned surface refrigerant (DX) or chilled water cooling coil. Cooling coils are available in capacities from 5 to over 40 tons (60 to 480 MBH). Depending on the size of the system, the cabinets accommodate coils with a finned surface area from 11.2 to 14.9 square feet. Large finned surface areas aid coil performance by reducing face velocities, lowering coil pressure drops, and increasing cooling capacity.

Cabinets are fully insulated with weatherproof construction for outdoor application. Standard construction is single-wall 20 gauge galvalume steel. Optional double-wall cabinet construction is available. The cooling coil cabinet has a drain trough for positive drainage under all operating conditions in compliance with ASHRAE Standard 62-1989. The drain trough is provided with a 1" FPVC connection on the exterior of the cabinet. Each side of the cooling coil cabinet has easily removable door panels for routine coil inspection and cleaning. For down discharge, an optional downturn plenum cabinet with or without discharge dampers is available.

The performance data is certified in accordance with ARI Standard 410.

For coil capacities not outlined in these tables or for special coil requirements, contact your Reznor Sales Representative.

COOLING COIL SELECTION PROCEDURE

Selecting the proper cooling coil is vital to air handling equipment performance and cost. The correctly sized coil provides the desired dehumidification and sensible cooling under all possible internal and external loads that the building may experience. In order to properly select the coil capacity, a detailed internal and external load analysis must be performed. Caution must be taken to ensure that the percentage of outside air brought into the building meets current codes. The percentage of outside air for most applications is approximately 25%. Some current codes require greater percentages of outside air, up to 100% for densely populated structures where contaminants become a significant health risk, such as schools. The current ASHRAE recommendations on proper percentages of outside air can be found in ASHRAE Standard 62-1999 "Ventilation for Acceptable Indoor Air Quality".

Review the coil performance tables for general capacity data at standard outside air (95°/75°F) and return air (80°/67°F) conditions. **The preferred method of selection is to use the Reznor Coil Selection Software.** If you do not have a copy, contact your local Reznor Sales Representative.

CONTROLS

Thermal expansion valves (TXV) and auxiliary connections for hot gas bypass are optionally available from about 5 to 15 tons per circuit. The parts used depend on the distributor dimensions.

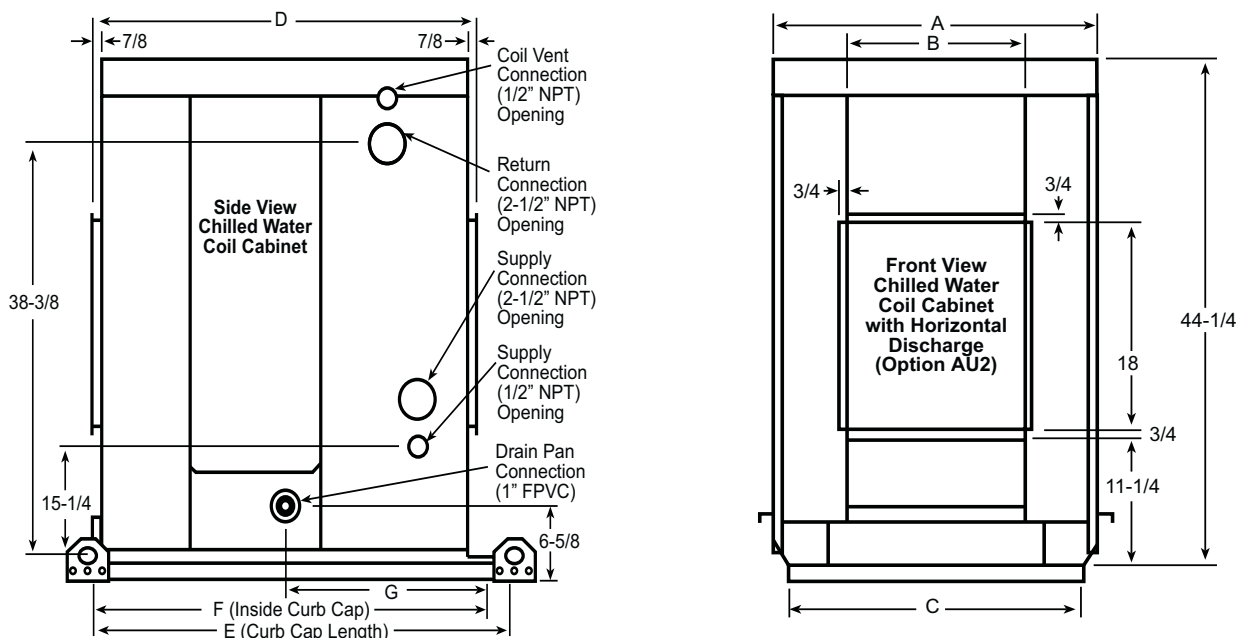
FEATURES

- Weatherized, insulated cabinet is an integral part of a Reznor® heating/makeup air system (with either a factory-installed DX or chilled water cooling coil)
- Single-wall cabinet construction (double-wall option available)
- Cabinet includes access panels for easy coil inspection or cleaning
- Available for standard refrigerant (DX) or chilled water coil
 - ◆ Capacities from 5 to over 40 tons (60 to 480 MBH)
 - ◆ 2, 3, 4 or 6 row coils with 8, 10, 12 or 14 fins per inch (fin thickness .0060") are standard

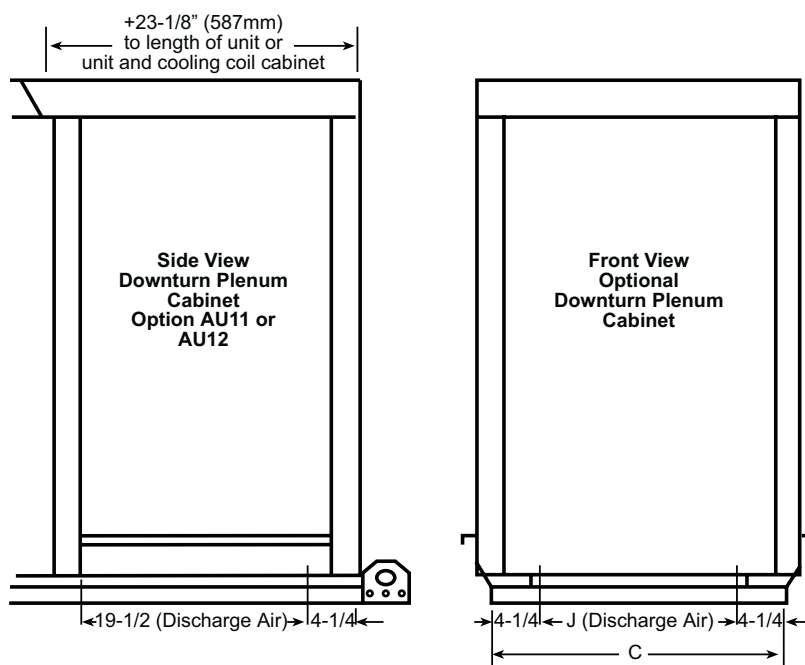
Additional Coil Options:

- ◆ Phenolic coatings
- ◆ Copper fins
- ◆ Stainless steel casing

| Table 1: Cabinet Option Designations | |
|--------------------------------------|--|
| Code | Description |
| AU2 | Cooling Coil Cabinet for a Chilled Water Coil |
| AU3 | Cooling Coil Cabinet for a DX Coil |
| AU11 | Cooling Coil Cabinet for a Chilled Water Coil plus a Downturn Plenum Cabinet |
| AU12 | Cooling Coil Cabinet for a Chilled Water Coil plus a Downturn Plenum Cabinet with 2-Position Discharge Dampers |
| AU13 | Cooling Coil Cabinet for a DX Coil plus a Downturn Plenum Cabinet |
| AU14 | Cooling Coil Cabinet for a DX Coil plus a Downturn Plenum Cabinet with 2-Position Discharge Dampers |



Discharge Damper Note: The two-position discharge dampers in Option AU12 fit in the discharge air opening. The damper motor fits inside the downturn plenum cabinet.

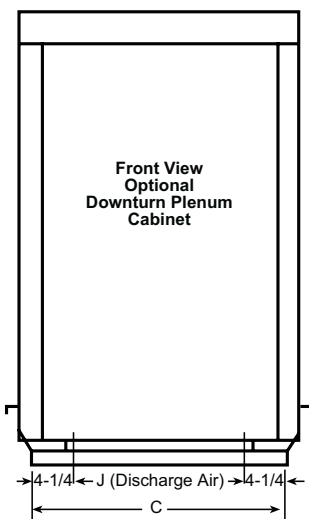
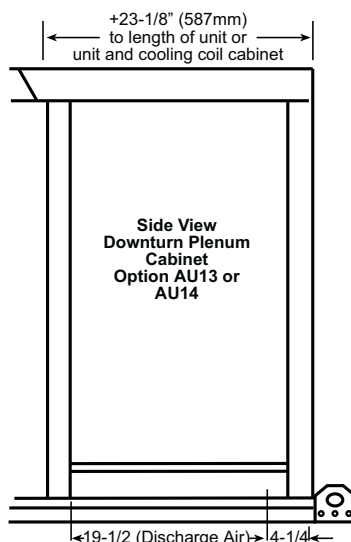
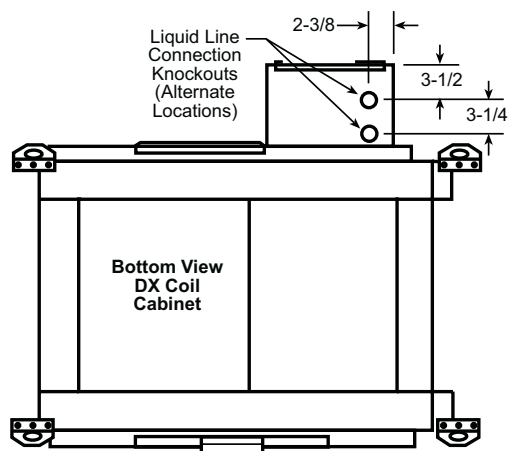
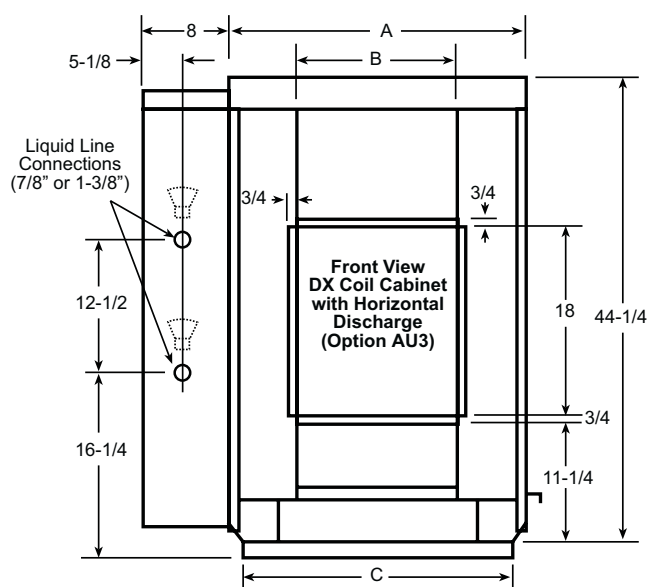
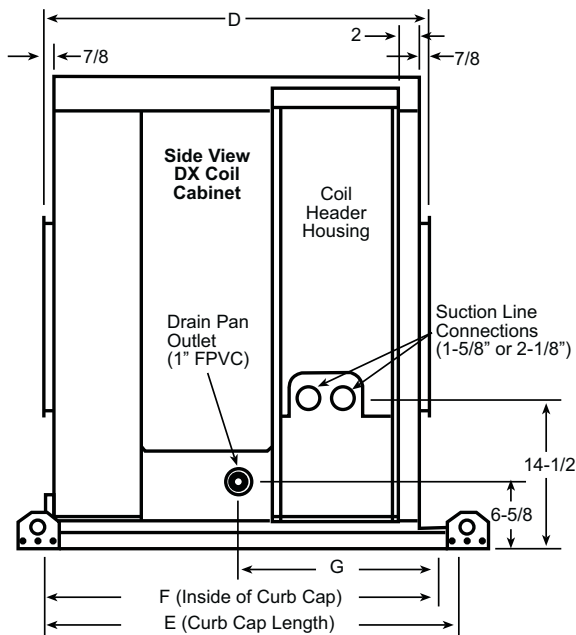


Dimensions (inches ± 1/8) and Approximate Weights (lbs)

| Furnace Size MBH | | A | B | C | D | E | | F | | G | J | | Cabinet Wt [lbs] | |
|------------------|------|---------|---------|---------|---------|------------------|---------------|------------------|---------------|--------|---------|------|------------------|---------------|
| | | | | | | Without Downturn | With Downturn | Without Downturn | With Downturn | | | | Without Downturn | With Downturn |
| 400 | in. | 58 3/4 | 45 1/2 | 56 1/8 | 67 3/8 | 70 3/8 | 94 3/8 | 68 3/8 | 92 3/8 | 34 5/8 | 47 5/8 | lbs. | 507 | 677 |
| | (mm) | (1,492) | (1,156) | (1,426) | (1,711) | (1,788) | (2,397) | (1,737) | (2,346) | (879) | (1,210) | (kg) | (230) | (307) |
| 500, 600 | in. | 47 3/4 | 34 1/2 | 45 1/8 | 56 3/8 | 59 3/8 | 83 3/8 | 57 3/8 | 81 3/8 | 29 1/8 | 36 5/8 | lbs. | 394 | 546 |
| | (mm) | (1,213) | (876) | (1,146) | (1,432) | (1,508) | (2,118) | (1,457) | (2,067) | (740) | (930) | (kg) | (179) | (248) |
| 700 | in. | 53 1/4 | 40 | 50 5/8 | 62 | 64 7/8 | 88 7/8 | 63 | 87 | 31 7/8 | 42 1/8 | lbs. | 449 | 610 |
| | (mm) | (1,353) | (1,016) | (1,286) | (1,575) | (1,648) | (2,257) | (1,600) | (2,210) | (810) | (1,070) | (kg) | (204) | (277) |
| 800 | in. | 58 3/4 | 45 1/2 | 56 1/8 | 67 3/8 | 70 3/8 | 94 3/8 | 68 3/8 | 92 3/8 | 34 5/8 | 47 5/8 | lbs. | 507 | 677 |
| | (mm) | (1,492) | (1,156) | (1,426) | (1,711) | (1,788) | (2,397) | (1,737) | (2,346) | (879) | (1,210) | (kg) | (230) | (307) |
| 1050 | in. | 53 1/4 | 40 | 50 5/8 | 62 | 64 7/8 | 88 7/8 | 63 | 87 | 31 7/8 | 42 1/8 | lbs. | 449 | 610 |
| | (mm) | (1,353) | (1,016) | (1,286) | (1,575) | (1,648) | (2,257) | (1,600) | (2,210) | (810) | (1,070) | (kg) | (204) | (277) |
| 1200 | in. | 58 3/4 | 45 1/2 | 56 1/8 | 67 3/8 | 70 3/8 | 94 3/8 | 68 3/8 | 92 3/8 | 34 5/8 | 47 5/8 | lbs. | 507 | 677 |
| | (mm) | (1,492) | (1,156) | (1,426) | (1,711) | (1,788) | (2,397) | (1,737) | (2,346) | (879) | (1,210) | (kg) | (230) | (307) |

Dimensional Data

Refrigerant (DX) Coil Cabinet - Options AU3, AU13, AU14



Discharge Damper Note: The two-position discharge dampers in Option AU14 fit in the discharge air opening. The damper motor fits inside the downturn plenum cabinet.

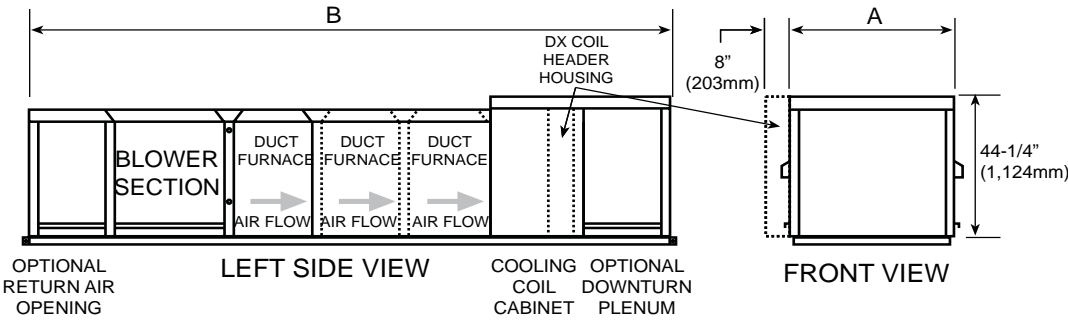
Dimensions (inches ± 1/8) and Approximate Weights (lbs)

| Furnace Size MBH | | A | B | C | D | E | | F | | G | J | | Cabinet Wt [lbs] | |
|------------------|------|---------|---------|---------|---------|------------------|---------------|------------------|---------------|--------|---------|------|------------------|---------------|
| | | | | | | Without Downturn | With Downturn | Without Downturn | With Downturn | | | | Without Downturn | With Downturn |
| 400 | in. | 58 3/4 | 45 1/2 | 56 1/8 | 67 3/8 | 70 3/8 | 94 3/8 | 68 3/8 | 92 3/8 | 34 5/8 | 47 5/8 | (kg) | 507 | 677 |
| | (mm) | (1,492) | (1,156) | (1,426) | (1,711) | (1,788) | (2,397) | (1,737) | (2,346) | (879) | (1,210) | (kg) | (230) | (307) |
| 500, 600 | in. | 47 3/4 | 34 1/2 | 45 1/8 | 56 3/8 | 59 3/8 | 83 3/8 | 57 3/8 | 81 3/8 | 29 1/8 | 36 5/8 | (kg) | 394 | 546 |
| | (mm) | (1,213) | (876) | (1,146) | (1,432) | (1,508) | (2,118) | (1,457) | (2,067) | (740) | (930) | (kg) | (179) | (248) |
| 700 | in. | 53 1/4 | 40 | 50 5/8 | 62 | 64 7/8 | 88 7/8 | 63 | 87 | 31 7/8 | 42 1/8 | (kg) | 449 | 610 |
| | (mm) | (1,353) | (1,016) | (1,286) | (1,575) | (1,648) | (2,257) | (1,600) | (2,210) | (810) | (1,070) | (kg) | (204) | (277) |
| 800 | in. | 58 3/4 | 45 1/2 | 56 1/8 | 67 3/8 | 70 3/8 | 94 3/8 | 68 3/8 | 92 3/8 | 34 5/8 | 47 5/8 | (kg) | 507 | 677 |
| | (mm) | (1,492) | (1,156) | (1,426) | (1,711) | (1,788) | (2,397) | (1,737) | (2,346) | (879) | (1,210) | (kg) | (230) | (307) |
| 1050 | in. | 53 1/4 | 40 | 50 5/8 | 62 | 64 7/8 | 88 7/8 | 63 | 87 | 31 7/8 | 42 1/8 | (kg) | 449 | 610 |
| | (mm) | (1,353) | (1,016) | (1,286) | (1,575) | (1,648) | (2,257) | (1,600) | (2,210) | (810) | (1,070) | (kg) | (204) | (277) |
| 1200 | in. | 58 3/4 | 45 1/2 | 56 1/8 | 67 3/8 | 70 3/8 | 94 3/8 | 68 3/8 | 92 3/8 | 34 5/8 | 47 5/8 | (kg) | 507 | 677 |
| | (mm) | (1,492) | (1,156) | (1,426) | (1,711) | (1,788) | (2,397) | (1,737) | (2,346) | (879) | (1,210) | (kg) | (230) | (307) |

REZNOR®

COOLING COIL CABINET (cont'd)

Overall Dimensions of Model RPBL
with Cooling Coil Cabinet, with or without downturn plenum



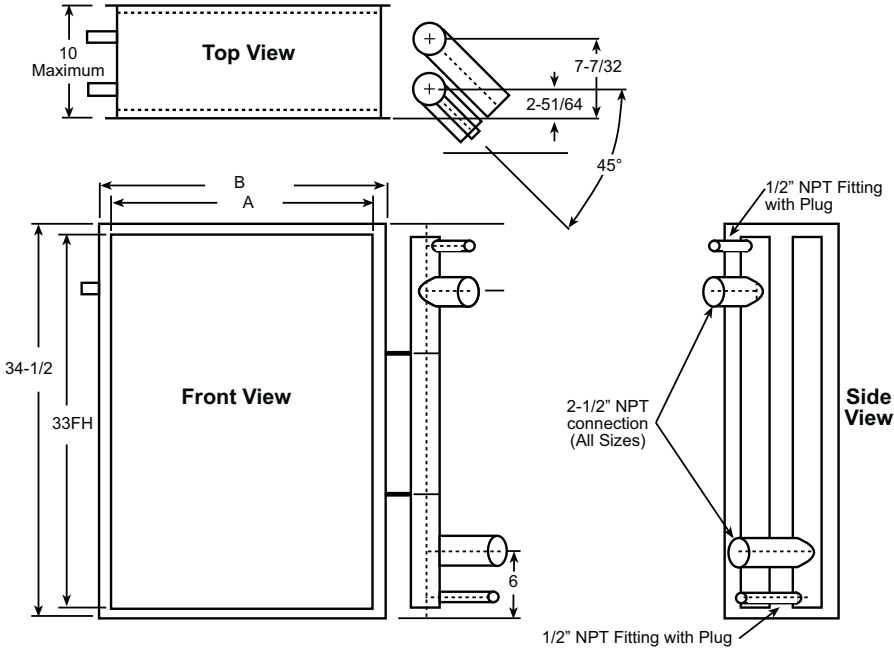
| SIZE | | A | Unit with Cooling Coil Cabinet <u>only</u> | Unit with Cooling Coil Cabinet <u>and</u> Downturn Plenum |
|----------|------|--------|--|---|
| | | | B | B |
| 400 | in. | 58 7/8 | 150 3/8 | 173 1/2 |
| | (mm) | 1,495 | 3,820 | 4,407 |
| 500, 600 | in. | 47 1/8 | 165 3/8 | 188 1/2 |
| | (mm) | 1,197 | 4,201 | 4,788 |
| 700 | in. | 53 3/8 | 171 | 194 1/8 |
| | (mm) | 1,356 | 4,343 | 4,931 |
| 800 | in. | 58 7/8 | 176 3/8 | 199 1/2 |
| | (mm) | 1,495 | 4,480 | 5,067 |
| 1050 | in. | 53 3/8 | 197 | 220 1/8 |
| | (mm) | 1,356 | 5,004 | 5,591 |
| 1200 | in. | 58 7/8 | 202 3/8 | 225 1/2 |
| | (mm) | 1,495 | 5,140 | 5,728 |

Dimensional Data (cont'd)

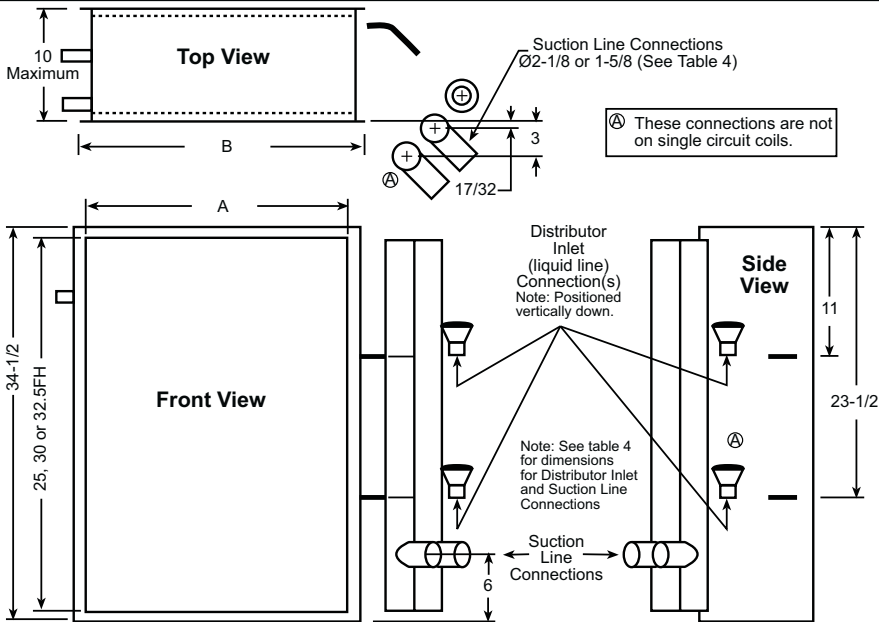
Coil Dimensions and Weights (table applies to both types of coils)

| Furnace Size MBH | A Fin Length | | B coil Length | | Maximum Finned Surface Area | | Dry Coil Weight | | | | | | | |
|---------------------|-----------------|---------|---------------------|---------|-----------------------------------|--------|-----------------|-----------|-----------|-----------|-------------|-------------|-------------|-------------|
| | | | | | | | 8 fpi | | 10 fpi | | 12 fpi | | 14 fpi | |
| | in | (mm) | in | (mm) | sq. ft. | (M2) | 3 fins/cm | 4 fins/cm | 4 fins/cm | 4 fins/cm | 4.7 fins/cm | 5.5 fins/cm | 5.5 fins/cm | 5.5 fins/cm |
| 400 | 65 | (1,651) | 67 | (1,702) | 14.9 | (1.38) | 283 | (128) | 308 | (140) | 334 | (152) | 361 | (164) |
| 500, 600 | 49 | (1,245) | 51 | (1,295) | 11.2 | (1.04) | 221 | (100) | 240 | (109) | 260 | (118) | 281 | (127) |
| 700 | 57 | (1,448) | 59 | (1,499) | 13.1 | (1.22) | 252 | (114) | 274 | (124) | 297 | (135) | 321 | (146) |
| 800 | 65 | (1,651) | 67 | (1,702) | 14.9 | (1.38) | 283 | (128) | 308 | (140) | 334 | (152) | 361 | (164) |
| 1050 | 57 | (1,448) | 59 | (1,499) | 13.1 | (1.22) | 252 | (114) | 274 | (124) | 297 | (135) | 321 | (146) |
| 1200 | 65 | (1,651) | 67 | (1,702) | 14.9 | (1.38) | 283 | (128) | 308 | (140) | 334 | (152) | 361 | (164) |

Chilled Water Coil
(Coil options to be selected with Cabinet Option AU2, AU11, or AU12)



DX Coil
(Coil options to be selected with Cabinet Option AU3, AU13, or AU14)



Heating and Cooling Airflow Ranges

| Models RPBL, SSCBL | | | | | | |
|--------------------|----------------------|--------|---------|--------|------------------------------|--------|
| With Furnace Size | Blower Airflow Range | | | | Cooling Standard Airflow | |
| | Maximum | | Minimum | | Maximum (550 SFPM) (2.8 M/s) | |
| | acfm | aM³/hr | acfm | aM³/hr | scfm | sM³/hr |
| 400 | 14,000 | 23,785 | 3,300 | 5,607 | 8,200 | 13,931 |
| 500 | 12,000 | 20,387 | 3,700 | 6,286 | 6,180 | 10,499 |
| 600 | 12,500 | 21,237 | 4,450 | 7,560 | 6,180 | 10,499 |
| 700 | 13,500 | 22,936 | 5,200 | 8,835 | 7,190 | 12,215 |
| 800 | 13,500 | 22,936 | 5,900 | 10,024 | 8,200 | 13,931 |
| 1050 | 13,500 | 22,936 | 6,500 | 11,043 | 7,190 | 12,215 |
| 1200 | 13,500 | 22,936 | 7,400 | 12,572 | 8,200 | 13,931 |

Notes for Table:

- 1) Calculate Coil Face Velocity as : [Airflow (scfm [sM³/hr]) / Finned Coil Surface Area (sq. ft. [M²])]
- 2) A general rule of thumb for required airflow is 400 scfm (680sM³/hr) per ton of cooling for return air applications. For outside air applications, the range is approximately 150 scfm per ton to 400 scfm per ton, depending on the outdoor enthalpy and humidity ratio.
- 3) To avoid the possibility of condensate blow-off, the coil face velocities should not exceed 550 sfpm.
- 4) Conversion to standard air flow is required above 1500 ft. To convert from actual airflow (acfm) to standard airflow (scfm), see **Conversion to Standard Airflow**.

Enthalpy of Saturated Air for Various Wet Bulb Temperatures

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|------------------------|---------------------|
| 50 | 20.4 |
| 50.5 | 20.6 |
| 51 | 20.9 |
| 51.5 | 21.2 |
| 52 | 21.4 |
| 52.5 | 21.7 |
| 53 | 22 |
| 53.5 | 22.3 |
| 54 | 22.6 |
| 54.5 | 22.9 |
| 55 | 23.2 |
| 55.5 | 23.5 |
| 56 | 23.8 |
| 56.5 | 24.1 |
| 57 | 24.4 |

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|------------------------|---------------------|
| 57.5 | 24.7 |
| 58 | 25.1 |
| 58.5 | 25.4 |
| 59 | 25.7 |
| 59.5 | 26.1 |
| 60 | 26.4 |
| 60.5 | 26.8 |
| 61 | 27.1 |
| 61.5 | 27.5 |
| 62 | 27.8 |
| 62.5 | 28.2 |
| 63 | 28.6 |
| 63.5 | 28.9 |
| 64 | 29.3 |
| 64.5 | 29.7 |

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|------------------------|---------------------|
| 65 | 30.1 |
| 65.5 | 30.4 |
| 66 | 30.8 |
| 66.5 | 31.2 |
| 67 | 31.6 |
| 67.5 | 32 |
| 68 | 32.4 |
| 68.5 | 32.9 |
| 69 | 33.3 |
| 69.5 | 33.7 |
| 70 | 34.1 |
| 70.5 | 34.6 |
| 71 | 35 |
| 71.5 | 35.4 |
| 72 | 35.9 |

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|------------------------|---------------------|
| 72.5 | 36.3 |
| 73 | 36.8 |
| 73.5 | 37.2 |
| 74 | 37.7 |
| 74.5 | 38.2 |
| 75 | 38.6 |
| 75.5 | 39.1 |
| 76 | 39.6 |
| 76.5 | 40 |
| 77 | 40.5 |
| 77.5 | 41 |
| 78 | 41.5 |
| 78.5 | 42 |
| 79 | 42.5 |
| 79.5 | 43 |

General Note : Enthalpy is approximately constant with constant wet bulb temperature. There is a slight variation with dry bulb temperature, but the variation is typically negligible over the range of dry bulb temperatures common to HVAC applications.

Models RPBL & SSCBL with 2 Row DX Coils

| Coils Generally for R/A Application or 100% O/A Applications in Dry Climates | | | | | | | | | | | | |
|--|------------------------|-------------------------|--------------|------|------------------------|---------------------------|-----------------|--------------|------|------------------------|---------------------------|-----------------|
| 2 Row DX Coils (R410A) | | | Minimum Coil | | | | | Maximum Coil | | | | |
| Furnace Size | Entering Wet Bulb (°F) | Cooling Air Flow (scfm) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) |
| 400, 800, 1200 | 63°F | 3,300 | 60 | .89 | 62.5 / 57.0 | 53.5 | .06 | 81 | .89 | 57.2 / 54.7 | 53.1 | .08 |
| | | 3,900 | 65 | .91 | 63.5 / 57.6 | 53.9 | .08 | 89 | .91 | 58.3 / 55.4 | 53.6 | .11 |
| | | 4,500 | 69 | .92 | 64.3 / 58.0 | 54.1 | .10 | 95 | .93 | 59.2 / 56.0 | 54.0 | .13 |
| | | 5,200 | 73 | .94 | 65.1 / 58.4 | 54.2 | .13 | 102 | .95 | 60.1 / 56.5 | 54.3 | .17 |
| | | 5,900 | 77 | .96 | 65.8 / 58.8 | 54.5 | .15 | 108 | 1.00 | 60.9 / 57.0 | 54.5 | .19 |
| | | 7,400 | 91 | .97 | 66.3 / 59.0 | 54.5 | .16 | 113 | 1.00 | 63.3 / 58.1 | 54.5 | .22 |
| | | 8,069 | 95 | 1.00 | 66.7 / 59.2 | 54.5 | .17 | 118 | 1.00 | 63.8 / 58.3 | 54.5 | .24 |
| | 65°F | 3,300 | 69 | .82 | 64.0 / 58.3 | 54.8 | .06 | 94 | .82 | 58.2 / 55.7 | 54.2 | .08 |
| | | 3,900 | 75 | .83 | 65.1 / 58.9 | 55.2 | .08 | 103 | .84 | 59.4 / 56.4 | 54.6 | .11 |
| | | 4,500 | 80 | .85 | 65.9 / 59.4 | 55.5 | .10 | 110 | .86 | 60.5 / 57.1 | 55.1 | .14 |
| | | 5,200 | 86 | .86 | 66.7 / 59.8 | 55.7 | .13 | 105 | .94 | 62.3 / 58.6 | 56.5 | .17 |
| | | 5,900 | 91 | .87 | 67.5 / 60.2 | 55.9 | .16 | 113 | .95 | 63.0 / 59.0 | 56.7 | .21 |
| | | 7,400 | 107 | .89 | 68.0 / 60.5 | 56.1 | .19 | 127 | 1.00 | 64.3 / 59.6 | 56.8 | .27 |
| | | 8,069 | 111 | .90 | 68.5 / 60.8 | 56.3 | .22 | 133 | 1.00 | 64.8 / 59.9 | 56.8 | .32 |
| | 67°F | 3,300 | 79 | .76 | 65.5 / 59.7 | 56.3 | .06 | 107 | .77 | 59.4 / 56.8 | 55.3 | .08 |
| | | 3,900 | 86 | .77 | 66.6 / 60.3 | 56.7 | .08 | 104 | .83 | 61.8 / 58.8 | 57.1 | .11 |
| | | 4,500 | 92 | .79 | 67.6 / 60.9 | 57.1 | .10 | 113 | .85 | 62.8 / 59.3 | 57.3 | .14 |
| | | 5,200 | 98 | .80 | 68.5 / 61.4 | 57.4 | .13 | 122 | .86 | 63.7 / 59.9 | 57.8 | .18 |
| | | 5,900 | 89 | .88 | 70.0 / 62.5 | 58.4 | .16 | 130 | .88 | 64.5 / 60.3 | 58.0 | .23 |
| | | 7,400 | 106 | .90 | 70.5 / 62.8 | 58.6 | .19 | 145 | .91 | 65.9 / 61.1 | 58.5 | .31 |
| | | 8,069 | 110 | .91 | 71.0 / 63.0 | 58.7 | .22 | 151 | .92 | 66.5 / 61.4 | 58.6 | .36 |
| | 69°F | 3,300 | 90 | .71 | 67.0 / 61.0 | 57.6 | .06 | 111 | .75 | 61.6 / 58.9 | 57.4 | .08 |
| | | 3,900 | 97 | .72 | 68.3 / 61.7 | 58.1 | .08 | 122 | .76 | 62.8 / 59.7 | 58.0 | .11 |
| | | 4,500 | 89 | .79 | 70.5 / 63.3 | 59.5 | .11 | 132 | .78 | 63.8 / 60.3 | 58.4 | .14 |
| | | 5,200 | 95 | .80 | 71.4 / 63.8 | 59.8 | .14 | 141 | .79 | 65.0 / 61.0 | 58.9 | .18 |
| | | 5,900 | 105 | .80 | 71.7 / 63.9 | 59.8 | .16 | 150 | .81 | 65.9 / 61.6 | 59.3 | .23 |
| | | 7,400 | 125 | .81 | 72.2 / 64.2 | 60.1 | .19 | 167 | .84 | 67.5 / 62.5 | 59.9 | .34 |
| | | 8,069 | 130 | .82 | 72.7 / 64.5 | 60.3 | .22 | 174 | .85 | 68.0 / 62.8 | 60.1 | .39 |
| | 71°F | 3,300 | 88 | .70 | 70.0 / 63.5 | 60.1 | .07 | 127 | .70 | 62.5 / 59.8 | 58.4 | .08 |
| | | 3,900 | 96 | .72 | 71.1 / 64.2 | 60.7 | .09 | 140 | .71 | 63.9 / 60.7 | 59.0 | .11 |
| | | 4,500 | 102 | .73 | 72.1 / 64.7 | 61.0 | .11 | 152 | .72 | 65.0 / 61.4 | 59.5 | .14 |
| | | 5,200 | 109 | .74 | 73.1 / 65.2 | 61.3 | .14 | 164 | .73 | 66.1 / 62.1 | 60.0 | .18 |
| | | 5,900 | 120 | .74 | 73.4 / 65.4 | 61.4 | .16 | 174 | .74 | 67.1 / 62.7 | 60.5 | .23 |
| | | 7,400 | 144 | .75 | 74.0 / 65.7 | 61.6 | .19 | 194 | .77 | 68.8 / 63.7 | 61.1 | .34 |
| | | 8,069 | 149 | .76 | 74.5 / 66.0 | 61.8 | .22 | 202 | .78 | 69.5 / 64.1 | 61.4 | .39 |
| 500, 600 | 63°F | 3,700 | 52 | .96 | 65.0 / 58.5 | 54.5 | .11 | 74 | .95 | 59.8 / 56.4 | 54.3 | .15 |
| | | 4,450 | 56 | 1.00 | 65.9 / 58.9 | 54.5 | .14 | 81 | 1.00 | 60.9 / 57.0 | 54.5 | .19 |
| | | 5,200 | 65 | 1.00 | 66.0 / 59.0 | 54.5 | .14 | 88 | 1.00 | 61.8 / 57.5 | 54.5 | .24 |
| | | 6,082 | 70 | 1.00 | 66.8 / 59.3 | 54.5 | .17 | 95 | 1.00 | 62.9 / 57.9 | 54.5 | .28 |
| | 65°F | 3,700 | 61 | .87 | 66.6 / 59.9 | 56.0 | .11 | 85 | .88 | 61.2 / 57.6 | 55.5 | .17 |
| | | 4,450 | 66 | .89 | 67.7 / 60.4 | 56.1 | .16 | 93 | .90 | 62.4 / 58.4 | 56.1 | .23 |
| | | 5,200 | 76 | .90 | 67.8 / 60.5 | 56.2 | .16 | 100 | .92 | 63.4 / 58.9 | 56.3 | .27 |
| | | 6,082 | 81 | .92 | 68.6 / 60.9 | 56.4 | .22 | 107 | .95 | 64.4 / 59.5 | 56.7 | .36 |
| | 67°F | 3,700 | 71 | .80 | 68.3 / 61.3 | 57.4 | .11 | 99 | .81 | 62.4 / 58.8 | 56.7 | .17 |
| | | 4,450 | 76 | .82 | 69.4 / 61.9 | 57.7 | .16 | 108 | .83 | 63.8 / 59.6 | 57.2 | .23 |
| | | 5,200 | 88 | .82 | 69.5 / 62.0 | 57.8 | .16 | 116 | .85 | 64.9 / 60.3 | 57.7 | .30 |
| | | 6,082 | 94 | .84 | 70.4 / 62.4 | 58.0 | .22 | 123 | .88 | 66.0 / 60.9 | 58.1 | .39 |
| | 69°F | 3,700 | 81 | .74 | 69.9 / 62.7 | 58.8 | .11 | 112 | .75 | 63.7 / 60.0 | 58.0 | .17 |
| | | 4,450 | 87 | .76 | 71.1 / 63.4 | 59.3 | .16 | 123 | .77 | 65.2 / 60.9 | 58.6 | .23 |
| | | 5,200 | 101 | .76 | 71.3 / 63.5 | 59.4 | .16 | 117 | .85 | 67.3 / 62.5 | 60.0 | .30 |
| | | 6,082 | 107 | .78 | 72.2 / 64.0 | 59.7 | .22 | 126 | .87 | 68.3 / 63.0 | 60.3 | .39 |
| | 71°F | 3,700 | 91 | .69 | 71.6 / 64.2 | 60.4 | .11 | 127 | .71 | 65.1 / 61.2 | 59.1 | .17 |
| | | 4,450 | 99 | .71 | 72.9 / 64.9 | 60.9 | .16 | 126 | .76 | 67.5 / 63.1 | 60.9 | .23 |
| | | 5,200 | 113 | .71 | 73.1 / 65.0 | 60.9 | .16 | 136 | .78 | 68.6 / 63.7 | 61.3 | .30 |
| | | 6,082 | 121 | .73 | 74.1 / 65.6 | 61.4 | .22 | 147 | .79 | 69.7 / 64.3 | 61.6 | .39 |
| 700, 1050 | 63°F | 5,200 | 67 | .97 | 65.9 / 58.8 | 54.4 | .15 | 96 | .97 | 60.9 / 56.9 | 54.4 | .19 |
| | | 5,850 | 76 | .96 | 65.8 / 58.8 | 54.5 | .15 | 101 | 1.00 | 61.6 / 57.3 | 54.5 | .23 |
| | | 6,500 | 80 | .98 | 66.3 / 59.0 | 54.5 | .16 | 107 | 1.00 | 62.2 / 57.6 | 54.5 | .24 |
| | | 7,076 | 83 | 1.00 | 66.7 / 59.2 | 54.5 | .19 | 111 | 1.00 | 62.9 / 57.9 | 54.5 | .26 |
| | 65°F | 5,200 | 79 | .88 | 67.6 / 60.3 | 56.0 | .16 | 110 | .90 | 62.4 / 58.3 | 55.9 | .23 |
| | | 5,850 | 90 | .88 | 67.5 / 60.2 | 55.9 | .16 | 115 | .92 | 63.2 / 58.8 | 56.2 | .28 |
| | | 6,500 | 93 | .89 | 68.1 / 60.5 | 56.1 | .19 | 121 | .93 | 63.9 / 59.2 | 56.5 | .31 |
| | | 7,076 | 97 | .90 | 68.5 / 60.8 | 56.3 | .22 | 114 | 1.00 | 65.0 / 60.0 | 56.8 | .32 |
| | 67°F | 5,200 | 90 | .81 | 69.3 / 61.8 | 57.6 | .16 | 112 | .89 | 64.7 / 60.5 | 58.2 | .21 |
| | | 5,850 | 103 | .81 | 69.2 / 61.8 | 57.7 | .16 | 119 | .91 | 65.4 / 60.9 | 58.5 | .26 |
| | | 6,500 | 107 | .82 | 69.9 / 62.1 | 57.8 | .19 | 125 | .92 | 66.1 / 61.3 | 58.7 | .31 |
| | | 7,076 | 111 | .83 | 70.4 / 62.4 | 58.0 | .22 | 130 | .93 | 66.6 / 61.5 | 58.7 | .36 |
| | 69°F | 5,200 | 103 | .76 | 71.1 / 63.3 | 59.1 | .16 | 129 | .82 | 66.1 / 61.8 | 59.5 | .23 |
| | | 5,850 | 98 | .82 | 72.1 / 64.2 | 60.1 | .17 | 137 | .83 | 66.9 / 62.2 | 59.7 | .28 |
| | | 6,500 | 122 | .76 | 71.6 / 63.6 | 59.4 | .19 | 144 | .85 | 67.6 / 62.6 | 60.0 | .34 |
| | | 7,076 | 111 | .84 | 72.8 / 64.6 | 60.4 | .22 | 150 | .86 | 68.2 / 62.9 | 60.2 | .39 |
| | 71°F | 5,200 | 104 | .75 | 73.5 / 65.5 | 61.5 | .16 | 150 | .75 | 67.3 / 62.9 | 60.7 | .23 |
| | | 5,850 | 114 | .76 | 73.9 / 65.7 | 61.7 | .17 | 159 | .76 | 68.2 / 63.4 | 61.0 | .28 |
| | | 6,500 | 123 | .76 | 74.1 / 65.8 | 61.7 | .19 | 167 | .78 | 69.0 / 63.9 | 61.4 | .34 |
| | | 7,076 | 128 | .77 | 74.6 / 66.1 | 61.9 | .22 | 173 | .79 | 69.6 / 64.2 | 61.5 | .39 |

Notes for Table:

- 1) Available for one external circuit, one distributor only.
- 2) Based on 3/8" tube OD with 1" tube spacing, circulated for refrigerant velocity > 1000 fpm, refrigerant PD < 10 psi.
- 3) Multiply Total MBH by SHR to get Sensible MBH.
- 4) Values shown are based on 45° SST, 100° LLT, 10° superheat. Entering DB is based on WB shown at 45% RH (DB has minor impact on capacity and SHR). Capacities will be higher at lower evaporator SST's (not recommended for outside air) and capacities will be lower at higher evaporator SST's. Evaporator plots are produced by the coil selection software.
- 5) Available fin spacings are 8, 10, 12, 14. Available tube diameters are 3/8" and 1/2".
- 6) The "minimum coil" is 8 fpi at the minimum finned height resulting in less than 500 fpm face velocity when possible. The "maximum coil" is 14 fpi with the maximum allowable finned height. Absolute maximum face velocity is 550 fpm.

| Coils Generally for 100% O/A Application in Mild Climates, ERV Applications, R/A Applications | | | | | | | | | | | | |
|---|------------------------|-------------------------|--------------|------|------------------------|---------------------------|-----------------|--------------|------|------------------------|---------------------------|-----------------|
| 3 Row DX Coils (R410A) | | | Minimum Coil | | | | | Maximum Coil | | | | |
| Furnace Size | Entering Wet Bulb (°F) | Cooling Air Flow (scfm) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) |
| 400, 800, 1200 | 64°F | 3,300 | 81 | .85 | 59.2 / 55.9 | 53.8 | .10 | 102 | .85 | 54.1 / 53.5 | 53.2 | .12 |
| | | 3,900 | 89 | .87 | 60.3 / 56.5 | 54.1 | .14 | 114 | .87 | 54.9 / 54.2 | 53.9 | .16 |
| | | 4,500 | 95 | .89 | 61.2 / 57.1 | 54.6 | .17 | 125 | .89 | 55.7 / 54.8 | 54.4 | .21 |
| | | 5,200 | 102 | .91 | 62.1 / 57.7 | 55.0 | .22 | 136 | .92 | 56.5 / 55.4 | 54.8 | .27 |
| | | 5,900 | 104 | 1.00 | 62.4 / 58.3 | 55.7 | .24 | 146 | .94 | 57.1 / 55.9 | 55.3 | .34 |
| | | 7,400 | 127 | 1.00 | 62.7 / 58.5 | 55.7 | .27 | 165 | 1.00 | 58.3 / 56.7 | 55.7 | .45 |
| | | 8,069 | 133 | 1.00 | 63.4 / 58.7 | 55.7 | .29 | 177 | 1.00 | 58.7 / 56.9 | 55.7 | .36 |
| | 67°F | 3,300 | 99 | .76 | 61.1 / 57.6 | 55.5 | .10 | 126 | .77 | 55.3 / 54.8 | 54.6 | .13 |
| | | 3,900 | 108 | .78 | 62.3 / 58.4 | 56.1 | .14 | 140 | .78 | 56.4 / 55.6 | 55.2 | .18 |
| | | 4,500 | 117 | .79 | 63.3 / 59.0 | 56.5 | .17 | 152 | .80 | 57.3 / 56.3 | 55.8 | .23 |
| | | 5,200 | 124 | .82 | 64.4 / 59.7 | 57.0 | .22 | 165 | .82 | 58.2 / 57.1 | 56.6 | .30 |
| | | 5,900 | 126 | .89 | 64.8 / 60.5 | 58.1 | .26 | 180 | .83 | 58.8 / 57.5 | 56.9 | .24 |
| | | 7,400 | 153 | .90 | 65.2 / 60.8 | 58.4 | .29 | 206 | .86 | 60.2 / 58.4 | 57.5 | .35 |
| | | 8,069 | 159 | .92 | 65.7 / 61.1 | 58.6 | .33 | 216 | .88 | 60.7 / 58.8 | 57.8 | .40 |
| | 70°F | 3,300 | 118 | .70 | 63.1 / 59.4 | 57.3 | .10 | 152 | .70 | 56.4 / 55.9 | 55.7 | .13 |
| | | 3,900 | 129 | .71 | 64.4 / 60.3 | 58.0 | .14 | 168 | .71 | 57.8 / 57.0 | 56.7 | .18 |
| | | 4,500 | 129 | .77 | 65.8 / 61.8 | 59.7 | .20 | 187 | .72 | 58.4 / 57.5 | 57.1 | .17 |
| | | 5,200 | 138 | .77 | 67.3 / 62.4 | 59.8 | .22 | 205 | .73 | 59.4 / 58.2 | 57.6 | .21 |
| | | 5,900 | 154 | .77 | 67.5 / 62.6 | 60.1 | .23 | 221 | .75 | 60.3 / 58.9 | 58.2 | .26 |
| | | 7,400 | 187 | .78 | 67.9 / 62.8 | 60.2 | .25 | 251 | .77 | 61.9 / 60.1 | 59.2 | .37 |
| | | 8,069 | 196 | .79 | 68.5 / 63.1 | 60.3 | .29 | 263 | .78 | 62.5 / 60.5 | 59.5 | .43 |
| | 73°F | 3,300 | 130 | .67 | 65.5 / 62.1 | 60.4 | .12 | 183 | .63 | 57.3 / 56.8 | 56.7 | .10 |
| | | 3,900 | 143 | .67 | 67.2 / 62.9 | 60.7 | .14 | 205 | .64 | 58.5 / 57.8 | 57.5 | .14 |
| | | 4,500 | 155 | .68 | 68.3 / 63.7 | 61.4 | .17 | 226 | .65 | 59.6 / 58.6 | 58.2 | .17 |
| | | 5,200 | 163 | .72 | 69.1 / 64.6 | 62.4 | .26 | 247 | .66 | 60.7 / 59.5 | 59.0 | .21 |
| | | 5,900 | 186 | .69 | 69.7 / 64.5 | 62.0 | .23 | 266 | .67 | 61.7 / 60.3 | 59.7 | .26 |
| | | 7,400 | 227 | .70 | 70.1 / 64.8 | 62.2 | .25 | 303 | .70 | 63.6 / 61.6 | 60.7 | .37 |
| | | 8,069 | 237 | .71 | 70.7 / 65.2 | 62.6 | .29 | 317 | .71 | 64.3 / 62.1 | 61.1 | .43 |
| | 76°F | 3,300 | 154 | .60 | 67.7 / 63.8 | 61.9 | .10 | 216 | .58 | 58.2 / 57.7 | 57.6 | .10 |
| | | 3,900 | 165 | .63 | 69.0 / 65.0 | 63.1 | .16 | 243 | .59 | 59.6 / 58.8 | 58.5 | .14 |
| | | 4,500 | 164 | .67 | 71.1 / 66.8 | 64.9 | .20 | 267 | .60 | 60.8 / 59.8 | 59.4 | .17 |
| | | 5,200 | 176 | .68 | 72.3 / 67.5 | 65.4 | .26 | 292 | .61 | 62.1 / 60.8 | 60.2 | .21 |
| | | 5,900 | 221 | .63 | 71.9 / 66.5 | 64.0 | .23 | 315 | .62 | 63.2 / 61.7 | 61.0 | .26 |
| | | 7,400 | 269 | .63 | 72.4 / 66.8 | 64.2 | .25 | 358 | .64 | 65.2 / 63.3 | 62.5 | .37 |
| | | 8,069 | 281 | .64 | 73.1 / 67.2 | 64.5 | .29 | 375 | .64 | 66.0 / 63.8 | 62.8 | .43 |
| 500, 600 | 64°F | 3,700 | 73 | .92 | 61.9 / 57.6 | 55.0 | .18 | 93 | .94 | 56.7 / 55.7 | 55.2 | .22 |
| | | 4,450 | 74 | 1.00 | 63.2 / 58.7 | 55.7 | .22 | 105 | .97 | 57.6 / 56.3 | 55.6 | .30 |
| | | 5,200 | 87 | 1.00 | 63.1 / 58.6 | 55.7 | .22 | 115 | 1.00 | 58.3 / 56.8 | 55.7 | .40 |
| | | 6,082 | 95 | 1.00 | 64.2 / 59.0 | 55.7 | .28 | 126 | 1.00 | 59.5 / 57.3 | 55.7 | .46 |
| | 67°F | 3,700 | 90 | .81 | 64.1 / 59.6 | 57.0 | .20 | 114 | .84 | 58.4 / 57.3 | 56.8 | .24 |
| | | 4,450 | 90 | .92 | 65.2 / 60.9 | 58.6 | .26 | 128 | .86 | 59.5 / 58.1 | 57.4 | .34 |
| | | 5,200 | 105 | .92 | 65.1 / 60.9 | 58.6 | .25 | 139 | .89 | 60.4 / 58.8 | 58.0 | .45 |
| | | 6,082 | 114 | .95 | 66.0 / 61.4 | 58.9 | .31 | 151 | .92 | 61.3 / 59.4 | 58.4 | .59 |
| | 70°F | 3,700 | 109 | .73 | 66.2 / 61.5 | 59.0 | .20 | 139 | .75 | 59.9 / 58.8 | 58.3 | .27 |
| | | 4,450 | 109 | .82 | 67.5 / 63.0 | 60.7 | .27 | 154 | .78 | 61.2 / 59.8 | 59.1 | .37 |
| | | 5,200 | 129 | .82 | 67.4 / 63.0 | 60.8 | .27 | 168 | .80 | 62.3 / 60.6 | 59.8 | .49 |
| | | 6,082 | 138 | .85 | 68.4 / 63.6 | 61.2 | .36 | 187 | .81 | 63.1 / 61.1 | 60.1 | .43 |
| | 73°F | 3,700 | 129 | .67 | 68.4 / 63.5 | 61.0 | .20 | 167 | .68 | 61.4 / 60.3 | 59.8 | .27 |
| | | 4,450 | 131 | .74 | 69.7 / 65.1 | 62.9 | .27 | 190 | .69 | 62.5 / 61.1 | 60.5 | .26 |
| | | 5,200 | 155 | .74 | 69.6 / 65.0 | 62.8 | .27 | 208 | .71 | 63.7 / 61.9 | 61.1 | .34 |
| | | 6,082 | 166 | .76 | 70.7 / 65.7 | 63.4 | .36 | 227 | .73 | 64.9 / 62.8 | 61.8 | .43 |
| | 76°F | 3,700 | 137 | .64 | 71.7 / 66.6 | 64.3 | .20 | 203 | .62 | 62.4 / 61.2 | 60.7 | .20 |
| | | 4,450 | 158 | .65 | 72.4 / 67.0 | 64.6 | .23 | 228 | .63 | 63.9 / 62.4 | 61.8 | .26 |
| | | 5,200 | 186 | .65 | 72.3 / 66.9 | 64.4 | .23 | 249 | .64 | 65.2 / 63.4 | 62.6 | .34 |
| | | 6,082 | 201 | .66 | 73.5 / 67.7 | 65.1 | .29 | 271 | .66 | 66.6 / 64.4 | 63.4 | .43 |
| 700, 1050 | 64°F | 5,200 | 90 | 1.00 | 62.7 / 58.5 | 55.7 | .24 | 126 | .95 | 57.3 / 56.0 | 55.3 | .30 |
| | | 5,850 | 110 | .92 | 62.5 / 57.9 | 55.1 | .22 | 135 | .97 | 57.9 / 56.4 | 55.6 | .37 |
| | | 6,500 | 109 | 1.00 | 63.1 / 58.6 | 55.7 | .25 | 144 | 1.00 | 58.4 / 56.8 | 55.7 | .45 |
| | | 7,076 | 114 | 1.00 | 63.7 / 58.9 | 55.7 | .29 | 151 | 1.00 | 58.9 / 57.1 | 55.7 | .52 |
| | 67°F | 5,200 | 108 | .90 | 65.0 / 60.7 | 58.4 | .26 | 153 | .85 | 59.2 / 57.8 | 57.1 | .34 |
| | | 5,850 | 135 | .82 | 64.8 / 60.0 | 57.3 | .24 | 163 | .87 | 59.9 / 58.4 | 57.7 | .42 |
| | | 6,500 | 132 | .91 | 65.3 / 60.9 | 58.5 | .29 | 173 | .89 | 60.6 / 58.8 | 57.9 | .51 |
| | | 7,076 | 137 | .93 | 65.8 / 61.2 | 58.7 | .33 | 181 | .90 | 61.1 / 59.2 | 58.2 | .40 |
| | 70°F | 5,200 | 132 | .81 | 67.2 / 62.8 | 60.6 | .28 | 186 | .76 | 60.9 / 59.5 | 58.8 | .26 |
| | | 5,850 | 162 | .74 | 67.1 / 62.1 | 59.5 | .24 | 199 | .78 | 61.7 / 60.1 | 59.3 | .32 |
| | | 6,500 | 160 | .82 | 67.6 / 63.0 | 60.7 | .31 | 211 | .79 | 62.4 / 60.5 | 59.6 | .38 |
| | | 7,076 | 166 | .83 | 68.2 / 63.4 | 61.0 | .36 | 222 | .80 | 62.9 / 60.9 | 59.9 | .43 |
| | 73°F | 5,200 | 157 | .71 | 70.1 / 64.9 | 62.4 | .23 | 225 | .69 | 62.3 / 60.9 | 60.3 | .26 |
| | | 5,850 | 174 | .71 | 70.3 / 65.0 | 62.4 | .24 | 242 | .70 | 63.2 / 61.5 | 60.7 | .32 |
| | | 6,500 | 191 | .72 | 70.5 / 65.1 | 62.5 | .25 | 256 | .71 | 64.0 / 62.1 | 61.2 | .38 |
| | | 7,076 | 199 | .72 | 71.1 / 65.5 | 62.8 | .29 | 268 | .72 | 64.7 / 62.6 | 61.6 | .43 |
| | 76°F | 5,200 | 187 | .64 | 72.3 / 66.9 | 64.4 | .23 | 269 | .63 | 63.8 / 62.2 | 61.5 | .26 |
| | | 5,850 | 204 | .67 | 72.1 / 67.2 | 65.0 | .29 | 288 | .63 | 64.8 / 63.0 | 62.2 | .32 |
| | | 6,500 | 228 | .65 | 72.7 / 67.1 | 64.6 | .25 | 305 | .64 | 65.7 / 63.7 | 62.8 | .38 |
| | | 7,076 | 237 | .65 | 73.4 / 67.6 | 65.0 | .29 | 319 | .65 | 66.4 / 64.2 | 63.2 | .43 |

Notes for Table:

- 1) Available with 1 or 2 external circuits (distributors) in interlaced configuration. Circuit capacities (distributors) do not have to be equal.
- 2) Based on 3/8" or 1/2" tube OD with 1.25" tube spacing (1.00" available), circuited for refrigerant velocity > 1000 fpm, refrigerant PD < 10 psi. Some discontinuities may be noted in MBH, SHR, Air PD, etc due to changes in tube OD and circuited in order to maintain adequate refrigerant velocity and PD.
- 3) Multiply Total MBH by SHR to get Sensible MBH.
- 4) Values shown are based on 45° SST, 100° LLT, 10° superheat. Entering DB is based on WB shown at 45% RH (DB has minor impact on capacity and SHR). Capacities will be higher at lower evaporator SST's (not recommended for outside air) and capacities will be lower at higher evaporator SST's. Evaporator plots are produced by the coil selection software.
- 5) Available fin spacings are 8, 10, 12, 14. Available tube diameters are 3/8" and 1/2".
- 6) The "minimum coil" is 8 fpi at the minimum finned height resulting in less than 500 fpm face velocity when possible. The "maximum coil" is 14 fpi with the maximum allowable finned height. Absolute maximum face velocity is 550 fpm.

| Coils Generally for 100% O/A Application in Warm Climates, Dehumidification | | | | | | | | | | | | |
|---|------------------------|-------------------------|--------------|-----|------------------------|---------------------------|-----------------|--------------|-----|------------------------|---------------------------|-----------------|
| 4 Row DX Coils (R410A) | | | Minimum Coil | | | | | Maximum Coil | | | | |
| Furnace Size | Entering Wet Bulb (°F) | Cooling Air Flow (scfm) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) |
| 400, 800, 1200 | 67°F | 3,300 | 111 | .78 | 58.2 / 56.4 | 55.4 | .15 | 144 | .74 | 52.7 / 52.7 | 52.7 | .18 |
| | | 3,900 | 121 | .80 | 59.3 / 57.3 | 56.2 | .21 | 161 | .75 | 53.7 / 53.6 | 53.6 | .24 |
| | | 4,500 | 136 | .79 | 60.3 / 57.6 | 56.1 | .23 | 188 | .75 | 53.6 / 53.4 | 53.3 | .23 |
| | | 5,200 | 148 | .80 | 61.2 / 58.2 | 56.5 | .29 | 207 | .76 | 54.5 / 54.2 | 54.0 | .29 |
| | | 5,900 | 166 | .81 | 61.4 / 58.3 | 56.5 | .31 | 225 | .77 | 55.2 / 54.8 | 54.7 | .35 |
| | | 7,400 | 202 | .81 | 61.9 / 58.6 | 56.7 | .34 | 260 | .80 | 56.6 / 55.9 | 55.6 | .50 |
| | | 8,069 | 212 | .82 | 62.4 / 58.9 | 56.9 | .39 | 273 | .81 | 57.2 / 56.3 | 55.9 | .57 |
| | 70°F | 3,300 | 137 | .69 | 59.6 / 57.5 | 56.3 | .14 | 181 | .66 | 52.6 / 52.6 | 52.6 | .14 |
| | | 3,900 | 152 | .70 | 60.9 / 58.3 | 56.9 | .18 | 205 | .67 | 53.6 / 53.5 | 53.5 | .18 |
| | | 4,500 | 142 | .78 | 63.3 / 60.8 | 59.5 | .27 | 227 | .68 | 54.5 / 54.3 | 54.2 | .23 |
| | | 5,200 | 180 | .72 | 63.1 / 59.9 | 58.2 | .29 | 251 | .69 | 55.5 / 55.2 | 55.1 | .29 |
| | | 5,900 | 201 | .73 | 63.3 / 60.0 | 58.2 | .31 | 272 | .70 | 56.3 / 55.9 | 55.8 | .35 |
| | | 7,400 | 246 | .73 | 63.7 / 60.3 | 58.5 | .34 | 313 | .72 | 58.0 / 57.2 | 56.9 | .50 |
| | | 8,069 | 258 | .74 | 64.4 / 60.7 | 58.7 | .39 | 330 | .73 | 58.6 / 57.8 | 57.5 | .57 |
| | 73°F | 3,300 | 163 | .63 | 61.1 / 58.9 | 57.7 | .14 | 214 | .61 | 53.2 / 53.2 | 53.2 | .14 |
| | | 3,900 | 181 | .64 | 62.5 / 59.9 | 58.5 | .18 | 243 | .62 | 54.4 / 54.3 | 54.3 | .18 |
| | | 4,500 | 197 | .65 | 63.7 / 60.7 | 59.1 | .23 | 269 | .62 | 55.4 / 55.2 | 55.1 | .23 |
| | | 5,200 | 215 | .66 | 64.8 / 61.5 | 59.8 | .29 | 297 | .63 | 56.5 / 56.2 | 56.1 | .29 |
| | | 5,900 | 239 | .66 | 65.2 / 61.7 | 59.9 | .31 | 323 | .64 | 57.5 / 57.1 | 57.0 | .35 |
| | | 7,400 | 292 | .66 | 65.7 / 62.1 | 60.3 | .34 | 371 | .66 | 59.4 / 58.6 | 58.3 | .50 |
| | | 8,069 | 306 | .67 | 66.4 / 62.6 | 60.7 | .39 | 391 | .67 | 60.1 / 59.2 | 58.8 | .57 |
| | 76°F | 3,300 | 191 | .58 | 62.6 / 60.3 | 59.1 | .14 | 250 | .57 | 53.9 / 53.9 | 53.9 | .14 |
| | | 3,900 | 212 | .59 | 64.1 / 61.4 | 60.0 | .18 | 283 | .57 | 55.2 / 55.2 | 55.2 | .18 |
| | | 4,500 | 230 | .60 | 65.5 / 62.4 | 60.9 | .23 | 314 | .58 | 56.4 / 56.2 | 56.1 | .23 |
| | | 5,200 | 250 | .60 | 66.8 / 63.3 | 61.6 | .29 | 346 | .58 | 57.7 / 57.3 | 57.2 | .29 |
| | | 5,900 | 280 | .61 | 67.1 / 63.5 | 61.8 | .31 | 376 | .59 | 58.8 / 58.3 | 58.2 | .35 |
| | | 7,400 | 343 | .61 | 67.6 / 63.9 | 62.1 | .34 | 383 | .64 | 63.0 / 62.2 | 61.9 | .74 |
| | | 8,069 | 358 | .62 | 68.4 / 64.5 | 62.7 | .39 | 401 | .65 | 63.8 / 62.9 | 62.6 | .87 |
| | 79°F | 3,300 | 221 | .54 | 64.1 / 61.7 | 60.5 | .14 | 288 | .53 | 54.7 / 54.7 | 54.7 | .14 |
| | | 3,900 | 245 | .54 | 65.8 / 63.0 | 61.7 | .18 | 326 | .53 | 56.1 / 56.1 | 56.1 | .18 |
| | | 4,500 | 266 | .55 | 67.3 / 64.1 | 62.6 | .23 | 361 | .54 | 57.5 / 57.3 | 57.2 | .23 |
| | | 5,200 | 289 | .56 | 68.8 / 65.2 | 63.5 | .29 | 399 | .54 | 58.9 / 58.6 | 58.5 | .29 |
| | | 5,900 | 323 | .56 | 69.1 / 65.4 | 63.7 | .31 | 392 | .57 | 62.4 / 61.9 | 61.8 | .50 |
| | | 7,400 | 395 | .56 | 69.7 / 65.8 | 64.0 | .34 | 474 | .57 | 63.5 / 62.7 | 62.4 | .50 |
| | | 8,069 | 413 | .57 | 70.6 / 66.4 | 64.5 | .39 | 500 | .58 | 64.3 / 63.3 | 62.9 | .57 |
| 500, 600 | 67°F | 3,700 | 111 | .79 | 60.6 / 57.7 | 56.0 | .26 | 140 | .78 | 55.1 / 54.8 | 54.6 | .36 |
| | | 4,450 | 117 | .86 | 61.6 / 58.9 | 57.4 | .37 | 157 | .80 | 56.3 / 55.8 | 55.6 | .50 |
| | | 5,200 | 137 | .85 | 61.6 / 58.9 | 57.4 | .36 | 175 | .81 | 57.0 / 56.4 | 56.2 | .41 |
| | | 6,082 | 148 | .88 | 62.6 / 59.6 | 58.0 | .44 | 193 | .83 | 57.9 / 57.1 | 56.8 | .53 |
| | 70°F | 3,700 | 123 | .76 | 62.9 / 60.3 | 59.0 | .31 | 168 | .71 | 56.4 / 56.1 | 56.0 | .36 |
| | | 4,450 | 141 | .77 | 63.6 / 60.8 | 59.4 | .37 | 194 | .72 | 57.3 / 56.8 | 56.7 | .35 |
| | | 5,200 | 166 | .77 | 63.5 / 60.7 | 59.3 | .36 | 214 | .73 | 58.3 / 57.6 | 57.3 | .45 |
| | | 6,082 | 181 | .77 | 65.1 / 61.4 | 59.5 | .39 | 236 | .75 | 59.4 / 58.5 | 58.1 | .57 |
| | 73°F | 3,700 | 148 | .67 | 65.1 / 61.9 | 60.3 | .26 | 206 | .64 | 57.0 / 56.7 | 56.6 | .26 |
| | | 4,450 | 171 | .68 | 65.8 / 62.4 | 60.7 | .31 | 232 | .65 | 58.4 / 57.9 | 57.8 | .35 |
| | | 5,200 | 201 | .68 | 65.7 / 62.3 | 60.6 | .30 | 257 | .66 | 59.5 / 58.9 | 58.7 | .45 |
| | | 6,082 | 219 | .69 | 67.0 / 63.2 | 61.3 | .39 | 283 | .68 | 60.7 / 59.8 | 59.4 | .57 |
| | 76°F | 3,700 | 157 | .66 | 67.9 / 65.0 | 63.7 | .31 | 243 | .59 | 57.9 / 57.7 | 57.6 | .26 |
| | | 4,450 | 202 | .62 | 67.7 / 64.1 | 62.4 | .31 | 275 | .60 | 59.5 / 59.0 | 58.9 | .35 |
| | | 5,200 | 238 | .62 | 67.6 / 64.1 | 62.4 | .30 | 304 | .61 | 60.8 / 60.1 | 59.9 | .45 |
| | | 6,082 | 259 | .63 | 69.0 / 65.0 | 63.1 | .39 | 334 | .62 | 62.2 / 61.2 | 60.8 | .57 |
| | 79°F | 3,700 | 205 | .56 | 68.7 / 65.3 | 63.8 | .26 | 282 | .54 | 58.9 / 58.7 | 58.6 | .26 |
| | | 4,450 | 236 | .57 | 69.6 / 65.9 | 64.2 | .31 | 320 | .55 | 60.6 / 60.2 | 60.1 | .35 |
| | | 5,200 | 277 | .57 | 69.5 / 65.8 | 64.1 | .30 | 353 | .56 | 62.1 / 61.4 | 61.2 | .45 |
| | | 6,082 | 302 | .58 | 71.0 / 66.9 | 65.1 | .39 | 388 | .57 | 63.7 / 62.7 | 62.3 | .57 |
| 700, 1050 | 67°F | 5,200 | 138 | .85 | 61.6 / 58.9 | 57.4 | .37 | 193 | .78 | 55.6 / 55.1 | 54.9 | .35 |
| | | 5,850 | 152 | .86 | 61.8 / 59.0 | 57.5 | .39 | 208 | .79 | 56.3 / 55.7 | 55.5 | .42 |
| | | 6,500 | 167 | .86 | 61.9 / 59.1 | 57.6 | .41 | 222 | .80 | 56.9 / 56.2 | 55.9 | .50 |
| | | 7,076 | 180 | .84 | 62.7 / 59.2 | 57.2 | .39 | 234 | .82 | 57.5 / 56.6 | 56.2 | .57 |
| | 70°F | 5,200 | 173 | .74 | 63.6 / 60.3 | 58.5 | .31 | 234 | .71 | 56.8 / 56.3 | 56.1 | .35 |
| | | 5,850 | 191 | .74 | 63.8 / 60.5 | 58.7 | .32 | 253 | .72 | 57.5 / 56.9 | 56.7 | .42 |
| | | 6,500 | 210 | .74 | 64.0 / 60.6 | 58.8 | .34 | 270 | .73 | 58.3 / 57.5 | 57.2 | .50 |
| | | 7,076 | 220 | .75 | 64.6 / 61.0 | 59.1 | .39 | 284 | .74 | 58.9 / 58.0 | 57.6 | .57 |
| | 73°F | 5,200 | 207 | .67 | 65.4 / 62.0 | 60.3 | .31 | 280 | .64 | 57.8 / 57.4 | 57.3 | .35 |
| | | 5,850 | 229 | .67 | 65.7 / 62.2 | 60.4 | .32 | 302 | .65 | 58.8 / 58.2 | 58.0 | .42 |
| | | 6,500 | 252 | .67 | 65.9 / 62.3 | 60.5 | .34 | 321 | .66 | 59.7 / 58.9 | 58.6 | .50 |
| | | 7,076 | 264 | .68 | 66.6 / 62.8 | 60.9 | .39 | 338 | .67 | 60.3 / 59.4 | 59.0 | .57 |
| | 76°F | 5,200 | 244 | .61 | 67.3 / 63.7 | 62.0 | .31 | 328 | .59 | 59.0 / 58.5 | 58.4 | .35 |
| | | 5,850 | 270 | .61 | 67.6 / 64.0 | 62.3 | .32 | 354 | .60 | 60.1 / 59.4 | 59.2 | .42 |
| | | 6,500 | 296 | .61 | 67.8 / 64.1 | 62.3 | .34 | 377 | .61 | 61.0 / 60.2 | 59.9 | .50 |
| | | 7,076 | 310 | .62 | 68.6 / 64.6 | 62.7 | .39 | 396 | .62 | 61.8 / 60.9 | 60.6 | .57 |
| | 79°F | 5,200 | 281 | .56 | 69.3 / 65.6 | 63.9 | .31 | 379 | .55 | 60.3 / 59.8 | 59.7 | .35 |
| | | 5,850 | 312 | .56 | 69.6 / 65.8 | 64.1 | .32 | 409 | .56 | 61.5 / 60.8 | 60.6 | .42 |
| | | 6,500 | 344 | .56 | 69.8 / 66.0 | 64.3 | .34 | 391 | .59 | 64.6 / 63.8 | 63.5 | .75 |
| | | 7,076 | 359 | .57 | 70.7 / 66.6 | 64.8 | .39 | 410 | .60 | 65.4 / 64.5 | 64.2 | .87 |

Notes for Table:

1) Available with 1 or 2 external circuits (distributors) in interlaced configuration. Circuit capacities (distributors) do not have to be equal. Circuit capacity may be limited to 25 tons per circuit due to distributor size. Special configurations may be available at additional cost.

2) Based on 3/8" or 1/2" tube OD with 1.25" tube spacing (1.00" available), circuited for refrigerant velocity > 1000 fpm, refrigerant PD < 10 psi. Some discontinuities may be noted in MBH, SHR, Air PD, etc due to changes in tube OD and circuiting in order to maintain adequate refrig velocity and PD.

3) Multiply Total MBH by SHR to get Sensible MBH.

4) Values shown are based on 45° SST, 100° LLT, 10° superheat. Entering DB is based on WB shown at 45% RH (DB has minor impact on capacity and SHR). Capacities will be higher at lower evaporator SST's (not recommended for outside air) and capacities will be lower at higher evaporator SST's. Evaporator plots are produced by the coil selection software.

5) Available fin spacings are 8, 10, 12, 14. Available tube diameters are 3/8" and 1/2".

6) The "minimum coil" is 8 fpi at the minimum finned height resulting in less than 500 fpm face velocity when possible. The "maximum coil" is 14 fpi with the maximum allowable finned height. Absolute maximum face velocity is 550 fpm.

| Coils Generally for 100% O/A Application in Warm & Humid Climates, Dehumidification | | | | | | | | | | | | |
|---|------------------------|-------------------------|--------------|-----|------------------------|---------------------------|-----------------|--------------|-----|------------------------|---------------------------|-----------------|
| 6 Row DX Coils (R410A) | | | Minimum Coil | | | | | Maximum Coil | | | | |
| Furnace Size | Entering Wet Bulb (°F) | Cooling Air Flow (scfm) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) | Total MBH | SHR | Leaving Air DB/WB (°F) | Leaving Air DewPoint (°F) | Air PD (in. WC) |
| 400, 800, 1200 | 67°F | 3,300 | 144 | .72 | 53.3 / 52.8 | 52.6 | .21 | 174 | .69 | 48.8 / 48.8 | 48.8 | .21 |
| | | 3,900 | 161 | .73 | 54.4 / 53.6 | 53.2 | .27 | 199 | .70 | 49.5 / 49.5 | 49.5 | .27 |
| | | 4,500 | 177 | .74 | 55.3 / 54.3 | 53.8 | .34 | 221 | .71 | 50.3 / 50.3 | 50.3 | .34 |
| | | 5,200 | 194 | .76 | 56.3 / 55.1 | 54.5 | .44 | 247 | .71 | 51.0 / 51.0 | 51.0 | .43 |
| | | 5,900 | 218 | .76 | 56.5 / 55.2 | 54.5 | .46 | 270 | .72 | 51.7 / 51.7 | 51.7 | .52 |
| | | 7,400 | 267 | .76 | 56.9 / 55.5 | 54.7 | .51 | 314 | .75 | 53.1 / 53.1 | 53.1 | .75 |
| | | 8,069 | 281 | .77 | 57.5 / 56.0 | 55.2 | .58 | 331 | .76 | 53.7 / 53.7 | 53.7 | .86 |
| | 71°F | 3,300 | 182 | .64 | 54.6 / 54.0 | 53.8 | .21 | 217 | .62 | 49.5 / 49.5 | 49.5 | .21 |
| | | 3,900 | 203 | .65 | 55.9 / 55.1 | 54.7 | .27 | 248 | .63 | 50.3 / 50.3 | 50.3 | .27 |
| | | 4,500 | 223 | .66 | 57.1 / 56.1 | 55.6 | .34 | 277 | .64 | 51.2 / 51.2 | 51.2 | .34 |
| | | 5,200 | 245 | .67 | 58.2 / 56.9 | 56.2 | .44 | 308 | .64 | 52.2 / 52.2 | 52.2 | .43 |
| | | 5,900 | 274 | .67 | 58.5 / 57.1 | 56.4 | .46 | 337 | .65 | 53.1 / 53.1 | 53.1 | .52 |
| | | 7,400 | 334 | .68 | 59.1 / 57.6 | 56.8 | .51 | 384 | .67 | 55.1 / 55.1 | 55.1 | .75 |
| | | 8,069 | 331 | .72 | 60.3 / 59.0 | 58.4 | .71 | 408 | .68 | 55.7 / 55.7 | 55.7 | .86 |
| | 75°F | 3,300 | 225 | .58 | 55.9 / 55.3 | 55.1 | .21 | 265 | .57 | 50.2 / 50.2 | 50.2 | .21 |
| | | 3,900 | 249 | .59 | 57.6 / 56.7 | 56.3 | .27 | 302 | .57 | 51.3 / 51.3 | 51.3 | .27 |
| | | 4,500 | 274 | .60 | 58.9 / 57.8 | 57.3 | .34 | 336 | .58 | 52.4 / 52.4 | 52.4 | .34 |
| | | 5,200 | 302 | .60 | 60.1 / 58.8 | 58.2 | .44 | 371 | .59 | 53.8 / 53.8 | 53.8 | .43 |
| | | 5,900 | 323 | .62 | 61.3 / 59.9 | 59.3 | .46 | 408 | .59 | 54.6 / 54.6 | 54.6 | .52 |
| | | 7,400 | 398 | .62 | 61.8 / 60.2 | 59.4 | .51 | 482 | .60 | 56.2 / 56.2 | 56.2 | .75 |
| | | 8,069 | 409 | .64 | 62.5 / 61.2 | 60.6 | .71 | 513 | .61 | 56.9 / 56.9 | 56.9 | .86 |
| | 79°F | 3,300 | 268 | .53 | 57.6 / 57.0 | 56.8 | .21 | 315 | .52 | 51.2 / 51.2 | 51.2 | .21 |
| | | 3,900 | 302 | .53 | 59.2 / 58.3 | 57.9 | .27 | 360 | .53 | 52.5 / 52.5 | 52.5 | .27 |
| | | 4,500 | 333 | .54 | 60.6 / 59.5 | 59.0 | .34 | 405 | .53 | 53.4 / 53.4 | 53.4 | .34 |
| | | 5,200 | 365 | .54 | 62.1 / 60.7 | 60.1 | .44 | 453 | .53 | 54.5 / 54.5 | 54.5 | .43 |
| | | 5,900 | 398 | .55 | 63.1 / 61.6 | 60.9 | .46 | 500 | .54 | 55.5 / 55.5 | 55.5 | .52 |
| | | 7,400 | 488 | .55 | 63.6 / 62.0 | 61.3 | .51 | 591 | .54 | 57.3 / 57.3 | 57.3 | .75 |
| | | 8,069 | 516 | .56 | 64.5 / 62.7 | 61.9 | .58 | 628 | .55 | 58.1 / 58.1 | 58.1 | .86 |
| | 82°F | 3,300 | 306 | .49 | 58.7 / 58.1 | 57.9 | .21 | 359 | .49 | 51.7 / 51.7 | 51.7 | .21 |
| | | 3,900 | 345 | .50 | 60.4 / 59.5 | 59.1 | .27 | 412 | .49 | 52.9 / 52.9 | 52.9 | .27 |
| | | 4,500 | 380 | .50 | 62.0 / 60.8 | 60.3 | .34 | 464 | .49 | 54.0 / 54.0 | 54.0 | .34 |
| | | 5,200 | 417 | .51 | 63.6 / 62.2 | 61.6 | .44 | 521 | .50 | 55.1 / 55.1 | 55.1 | .43 |
| | | 5,900 | 458 | .51 | 64.5 / 63.0 | 62.4 | .46 | 574 | .50 | 56.2 / 56.2 | 56.2 | .52 |
| | | 7,400 | 562 | .51 | 65.1 / 63.5 | 62.8 | .51 | 679 | .51 | 58.3 / 58.3 | 58.3 | .75 |
| | | 8,069 | 594 | .52 | 66.1 / 64.2 | 63.4 | .58 | 722 | .51 | 59.1 / 59.1 | 59.1 | .86 |
| 500, 600 | 67°F | 3,700 | 139 | .76 | 56.1 / 55.0 | 54.4 | .40 | 177 | .71 | 50.8 / 50.8 | 50.8 | .39 |
| | | 4,450 | 162 | .76 | 56.6 / 55.4 | 54.8 | .46 | 204 | .73 | 51.7 / 51.7 | 51.7 | .52 |
| | | 5,200 | 191 | .76 | 56.6 / 55.3 | 54.6 | .45 | 227 | .74 | 52.6 / 52.6 | 52.6 | .67 |
| | | 6,082 | 209 | .78 | 57.7 / 56.1 | 55.2 | .58 | 253 | .75 | 53.5 / 53.5 | 53.5 | .86 |
| | 71°F | 3,700 | 177 | .67 | 57.8 / 56.6 | 56.0 | .40 | 224 | .64 | 51.6 / 51.6 | 51.6 | .39 |
| | | 4,450 | 206 | .67 | 58.5 / 57.2 | 56.5 | .46 | 257 | .65 | 52.8 / 52.8 | 52.8 | .52 |
| | | 5,200 | 242 | .67 | 58.4 / 57.1 | 56.4 | .45 | 288 | .66 | 53.8 / 53.8 | 53.8 | .67 |
| | | 6,082 | 266 | .68 | 59.7 / 58.1 | 57.3 | .58 | 320 | .67 | 54.9 / 54.9 | 54.9 | .86 |
| | 75°F | 3,700 | 219 | .60 | 59.6 / 58.4 | 57.8 | .40 | 276 | .58 | 52.5 / 52.5 | 52.5 | .39 |
| | | 4,450 | 255 | .60 | 60.4 / 59.0 | 58.3 | .46 | 316 | .59 | 54.0 / 54.0 | 54.0 | .52 |
| | | 5,200 | 299 | .60 | 60.3 / 58.9 | 58.2 | .45 | 352 | .59 | 55.2 / 55.2 | 55.2 | .67 |
| | | 6,082 | 329 | .61 | 61.8 / 60.1 | 59.3 | .58 | 371 | .62 | 57.8 / 57.8 | 57.8 | .86 |
| | 79°F | 3,700 | 265 | .54 | 61.6 / 60.3 | 59.7 | .40 | 331 | .53 | 53.7 / 53.7 | 53.7 | .39 |
| | | 4,450 | 308 | .55 | 62.5 / 61.1 | 60.5 | .46 | 365 | .54 | 56.4 / 56.4 | 56.4 | .52 |
| | | 5,200 | 361 | .55 | 62.4 / 61.0 | 60.4 | .45 | 398 | .55 | 58.4 / 58.4 | 58.4 | .99 |
| | | 6,082 | 373 | .57 | 65.3 / 63.5 | 62.7 | .58 | 441 | .56 | 59.9 / 59.9 | 59.9 | 1.30 |
| | 82°F | 3,700 | 287 | .51 | 64.4 / 63.0 | 62.4 | .40 | 376 | .50 | 54.5 / 54.5 | 54.5 | .39 |
| | | 4,450 | 334 | .52 | 65.3 / 63.8 | 63.2 | .46 | 409 | .51 | 58.0 / 58.0 | 58.0 | .75 |
| | | 5,200 | 392 | .52 | 65.2 / 63.7 | 63.1 | .45 | 455 | .51 | 59.6 / 59.6 | 59.6 | .99 |
| | | 6,082 | 419 | .54 | 67.0 / 65.6 | 65.1 | .71 | 531 | .51 | 59.8 / 59.8 | 59.8 | .86 |
| 700, 1050 | 67°F | 5,200 | 192 | .76 | 56.5 / 55.2 | 54.5 | .46 | 239 | .72 | 51.6 / 51.6 | 51.6 | .53 |
| | | 5,850 | 212 | .76 | 56.8 / 55.5 | 54.8 | .49 | 260 | .73 | 52.3 / 52.3 | 52.3 | .64 |
| | | 6,500 | 234 | .77 | 56.9 / 55.5 | 54.7 | .51 | 279 | .74 | 52.9 / 52.9 | 52.9 | .75 |
| | | 7,076 | 248 | .77 | 57.4 / 55.9 | 55.1 | .58 | 294 | .75 | 53.5 / 53.5 | 53.5 | .86 |
| | 71°F | 5,200 | 242 | .67 | 58.4 / 57.1 | 56.4 | .46 | 300 | .65 | 52.9 / 52.9 | 52.9 | .53 |
| | | 5,850 | 269 | .68 | 58.7 / 57.3 | 56.6 | .49 | 325 | .66 | 53.7 / 53.7 | 53.7 | .64 |
| | | 6,500 | 296 | .68 | 58.9 / 57.5 | 56.8 | .51 | 348 | .66 | 54.5 / 54.5 | 54.5 | .75 |
| | | 7,076 | 310 | .69 | 59.7 / 58.1 | 57.3 | .58 | 344 | .69 | 56.3 / 56.3 | 56.3 | 1.30 |
| | 75°F | 5,200 | 297 | .60 | 60.5 / 59.1 | 58.4 | .46 | 349 | .60 | 55.4 / 55.4 | 55.4 | .53 |
| | | 5,850 | 309 | .63 | 61.7 / 60.5 | 60.0 | .58 | 381 | .60 | 56.2 / 56.2 | 56.2 | .64 |
| | | 6,500 | 339 | .63 | 61.9 / 60.7 | 60.2 | .61 | 403 | .61 | 57.3 / 57.3 | 57.3 | 1.12 |
| | | 7,076 | 355 | .63 | 63.1 / 61.4 | 60.6 | .58 | 425 | .62 | 58.0 / 58.0 | 58.0 | 1.30 |
| | 79°F | 5,200 | 340 | .56 | 63.7 / 62.2 | 61.5 | .46 | 421 | .54 | 56.8 / 56.8 | 56.8 | .75 |
| | | 5,850 | 398 | .55 | 63.0 / 61.4 | 60.7 | .49 | 456 | .55 | 57.9 / 57.9 | 57.9 | .93 |
| | | 6,500 | 412 | .57 | 64.1 / 62.9 | 62.4 | .61 | 507 | .55 | 58.0 / 58.0 | 58.0 | .75 |
| | | 7,076 | 433 | .57 | 64.9 / 63.5 | 62.9 | .71 | 539 | .55 | 58.7 / 58.7 | 58.7 | .86 |
| | 82°F | 5,200 | 385 | .52 | 65.3 / 64.1 | 63.6 | .55 | 496 | .50 | 56.9 / 56.9 | 56.9 | .53 |
| | | 5,850 | 456 | .51 | 64.5 / 62.9 | 62.2 | .49 | 542 | .50 | 57.9 / 57.9 | 57.9 | .64 |
| | | 6,500 | 482 | .52 | 65.7 / 64.0 | 63.3 | .51 | 585 | .51 | 58.8 / 58.8 | 58.8 | .75 |
| | | 7,076 | 509 | .52 | 66.6 / 64.7 | 63.9 | .58 | 622 | .51 | 59.6 / 59.6 | 59.6 | .86 |

Notes for Table:

- Available with 1 or 2 external circuits (distributors) in interlaced configuration. Circuit capacities (distributors) do not have to be equal. Circuit capacity may be limited to 25 tons per circuit due to distributor size. Special configurations may be available at additional cost.
- Based on 3/8" or 1/2" tube OD with 1.25" tube spacing (1.00" available), circuited for refrigerant velocity > 1000 fpm, refrigerant PD < 10 psi. Some discontinuities may be noted in MBH, SHR, Air PD, etc due to changes in tube OD and circuiting in order to maintain adequate refrigerant velocity and PD.
- Multiply Total MBH by SHR to get Sensible MBH.
- Values shown are based on 45° SST, 100° LLT, 10° superheat. Entering DB is based on WB shown at 45% RH (DB has minor impact on capacity and SHR). Capacities will be higher at lower evaporator SST's (not recommended for outside air) and capacities will be lower at higher evaporator SST's. Evaporator plots are produced by the coil selection software.
- Available fin spacings are 8, 10, 12, 14. Available tube diameters are 3/8" and 1/2".
- The "minimum coil" is 8 fpi at the minimum finned height resulting in less than 500 fpm face velocity when possible. The "maximum coil" is 14 fpi with the maximum allowable finned height. Absolute maximum face velocity is 550 fpm.

Models RPBL with Chilled Water Coils

Performance based on entering air conditions – 80°F Dry Bulb and 67°F Wet Bulb

Capacity based on 80°F EDB, 67°F EWB, 45°F Entering Water, 70 GPM

| Model RPBL | | | | 4 Row | | | | | | 6 Row | | | | | |
|----------------|------------------------|----------------------|-------------------|-----------|-----------|---------|---------|----------------|----------------|-----------|-----------|---------|---------|----------------|----------------|
| Furnace Models | Cooling Airflow (scfm) | Face Velocity (sfpm) | Fin Spacing (fpi) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) |
| 400 | 4020 | 270 | 8 | 170 | 113 | 54 | 53 | 0.14 | 8.6 | 202 | 130 | 50 | 50 | 0.21 | 11.9 |
| | | | 10 | 183 | 120 | 53 | 52 | 0.17 | 8.6 | 213 | 136 | 49 | 49 | 0.26 | 11.9 |
| | | | 12 | 193 | 126 | 51 | 51 | 0.20 | 8.6 | 221 | 140 | 48 | 48 | 0.30 | 11.9 |
| | 8200 | 550 | 8 | 247 | 180 | 60 | 58 | 0.46 | 8.6 | 309 | 216 | 56 | 55 | 0.68 | 11.9 |
| | | | 10 | 269 | 195 | 58 | 57 | 0.54 | 8.6 | 331 | 230 | 54 | 54 | 0.82 | 11.9 |
| | | | 12 | 286 | 207 | 57 | 56 | 0.63 | 8.6 | 349 | 240 | 53 | 53 | 0.95 | 11.9 |
| 500, 600 | 3030 | 270 | 8 | 130 | 86 | 54 | 53 | 0.14 | 7.5 | 155 | 100 | 50 | 50 | 0.21 | 10.2 |
| | | | 10 | 140 | 92 | 52 | 52 | 0.17 | 7.5 | 163 | 104 | 49 | 49 | 0.26 | 10.2 |
| | | | 12 | 148 | 96 | 51 | 51 | 0.20 | 7.5 | 169 | 107 | 48 | 48 | 0.30 | 10.2 |
| | 6180 | 550 | 8 | 192 | 138 | 59 | 57 | 0.46 | 7.5 | 241 | 167 | 55 | 54 | 0.68 | 10.2 |
| | | | 10 | 210 | 150 | 58 | 56 | 0.54 | 7.5 | 259 | 178 | 54 | 53 | 0.82 | 10.2 |
| | | | 12 | 224 | 159 | 56 | 55 | 0.63 | 7.5 | 273 | 185 | 53 | 52 | 0.95 | 10.2 |
| 700 | 3530 | 270 | 8 | 150 | 100 | 54 | 53 | 0.14 | 8.0 | 179 | 115 | 50 | 50 | 0.21 | 11.0 |
| | | | 10 | 162 | 107 | 52 | 52 | 0.17 | 8.0 | 188 | 120 | 49 | 49 | 0.26 | 11.0 |
| | | | 12 | 171 | 111 | 51 | 51 | 0.20 | 8.0 | 196 | 124 | 48 | 48 | 0.30 | 11.0 |
| | 7190 | 550 | 8 | 220 | 159 | 59 | 57 | 0.46 | 8.0 | 276 | 192 | 56 | 55 | 0.68 | 11.0 |
| | | | 10 | 240 | 173 | 58 | 56 | 0.54 | 8.0 | 296 | 204 | 54 | 54 | 0.82 | 11.0 |
| | | | 12 | 256 | 183 | 57 | 56 | 0.63 | 8.0 | 312 | 213 | 53 | 53 | 0.95 | 11.0 |
| 800 | 4020 | 270 | 8 | 170 | 113 | 54 | 53 | 0.14 | 8.6 | 202 | 130 | 50 | 50 | 0.21 | 11.9 |
| | | | 10 | 183 | 120 | 53 | 52 | 0.17 | 8.6 | 213 | 136 | 49 | 49 | 0.26 | 11.9 |
| | | | 12 | 193 | 126 | 51 | 51 | 0.20 | 8.6 | 221 | 140 | 48 | 48 | 0.30 | 11.9 |
| | 8200 | 550 | 8 | 247 | 180 | 60 | 58 | 0.46 | 8.6 | 309 | 216 | 56 | 55 | 0.68 | 11.9 |
| | | | 10 | 269 | 195 | 58 | 57 | 0.54 | 8.6 | 331 | 230 | 54 | 54 | 0.82 | 11.9 |
| | | | 12 | 286 | 207 | 57 | 56 | 0.63 | 8.6 | 349 | 240 | 53 | 53 | 0.95 | 11.9 |
| 1050 | 3530 | 270 | 8 | 150 | 100 | 54 | 53 | 0.14 | 8.0 | 179 | 115 | 50 | 50 | 0.21 | 11.0 |
| | | | 10 | 162 | 107 | 52 | 52 | 0.17 | 8.0 | 188 | 120 | 49 | 49 | 0.26 | 11.0 |
| | | | 12 | 171 | 111 | 51 | 51 | 0.20 | 8.0 | 196 | 124 | 48 | 48 | 0.30 | 11.0 |
| | 7190 | 550 | 8 | 220 | 159 | 59 | 57 | 0.46 | 8.0 | 276 | 192 | 56 | 55 | 0.68 | 11.0 |
| | | | 10 | 240 | 173 | 58 | 56 | 0.54 | 8.0 | 296 | 204 | 54 | 54 | 0.82 | 11.0 |
| | | | 12 | 256 | 183 | 57 | 56 | 0.63 | 8.0 | 312 | 213 | 53 | 53 | 0.95 | 11.0 |
| 1200 | 4020 | 270 | 8 | 170 | 113 | 54 | 53 | 0.14 | 8.6 | 202 | 130 | 50 | 50 | 0.21 | 11.9 |
| | | | 10 | 183 | 120 | 53 | 52 | 0.17 | 8.6 | 213 | 136 | 49 | 49 | 0.26 | 11.9 |
| | | | 12 | 193 | 126 | 51 | 51 | 0.20 | 8.6 | 221 | 140 | 48 | 48 | 0.30 | 11.9 |
| | 8200 | 550 | 8 | 247 | 180 | 60 | 58 | 0.46 | 8.6 | 309 | 216 | 56 | 55 | 0.68 | 11.9 |
| | | | 10 | 269 | 195 | 58 | 57 | 0.54 | 8.6 | 331 | 230 | 54 | 54 | 0.82 | 11.9 |
| | | | 12 | 286 | 207 | 57 | 56 | 0.63 | 8.6 | 349 | 240 | 53 | 53 | 0.95 | 11.9 |

CONVERSIONS:

1 m³/s = 2120 cfm
 1 m/s = 197 fpm
 1 ton cooling = 1/12 mbh
 1 kW = 3.41 mbh
 (°F-32) 5/9 = °C
 1 in wc = 249 pascals
 1 lb = 0.45 kg

NOTES :

- 1) Coil Performance Data certified in accordance with ARI Standard 410
- 2) Maximum recommended coil face velocity is 550 sfpm
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Models SSCBL with Chilled Water Coils

Performance based on entering air conditions – 80°F Dry Bulb and 67°F Wet Bulb

Capacity based on 80°F EDB, 67°F EWB, 45°F Entering Water, 70 GPM

| Model SSCBL | | | | 4 Row | | | | | | 6 Row | | | | | |
|----------------|------------------------|----------------------|-------------------|-----------|-----------|---------|---------|----------------|----------------|-----------|-----------|---------|---------|----------------|----------------|
| Furnace Models | Cooling Airflow (scfm) | Face Velocity (sfpm) | Fin Spacing (fpi) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) |
| 500, 600 | 3030 | 270 | 8 | 130 | 86 | 54 | 53 | 0.14 | 7.5 | 155 | 100 | 50 | 50 | 0.21 | 10.2 |
| | | | 10 | 140 | 92 | 52 | 52 | 0.17 | 7.5 | 163 | 104 | 49 | 49 | 0.26 | 10.2 |
| | | | 12 | 148 | 96 | 51 | 51 | 0.20 | 7.5 | 169 | 107 | 48 | 48 | 0.30 | 10.2 |
| | 6180 | 550 | 8 | 192 | 138 | 59 | 57 | 0.46 | 7.5 | 241 | 167 | 55 | 54 | 0.68 | 10.2 |
| | | | 10 | 210 | 150 | 58 | 56 | 0.54 | 7.5 | 259 | 178 | 54 | 53 | 0.82 | 10.2 |
| | | | 12 | 224 | 159 | 56 | 55 | 0.63 | 7.5 | 273 | 185 | 53 | 52 | 0.95 | 10.2 |
| 700, 1050 | 3530 | 270 | 8 | 150 | 100 | 54 | 53 | 0.14 | 8.0 | 179 | 115 | 50 | 50 | 0.21 | 11.0 |
| | | | 10 | 162 | 107 | 52 | 52 | 0.17 | 8.0 | 188 | 120 | 49 | 49 | 0.26 | 11.0 |
| | | | 12 | 171 | 111 | 51 | 51 | 0.20 | 8.0 | 196 | 124 | 48 | 48 | 0.30 | 11.0 |
| | 7190 | 550 | 8 | 220 | 159 | 59 | 57 | 0.46 | 8.0 | 276 | 192 | 56 | 55 | 0.68 | 11.0 |
| | | | 10 | 240 | 173 | 58 | 56 | 0.54 | 8.0 | 296 | 204 | 54 | 54 | 0.82 | 11.0 |
| | | | 12 | 256 | 183 | 57 | 56 | 0.63 | 8.0 | 312 | 213 | 53 | 53 | 0.95 | 11.0 |
| 400, 800, 1200 | 4020 | 270 | 8 | 170 | 113 | 54 | 53 | 0.14 | 8.6 | 202 | 130 | 50 | 50 | 0.21 | 11.9 |
| | | | 10 | 183 | 120 | 53 | 52 | 0.17 | 8.6 | 213 | 136 | 49 | 49 | 0.26 | 11.9 |
| | | | 12 | 193 | 126 | 51 | 51 | 0.20 | 8.6 | 221 | 140 | 48 | 48 | 0.30 | 11.9 |
| | 8200 | 550 | 8 | 247 | 180 | 60 | 58 | 0.46 | 8.6 | 309 | 216 | 56 | 55 | 0.68 | 11.9 |
| | | | 10 | 269 | 195 | 58 | 57 | 0.54 | 8.6 | 331 | 230 | 54 | 54 | 0.82 | 11.9 |
| | | | 12 | 286 | 207 | 57 | 56 | 0.63 | 8.6 | 349 | 240 | 53 | 53 | 0.95 | 11.9 |

CONVERSIONS:

1 m³/s = 2120 cfm

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NOTES :

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Models RPBL with Chilled Water Coils

Performance based on entering air conditions – 95°F Dry Bulb and 75°F Wet Bulb

Capacity based on 95°F EDB, 75°F EWB, 45°F Entering Water, 70 GPM

| Model RPBL | | | | 4 Row | | | | | | 6 Row | | | | | |
|----------------|------------------------|----------------------|-------------------|-----------|-----------|---------|---------|----------------|----------------|-----------|-----------|---------|---------|----------------|----------------|
| Furnace Models | Cooling Airflow (scfm) | Face Velocity (sfpm) | Fin Spacing (fpi) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) |
| 400 | 4020 | 270 | 8 | 252 | 159 | 59 | 57 | 0.14 | 8.6 | 299 | 184 | 53 | 53 | 0.21 | 11.8 |
| | | | 10 | 271 | 170 | 56 | 55 | 0.17 | 8.6 | 315 | 192 | 51 | 51 | 0.26 | 11.8 |
| | | | 12 | 285 | 178 | 55 | 54 | 0.20 | 8.6 | 328 | 198 | 50 | 50 | 0.30 | 11.8 |
| | 8200 | 550 | 8 | 362 | 253 | 67 | 63 | 0.46 | 8.6 | 452 | 304 | 61 | 60 | 0.68 | 11.8 |
| | | | 10 | 393 | 274 | 64 | 62 | 0.54 | 8.6 | 485 | 323 | 59 | 58 | 0.82 | 11.8 |
| | | | 12 | 418 | 291 | 63 | 61 | 0.63 | 8.6 | 511 | 336 | 57 | 57 | 0.95 | 11.8 |
| 500, 600 | 3030 | 270 | 8 | 193 | 121 | 58 | 57 | 0.14 | 7.5 | 230 | 141 | 53 | 52 | 0.21 | 10.1 |
| | | | 10 | 208 | 130 | 56 | 55 | 0.17 | 7.5 | 242 | 147 | 51 | 51 | 0.26 | 10.1 |
| | | | 12 | 219 | 136 | 54 | 54 | 0.20 | 7.5 | 251 | 151 | 49 | 48 | 0.30 | 10.1 |
| | 6180 | 550 | 8 | 282 | 194 | 66 | 63 | 0.46 | 7.5 | 355 | 234 | 60 | 59 | 0.68 | 10.1 |
| | | | 10 | 307 | 211 | 64 | 61 | 0.54 | 7.5 | 381 | 249 | 58 | 57 | 0.82 | 10.1 |
| | | | 12 | 328 | 223 | 62 | 60 | 0.63 | 7.5 | 401 | 260 | 57 | 56 | 0.95 | 10.1 |
| 700 | 3530 | 270 | 8 | 223 | 141 | 59 | 57 | 0.14 | 8.0 | 265 | 162 | 53 | 52 | 0.21 | 11.0 |
| | | | 10 | 240 | 150 | 56 | 55 | 0.17 | 8.0 | 279 | 170 | 51 | 51 | 0.26 | 11.0 |
| | | | 12 | 253 | 157 | 54 | 54 | 0.20 | 8.0 | 290 | 175 | 50 | 50 | 0.30 | 11.0 |
| | 7190 | 550 | 8 | 322 | 224 | 66 | 63 | 0.46 | 8.0 | 405 | 270 | 61 | 59 | 0.68 | 11.0 |
| | | | 10 | 351 | 243 | 64 | 62 | 0.54 | 8.0 | 434 | 286 | 59 | 58 | 0.82 | 11.0 |
| | | | 12 | 374 | 258 | 62 | 61 | 0.63 | 8.0 | 457 | 299 | 57 | 57 | 0.95 | 11.0 |
| 800 | 4020 | 270 | 8 | 252 | 159 | 59 | 57 | 0.14 | 8.6 | 299 | 184 | 53 | 53 | 0.21 | 11.8 |
| | | | 10 | 271 | 170 | 56 | 55 | 0.17 | 8.6 | 315 | 192 | 51 | 51 | 0.26 | 11.8 |
| | | | 12 | 285 | 178 | 55 | 54 | 0.20 | 8.6 | 328 | 198 | 50 | 50 | 0.30 | 11.8 |
| | 8200 | 550 | 8 | 362 | 253 | 67 | 63 | 0.46 | 8.6 | 452 | 304 | 61 | 60 | 0.68 | 11.8 |
| | | | 10 | 393 | 274 | 64 | 62 | 0.54 | 8.6 | 485 | 323 | 59 | 58 | 0.82 | 11.8 |
| | | | 12 | 418 | 291 | 63 | 61 | 0.63 | 8.6 | 511 | 336 | 57 | 57 | 0.95 | 11.8 |
| 1050 | 3530 | 270 | 8 | 223 | 141 | 59 | 57 | 0.14 | 8.0 | 265 | 162 | 53 | 52 | 0.21 | 11.0 |
| | | | 10 | 240 | 150 | 56 | 55 | 0.17 | 8.0 | 279 | 170 | 51 | 51 | 0.26 | 11.0 |
| | | | 12 | 253 | 157 | 54 | 54 | 0.20 | 8.0 | 290 | 175 | 50 | 50 | 0.30 | 11.0 |
| | 7190 | 550 | 8 | 322 | 224 | 66 | 63 | 0.46 | 8.0 | 405 | 270 | 61 | 59 | 0.68 | 11.0 |
| | | | 10 | 351 | 243 | 64 | 62 | 0.54 | 8.0 | 434 | 286 | 59 | 58 | 0.82 | 11.0 |
| | | | 12 | 374 | 258 | 62 | 61 | 0.63 | 8.0 | 457 | 299 | 57 | 57 | 0.95 | 11.0 |
| 1200 | 4020 | 270 | 8 | 252 | 159 | 59 | 57 | 0.14 | 8.6 | 299 | 184 | 53 | 53 | 0.21 | 11.8 |
| | | | 10 | 271 | 170 | 56 | 55 | 0.17 | 8.6 | 315 | 192 | 51 | 51 | 0.26 | 11.8 |
| | | | 12 | 285 | 178 | 55 | 54 | 0.20 | 8.6 | 328 | 198 | 50 | 50 | 0.30 | 11.8 |
| | 8200 | 550 | 8 | 362 | 253 | 67 | 63 | 0.46 | 8.6 | 452 | 304 | 61 | 60 | 0.68 | 11.8 |
| | | | 10 | 393 | 274 | 64 | 62 | 0.54 | 8.6 | 485 | 323 | 59 | 58 | 0.82 | 11.8 |
| | | | 12 | 418 | 291 | 63 | 61 | 0.63 | 8.6 | 511 | 336 | 57 | 57 | 0.95 | 11.8 |

CONVERSIONS:

1 m³/s = 2120 cfm
 1 m/s = 197 fpm
 1 ton cooling = 1/12 mbh
 1 kW = 3.41 mbh
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 1 in wc = 249 pascals
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NOTES :

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Models SSCBL with Chilled Water Coils

Performance based on entering air conditions – 95°F Dry Bulb and 75°F Wet Bulb

Capacity based on 95°F EDB, 75°F EWB, 45°F Entering Water, 70 GPM

| Model SSCBL | | | | 4 Row | | | | | | 6 Row | | | | | |
|----------------|------------------------|----------------------|-------------------|-----------|-----------|---------|---------|----------------|----------------|-----------|-----------|---------|---------|----------------|----------------|
| Furnace Models | Cooling Airflow (scfm) | Face Velocity (sfpm) | Fin Spacing (fpi) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) | Total MBH | Sens. MBH | DB (°F) | WB (°F) | APD (in. w.c.) | FPD (ft. w.c.) |
| 500, 600 | 3030 | 270 | 8 | 193 | 121 | 58 | 57 | 0.14 | 7.5 | 230 | 141 | 53 | 52 | 0.21 | 10.1 |
| | | | 10 | 208 | 130 | 56 | 55 | 0.17 | 7.5 | 242 | 147 | 51 | 51 | 0.26 | 10.1 |
| | | | 12 | 219 | 136 | 54 | 54 | 0.20 | 7.5 | 251 | 151 | 49 | 48 | 0.30 | 10.1 |
| | 6180 | 550 | 8 | 282 | 194 | 66 | 63 | 0.46 | 7.5 | 355 | 234 | 60 | 59 | 0.68 | 10.1 |
| | | | 10 | 307 | 211 | 64 | 61 | 0.54 | 7.5 | 381 | 249 | 58 | 57 | 0.82 | 10.1 |
| | | | 12 | 328 | 223 | 62 | 60 | 0.63 | 7.5 | 401 | 260 | 57 | 56 | 0.95 | 10.1 |
| 700, 1050 | 3530 | 270 | 8 | 223 | 141 | 59 | 57 | 0.14 | 8.0 | 265 | 162 | 53 | 52 | 0.21 | 11.0 |
| | | | 10 | 240 | 150 | 56 | 55 | 0.17 | 8.0 | 279 | 170 | 51 | 51 | 0.26 | 11.0 |
| | | | 12 | 253 | 157 | 54 | 54 | 0.20 | 8.0 | 290 | 175 | 50 | 50 | 0.30 | 11.0 |
| | 7190 | 550 | 8 | 322 | 224 | 66 | 63 | 0.46 | 8.0 | 405 | 270 | 61 | 59 | 0.68 | 11.0 |
| | | | 10 | 351 | 243 | 64 | 62 | 0.54 | 8.0 | 434 | 286 | 59 | 58 | 0.82 | 11.0 |
| | | | 12 | 374 | 258 | 62 | 61 | 0.63 | 8.0 | 457 | 299 | 57 | 57 | 0.95 | 11.0 |
| 400, 800, 1200 | 4020 | 270 | 8 | 252 | 159 | 59 | 57 | 0.14 | 8.6 | 299 | 184 | 53 | 53 | 0.21 | 11.8 |
| | | | 10 | 271 | 170 | 56 | 55 | 0.17 | 8.6 | 315 | 192 | 51 | 51 | 0.26 | 11.8 |
| | | | 12 | 285 | 178 | 55 | 54 | 0.20 | 8.6 | 328 | 198 | 50 | 50 | 0.30 | 11.8 |
| | 8200 | 550 | 8 | 362 | 253 | 67 | 63 | 0.46 | 8.6 | 452 | 304 | 61 | 60 | 0.68 | 11.8 |
| | | | 10 | 393 | 274 | 64 | 62 | 0.54 | 8.6 | 485 | 323 | 59 | 58 | 0.82 | 11.8 |
| | | | 12 | 418 | 291 | 63 | 61 | 0.63 | 8.6 | 511 | 336 | 57 | 57 | 0.95 | 11.8 |

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 (°F-32) 5/9 = °C
 1 in wc = 249 pascals
 1 lb = 0.45 kg

NOTES :

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- 2) Maximum recommended coil face velocity is 550 sfpm
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Coil Selection Requirements

A. Required Application Information

- For any coil selection the following information is required;
 - ♦ Cabinet option number based on the furnace model. (See the **Cabinet Option Designations**)
 - ♦ Airflow in standard cubic feet per minute (scfm). (For conversion from actual to standard see **Conversion to Standard Airflow**)
- Note:** To avoid conditions favorable to condensate blow-off, equipment should be selected so that coil face velocities DO NOT exceed 550 sfpm if the coil will experience a latent load.
 - ♦ Conditions (DB/WB) temperatures entering the coil
 - ♦ Cooling capacity requirements in MBH or Tons

B. Required Chilled Water Coil Information

- For water coils the following additional information must be supplied;
 - ♦ Entering fluid temperature, °F
 - ♦ Leaving fluid temperature, °F or fluid flow rate in gallons per minute (gpm)
 - ♦ Percentage of glycol and type (ethylene or propylene glycol)
- Note:** For water coil applications where temperatures may fall below 32°F, coils should be drained per standard maintenance procedures. If a glycol is used, always test the glycol percentage prior to winter months to ensure adequate protection against freezing.
 - ♦ Maximum allowable fluid-side pressure drop through the coil, (ft w.c.)

C. Required Refrigerant Coil Information

For refrigerant coils the following additional information must be supplied;

- Evaporator temperature, °F
- Liquid temperature, °F
- Consult the factory for special circuiting or refrigerants

D. Special Requirements

The following special options are available on all coil types and sizes.

- Phenolic coatings
- Stainless steel coil casing material
- Copper fins
- **Note:** For special requirements not listed here, contact your Reznor Sales Representative.

E. Entering Air Conditions

Design dry bulb and wet bulb temperatures must be considered when choosing a coil. For applications using a percentage of outdoor air, the condition of the "mixed air" entering the coil can be calculated as shown in the following steps.

- Mixed Dry Bulb Temperature

The mixed dry bulb temperature is a simple arithmetic average of the return and outside air temperatures weighted by the percentage of the standard cfm in each air stream.

Example:

1000 acfm of outside air @ 95°F (db) is mixed with 5000 acfm of return air @ 80°F (db). The elevation is 2000 ft. above sea level.

Step 1

Determine the standard airflow (scfm) by adjusting the actual (acfm) with temperature, F_t , and elevation, F_e , correction factors; see Tables 10 and 11 to determine the value of these factors.

Correction Factors for **Outside Air** --

- ♦ $F_t = 0.05$ and
- ♦ $F_e = 0.08$

Standard airflow = acfm / $(1 + F_t + F_e)$

- ♦ $1000 / 1.13 = 885$ scfm

Correction Factors for **Return Air** --

- ♦ $F_t = 0.02$ and
- ♦ $F_e = 0.08$

Standard airflow = acfm / $(1 + F_t + F_e)$

- ♦ $5000 / 1.10 = 4545$ scfm

Total supply airflow = 885 + 4545 = 5430 scfm

Step 2

The **mixed air dry bulb temperature** is the average as shown below.

- ♦ $\{(95 \times 885) + (80 \times 4545)\} / 5430 = 82.4^\circ\text{F}$

- Mixed Wet Bulb Temperature

The mixed wet bulb temperature must be determined using a psychrometric chart.

Example

1000 acfm of outside air @ 75°F (wb) is mixed with 5000 acfm of return air @ 67°F (wb).

Step 1

Using Table 12, determine the enthalpy of each air stream.

- ♦ Outside air at 75°F (wb) = 38.6 Btu/lb
- ♦ Return air at 67°F (wb) = 31.6 Btu/lb.

Step 2

The enthalpy of the mixed airstream is determined by calculating the average as shown below.

- ♦ $\{(38.6 \times 885) + (31.6 \times 4545)\} / 5430 = 32.7$ Btu/lb

Step 3

The mixed airstream wet bulb temperature can be found in Table 12 corresponding to the mixed enthalpy value of 32.7 Btu/lb.

- ♦ $T(\text{wb}) = 68.3^\circ\text{F}$
- Entering Air Condition

Entering air condition is typically written as $T(\text{db}) / T(\text{wb})$. In the above example, the mixed air condition is 82.4°F / 68.3°F.

F. Conversion to Standard Airflow

A fan must be selected using airflow calculated at the actual conditions of operation. Since a fan is a "constant volume" device, the **actual CFM (ACFM)** is required for analysis and properly determining motor requirements. To specify a coil, it is important that the airflow be converted into **standard CFM (SCFM)** or air at a density of 0.075 lb/ft³. Cooling and heating coils must be selected using SCFM. Up to an altitude of approximately 1,500 feet above sea level, very little error is introduced if ACFM is substituted in the selection of a coil. For altitudes that exceed 1,500 feet above sea level, the coil should always be selected using SCFM. The relationship between ACFM and SCFM is shown by the following equation: $\text{SCFM} = \text{ACFM} \times (\text{Actual Density} / 0.075)$. From this equation it is obvious that the relationship between SCFM and ACFM is dependent upon air density which is a function of blower temperature and elevation. Tables 10 and 11 contain correction factors for conversion from ACFM to SCFM.

The factors are used in the following manner: $\text{SCFM} = \text{ACFM} (1 + F)$ where F may be a correction factor for temperature (F_t), or elevation (F_e), or both ($F_e + F_t$).

- ♦ **Example:** A cooling coil must be selected for an application that is 3,500 ft. above sea level with entering air of 90°F dry bulb. The blower delivers 10,000 ACFM. What is the SCFM seen by the coil?

- ♦ **Answer:** For 90°F the temperature correction factor in Table 10 is 0.04. At 3,500 feet, the elevation correction factor from Table 11 is 0.14. The answer is found by adding the two correction factors and dividing as shown here.

- ♦ $\text{SCFM} = 10,000 \text{ ACFM} / (1 + 0.14 + 0.04) = 8,475 \text{ SCFM}$

Temperature Correction Factors

| °F | -40 | -20 | 0 | 20 | 40 | 70 | 80 | 90 | 100 | 120 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| F_t | -0.21 | -0.17 | -0.13 | -0.09 | -0.06 | 0.00 | 0.02 | 0.04 | 0.06 | 0.09 |

Note : Standard temperature is 70°F.

Elevation Correction Factors

| | Elevation, Ft. | | | | | | | | | |
|-------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1,500 | 2,000 | 2,500 | 3,000 | 3,500 | 4,000 | 4,500 | 5,000 | 6,000 | 7,000 |
| F_e | 0.06 | 0.08 | 0.10 | 0.12 | 0.14 | 0.16 | 0.18 | 0.20 | 0.25 | 0.30 |

Note : Applications for elevations below 1,500 ft. do not require the use of an elevation correction factor.

The Reznor Coil Selection Software (DX selection, shown above) that is part of RezQuote™ and RezPro® Toolbox packages will optimally design heating and cooling coils for your specific application for all Reznor models utilizing custom coils.

Exact design and performance are shown on coil data sheets output by Reznor coil selection software. You may request or download a copy of the software or submit the coil request form (found at the end of this section on cooling) to your Reznor Representative, who can then provide you with a detailed coil run.

DX Coil Controls and Circuits

DX coils are available for one, two, or three stage operation. Two or three stage operation is generally recommended for makeup air, where the load on the coil may vary considerably.

Two stage DX cooling operation is accomplished by two equal capacity interlaced coil circuits for connection to a two stage condensing unit or two equal capacity single stage condensers. Three stage operation is accomplished by two unequal interlaced circuits, with approximately 1/3 of the coil tubes on the first circuit and 2/3 of the coil tubes on the second. Two condensing units of unequal capacity are used – one 5 ton and one 10 ton for example. The first circuit is connected to the smaller condenser and the second to the larger. The 3 stage digital cooling control system in the unit will activate the first condenser on first stage. On second stage, the first condenser is deactivated and the larger second condenser is activated. On third stage, both condensers are activated. TXV's, liquid line solenoids, any desired hot gas bypass valves, and condensing units are provided by others. Alternate analog heating controls are available for cooling controls by others or heating/cooling by room thermostat only. Call your Reznor Representative for special requirements.

Coil Design – DX Coils

Individual coils are custom designed and internally circuited by Reznor coil selection/design software to optimize for the exact conditions specified. Variables are:

External Circuiting: Single (one stage), Dual 50-50 (2 stage), Dual 1/3-2/3 (3 stage)

Refrigerants: R410a

Rows: 2, 3, 4, or 6

Fins per Inch: 8, 10, 12, or 14

Tube OD: 1/2" (standard) or 3/8" (low load)

Fin Height: 20", 22.5", or 25" (75 to 150 sizes)

30", 32.5", or 35" (175 to 400A sizes)

Internal Circuiting: The number of internal coil circuits is thermodynamically optimized, but circuits may be increased to decrease refrigerant pressure drop or decreased to increase refrigerant velocity. Refrigerant velocity should be above 1000 fpm and refrigerant pressure drop should be less than 8 psi. When coil loads are light and refrigerant velocity would be less than 1100 fpm with 1/2" tube, 3/8" tube is used to improve refrigerant velocity. Note that higher refrigerant velocities are available with 20", 25", 30" and 35" height coils and lower refrigerant pressure drop with optimal thermodynamic efficiency are available with 22.5" and 32.5" height coils (due to internal circuiting). In general, preference is given to coils having the lowest air pressure drop, which favors taller fin heights.

Coil Design - Chilled Water Coils

Individual coils are custom designed and internally circuited by Reznor coil selection/design software to optimize for the exact conditions specified. Variables are:

Refrigerants: Water, Ethylene Glycol(%), or Propylene Glycol(%)

Rows: 4 or 6

Fins per Inch: 6, 8, 10, 12, or 14

Tube OD: 1/2

Internal Circuiting: Quarter, Half, Three Quarter, or Single serpentine

Quarter circuit coils are used for low flow rates and have high pressure drops. Full circuit coils are for high flow rates and have low pressure drops. Half and Three Quarter circuit coils are in between. The best circuiting for a given application can be optimized based on flow rate, pressure drop and output requirements.

Chilled water coil performance is significantly diminished by glycol, higher percentages causing lower performance. The unit size/coil face may have to be increased to achieve adequate cooling performance with glycol in some cases. See approximate derates in the table below:

| Chilled Water Coil Output Derate (from pure water) for Glycol | | | | | | |
|---|-------------------|------|------|-------|-------|-------|
| Glycol Type | % Glycol by Wt | 12% | 20% | 28% | 36% | 40% |
| Ethylene | Derate | 2.7% | 4.2% | 6.4% | 10.1% | 11.7% |
| | Freezing Point °F | 24.7 | 17.9 | 9.2 | -1.5 | -8.1 |
| Propylene | Derate | 3.9% | 7.0% | 13.6% | 22.9% | 28.2% |
| | Freezing Point °F | 24.9 | 19.2 | 2.2 | 0.8 | -6.0 |

MODEL SSCBL INDOOR HEATING AND MAKEUP AIR UNITS (SEPARATED COMBUSTION)

GENERAL

Provide packaged heating and makeup air unit as Reznor® brand equipment. These units shall be the SSCBL series with power-vented separated combustion 80% thermal efficient gas furnaces, arranged for suspension or mounting on a (slab) (post and rail).

CABINET

The (single-wall) (double-wall) insulated blower cabinet (and coil cabinet) is (are) to be arranged for (recirculated) (makeup) (combination recirculated and makeup) air. Inlet air shall be supplied through (horizontal cabinet opening) (outdoor cabinet with bottom inlet opening) (cabinet with both horizontal and bottom air inlet openings) (100% outside air damper with motor) (modulating outside air and return air mixing dampers) (alternating 100% outside air or 100% return air with 2-position damper motor) (modulating 100% outside air and 100% return air mixing damper with remote manual dial [potentiometer]) (100% outside air and 100% return air dampers with modulating motor controlled by pressure null switch) (modulating 100% outside air and 100% return air mixing damper with DDC control).

BLOWER

The units are to include a centrifugal blower and filter rack with (2" disposable) (2" permanent) (2" pleated) filters, factory installed. Motor shall be (open drip-proof) (totally enclosed) and motors should meet EISA specifications for efficiency with (adjustable belt drive) (variable frequency drive with (soft start) (2-speed) (DDC signal from remote device) (other) control). Include all other required controls.

HEATING CONTROLS

All units shall be equipped for use with (natural) (propane) gas, (120/1) (208/1) (230/1) (208/3) (230/3) (460/3) (575/3) supply voltage, 24-volt control transformer, automatic power venter, (motor contactor) (motor starter), and a(n) intermittent spark pilot (intermittent spark pilot with timed lockout). Unit shall have a(n) (one-stage gas control [with relays] [with thermostat]) (two-stage gas control [with relays] [with thermostat]) (electronic modulation - 50%-100% turndown - gas control) (two-stage gas control from ductstat per furnace section) (electronic two-stage gas control using ductstat with remote temperature adjustment [and temperature display] per furnace section) (two-stage gas control for dual furnace units [using a ductstat with remote temperature adjustment {and temperature display}]) (three-stage gas control for triple furnace units) (electronic three-stage gas controls for triple furnace units using a ductstat with remote temperature selector [and temperature display]) (electronic modulation - 50%-100% turndown - with ductstat and remote temperature selector) (electronic modulation with DDC controls) (electronic modulation gas control with four to one turndown ratio and remote temperature selector).

HEAT EXCHANGER

The gas furnace shall contain a heat exchanger of (aluminized) (E-3 [409] stainless) steel, die-formed burners of (aluminized) (E-3 [409] stainless) steel, and an (aluminized) (E-3 [409] stainless) steel drip pan. The furnace(s) shall be equipped with all required safety and limit controls.

OPTIONAL ACCESSORIES

The following accessories shall be provided: (convenience outlet), (air proving switch), (high ambient burner cutoff), (firestat[s]), (freezestat), (summer/winter control), (remote console with required lights and switches) (high and low gas pressure switches), (evaporative cooler), (double wall cabinet construction) (cooling coil cabinet with [DX] [chilled water] coil).

CERTIFICATION

The duct furnace and the packaged heating and makeup air system shall be design-certified to ANSI and CSA Standards.

Manufacturer must have minimum of forty (40) years of experience with this type of makeup air heating equipment. See drawings and schedules for quantities, sizes and capacities.

MODEL RPBL

ROOF MOUNTED HEATING AND MAKEUP AIR UNITS (POWER-VENTED)

GENERAL

Provide packaged, roof-mounted heating and make up air units as Reznor® brand equipment. These units shall be the RPBL series designed for 80% thermal efficiency with power-vented gas furnaces, arranged for roof mounting on a (field-assembled curb) (slab) (post and rail). The units are to be arranged for field duct connection with horizontal (downturn plenum) supply connection at discharge and horizontal (and/or bottom) inlet connection.

CABINET

The single (double) wall insulated blower cabinet (and coil cabinet) is (are) to be arranged for (recirculated) (makeup) (combination recirculated and makeup) air. Inlet air shall be supplied through (horizontal cabinet opening) (bottom inlet opening) (both horizontal and bottom air inlet openings with manual dampers - 30% outside air) (both horizontal and bottom air inlet openings with motorized dampers - 30% outside air) (100% outside air damper with damper motor - on/off) (modulating outside air and return air mixing dampers) (alternating 100% outside air or 100% return air with 2-position damper motor) (modulating 100% outside air and 100% return air mixing damper with remote manual dial [potentiometer]) (modulating 100% outside air and 100% return air mixing damper with DDC control). (Outside air hood with moisture eliminator louvers to be shipped separately.)

BLOWER

The units are to include a centrifugal blower and filter rack with (2" disposable) (2" permanent) (2" pleated) filters, factory installed. Motor shall be (open drip-proof) (totally enclosed) and motors shall meet EISA specifications for efficiency with (adjustable belt drive) (variable frequency drive with (soft start) (2-speed) (DDC signal from remote device) (other) control). Include all other required controls.

HEATING CONTROLS

All units shall be equipped for use with (natural) (propane) gas (208/1) (230/1) (208/3) (230/3) (460/3) (575/3) supply voltage, 24-volt control transformer, automatic power venter, (motor contactor) (motor starter), (intermittent spark pilot [with timed lockout]), and a (one-stage) (two-stage [from ductstat]) (electronic two-stage using ductstat [with remote temperature adjustment] [with remote temperature adjustment and temperature display]) (three-stage) (electronic three-stage using ductstat with remote temperature adjustment [and temperature display]) (electronic modulation with DDC controls) (electronic modulation gas control with four to one turndown ratio and remote temperature selector) (electronic modulation with 2:1 or 4:1 turndown ration) gas control system.

HEAT EXCHANGER

The gas furnace(s) shall contain a heat exchanger of (aluminized) (E-3 [409] stainless) steel, die-formed burners of (aluminized) (E-3 [409] stainless) steel, and an (aluminized) (E-3 [409] stainless) steel drip pan.

OPTIONAL ACCESSORIES

The following accessories shall be provided: (convenience outlet), (air proving switch), (high ambient burner cutoff), (firestat[s]), (freezestat), summer/winter control), (remote console with required lights and switches), (high and low gas pressure switches), (outside air screened hood with moisture-eliminating louvers), (evaporative cooler), (downturn plenum), (double wall cabinet construction), (2-position discharge damper).

CERTIFICATION

All gas-fired packaged heating equipment must bear the C.S.A. label. The manufacturer must have a minimum of forty (40) years experience with this type of makeup air heating equipment.

Unit shall be warranted for 12 months from date of installation or 18 months from date of shipment, whichever occurs first.

See drawings and schedules for quantities, sizes and capacities.

MODEL RBL

OUTDOOR MOUNTED CABINET BLOWER

GENERAL

Provide roof-mounted cabinet blower, air handler units as Reznor® brand equipment. These units shall be Model RBL, arranged for roof mounting on a (field-assembled curb) (slab) (post and rail). The units are to be arranged for field duct connection with horizontal (downturn plenum) supply connection at discharge and horizontal (and/or bottom) inlet connection.

CABINET

The single (double) wall insulated blower cabinet (and coil cabinet) is (are) to be arranged for (recirculated) (makeup) (combination recirculated and makeup) air. Inlet air shall be supplied through (horizontal cabinet opening) (bottom inlet opening) (both horizontal and bottom air inlet openings) (both horizontal and bottom air inlet openings with manual dampers - 30% outside air) (both horizontal and bottom air inlet openings with motorized dampers - 30% outside air) (100% outside air damper with damper motor - on/off) (modulating outside air and return air mixing dampers) (alternating 100% outside air or 100% return air with 2-position damper motor) (modulating 100% outside air and 100% return air mixing damper with remote manual dial [potentiometer]) (modulating 100% outside air and 100% return air mixing damper with DDC control). (Outside air hood with moisture eliminator louvers to be shipped separately.)

BLOWER

The units are to include a centrifugal blower, (open drip-proof) (totally enclosed) blower motor, and an adjustable belt drive, filter (rack with 2" [disposable] [permanent] [pleated] filters, factory installed). Include all required controls, dampers, and inlets to provide an air control cycle of (100% outside air inlet and 100% return air inlet with dampers and [manual dial/potentiometer] [2-position motor] [modulating damper motor and mixed air controller]) (30% outdoor air inlet, hood [with manual locking damper] [with motorized damper] and bottom inlet) .

OPTIONAL ACCESSORIES

The following accessories shall be provided: (summer/winter control), (outside air screened hood with moisture-eliminating louvers), (evaporative cooler), (downturn plenum), (double wall cabinet construction), (2-position discharge damper).

CERTIFICATION

The manufacturer must have a minimum of forty (40) years experience with this type of air handling equipment.

Unit shall be warranted for 12 months from date of installation or 18 months from date of shipment, whichever occurs first.

See drawings and schedules for quantities, sizes and capacities.



Enthalpy of Saturated Air for Various Wet Bulb Temperatures

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|---------------------------|------------------------|
| 50 | 20.4 |
| 50.5 | 20.6 |
| 51 | 20.9 |
| 51.5 | 21.2 |
| 52 | 21.4 |
| 52.5 | 21.7 |
| 53 | 22 |
| 53.5 | 22.3 |
| 54 | 22.6 |
| 54.5 | 22.9 |
| 55 | 23.2 |
| 55.5 | 23.5 |
| 56 | 23.8 |
| 56.5 | 24.1 |
| 57 | 24.4 |

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|---------------------------|------------------------|
| 57.5 | 24.7 |
| 58 | 25.1 |
| 58.5 | 25.4 |
| 59 | 25.7 |
| 59.5 | 26.1 |
| 60 | 26.4 |
| 60.5 | 26.8 |
| 61 | 27.1 |
| 61.5 | 27.5 |
| 62 | 27.8 |
| 62.5 | 28.2 |
| 63 | 28.6 |
| 63.5 | 28.9 |
| 64 | 29.3 |
| 64.5 | 29.7 |

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|---------------------------|------------------------|
| 65 | 30.1 |
| 65.5 | 30.4 |
| 66 | 30.8 |
| 66.5 | 31.2 |
| 67 | 31.6 |
| 67.5 | 32 |
| 68 | 32.4 |
| 68.5 | 32.9 |
| 69 | 33.3 |
| 69.5 | 33.7 |
| 70 | 34.1 |
| 70.5 | 34.6 |
| 71 | 35 |
| 71.5 | 35.4 |
| 72 | 35.9 |

| Wet Bulb Temp, [deg.F] | Enthalpy [Btu / lb] |
|---------------------------|------------------------|
| 72.5 | 36.3 |
| 73 | 36.8 |
| 73.5 | 37.2 |
| 74 | 37.7 |
| 74.5 | 38.2 |
| 75 | 38.6 |
| 75.5 | 39.1 |
| 76 | 39.6 |
| 76.5 | 40 |
| 77 | 40.5 |
| 77.5 | 41 |
| 78 | 41.5 |
| 78.5 | 42 |
| 79 | 42.5 |
| 79.5 | 43 |

General Note : Enthalpy is approximately constant with constant wet bulb temperature. There is a slight variation with dry bulb temperature, but the variation is typically negligible over the range of dry bulb temperatures common to HVAC applications.

Worksheet



Motor/Horsepower/Voltage Selection and Starter Requirement Chart

Applies to Models RPBL & SSCBL

Use this chart to determine whether a particular voltage/horsepower combination is available. Option AN10 starter must be ordered where indicated. 1-3 HP Open and Enclosed motors that require a starter do not have internal overload protection, and a starter (Option AN10) must be ordered to provide external overload protection. 1-3 HP Open and Enclosed motors that do not require a starter have internal overload protection and a standard contactor.

In the chart to the right, "S" indicates that a motor starter is standard, "C" indicates that the Contactor is standard and a motor starter is optional, "SV" indicates that an optional motor starter or a variable frequency drive **must** be selected.

| Motor Type | Option No. | HP | Voltage RPM | 208/1/60 AK2 | 230/1/60 AK3 | 208/3/60 AK5 | 230/3/60 AK6 | 460/3/60 AK7 | 575/3/60 AK8 |
|------------------|------------|----------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Open Dripproof | AL6 | 1 HP | 1800 | C | C | C | C | C | SV |
| | AL7 | 1-1/2 HP | 1800 | C | C | C | C | C | SV |
| | AL8 | 2 HP | 1800 | C | C | C | C | C | SV |
| | AL9 | 3 HP | 3600 | S | S | C | C | C | SV |
| | AL10 | 5 HP | 3600 | S | S | SV | SV | SV | SV |
| | AL11 | 7-1/2 HP | 1800 | S | S | SV | SV | SV | SV |
| | AL12 | 10 HP | 1800 | S | S | SV | SV | SV | SV |
| | AL15 | 15 HP | 1800 | ■ | ■ | SV | SV | SV | SV |
| Totally Enclosed | AL16 | 20 HP | 1800 | ■ | ■ | SV | SV | SV | SV |
| | AL23 | 1 HP | 1800 | C | C | SV | SV | SV | SV |
| | AL24 | 1-1/2 HP | 1800 | C | C | SV | SV | SV | SV |
| | AL25 | 2 HP | 1800 | ■ | C | SV | SV | SV | SV |
| | AL26 | 3 HP | 3600 | ■ | S | SV | SV | SV | SV |
| | AL27 | 5 HP | 3600 | ■ | S | SV | SV | SV | SV |
| | AL32 | 7-1/2 HP | 1800 | ■ | S | SV | SV | SV | SV |
| | AL33 | 10 HP | 1800 | ■ | S | SV | SV | SV | SV |
| | AL34 | 15 HP | 1800 | ■ | ■ | SV | SV | SV | SV |
| | AL35 | 20 HP | 1800 | ■ | ■ | SV | SV | SV | SV |



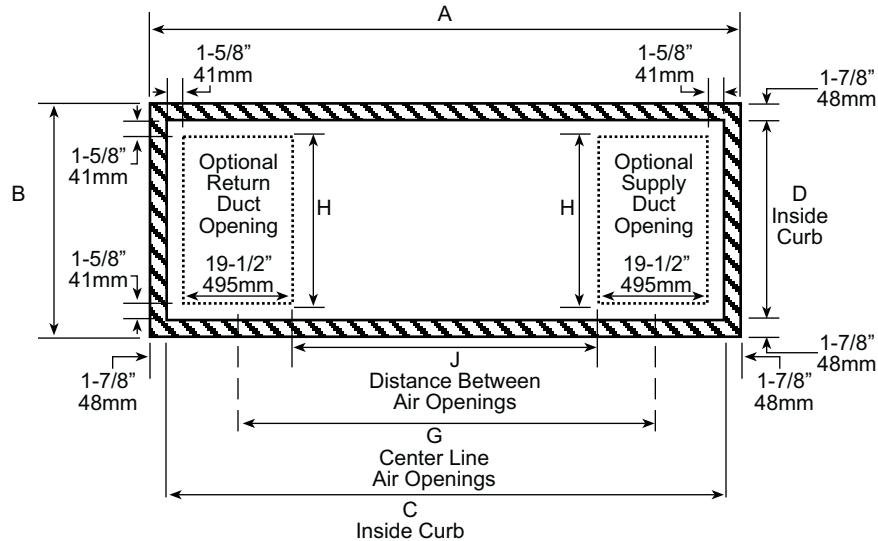
Motor/Horsepower/Voltage Selection and Starter Requirement Chart

Applies to Models RPB

Use this chart to determine whether a particular voltage/horsepower combination is available. Option AN10 starter must be ordered where indicated. 1-3 HP Open and Enclosed motors that require a starter do not have internal overload protection, and a starter (Option AN10) must be ordered to provide external overload protection. 1-3 HP Open and Enclosed motors that do not require a starter have internal overload protection and a standard contactor.

In the chart to the right, "S" indicates that a motor starter is standard, "C" indicates that the Contactor is standard and a motor starter is optional, "SV" indicates that an optional motor starter or a variable frequency drive **must** be selected.

| Motor Type | Option No. | HP | Voltage RPM | 115/1/60 AK1 | 208/1/60 AK2 | 230/1/60 AK3 | 208/3/60 AK5 | 230/3/60 AK6 | 460/3/60 AK7 | 575/3/60 AK8 |
|------------------|------------|----------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Open Dripproof | AL2 | 1/4 HP | 1800 | C | C | C | S | S | S | ■ |
| | AL3 | 1/3 HP | 1800 | C | C | C | S | S | S | ■ |
| | AL4 | 1/2 HP | 1800 | C | C | C | C | C | C | S |
| | AL5 | 3/4 HP | 1800 | C | C | C | C | C | C | S |
| | AL6 | 1 HP | 1800 | C | C | C | C | C | C | S |
| | AL7 | 1-1/2 HP | 1800 | C | C | C | C | C | C | S |
| | AL8 | 2 HP | 1800 | C | C | C | C | C | C | S |
| | AL9 | 3 HP | 3600 | ■ | S | S | C | C | C | S |
| Totally Enclosed | AL10 | 5 HP | 3600 | ■ | ■ | ■ | SV | SV | SV | SV |
| | AL19 | 1/4 HP | 1800 | C | C | C | S | S | S | ■ |
| | AL20 | 1/3 HP | 1800 | C | C | C | S | S | S | ■ |
| | AL21 | 1/2 HP | 1800 | C | C | C | C | C | C | S |
| | AL22 | 3/4 HP | 1800 | C | C | C | C | C | C | S |
| | AL23 | 1 HP | 1800 | C | C | C | SV | SV | SV | SV |
| | AL24 | 1-1/2 HP | 1800 | C | C | C | SV | SV | SV | SV |
| | AL25 | 2 HP | 1800 | ■ | ■ | ■ | SV | SV | SV | SV |
| | AL26 | 3 HP | 3600 | ■ | ■ | ■ | SV | SV | SV | ■ |



Roof Curb Dimensions for Model RPB

Option CJ1 - Roof Curb for Heater Only

| SIZE | A | | B | | C* | | D* | | G | | H | | J | | Weight | |
|--------------|--------|---------|----------|---------|----------|---------|----------|---------|-----|------|--------|---------|-----|------|--------|------|
| | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | lbs. | (kg) |
| 75, 100, 125 | 60 5/8 | (1,540) | 24 5/16 | (618) | 56 15/16 | (1,446) | 20 9/16 | (522) | -- | -- | 17 3/8 | (441) | -- | -- | 90 | (41) |
| 150, 175 | 60 5/8 | (1,540) | 29 13/16 | (757) | 56 15/16 | (1,446) | 26 1/16 | (662) | -- | -- | 22 7/8 | (581) | -- | -- | 95 | (43) |
| 200, 225 | 60 5/8 | (1,540) | 35 5/16 | (897) | 56 15/16 | (1,446) | 31 9/16 | (802) | -- | -- | 28 3/8 | (721) | -- | -- | 101 | (46) |
| 250, 300 | 60 5/8 | (1,540) | 43 9/16 | (1,106) | 56 15/16 | (1,446) | 39 13/16 | (1,011) | -- | -- | 36 5/8 | (930) | -- | -- | 111 | (50) |
| 350 | 60 5/8 | (1,540) | 49 1/16 | (1,246) | 56 15/16 | (1,446) | 45 5/16 | (1,151) | -- | -- | 42 1/8 | (1,070) | -- | -- | 117 | (53) |
| 400 | 60 5/8 | (1,540) | 54 1/2 | (1,384) | 56 15/16 | (1,446) | 50 13/16 | (1,291) | -- | -- | 47 5/8 | (1,210) | -- | -- | 123 | (56) |

Option CJ2 - Roof Curb for Heater Plus Factory-Installed Downturn Plenum (Option AQ5 or AQ8)

| SIZE | A | | B | | C* | | D* | | G | | H | | J | | Weight | |
|--------------|---------|---------|----------|---------|----------|---------|----------|---------|--------|---------|--------|---------|--------|-------|--------|------|
| | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | in. | (mm) | lbs. | (kg) |
| 75, 100, 125 | 84 9/16 | (2,148) | 24 5/16 | (618) | 80 13/16 | (2,053) | 20 9/16 | (522) | 58 1/8 | (1,476) | 17 3/8 | (441) | 38 5/8 | (981) | 112 | (51) |
| 150, 175 | 84 9/16 | (2,148) | 29 13/16 | (757) | 80 13/16 | (2,053) | 26 1/16 | (662) | 58 1/8 | (1,476) | 22 7/8 | (581) | 38 5/8 | (981) | 118 | (54) |
| 200, 225 | 84 9/16 | (2,148) | 35 5/16 | (897) | 80 13/16 | (2,053) | 31 9/16 | (802) | 58 1/8 | (1,476) | 28 3/8 | (721) | 38 5/8 | (981) | 124 | (56) |
| 250, 300 | 84 9/16 | (2,148) | 43 9/16 | (1,106) | 80 13/16 | (2,053) | 39 13/16 | (1,011) | 58 1/8 | (1,476) | 36 5/8 | (930) | 38 5/8 | (981) | 133 | (60) |
| 350 | 84 9/16 | (2,148) | 49 1/16 | (1,246) | 80 13/16 | (2,053) | 45 5/16 | (1,151) | 58 1/8 | (1,476) | 42 1/8 | (1,070) | 38 5/8 | (981) | 139 | (63) |
| 400 | 84 9/16 | (2,148) | 54 1/2 | (1,384) | 80 13/16 | (2,053) | 50 13/16 | (1,291) | 58 1/8 | (1,476) | 47 5/8 | (1,210) | 38 5/8 | (981) | 145 | (66) |

* C and D are roof opening dimensions



MOTOR FULL LOAD AMPS (F.L.A.) TABLES

| HP | Motor Type | Motor F.L.A. | RPM | Voltage | PH |
|------|------------|--------------|------|---------|----|
| 0.25 | OPEN | 5.1 | 1750 | 120 | 1 |
| 0.25 | OPEN | 2.1 | 1750 | 208 | 1 |
| 0.25 | OPEN | 2.3 | 1750 | 240 | 1 |
| 0.25 | OPEN | 1.1 | 1750 | 208 | 3 |
| 0.25 | OPEN | 1.4 | 1750 | 240 | 3 |
| 0.25 | OPEN | 0.75 | 1750 | 480 | 3 |
| 0.25 | TEFC | 3.6 | 1750 | 120 | 1 |
| 0.25 | TEFC | 2.2 | 1750 | 208 | 1 |
| 0.25 | TEFC | 1.9 | 1750 | 240 | 1 |
| 0.25 | TEFC | 1.6 | 1750 | 208 | 3 |
| 0.25 | TEFC | 1.4 | 1750 | 240 | 3 |
| 0.25 | TEFC | 0.7 | 1750 | 480 | 3 |
| 0.33 | OPEN | 5.5 | 1750 | 120 | 1 |
| 0.33 | OPEN | 3.2 | 1750 | 208 | 1 |
| 0.33 | OPEN | 2.8 | 1750 | 240 | 1 |
| 0.33 | OPEN | 1.4 | 1750 | 208 | 3 |
| 0.33 | OPEN | 1.6 | 1750 | 240 | 3 |
| 0.33 | OPEN | 0.8 | 1750 | 480 | 3 |
| 0.33 | TEFC | 4.6 | 1750 | 120 | 1 |
| 0.33 | TEFC | 2.3 | 1750 | 208 | 1 |
| 0.33 | TEFC | 2.4 | 1750 | 240 | 1 |
| 0.33 | TEFC | 1.2 | 1750 | 208 | 3 |
| 0.33 | TEFC | 1.2 | 1750 | 240 | 3 |
| 0.33 | TEFC | 0.6 | 1750 | 480 | 3 |
| 0.50 | OPEN | 8.8 | 1750 | 120 | 1 |
| 0.50 | OPEN | 5.1 | 1750 | 208 | 1 |
| 0.50 | OPEN | 4.4 | 1750 | 240 | 1 |
| 0.50 | OPEN | 2.1 | 1750 | 208 | 3 |
| 0.50 | OPEN | 2 | 1750 | 240 | 3 |
| 0.50 | OPEN | 1 | 1750 | 480 | 3 |
| 0.50 | TEFC | 7 | 1750 | 120 | 1 |
| 0.50 | TEFC | 3.4 | 1750 | 208 | 1 |
| 0.50 | TEFC | 3.5 | 1750 | 240 | 1 |
| 0.50 | TEFC | 2.3 | 1750 | 208 | 3 |
| 0.50 | TEFC | 2 | 1750 | 240 | 3 |
| 0.50 | TEFC | 1 | 1750 | 480 | 3 |
| 0.50 | TEFC | 0.7 | 1750 | 575 | 3 |
| 0.75 | OPEN | 11 | 1750 | 120 | 1 |
| 0.75 | OPEN | 6.3 | 1750 | 208 | 1 |
| 0.75 | OPEN | 5.5 | 1750 | 240 | 1 |
| 0.75 | OPEN | 2.9 | 1750 | 208 | 3 |
| 0.75 | OPEN | 2.6 | 1750 | 240 | 3 |
| 0.75 | OPEN | 1.3 | 1750 | 480 | 3 |
| 0.75 | TEFC | 11 | 1750 | 120 | 1 |
| 0.75 | TEFC | 5.4 | 1750 | 208 | 1 |
| 0.75 | TEFC | 5.5 | 1750 | 240 | 1 |
| 0.75 | TEFC | 2 | 1750 | 208 | 3 |
| 0.75 | TEFC | 2.2 | 1750 | 240 | 3 |
| 0.75 | TEFC | 1.1 | 1750 | 480 | 3 |
| 0.75 | TEFC | 0.8 | 1750 | 575 | 3 |

| HP | Motor Type | Motor F.L.A. | RPM | Voltage | PH |
|------|------------|--------------|------|---------|----|
| 1.00 | OPEN | 13 | 1750 | 120 | 1 |
| 1.00 | OPEN | 7.5 | 1750 | 208 | 1 |
| 1.00 | OPEN | 6.5 | 1750 | 240 | 1 |
| 1.00 | OPEN | 3.7 | 1750 | 208 | 3 |
| 1.00 | OPEN | 3.2 | 1750 | 240 | 3 |
| 1.00 | OPEN | 1.6 | 1750 | 480 | 3 |
| 1.00 | OPEN | 1.4 | 1750 | 575 | 3 |
| 1.00 | TEFC | 13 | 1750 | 120 | 1 |
| 1.00 | TEFC | 6.5 | 1750 | 240 | 1 |
| 1.00 | TEFC | 3.3 | 1750 | 208 | 3 |
| 1.00 | TEFC | 3.4 | 1750 | 240 | 3 |
| 1.00 | TEFC | 1.7 | 1750 | 480 | 3 |
| 1.00 | TEFC | 1.4 | 1750 | 575 | 3 |
| 1.00 | EE | 3.1 | 1750 | 208 | 3 |
| 1.00 | EE | 2.7 | 1750 | 240 | 3 |
| 1.00 | EE | 1.35 | 1750 | 480 | 3 |
| 1.00 | EE | 1.1 | 1750 | 575 | 3 |
| 1.50 | TEFC | 16.4 | 1750 | 120 | 1 |
| 1.50 | TEFC | 9.5 | 1750 | 208 | 1 |
| 1.50 | TEFC | 8.2 | 1750 | 240 | 1 |
| 1.50 | TEFC | 4.3 | 1750 | 208 | 3 |
| 1.50 | TEFC | 4.4 | 1750 | 240 | 3 |
| 1.50 | TEFC | 2.2 | 1750 | 480 | 3 |
| 1.50 | TEFC | 1.8 | 1750 | 575 | 3 |
| 1.50 | EE | 4.5 | 1750 | 208 | 3 |
| 1.50 | EE | 3.9 | 1750 | 240 | 3 |
| 1.50 | EE | 1.95 | 1750 | 480 | 3 |
| 1.50 | EE | 1.6 | 1750 | 575 | 3 |
| 1.50 | OPEN | 15 | 1750 | 120 | 1 |
| 1.50 | OPEN | 8.3 | 1750 | 208 | 1 |
| 1.50 | OPEN | 7.5 | 1750 | 240 | 1 |
| 1.50 | OPEN | 5.6 | 1750 | 208 | 3 |
| 1.50 | OPEN | 5 | 1750 | 240 | 3 |
| 1.50 | OPEN | 2.7 | 1750 | 480 | 3 |
| 1.50 | OPEN | 2 | 1750 | 575 | 3 |
| 2.00 | OPEN | 20.4 | 1750 | 120 | 1 |
| 2.00 | OPEN | 10 | 1750 | 208 | 1 |
| 2.00 | OPEN | 10.2 | 1750 | 240 | 1 |
| 2.00 | OPEN | 7 | 1750 | 208 | 3 |
| 2.00 | OPEN | 6.6 | 1750 | 240 | 3 |
| 2.00 | OPEN | 3.3 | 1750 | 480 | 3 |
| 2.00 | OPEN | 2.4 | 1750 | 575 | 3 |
| 2.00 | TEFC | 24 | 1750 | 120 | 1 |
| 2.00 | TEFC | 12 | 1750 | 240 | 1 |
| 2.00 | TEFC | 6.5 | 1750 | 208 | 3 |
| 2.00 | TEFC | 5.6 | 1750 | 240 | 3 |
| 2.00 | TEFC | 2.8 | 1750 | 480 | 3 |
| 2.00 | TEFC | 2.2 | 1750 | 575 | 3 |
| 2.00 | EE | 6 | 1750 | 208 | 3 |
| 2.00 | EE | 5.2 | 1750 | 240 | 3 |
| 2.00 | EE | 2.6 | 1750 | 480 | 3 |
| 2.00 | EE | 2.1 | 1750 | 575 | 3 |



MOTOR FULL LOAD AMPS (F.L.A.) TABLES (cont'd)

| HP | Motor Type | Motor F.L.A. | RPM | Voltage | PH |
|-------|------------|--------------|-----------|---------|----|
| 3.00 | OPEN | 14 | 3600 | 208 | 1 |
| 3.00 | OPEN | 12.4 | 3600 | 240 | 1 |
| 3.00 | OPEN | 9.1 | 3600 | 208 | 3 |
| 3.00 | OPEN | 8.4 | 3600 | 240 | 3 |
| 3.00 | OPEN | 4.2 | 3600 | 480 | 3 |
| 3.00 | OPEN | 3.6 | 3600 | 575 | 1 |
| 3.00 | TEFC | 30 | 3600 | 120 | 1 |
| 3.00 | TEFC | 15 | 3600 | 240 | 3 |
| 3.00 | TEFC | 8.5 | 3600 | 208 | 3 |
| 3.00 | TEFC | 8.2 | 3600 | 240 | 3 |
| 3.00 | TEFC | 4.1 | 3600 | 480 | 3 |
| 3.00 | TEFC | 3.1 | 3600 | 575 | 3 |
| 3.00 | EE | 8.6 | 3600 | 208 | 3 |
| 3.00 | EE | 7.8 | 3600 | 240 | 3 |
| 3.00 | EE | 3.9 | 3600 | 480 | 3 |
| 3.00 | EE | 3 | 3600 | 575 | 3 |
| 5.00 | OPEN | 28 | 3600 | 208 | 1 |
| 5.00 | OPEN | 26 | 3600 | 240 | 1 |
| 5.00 | OPEN | 13.4 | 3600 | 208 | 3 |
| 5.00 | OPEN | 13.2 | 3600 | 240 | 3 |
| 5.00 | OPEN | 6.6 | 3600 | 480 | 3 |
| 5.00 | OPEN | 5.4 | 3600 | 575 | 3 |
| 5.00 | TEFC | 13.2 | 3600 | 208 | 3 |
| 5.00 | TEFC | 12 | 3600 | 240 | 3 |
| 5.00 | TEFC | 6 | 3600 | 480 | 3 |
| 5.00 | TEFC | 4.8 | 3600 | 575 | 3 |
| 5.00 | TEFC | 22.8 | 3600 | 240 | 1 |
| 5.00 | EE | 13.9 | 3600 | 208 | 3 |
| 5.00 | EE | 12.6 | 3600 | 240 | 3 |
| 5.00 | EE | 6.3 | 3600 | 480 | 3 |
| 5.00 | EE | 4.8 | 3600 | 575 | 3 |
| 5/2.2 | 2 SPD | 17.2/11.3 | 1800/1200 | 208 | 3 |
| 5/2.3 | 2 SPD | 15.5/10.2 | 1800/1200 | 230 | 3 |
| 5/2.4 | 2 SPD | 7.1/14.8 | 1800/1200 | 460 | 3 |
| 7.50 | OPEN | 35 | 1750 | 208 | 1 |
| 7.50 | OPEN | 32 | 1750 | 240 | 1 |
| 7.50 | OPEN | 22 | 1750 | 208 | 3 |
| 7.50 | OPEN | 21 | 1750 | 240 | 3 |
| 7.50 | OPEN | 10.5 | 1750 | 480 | 3 |
| 7.50 | OPEN | 8.4 | 1750 | 575 | 3 |
| 7.50 | TEFC | 34 | 1750 | 240 | 1 |
| 7.50 | TEFC | 23 | 1750 | 208 | 3 |
| 7.50 | TEFC | 21 | 1750 | 240 | 3 |
| 7.50 | TEFC | 10.5 | 1750 | 480 | 3 |
| 7.50 | TEFC | 8.4 | 1750 | 575 | 3 |
| 7.50 | EE | 22.5 | 1750 | 208 | 3 |
| 7.50 | EE | 19.6 | 1750 | 240 | 3 |
| 7.50 | EE | 9.8 | 1750 | 480 | 3 |
| 7.50 | EE | 7.5 | 1750 | 575 | 3 |

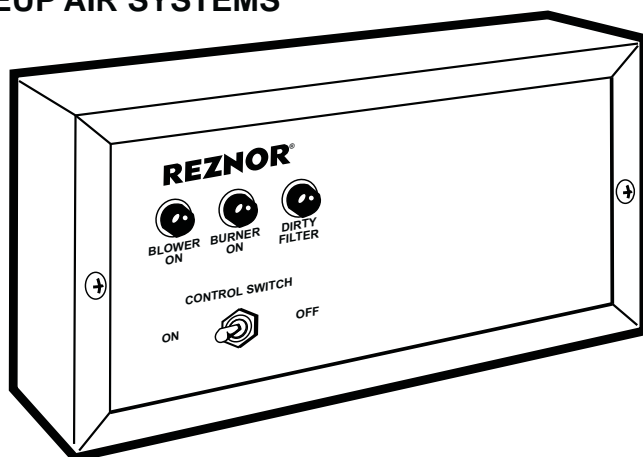
| HP | Motor Type | Motor F.L.A. | RPM | Voltage | PH |
|---------|------------|--------------|-----------|---------|----|
| 7.5/3.3 | 2 SPD | 21.6/13.6 | 1800/1200 | 208 | 3 |
| 7.5/3.3 | 2 SPD | 19.5/12.3 | 1800/1200 | 230 | 3 |
| 7.5/3.3 | 2 SPD | 9.75/6.2 | 1800/1200 | 460 | 3 |
| 10.00 | OPEN | 42 | 1750 | 208 | 1 |
| 10.00 | OPEN | 38 | 1750 | 240 | 1 |
| 10.00 | OPEN | 30 | 1750 | 208 | 3 |
| 10.00 | OPEN | 26 | 1750 | 240 | 3 |
| 10.00 | OPEN | 13 | 1750 | 480 | 3 |
| 10.00 | OPEN | 10.4 | 1750 | 575 | 3 |
| 10.00 | OPEN | 9.9 | 1750 | 575 | 3 |
| 10.00 | TEFC | 39 | 1750 | 240 | 1 |
| 10.00 | TEFC | 30 | 1750 | 208 | 3 |
| 10.00 | TEFC | 26 | 1750 | 240 | 3 |
| 10.00 | TEFC | 13 | 1750 | 480 | 3 |
| 10.00 | TEFC | 10.4 | 1750 | 575 | 3 |
| 10.00 | EE | 28 | 1750 | 208 | 3 |
| 10.00 | EE | 24.4 | 1750 | 240 | 3 |
| 10.00 | EE | 12.2 | 1750 | 480 | 3 |
| 10.00 | EE | 9.7 | 1750 | 575 | 3 |
| 10/4.4 | 2 SPD | 31/19.4 | 1800/1200 | 208 | 3 |
| 10/4.4 | 2 SPD | 28/17.5 | 1800/1200 | 230 | 3 |
| 10/4.4 | 2 SPD | 13.5/7.5 | 1800/1200 | 460 | 3 |
| 15.00 | OPEN | 43.1 | 1750 | 208 | 3 |
| 15.00 | OPEN | 39 | 1750 | 240 | 3 |
| 15.00 | OPEN | 19.5 | 1750 | 480 | 3 |
| 15.00 | OPEN | 16 | 1750 | 575 | 3 |
| 15.00 | TEFC | 38 | 1750 | 240 | 3 |
| 15.00 | TEFC | 19 | 1750 | 480 | 3 |
| 15.00 | TEFC | 15 | 1750 | 575 | 3 |
| 15.00 | EE | 40 | 1750 | 208 | 3 |
| 15.00 | EE | 36 | 1750 | 240 | 1 |
| 15.00 | EE | 18 | 1750 | 480 | 3 |
| 15.00 | EE | 14.5 | 1750 | 575 | 3 |
| 20.00 | OPEN | 58.7 | 1750 | 208 | 3 |
| 20.00 | OPEN | 53 | 1750 | 240 | 3 |
| 20.00 | OPEN | 26.5 | 1750 | 480 | 3 |
| 20.00 | OPEN | 21.2 | 1750 | 575 | 3 |
| 20.00 | TEFC | 52 | 1750 | 240 | 3 |
| 20.00 | TEFC | 26 | 1750 | 480 | 3 |
| 20.00 | TEFC | 20.6 | 1750 | 575 | 3 |
| 20.00 | EE | 52.9 | 1750 | 208 | 3 |
| 20.00 | EE | 48 | 1750 | 240 | 3 |
| 20.00 | EE | 24 | 1750 | 480 | 3 |
| 20.00 | EE | 19.2 | 1750 | 575 | 3 |



REMOTE CONSOLE OPTIONAL ON INDIRECT FIRED PACKAGED HEATING/MAKEUP AIR SYSTEMS

STANDARD FEATURES

- 16 Gauge steel box
- Wiring terminal blocks
- Engraved plastic cover
- Stainless steel mounting ring
- Designed for either recessed or wall mounting

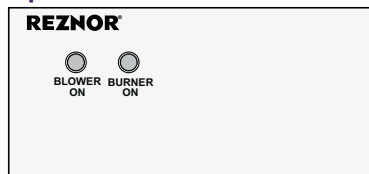


DESCRIPTION

A Reznor remote console is designed to allow remote control of the system as well as provide indicator safety lights. The console is comprised of a 16-gauge steel box with knockouts for field wiring, wiring terminal blocks suited to components, and a custom engraved plastic cover. The engraved lettering on the cover indicates the function and position of the switch and the message of the indicator light. The box may be either recessed or wall mounted. A mounted ring is included for wall mounting. In place of the standard plastic cover, an optional stainless steel cover is available (requires extended lead time).

The remove console option is available with twelve pre-selected combinations of factory-installed switches, indicator lights and controls. The available combinations of components are illustrated below. Each of the consoles may be ordered with one additional factory-mounted control. Controls available are a one- or two-stage heating thermostat, a one- two-stage heating/cooling thermostat, or a Maxitrol Temperature Selector. If the installation requires any components or component combinations that are not available with Options RC1-12, it is necessary to specify a custom-built remote console (see Remote Console Section).

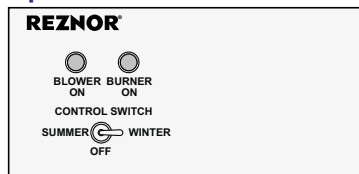
Option RC1



Lights

- Blower On
- Burner On

Option RC5



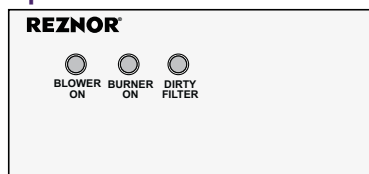
Lights

- Blower On
- Burner On

Switch

- Summer/Off/Winter

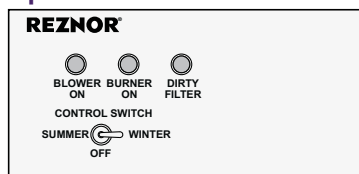
Option RC2



Lights

- Blower On
- Burner On
- Dirty Filter

Option RC6



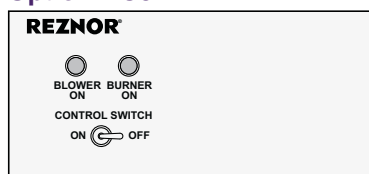
Lights

- Blower On
- Burner On
- Dirty Filter

Switch

- Summer/Off/Winter

Option RC3



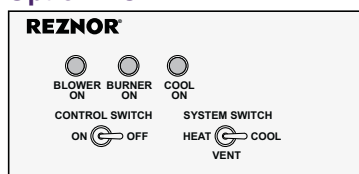
Lights

- Blower On
- Burner On

Switch

- On/Off

Option RC7



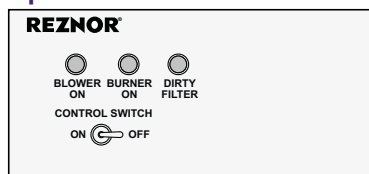
Lights

- Blower On
- Burner On
- Cool On

Switch

- On/Off
- Heat/Vent/Cool

Option RC4



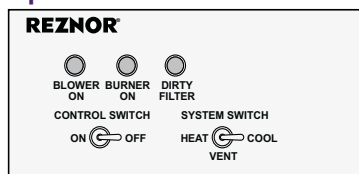
Lights

- Blower On
- Burner On
- Dirty Filter

Switch

- On/Off

Option RC8



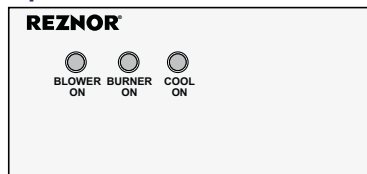
Lights

- Blower On
- Burner On
- Dirty Filter

Switch

- On/Off
- Heat/Vent/Cool

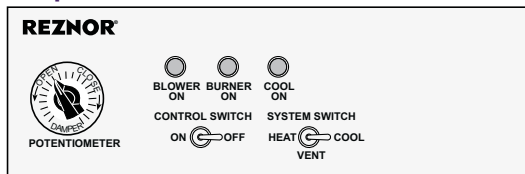
Option RC9



Lights

- Blower On
- Burner On
- Cool On

Option RC11



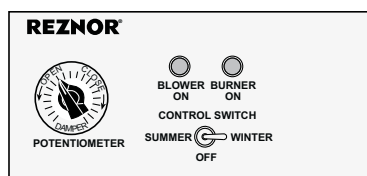
Lights

- Blower On
- Burner On
- Cool On

Switch

- On/Off
- Heat/Vent/Cool

Option RC10



Lights

- Blower On
- Burner On

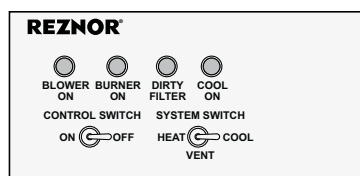
Switch

- Summer/Off/Winter

Control

- Potentiometer*

Option RC12



Lights

- Blower On
- Burner On
- Dirty Filter
- Cool On

Switch

- On/Off
- Heat/Vent/Cool

* Must order Damper Arrangement Option GE10 to get a remote potentiometer (see Air Control System section).

NOTE: To coordinate option selection, see Mixing Box Module and Air Inlet Options section for damper arrangement options and Heating and Heating/Cooling Controls section for control selection.

| Remote Console Components | Function | Included Options | | | | | | | | | | | |
|----------------------------------|--|------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| | | RC1 | RC2 | RC3 | RC4 | RC5 | RC6 | RC7 | RC8 | RC9 | RC10 | RC11 | RC12 |
| Blower On Indicator Light | Lights when blower is operating | X | X | X | X | X | X | X | X | X | X | X | X |
| Burner On Indicator Light | Lights when burners are lit | X | X | X | X | X | X | X | X | X | X | X | X |
| Dirty Filter Indicator Light | Lights when the pressure switch indicates that filters need to be cleaned or replaced | N/A | X | N/A | X | N/A | X | N/A | X | N/A | N/A | N/A | X |
| On/Off Control Switch | "On" position energizes the unit for thermostat control "Off" position de-energizes the unit and closes optional automatically controlled outside air dampers | N/A | N/A | X | X | N/A | N/A | X | X | N/A | N/A | X | X |
| Summer/Winter/Off Control Switch | "Summer" position operates the blower only "Winter" position energizes the unit for thermostat control "Off" position de-energizes the unit and closes optional automatically controlled outside air dampers | N/A | N/A | N/A | N/A | X | X | N/A | N/A | N/A | X | N/A | N/A |
| Heat/Vent/Cool System Switch | "Heat" position energizes the unit for thermostat control. "Vent" position operates the blower and opens automatically controlled outside air dampers "Cool" position energizes the blower, the dampers and cooling unit | N/A | N/A | N/A | N/A | N/A | N/A | X | X | N/A | N/A | X | X |
| Cooling Indicator Light | Lights when cooling system is operating | N/A | N/A | N/A | N/A | N/A | N/A | X | N/A | X | N/A | X | X |

| Console Option | Minimum No. of Wires | Console Option | Minimum No. of Wires |
|----------------|----------------------|------------------------------------|----------------------|
| RC1 | 3 | RC10 | 7-9 |
| RC2 | 4 | RC11 | 9-10 |
| RC3 | 5-6 | RC12 | 8 |
| RC4 | 6-7 | 1-Stage Heating Thermostat | +2 |
| RC5 | 5-6 | 2-Stage Heating Thermostat | +3 |
| RC6 | 6-7 | 1-Stage Heating/Cooling Thermostat | +4 |
| RC7 | 7 | 2-Stage Heating/Cooling Thermostat | +5 |
| RC8 | 8 | Maxitrol Temperature Selector | +2 |
| RC9 | 4 | | |

CAUTION: The minimum number of wires listed should be used only as a guideline. Do NOT use for actual wiring. The required number of wires varies depending upon the circuit and the function of the switch and can only be accurately determined from the wiring diagram designed for the specific installation.

Wires:

| Console Feature | Minimum No. of Wires |
|--|----------------------|
| 1 Light | 2 |
| 2 Lights | 3 |
| 3 Lights | 4 |
| 4 Lights | 5 |
| NOTE: For cooling light, add one wire. | |
| 1 DPDT (3-position) Switch | 4-6 |
| 1 SPDT Switch | 3 |
| 1 DPST Switch | 3-4 |
| 1 SPST Switch | 2 |
| 1 2-Stage Thermostat | 3-9 |
| 1 1-Stage Thermostat | 2-8 |
| 1 Potentiometer | 3 |

CAUTION: The minimum number of wires listed should be used only as a guideline. Do NOT use for actual wiring. The required number of wires varies depending upon the circuit and the function of the switch and can only be accurately determined from the wiring diagram designed for the specific installation.

REZNOR® THERMOSTATS FOR WALL OR CONSOLE MOUNTING

(If console mounted, select one per console)

Applies to Models RPB, RPBL, & SSCBL (unless otherwise noted)

Single Stage Heating/Cooling Thermostat - Option CL1



Non-programmable
24V Supply voltage
50° - 90°F

(Cross reference: P/N 255350)

(Applies to Model RPB only)

Override Thermostat for Electronic Modulation - Option CL9

Low voltage room override thermostat
Electronic modulating
60-85°F
For use with makeup air applications
Vertical mounting
SPST
Line voltage

(Cross reference: P/N 24857)

Use with electronic modulating gas controls, Options AG8, AG9, AG39 or AG41



Electronic 2-Stage Heating/Cooling Thermostat (Wall Mount Option CL33, Console Mount Option RCT5 ⁴)



7-Day programmable
LCD Display
24VAC/50/60 Hz Supply
Microprocessor Control
Selectable Output Staging:
1) 1 Heat — 1 Cool
2) 1 Heat — 2 Cool
3) 2 Heat — 1 Cool
4) 2 Heat — 2 Cool
Sub/Base has Auto/Cool/Off/Heat
System switch and Auto/On (fan)
Switch

(Cross reference: P/N 221038)

Use with Remote Consoles RC1, RC2 or RC9

Two Stage Heating/Cooling Thermostat - Option CL22

Non-programmable
24V Supply voltage
50° - 90°F

(Cross reference: P/N 220630)



Electronic Single Stage Heating/Cooling Thermostat on Panel (Wall Mount Option CL52, Console Mount Option RCT9)

5 Day/2 Day Programmable
LCD Display
(battery required)
with Fan Auto/On and
Cool/Off/Heat Switches

(Cross reference: P/N 220632)

Use with Remote Consoles RC1, RC2 or RC9

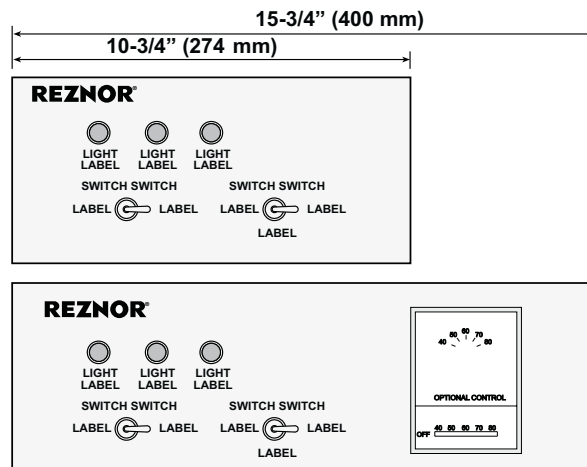


⁴ RCT5 contains most switching functions that are likely to be needed. Any switches on the panel limit the number of lights and/or potentiometer that can be installed due to space limitations and affects control sequence. Consult your Reznor Representative.



REMOTE CONSOLE OPTIONAL ON INDIRECT FIRED PACKAGED HEATING/MAKEUP AIR SYSTEMS (cont'd)

| Dimensions | Length | | Height | | Depth | |
|---|------------|-----------|------------|-----------|------------|-----------|
| Wall Mounted - Remote Console with wall mounting ring | in. | mm | in. | mm | in. | mm |
| Consoles RC1-RC10 and RC12 without an optional control | 10 3/4 | 273 | 7 5/8 | 194 | 2 5/8 | 67 |
| Consoles RC-10 and RC12 with an optional control and RC11 with or without an optional control | 15 3/4 | 400 | 7 5/8 | 194 | 2 5/8 | 67 |
| Recessed - Size of the body; do not use mounting ring | in. | mm | in. | mm | in. | mm |
| Consoles RC1-RC10, RC12 without an optional control | 10 3/4 | 273 | 6 5/8 | 168 | 2 5/8 | 67 |
| Consoles RC-10 and RC12 with an optional control and RC11 with or without an optional control | 15 3/4 | 400 | 6 5/8 | 168 | 2 5/8 | 67 |



CUSTOM BUILT REMOTE MONITORING CONSOLE DESCRIPTION

If components or component combinations are required that are not included in the standard remote console option offering, select a custom-built remote console. Custom design the console by selecting from the light label, switch label, and control selections listed below. Specific functions of all switches and lights must be included on the order.

| Custom REMCON | | | - C | - D | - E | - F | - G | - H | - J | - K | - M | - Z |
|--|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Engraved Plastic Cover on Metal Box with Mounting Ring | Lights | Qty | 2 | 3 | 4 | 2 | 3 | 4 | 2 | 3 | 4 | Custom Plastic Cover (combinations or engraving not listed) - call Reznor Representative for approval and pricing. |
| | Switches (2 position or 3 position) | Qty | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | |

| LIGHT LABEL TO BE ENGRAVED ON PLASTIC COVER | |
|---|------|
| (number of selections must agree with quantity of lights available on the REMCON model ordered) | |
| BURNER | EB1 |
| BLOWER | EB2 |
| DIRTY FILTER (LIGHT with SWITCH IN UNIT) | EB3 |
| COOL | EB4 |
| SAFETY LOCKOUT | EB21 |
| Custom Label - 14 characters maximum | SPEC |

| SWITCH LABELS TO BE ENGRAVED ON COVER | | | |
|---|------|-----------------------------|------|
| Select REMCON Size -C through -M based on number of lights and switches selected. Switches selected cannot have duplicate function. | | | |
| SUMMER/OFF/WINTER | EB5A | ON/OFF (SPDT System Switch) | EB7X |
| HEAT/OFF/VENT | EB5B | SUMMER/WINTER | EB7A |
| ON/OFF/AUTO | EB5C | HEAT/VENT | EB7B |
| HEAT/VENT/COOL | EB5D | AUTO/ON | EB7C |
| DAY/OFF/NIGHT | EB5E | HEAT/COOL | EB7D |
| OCCUPIED/OFF/UNOCCUPIED | EB5F | DAY/NIGHT | EB7E |
| LOCAL/OFF/REMOTE | EB5G | OCCUPIED/UNOCCUPIED | EB7F |
| HIGH/OFF/LOW | EB5H | LOCAL/REMOTE | EB7G |
| HIGH/MED/LOW | EB5I | HIGH/LOW | EB7H |
| HAND/OFF/AUTO | EB5J | SPRAY/DRY | EB7J |
| HEAT/OFF/COOL | EB5K | FILL/DRAIN | EB7K |
| ON/OFF (DPST System Switch) | EB6X | DAMPER OPEN/CLOSED | EB7L |
| Custom Label - 22 characters maximum | | | SPEC |



CUSTOM BUILT REMOTE MONITORING CONSOLE (cont'd)

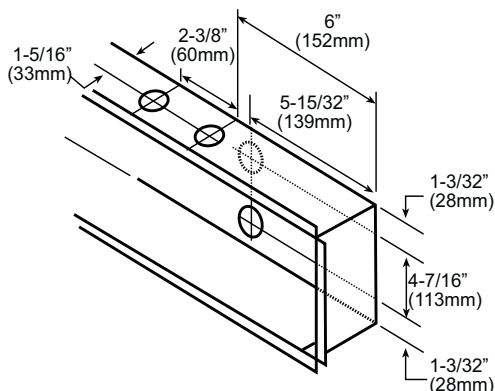
| OPTIONAL CONTROLS MOUNTED ON CUSTOM REMCONS | |
|--|------|
| 1-Stage Heating Thermostat | RCT1 |
| 2-Stage Heating Thermostat | RCT2 |
| 1-Stage Heating/Cooling Thermostat | RCT3 |
| 2-Stage Heating/Cooling Thermostat | RCT4 |
| Commercial Electronic Programmable Heating/Cooling Thermostat* | RCT5 |
| T244 Selectrstat used with Gas Control Option AG33 | RT6A |
| T107A-1 Selectrstat used with Option AG7 | RT6B |
| Maxitrol T115 Room Override Thermostat (Gas Control Options AG8, AG9, or AG31) | RCT7 |
| 2-Stage Heating/Cooling Thermostat (same as Option CL50) | RCT8 |
| Maxitrol TD-121 Dial (used with Gas Control Option AG9) | RCM1 |
| Maxitrol TD-114 Dial (used with Gas Control Options AG30 and AG31 - U.S.) | RCM2 |
| Maxitrol TD-114 Dial (used with Gas Control Options AG30 and AG31 - Canada) | RCM3 |
| Maxitrol TD-114A Dial (used with Gas Control Option AG32) | RCM4 |
| Maxitrol TD-114B Dial (used with Gas Control Option AG35) | RCM5 |
| Maxitrol TD-92 (used with Gas Control Options AG39 and AG41) | RCM6 |
| Potentiometer (used with Air Control Options AR18, AR19, AR22, or AR55) | RCD1 |
| Mount other Control on Remcon (Call for Quote - may require relays) | SPEC |

| Number of Optional Controls Available by custom REMCON Model - length of console changes; see dimensions below | | | | | | | | | | |
|--|-------------------------------------|-----|--|-----|-----|-----|-----|-----|-----|-----|
| Custom REMCON | | | - C | - D | - E | - F | - G | - H | - J | - K |
| Engraved Plastic Cover on Metal | Lights | Qty | 2 | 3 | 4 | 2 | 3 | 4 | 2 | 3 |
| Box with Mounting Ring | Switches (2 position or 3 position) | Qty | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 |
| Maximum number of Optional Controls available | | | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 |
| Custom REMCON Dimensions | | | Without an optional control, the length of the console is 10-3/4" (273mm). When an optional control is added to any custom console, length becomes 15-3/4" (400mm). All consoles with mounting ring are 7-5/8" (194mm) high and 2-5/8" (67mm) deep. If recessed (not using mounting ring), box is 6-5/8" (168mm) high. | | | | | | | |

* RCT5 contains most switching functions that are likely to be needed. Any switches on the panel limit the number of lights and/or potentiometer that can be installed due to space limitations and affects control sequence. Consult your Reznor Representative.

Location of Knockout Holes -

Dimensions to Center Line of all holes





MODEL RPB

OUTDOOR, POWER VENTED, GAS FIRED PACKAGED DUCT FURNACE / BLOWER UNIT FOR COMMERCIAL/INDUSTRIAL HEATING AND MAKEUP AIR



ANSI Z83.9 &
A.G.A. 14-95



CAN/C.G.A.
2.8 & 2.6



**Model RPB
has been discontinued.
Orders will be accepted
for replacement units only.**

DESCRIPTION

Reznor® RPB Series packaged units are 80% thermal efficient, power-vented, gas-fired forced air furnaces, designed for installation outdoors and used with recirculating and/or makeup air warm air duct systems. These units use either natural or propane gas, as specified, in sizes from 125,000 through 400,000 BTUH gas input.

Standard features include a spark-ignited intermittent pilot and a single-stage, 24-volt gas valve. Each unit has all the required limit and safety controls including a venter pressure switch which verifies power vent flow prior to allowing operation of the gas valve. For automatic operation, each unit is wired for field connection to a remote 24-volt thermostat.

The RPB Series models have a weatherized galvalume steel cabinet with interlocking joint construction and a full curb cap for mounting on a roof curb or supports. The standard packaged furnace has a horizontal discharge air opening. A bottom discharge air opening is available with the addition of a downturn plenum. The blower cabinet has a standard horizontal inlet but is engineered to allow for horizontal and/or bottom air inlet with various optional damper control systems. The air control systems for both return air heating and makeup air are complemented by a selection of gas control options. To obtain the desired CFM, a wide selection of optional motor and drive combinations is available to operate the centrifugal blower.

To meet a variety of installation requirements, Model RPB packaged units are available in selected combinations equipped with a downturn plenum, an evaporative cooling module, a cooling coil cabinet with DX or chilled water coil, and/or an outside air inlet hood.

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)
- 120-volt power supply
- 24-volt control transformer
- Redundant single-stage combination gas valve (see Note 1)
- Intermittent spark pilot
- Fan and limit safety controls
- Power venter
- Reverse air flow limit control
- Adjustable belt drive
- Motor contactor
- Terminal block wiring
- Full curb cap base
- Horizontal discharge air opening with duct flanges
- Horizontal inlet air opening with duct flanges
- Left side access to burner and controls (facing airstream)
- Insulated, weatherized steel cabinet with interlocking joint construction for outdoor mounting
- 1/2" O.D. BX cable (Chicago code)

NOTE 1: Regulated combination redundant gas valve consists of combination pilot solenoid valve, electric gas valve, pilot filter, pressure regulator, pilot shut-off, and manual shut-off, 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.

NOTE 2: Not certified for residential use.



OPTIONAL FEATURES - FACTORY INSTALLED

MODEL RPB (cont'd)

- Unit equipped for propane gas
- E-3 (409) stainless steel heat exchanger
- E-3 (409) stainless steel burners
- E-3 (409) stainless steel drip pan
- Intermittent spark pilot with flame supervision and timed lockout
- 1/4 HP through 3 HP open drip-proof or totally enclosed motors, 5 HP available in open drip-proof motor only (motors meet EISA specifications for efficiency)
- 208/1, 230/1, 208/3, 230/3, 460/3, 575/3 alternate supply voltages
- Motor starter (optional with motors having internal overload protection)
- Burner air shutters (required for units equipped for propane gas)
- Two-stage gas control (unit mounted or remote temperature selector)
- Electronic modulation (50-100% turndown and 20-100% turndown)
- Direct digital control packages for system control
- Makeup air controls/dampers
- Convenience outlet
- Firestat(s)
- Freezestat
- Filter rack with filters (2" disposable, permanent or pleated)
- Evaporative cooling module
- 30% O/A inlet hood (adjustable 0-30% dampers)
- Downturn plenum cabinet (insulated)
- Discharge damper, 2-position, with downturn plenum
- Double wall cabinet construction
- High ambient burner cutoff
- Gas pressure safety switches
- Air flow proving switch
- Right side controls (facing airstream)
- Full roof curb
- Disconnect switch - UL Listed
- Single-stage thermostat
- Two-stage thermostat
- Electronic 7-day programmable thermostat
- Thermostat guard with locking cover
- Remote control console
- 100% outside air, screened inlet air hood
- Vertical flue extension

OPTIONAL FEATURES - FIELD INSTALLED

TECHNICAL DATA

| SIZE | | | 125 | 150 | 175 | 200 | 225 | 250 | 300 | 350 | 400 |
|---|--------------------------|----------------------|-----------------|----------------------|----------------------|--|--|----------------------|----------------------|----------------------|--|
| Heating Input | | BTUH | 125,000 | 150,000 | 175,000 | 200,000 | 225,000 | 250,000 | 300,000 | 350,000 | 400,000 |
| | | (kW) | (36.6) | (44.0) | (51.3) | (58.6) | (65.9) | (73.3) | (87.9) | (102.6) | (117.2) |
| Thermal Output Capacity (80%) ^A | | BTUH | 100,000 | 120,000 | 140,000 | 160,000 | 180,000 | 200,000 | 240,000 | 280,000 | 320,000 |
| | | (kW) | (29.3) | (35.2) | (41.0) | (46.9) | (52.8) | (58.6) | (70.3) | (82.1) | (93.8) |
| Unit Amps (Less motor) 115V | | | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| Control Amps (24V) | | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Air Volume Range | ANSI - RPB | cfm | 1,025 - 1,230 | 1,230 - 1,480 | 1,440 - 1,725 | 1,645 - 1,975 | 1,850 - 2,220 | 2,055 - 2,465 | 2,465 - 2,960 | 2,880 - 3,455 | 3,290 - 3,950 |
| | | (m ³ /hr) | (1,835 - 2,202) | (2,202 - 2,649) | (2,578 - 3,088) | (2,945 - 3,536) | (3,312 - 3,974) | (3,679 - 4,413) | (4,413 - 5,299) | (5,156 - 6,185) | (5,890 - 7,071) |
| | ANSI - HRPB ^B | cfm | 1,230 - 3,800 | 1,480 - 4,700 | 1,725 - 5,000 | 1,975 - 5,100 | 2,220 - 5,150 | 2,465 - 5,800 | 2,960 - 6,300 | 3,455 - 6,800 | 3,950 - 7,100 |
| | | (m ³ /hr) | (2,202 - 6,803) | (2,649 - 8,414) | (3,088 - 8,951) | (3,536 - 9,130) | (3,974 - 9,219) | (4,413 - 10,383) | (5,299 - 11,278) | (6,185 - 12,173) | (7,071 - 12,710) |
| | C.G.A. - RPB | cfm | 1,025 - 1,850 | 1,230 - 2,220 | 1,440 - 2,590 | 1,645 - 2,960 | 1,850 - 3,330 | 2,055 - 3,700 | 2,465 - 4,440 | 2,880 - 5,185 | 3,290 - 5,925 |
| | | (m ³ /hr) | (1,835 - 3,312) | (2,202 - 3,974) | (2,578 - 4,637) | (2,945 - 5,299) | (3,312 - 5,961) | (3,679 - 6,624) | (4,413 - 7,948) | (5,156 - 9,282) | (5,890 - 10,607) |
| C.G.A. - HRPB ^B | cfm | 1,850 - 3,800 | 2,220 - 4,700 | 2,590 - 5,000 | 2,960 - 5,100 | 3,330 - 5,150 | 3,700 - 5,800 | 4,440 - 6,300 | 5,185 - 6,800 | 5,925 - 7,100 | |
| | (m ³ /hr) | (3,312 - 6,803) | (3,974 - 8,414) | (4,637 - 8,951) | (5,299 - 9,130) | (5,961 - 9,219) | (6,624 - 10,383) | (7,948 - 11,278) | (9,282 - 12,173) | (10,607 - 12,710) | |
| Net Weight ^C | | lbs. | 482 | 520 | 520 | 534 | 534 | 588 | 588 | 630 | 662 |
| | | (kg) | (219) | (236) | (236) | (242) | (242) | (267) | (267) | (286) | (300) |
| Downturn Plenum Ship Weight ^C | | lbs. | 622 | 677 | 677 | 714 | 714 | 817 | 817 | 874 | 930 |
| | | kg | (282) | (307) | (307) | (324) | (324) | (371) | (371) | (396) | (422) |
| Cabinet Weight ^D | | lbs. | 166 | 177 | 177 | 196 | 196 | 229 | 229 | 253 | 271 |
| | | kg | (75) | (80) | (80) | (89) | (89) | (104) | (104) | (115) | (123) |
| Gas connection - Natural ^E | | | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 3/4" | 3/4" | 3/4" |
| Filter Size (Filters are optional and available in 2" disposable, permanent or pleated) | | | (2)20x25 | (2)16x20 (2)16x25 | (2)16x20 (2)16x25 | (1)16x20 (1)20x20 (1)16x25 (1)20x25 | (1)16x20 (1)20x20 (1)16x25 (1)20x25 | (1)20x20 (3)20x25 | (1)20x20 (3)20x25 | (3)20x25 (2)16x25 | (2)20x20 (1)16x20 (1)16x25 (2)20x25 |

^A In the U.S. ratings are for altitudes to 2000 feet. Above 2000 feet derate by orifice change, 4% for each 1000 feet above sea level.

In Canada ratings are for altitudes to 2000 feet. High altitude units (2001 to 4500 ft.) are derated by 10% of maximum input.

^B Prefix "H" indicates high CFM units without directional finger baffles.

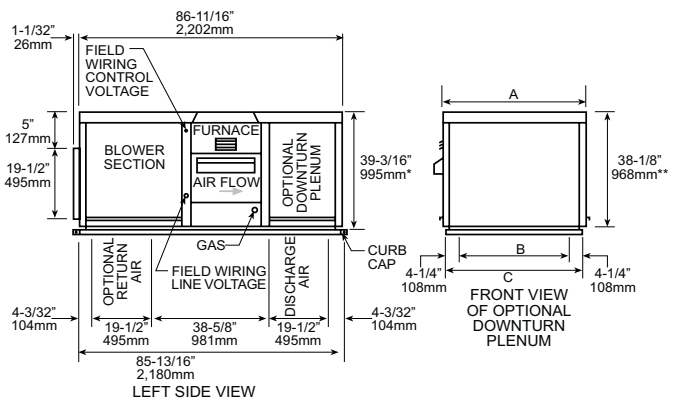
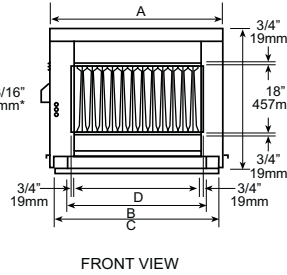
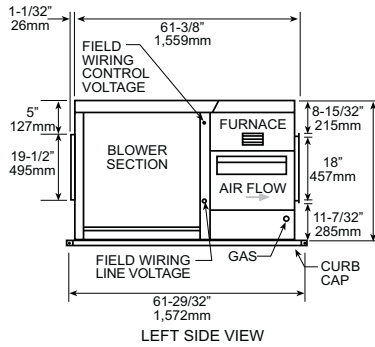
^C Weights shown are for packaged furnace and blower. For weights of accessories, see below.

^D Add to base weight of unit. For weights for other options such as the cooling coil cabinet or roof curbs, see those sections.

^E Gas connection for optional propane is 1/2" for all sizes. Sizes shown are for gas connection to single stage gas valve, NOT gas supply line size.

Dimension

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



MODEL RPB WITH OPTIONAL DOWNTURN PLENUM

* Height from top of cabinet to top of curb cap.

** Height from top of cabinet to bottom of cabinet side.

| Size | | A | B | C | D |
|---|------|---------------------|---------|---------|---------|
| 125 | in. | 28 5/8 | 17 3/8 | 25 7/8 | 15 1/4 |
| | (mm) | (727) | (441) | (657) | (387) |
| 150, 175 | in. | 34 1/8 | 22 7/8 | 31 3/8 | 20 3/4 |
| | (mm) | (867) | (581) | (797) | (527) |
| 200, 225 | in. | 39 5/8 | 28 3/8 | 36 7/8 | 26 1/4 |
| | (mm) | (1,006) | (721) | (937) | (667) |
| 250, 300 | in. | 47 7/8 | 36 5/8 | 45 1/8 | 34 1/2 |
| | (mm) | (1,216) | (930) | (1,146) | (876) |
| 350 | in. | 53 3/8 | 42 1/8 | 50 5/8 | 40 |
| | (mm) | (1,356) | (1,070) | (1,286) | (1,016) |
| 400 | in. | 58 7/8 | 47 5/8 | 56 1/8 | 45 1/2 |
| | (mm) | (1,495) | (1,210) | (1,426) | (1,156) |
| Air Openings | | Dimensions | | | |
| Standard Horizontal Air Inlet | | 19-1/2" (495mm) x B | | | |
| Optional Return Air Opening | | 19-1/2" (495mm) x B | | | |
| Standard Horizontal Discharge Air Opening | | 18" (457mm) x D | | | |
| Optional Discharge Air Opening (with Downturn Plenum) | | 19-1/2" (495mm) x B | | | |

NOTES:

- Reznor designed optional outside air hood or evaporative cooling module is required to ensure complete weather resistance. See Outside Air Hood Option for dimensions.
- Burner and control access shown left side (facing air stream). Specify right side (Option AJ2) for opposite side access and connections.

CLEARANCE FROM COMBUSTIBLES

- Furnace bottom - 0". (When installed on a roof curb on a combustible surface, the roof area enclosed within the curb must be either ventilated, left open, or covered with anon-combustible material which has an "R" value of at least 5.0)
- Unit top to overhangs - 36" (914mm)
- Side opposite controls - 6" (152mm)
- Control side - unit width plus 6" (152mm)

Weights of Accessories - add to unit Ship Weight

| Weights of options shipped installed on the furnace: | | | 75, 100, 125 | 150, 175 | 200, 225 | 250, 300 | 350 | 400 |
|--|---|------|--------------|----------|----------|----------|-------|-------|
| AQ5 | Downturn Plenum Cabinet (wt. Includes additional crate) | lbs. | 166 | 177 | 196 | 229 | 253 | 271 |
| | | (kg) | (75) | (80) | (89) | (104) | (115) | (123) |
| Weights of options shipped separately for field assembly and installation: | | | | | | | | |
| AS2 | AS2 Outside Air Inlet Hood | lbs. | 70 | 76 | 79 | 87 | 92 | 96 |
| | | (kg) | (32) | (34) | (36) | (39) | (42) | (44) |
| CJ1 | Roof Curb for Basic Unit | lbs. | 90 | 95 | 101 | 111 | 117 | 123 |
| | | (kg) | (41) | (43) | (46) | (50) | (53) | (56) |
| CJ2 | Roof Curb for Unit with Downturn Plenum Cabinet | lbs. | 112 | 118 | 124 | 133 | 139 | 145 |
| | | (kg) | (51) | (54) | (56) | (60) | (63) | (66) |

IGNITION CONTROL OPTIONS

STANDARD EQUIPMENT INTERMITTENT SPARK PILOT: Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. Certified by the Canadian Standards Association for use in Canada with natural gas only. Certified for use in the U.S.A. on outdoor units with natural gas or propane.

OPTION AH3 INTERMITTENT SPARK PILOT WITH TIMED LOCKOUT: Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. This system also incorporates a lockout device which stops gas flow to the pilot if the pilot fails to light in 120 seconds. Reset of lockout requires manual interruption of the thermostat cycle. Approved for use with natural or propane gas.

GAS CONTROLS

SPACE HEATING APPLICATIONS

MAKEUP AIR HEATING APPLICATIONS

Option AG1 ONE-STAGE CONTROL: Single-stage gas valve which cycles on at 100% fire on a call for heat by a remote single-stage thermostat. Thermostat is not included.

Option AG2 TWO-STAGE CONTROL: Two-stage gas valve which fires at 100% or 50%, as required, on call by a remote two-stage thermostat. Thermostat is not included.

Option AG7 ELECTRONIC MODULATION (60°-85°F): Solid state control system, providing close temperature control via manifold pressure. On a call for heat from a remote electronic thermostat, controls modulate between 50% and 100%. Remote thermostat is included.

Option AG3 TWO-STAGE CONTROL FROM DUCTSTAT (60°-110°F): Two-stage gas valve which fires at 100% or 50% as required, on call from a unit-mounted, two-stage ductstat.

Option AG15 ELECTRONIC TWO-STAGE CONTROL USING DUCTSTAT (50°-130°F) WITH REMOTE

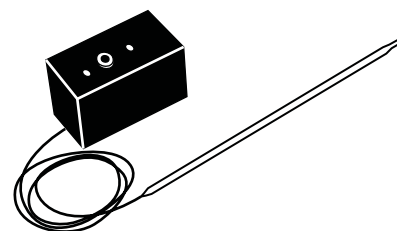
Options AG15



A = Ductstat Temperature Module P/N 115848

B = Stage Adder Module, P/N 115849 (quantity varies - see Option description)

Options AG3



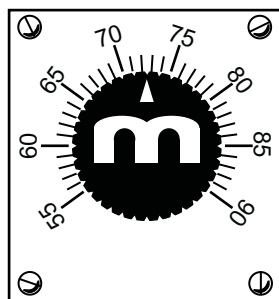
Unit-Mounted Ductstat P/N 41700 (quantity varies - see Option description)

TEMPERATURE ADJUSTMENT: Same type of control as Option AG3, but the setpoint of the ductstat is adjustable from a remote temperature-selector. Includes factory-installed sensor and field-installed temperature-selector module with an adjustable stage-adder module.

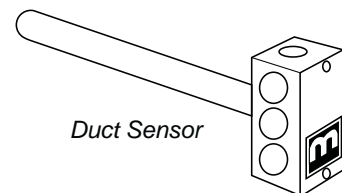
Option AG8 ELECTRONIC MODULATION (55°-90°F) WITH DUCTSTAT: Solid state control system, providing close temperature control through regulated manifold pressure. On a call for heat from a unit-mounted ductstat, controls modulate between 50% and 100%, as required. A room override thermostat (Option CL9) is available for use with this system. Temperature range 55° - 90°F.

Option AG9 ELECTRONIC MODULATION (55°-90°F) WITH DUCTSTAT AND REMOTE TEMPERATURE SELECTION: Control is the same as Option AG8 except that the duct sensor setpoint may be reset from a remote selector. A room override thermostat (Option CL9) is available for use with this system. (See illustration)

AG21 ELECTRONIC MODULATION WITH DDC CONTROL: Used with customer-supplied 4-20MA or 0-10V input signal. Includes Maxitrol A200/SC10C-B6S1 signal conditioner and special modulating gas regulator.



Maxitrol Signal Selector (AG9 Only)



Duct Sensor

MAKEUP AIR HEATING APPLICATIONS (cont'd)

Option AG39 ELECTRONIC MODULATION (SEE FIRING RATE TURNDOWN PERCENT IN TABLE BELOW): **(Available with natural gas only)**

Description

- Reznor Option AG39 is an electronic modulation gas control that will provide precise control of discharge air temperature over an increased range of outside air conditions. It is now available on selected Models of Reznor gas furnaces.
- This option allows the furnace input ratio to be fully modulated between 100% and 28 to 20%.
- The part-load thermal efficiency of this system complies with and exceeds the current seventy-five percent minimum requirement of ASHRAE standard 90.1 for part-load efficiencies. This system offers an average thermal efficiency over the range of modulation that is equal to or exceeds the full input rate thermal efficiency.
- Furnaces with Option AG39 require stainless steel burners, a stainless steel heat exchanger, and a stainless steel bottom pan. The gas train includes a single-stage gas valve, a modulating valve, and two gas pressure switches. The burner rack is equipped with one flash carry-over and a regulated gas lighter tube system. The carry-over lighter tube receives its gas supply through the regulator, simultaneously with the gas to the burner. Control of the system is through a Maxitrol #A1092 amplifier with a corresponding remote temperature dial (Maxitrol® #TD92-0509).

Sensor Location

- The duct temperature sensor will be located in the discharge ductwork (Refer to the installation manual for recommend location).

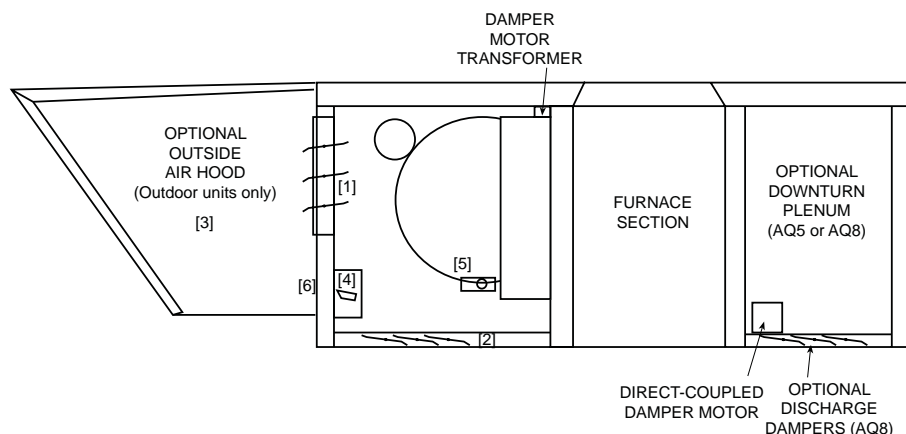
Sample Specification

- The unit shall have electronic modulation offering at least full modulation to 28% of full fire (capacity) input rate.
- Modulating gas control shall be certified by CSA for use in The United States and Canada.
- The furnace shall maintain an average thermal efficiency over the range of modulation that is equal to or exceeds the full input rate thermal efficiency.
- The furnace shall ignite at any fire rate within its modulation range, not just high fire on start.

Option AG40 ELECTRONIC MODULATION (SEE FIRING RATE TURNDOWN PERCENT IN TABLE BELOW) WITH DDC CONTROL: Same system as AG39 but includes signal conditioner for use with customer-supplied 4-20MA or 0-10V input signal. **(Available with natural gas only)**

| Options AG39 and 40 | | Maximum Trundown Percent | Input Range | | Gas Supply Pressure Required | |
|---------------------|------|--------------------------|-------------|--------------|------------------------------|-----------|
| Model | Size | | MBH | kW | | |
| RPB | 125 | 20% | 25 - 125 | 7.3 - 36.6 | 5" w.c. | 12.5 mbar |
| RPB | 150 | 27% | 40.3 - 150 | 11.8 - 44 | 5" w.c. | 12.5 mbar |
| RPB | 175 | 23% | 40.3 - 175 | 11.8 - 51.3 | 5" w.c. | 12.5 mbar |
| RPB | 200 | 26% | 51.8 - 200 | 15.2 - 58.6 | 5" w.c. | 12.5 mbar |
| RPB | 225 | 23% | 51.8 - 225 | 15.2 - 65.9 | 5" w.c. | 12.5 mbar |
| RPB | 250 | 28% | 69 - 250 | 20.2 - 73.3 | 5" w.c. | 12.5 mbar |
| RPB | 300 | 23% | 69 - 300 | 20.2 - 87.9 | 5" w.c. | 12.5 mbar |
| RPB | 400 | 25% | 100 - 400 | 29.3 - 117.2 | 6" w.c. | 14.9 mbar |

**APPLICATION NOTE: If the installation of a packaged unit with more than one furnace section requires that any of the controls in this table be used in conjunction with an override thermostat, additional factory-installed relays are required. Since this application is not covered by "normal" control sequence, the additional relays (Option BG2) must be specified.*



| Option | [1] | | | | | [2] | | | [3] | [4] | | | | [5] | | [6] | [7] | | |
|-------------------|--------------------------|------------------------|--------------------------|--------------------|-------------------------------------|--------------------------|--------------------|-------------------------------------|--------------|--------------|---------------------|-------------------------|----------------------------------|----------------------|---------------|-----------------|-------------------------|----------------------|-----------------------------|
| | Horiz. Inlet Air Opening | 30% Horiz. O/A Opening | ...with 100% O/A Dampers | ...with O/A Damper | ...with Duct Flanges and Insulation | Bottom Inlet Air Opening | ...with R/A Damper | ...with Duct Flanges and Insulation | 30% O/A Hood | Damper Motor | 2 Pos. Damper Motor | Modulating Damper Motor | Modulating Damper Motor with DDC | Mixed Air Controller | Potentiometer | Warm-up Control | Optional O/A Changeover | Remote Potentiometer | Remote Pressure Null Switch |
| STD | X | | | | | | | | | | | | | | | | | | |
| AR4 | | | | | | X | | | | | | | | | | | | | |
| AR6 ^A | | X | | X | | X | | | X | | | | | | | | | | |
| AR7 ^A | | X | | X | | X | | | X | X | | | | | | | | | |
| AR8 | | | X | | | | | | | | X | | | | | | | | |
| AR15 | | | | X | | | X | | | | | X | | X | X | X | X | | |
| AR17 | | | | X | | | X | | | | X | | | | | | | | |
| AR18 ^B | | | | X | | | X | | | | | X | | | | | | X | |
| AR23 ^C | | | | X | | | X | | | | | X | | | | | | | X |
| AR24 | | | | | X | | | X | | | | | | | | | | | |
| AR25 | | | X | | | | X | | | | | | X | | | | | | |

^A Outdoor units only.

^B Includes manual locking quadrant - not shown.

^C Includes remote potentiometer - not shown.

^D Includes remote pressure null switch - not shown.

Standard Control - Outside Horizontal Air Inlet

Option AR4 - Bottom Return Air Inlet, 100% Return Air Inlet only - Designed for 100% recirculated heating system. **OUTDOOR UNITS ONLY.**

Option AR6 - 30% Outside Horizontal Air Inlet, Bottom Return Air Inlet, 30% Outside Air Hood, Outside Air Dampers: 100% Return Air Inlet, 30% Outside Air Inlet with Hood (see Outside Air Hood section) and Manual Outside Air Damper - Supplies constant 30% or less outside air to recirculating heating system. Outside air hood is shipped separately for field installation. **OUTDOOR UNITS ONLY.**

Option AR7 - 30% Outside Horizontal Air Inlet, Bottom Return Air Inlet, 30% Outside Air Hood, Outside Air Dampers, Damper Motor: 100% Return Air Inlet, 30% Outside Air Inlet with Hood (see Outside Air Hood section) and Motorized Outside Air Damper - Supplies 30% outside air to a recirculating heating system at specific times, as controlled by a time clock or switch. On shutdown, the outside air damper closes. Outside air hood is shipped separately for field installation.

Option AR8 - Outside Horizontal Air Inlet, Outside Air Dampers, Damper Motor (2-Position): 100% Outside Air Inlet, with Two-Position (open/closed) Motorized Damper - 100% outside air system which provides makeup air intermittently, usually in unison with a building exhauster. Outside air damper opens when unit is on; closes when units is off.

INLET AIR CONTROL OPTIONS (cont'd)

- Option AR15 - Outside Horizontal Air Inlet, Bottom Return Air Inlet, Outside Air Dampers, Damper Motor (Modulating), Return Air Dampers, Mixed Air Controller, Potentiometer, Warm Up Control : 100% Outside Air and 100% Return Air Inlets with Dampers, Modulating Damper Motor, Potentiometer, Mixed Air Controller and Warm-up Control (ASHRAE Cycle II) - 100% return air on warm-up and automatically controlled mix of outside/return air to meet the temperature setting of the mixed air controller after warm-up. A minimum amount of outside air is allowed after warm-up as determined by the potentiometer setting. When used with mechanical cooling, optional air change over control may be added. An outside air change over control (not included in Option AR15 package) closes outside air dampers when the entering air reaches a set temperature (Usually 75 degrees F).
- Option AR17 - Outside Horizontal Air Inlet, Bottom Return Air Inlet, Outside Air Dampers, Damper Motor (2-Position), Return Air Dampers: 100% Outside Air and 100% Return Air Inlets with Dampers and a Two-Position Damper Motor - 100% return air or 100% outside air as controlled by a switch or time clock. ON shutdown, the outside air damper closes.
- Option AR18 - Outside Horizontal Air Inlet, Bottom Return Air Inlet, Outside Air Dampers, Damper Motor (Modulating), Return Air Dampers, Remote Potentiometer: 100% Outside Air and 100% Return Air Inlets with Dampers, a Modulating Damper Motor and Potentiometer - Mixture of return and outside air as controlled by a manually set remote potentiometer. On shutdown, the outside air damper closes.
- Option AR25 - Outside Horizontal Air Inlet, Bottom Return Air Inlet ,Outside Air Dampers, Damper Motor with DDC, Return Air Dampers: Includes outside air damper and return air damper linked together with a modulating damper motor with an interface module to accept a 0 - 10 volt, or 4 - 20 mA signal from a D.D.C. system, to position the dampers for mixed air.

DISCHARGE AIR OPTIONS

| | Horiz. Discharge Air Opening w/ Duct Flanges | Downturn Plenum for Vertical Discharge Air | Vertical Discharge Air Opening w/ Duct Flanges | 2-Position Dampers |
|-----|---|--|---|-----------------------|
| STD | X | | | |
| AQ5 | | X | X | |
| AQ8 | | X | X | X |

Standard Discharge - Installation that requires connection to horizontal ductwork before turning downward or where immediate downturn ductwork with horizontal connection is field supplied.

- 3/4" Duct Flange designed for "U" channel top/bottom ductwork connection and "L" type on each side

Option AQ5 - Installation where vertical ductwork is attached and sealed directly to the duct flange on the bottom of the downturn plenum cabinet.

- Downturn Plenum Cabinet
- 1" Duct Flange for slip-type connection (flange is perpendicular to the cabinet)

Options AQ8 - Installation where vertical ductwork is attached and sealed directly to the duct flange on the bottom of the downturn plenum cabinet. The two-position (open/close) dampers in the discharge opening are designed to isolate the unit from the building atmosphere when the system is not operating. The damper motor is located inside the downturn plenum cabinet.

- Downturn Plenum Cabinet
- Two-Position Dampers
- Direct-Coupled Motor (rated for use in discharge airstream)
- 1" Duct Flange for slip-type connection (flange is perpendicular to the cabinet)



OUTSIDE AIR HOOD OPTION
SCREENED OUTSIDE AIR HOOD FOR
100% OUTSIDE AIR INLET OPENING
Applies to Model RPB

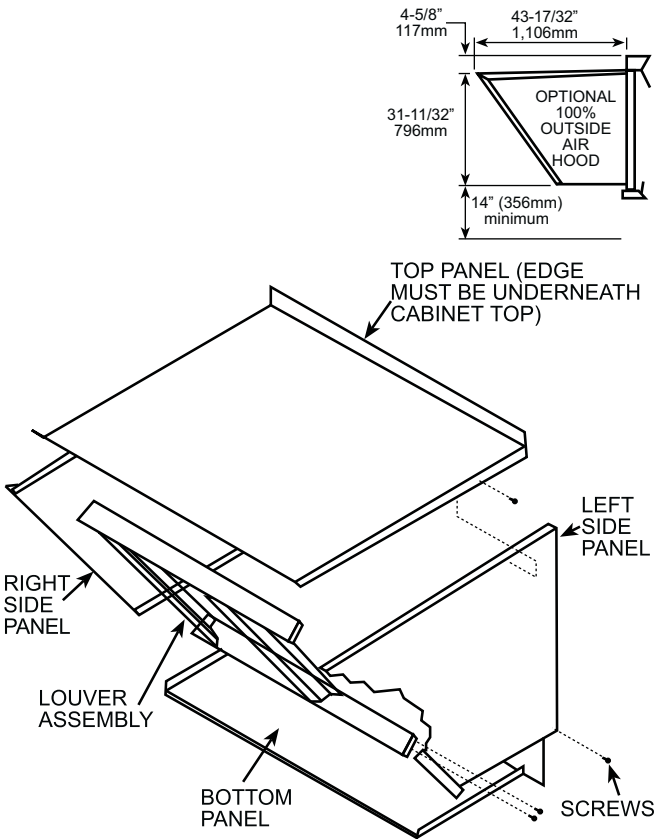
DESCRIPTION

Option AS2, Outside Air Hood, is a weatherized screened hood designed to be field assembled and installed around the horizontal inlet air opening of a Model RPB or RPBL packaged unit or a Model RBL blower cabinet. The air hood includes a pre-assembled louver assembly designed to help eliminate moisture from the inlet air.

| Models | Size | Width of Outside Air Hood | |
|--------|----------|---------------------------|-------|
| | | in. | mm |
| RPB | 125 | 28 5/8 | 727 |
| RPB | 150, 175 | 34 1/8 | 867 |
| RPB | 200, 225 | 39 5/8 | 1,006 |
| RPB | 250, 300 | 47 7/8 | 1,216 |
| RPB | 350 | 53 3/8 | 1,356 |
| RPB | 400 | 58 7/8 | 1,495 |

Note: The width of the outside air hood is the same as the width of the blower cabinet.

| MODEL | SIZE | 125 | 150, 175 | 200, 225 | 250, 300 | 350 | 400 |
|-------|------|------|----------|----------|----------|------|------|
| RPB | lbs. | 70 | 76 | 79 | 87 | 92 | 96 |
| | (kg) | (32) | (34) | (36) | (39) | (42) | (44) |

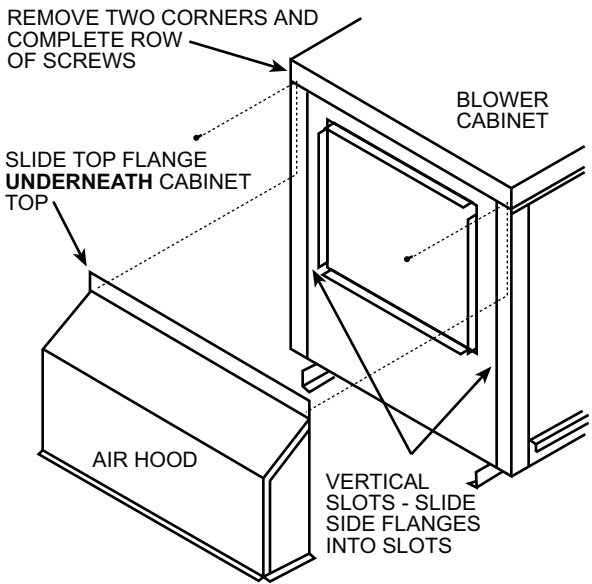


30% OUTSIDE AIR HOOD SUPPLIED WITH INLET AIR OPTIONS AR6 AND AR7
(see description in Air Control Option section)

DESCRIPTION

The outside air hood included in the air inlet options that provide 30% outside air (Options AR6 and AR7) is shipped separately for field installation. The hood is factory assembled but requires field attachment to the blower cabinet. Illustrated instructions are provided.

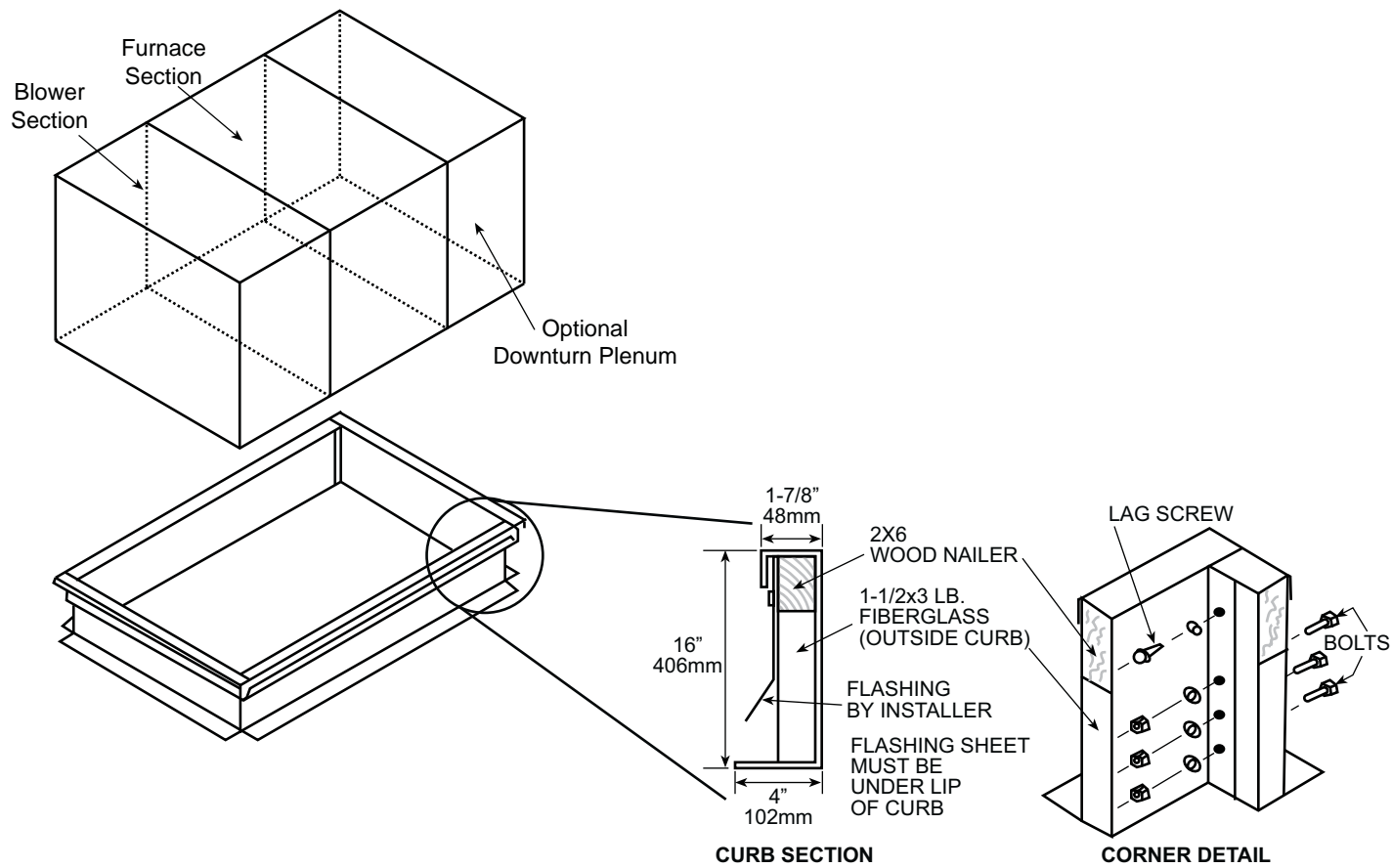
| RPB | | Width of 30% Hood |
|----------|------|-------------------|
| 125 | in. | 28 5/8 |
| | (mm) | (727) |
| 150, 175 | in. | 34 1/8 |
| | (mm) | (867) |
| 200, 225 | in. | 39 5/8 |
| | (mm) | (1,006) |
| 250, 300 | in. | 47 7/8 |
| | (mm) | (1,216) |
| 350 | in. | 53 3/8 |
| | (mm) | (1,356) |
| 400 | in. | 58 7/8 |
| | (mm) | (1,495) |





ROOF CURB OPTION
Applies to Model RPB

Reznor optional roof curbs are available in sizes to fit all Reznor packaged heating/makeup air systems. Roof curbs are shipped in pre-assembled sections constructed of 16 gauge aluminized steel, 2x6 wood nailers and 3# fiberglass insulation. Field assembly and installation are required.



REZNOR® PRODUCT LIMITED WARRANTY

Manufacturer warrants to the original owner-user that this Reznor product will be free from defects in material or workmanship. This warranty is limited to twelve (12) months from the date of original installation, whether or not actual use begins on that date, or eighteen (18) months from date of shipment, whichever occurs first.

OPTIONAL PURCHASED EXTENDED WARRANTY

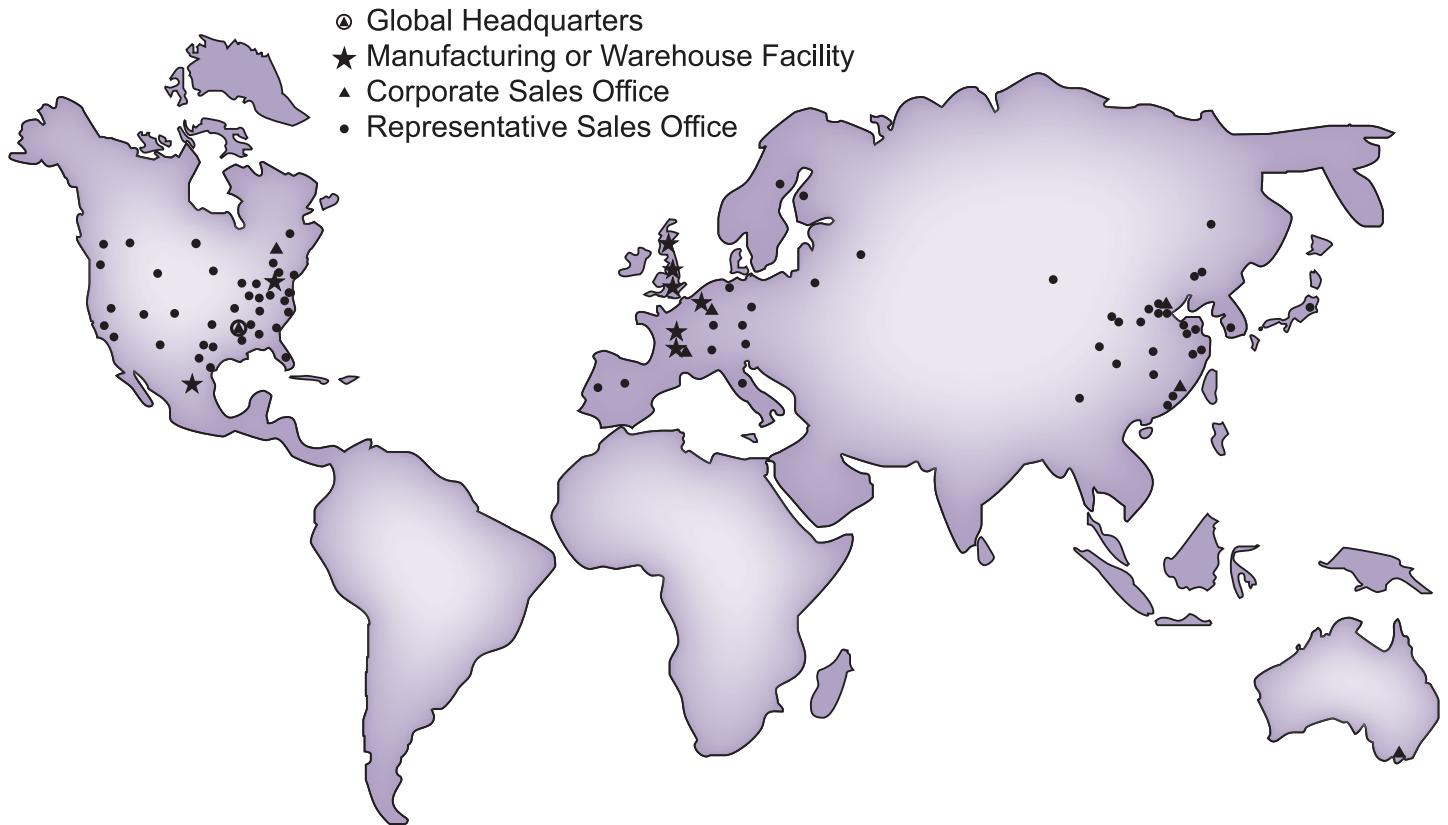
Models RPBL and SSCBL — Option XW2 - Extended four (4) years for a total five-year, non-prorated warranty on the heat exchanger. — **Option XW3** - Extended nine (9) years for a total ten-year, non-prorated warranty on the heat exchanger.

LIMITATIONS AND EXCLUSIONS

Manufacturer's obligations under this warranty and the sole remedy for its breach are limited to repair, at its manufacturing facility, of any part or parts of its Reznor products which prove to be defective; or, in its sole discretion, replacement of such products. All returns of defective parts or products must include the product model number and serial number, and must be made through an authorized Reznor distributor or arranged through Reznor Customer Service. Authorized returns must be shipped prepaid. Repaired or replacement parts will be shipped F.O.B. shipping point.

1. The warranty provided herein does not cover charges for labor or other costs incurred in the troubleshooting, repair, removal, installation, service or handling of parts or complete products.
2. All claims under the warranty provided herein must be made within ninety (90) days from the date of discovery of the defect. Failure to notify manufacturer of a warranted defect within ninety (90) days of its discovery voids obligations hereunder.
3. The warranty provided herein shall be void and of no effect in the event that (a) the product has been operated outside its designed output capacity (heating, cooling, airflow); (b) the product has been subjected to misuse, neglect, accident, improper or inadequate maintenance, corrosive environments, environments containing airborne contaminants (silicone, aluminum oxide, etc.), or excessive thermal shock; (c) unauthorized modifications are made to the product; (d) the product is not installed or operated in compliance with the manufacturer's printed instructions; (e) the product is not installed and operated in compliance with applicable building, mechanical, plumbing and electrical codes; or (f) the serial number of the product has been altered, defaced or removed.
4. The warranty provided herein is for repair or replacement only. Manufacturer shall not be liable for any loss, cost, damage, or expense of any kind arising out of a breach of the warranty. Further, manufacturer shall not be liable for any incidental, consequential, exemplary, special, or punitive damages, nor for any loss of revenue, profit or use, arising out of a breach of this warranty or in connection with the sale, maintenance, use, operation or repair of any Reznor product. In no event will manufacturer be liable for any amount greater than the purchase price of a defective product. The disclaimers of liability included in this paragraph 4 shall remain in effect and shall continue to be enforceable in the event that any remedy herein shall fail of its essential purpose.
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etc., of equipment information shown here.*