REZNOR®

APPLICATIONS Heating/Cooling/Makeup Air

- » WAREHOUSES / FACTORIES
- » SCHOOLS / UNIVERSITIES
- » COMMERCIAL / RETAIL
- » INDUSTRIAL
- » GYMNASIUMS / FITNESS CENTERS
- » CHURCHES / MEETING HALLS
- » COMMUNITY CENTERS
- » ARENAS





REZNOR







ReznorHVAC.com

1,000 - 150,000 CFM Air Handlers

Large capacity applications can be very specialized. Many manufacturers offer only one type of large air volume unit. Don't fit your project around the HVAC equipment. With Reznor HVAC equipment, you get your choice:

- Direct or indirect fired
- Indoor or outdoor installation
- Vertical or horizontal discharge air
- Vertical or horizontal cabinetry
- Air turnover equipment





Reznor high air volume equipment is pre-engineered and cataloged. This gives you quick performance, submittal and specification information at your fingertips.

The range and features of Reznor high air capacity units make them ideally suited for space conditioning, makeup air or process applications such as:

- Agriculture curing, heating and ventilating
- Kitchen and laboratory makeup air
- Paint booths makeup air and drying
- Industrial process heating

			Air Volu	me (CFM)		Heat	ting Capacity (N	IBH)
Madal	Indoor /	Heating	with DX Cooling	with Evaporative	with Chilled	Direct Fired	Indian of Fired	Separated
Model	Outdoor	Only	with DX Cooling	Cooling	Water Cooling	Direct Fired	Indirect Fired	Combustion
RPBL	Outdoor	3,300 - 14,000	4,000 - 8,000	4,000 - 8,000	4,000 - 8,000	-	400 - 1,200	-
SSCBL	Indoor	3,300 - 13,500	4,000 - 8,000	4,000 - 8,000	4,000 - 8,000	-	-	400 - 1,200
RDF	Indoor/Outdoor	1,000 - 28,000	-	-	-	400 - 3,000	-	-
ADF	Indoor/Outdoor	2,000 - 15,500	-	2,000 - 15,500	-	500 - 1,250	-	-
ADFH	Indoor/Outdoor	2,000 - 15,500	-	2,000 - 15,500	-	500 - 1,250	-	-
DFC	Indoor/Outdoor	20,000 - 90,000	20,000 - 90,000	20,000 - 90,000	20,000 - 90,000	4,000 - 12,800	-	-
AEB	Indoor/Outdoor	3,250 - 150,000	3,250 - 150,000	-	3,250 - 150,000	-	250 - 7,500	-
PCD	Indoor/Outdoor	1,700 - 110,000	1,684 - 110,000	1,684 - 110,000	1,684 - 110,000	-	250 - 7,500	-
HPCD	Indoor/Outdoor	3,100 - 140,000	3,086 - 140,000	3,086 - 140,000	3,086 - 140,000	-	250 - 7,500	-

Value

Reznor high capacity air handlers are engineered to provide the best value per cfm. This is evident by the number of national and international corporations that have chosen Reznor equipment for their factories and office buildings. Our customers include internationally known automobile manufacturers, aerospace manufacturers, electronics manufacturers, food and medicine producers.



SELECTION GUIDE

Indoor/Outdoor Custom Equipment

Model DFCH

Model AEB



TECHNICAL DATA

The Reznor line offers a complete package of ultra high volume air handlers for vertical and horizontal applications.

- 100% outside air
- Mixed air control
- Space heating
- Air turnover

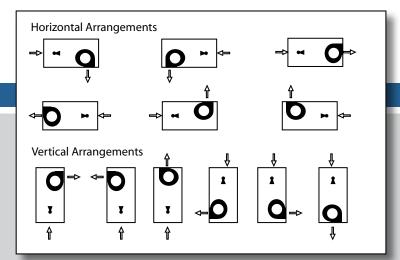
Features & Options

- Natural gas, propane, electric, steam, hot water or fuel oil
- 208-230V/1, 208-230V/3, 460V/3, 575V/3
- 8 different makeup air, space and discharge air controls
- 14 or 16 gauge cabinet construction
- Standard or high density insulation
- Multiple configurations for inlets and discharge with dampers
- Inlet louvers and filters
- 5-75 hp motors
- Variable frequency drive
- Vibration isolation
- Cooling DX, chilled water or evaporative cooling
- Stainless steel heat exchanger
- Disconnects
- Roof curbs
- Remote console

					(Cooling Types			Н	eating Fuels	;	
Model	Arrangement	Source	CFM	Heating (MBH)	DX Cooling	Evaporative Cooling	Chilled Water	Natural Gas	Propane	Steam / Hot Water	Electric	Fuel Oil
DFCH	Horizontal	Direct Fired	20,000 - 90,000	1,400 - 12,830	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
DFCV	Vertical	Direct Fired	20,000 - 90,000	1,400 - 12,830	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
PCDH	Horizontal	Power Burner	1,700 - 110,000	250 - 7,500	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
PCDV	Vertical	Power Burner	1,700 - 110,000	250 - 7,500	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
HPCDH	Horizontal	Power Burner	3,100 - 140,000	250 - 7,500	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
HPCDV	Vertical	Power Burner	3,100 - 140,000	250 - 7,500	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
AEB	Vertical	Air Turnover	3,250 - 150,000	250 - 7,500	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Air Flow Configurations

Some jobs are constrained by the air flow and duct work. Reznor air handlers make it easy to apply the units, even in the most difficult of applications. Units can be floor mounted for easy access. If floor space is at a premium, most units can be suspended, mounted on the roof, or pad mounted outside the building with discharge air ducted inside. See configurations at right.





Indirect Fired



Reznor indirect fired air handlers provide heating/cooling for comfort; makeup air for exhaust; or ventilation air for improved indoor air quality (IAQ).

This makes these units ideal for

- Factories
- Animal shelters
- Schools
- Retail stores
- Locker rooms

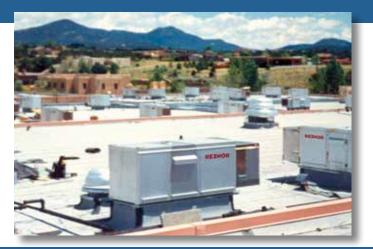
Indoor Mounted Units

Indoor indirect fired units give you the right amount of heat just where you need it. All units can be floor or ceiling mounted. Model SSCBL is a separated combustion unit.

- Up to 130°F temperature rise
- Over 2" external static pressure
- 80% thermally efficient
- Custom DX & chilled water coils



Outdoor Mounted Units



Model RPBL units are specifically designed for outdoor applications. They can deliver up to 100% outside air for make-up air or space conditioning. The weatherproof cabinet gives you worry-free performance. An air intake hood includes moisture elimination louvres. The robust indirect fired burner design allows the units to be used for general ventilation applications for occupied spaces.

- Up to 120°F temperature rise
- Over 2" external static pressure
- 80% thermally efficient
- Custom DX & chilled water coils

The Advantages of Separated Combustion

Reznor separated combustion system technology eliminates common "open flame" combustion problems such as contaminants in the indoor air and negative building air pressure.

- Air for combustion is taken from outside the building, preventing dirt, lint, dust or other contaminants in the indoor atmosphere from being burned.
- The combustion air flow is unaffected by negative building pressure or wind which can cause nuisance shutdown.
- > Only one building penetration, horizontal or vertical (see the illustration at right).

Features & Options





Features

- Natural gas or propane
- Aluminized steel heat exchanger
- Power vented
- Intermittent spark pilot
- Twin centrifugal blowers
- Gas control safeties
- Motor starter
- Curb cap base
- Suspension hangers (Model SSCBL only)
- 208-230V/1, 208-230V/3, 460V/3, 575V/3 voltage
- Downturn plenum (Model RPBL only)
- Filter rack with 2" filters

Options

- 409 stainless steel heat exchanger
- 409 stainless drip pan
- Heat Controls (makeup air/discharge air)
 - » 6 stages
 - » Modulation, 2:1 through 12:1
- Thermostat control
- Single or double wall insulated construction
- Intermittent spark pilot with timed lockout
- Horizontal or vertical discharge
- Discharge dampers
- Horizontal and/or vertical Inlets
- Multiple damper control options
- Open dripproof or TEFC motor (motors meet EISA specifications for efficiency)
- Variable frequency drives
- High and low gas pressure switch
- Firestat and freezestat high ambient cutoff
- Convenience outlet
- Cooling cabinet with DX or chilled water coil (16-50 tons)
- Evaporative cooling module
- Disconnect switch UL Listed
- Outside air hood (Model RPBL only)
- Roof curbs (Model RPBL only)

TECHNICAL DATA

Heating Only Heating &			Capacity (MBH)							Separated	
Model	CFM	Cooling CFM	Installation	400	500	600	700	800	1050	1200	Combustion
SSCBL	3,300 - 14,000	4,000 - 8,068	Indoor	\checkmark							
RPBL	3,300 - 14,000	4,000 - 8,068	Outdoor	\checkmark							

Advantages of Indirect Fired Units

- Proven and robust Thermocore heat exchanger over 1.5 million units installed since 1963
- ▶ 80% thermally efficient
- Heated air without the carbon monoxide or other flue gases in the air stream
- Allows up to 6 stages of control or up to 12:1 modulation for demanding applications





Indoor/Outdoor Air Handlers - Direct Fired

Models ADF, ADFH and RDF are specifically designed to deliver up to 100% outside air for process make-up air or general ventilation. The robust direct fired burner units are an economical way to meet the heating needs of your applications.

- Up to 130°F temperature rise
- Maintain 160°F discharge air
- Over 2" external static pressure
- 92% thermal efficient
- Model RDF allows up to 75% recirculation air



CSA 3.7

Model ADF



Features

- Natural gas or propane
- Hot surface ignition system
- Motor starter
- Curb cap base with suspension hangers
- 208-230V/1, 208-230V/3, 460V/3, 575V/3
- Insulated cabinet construction

Options

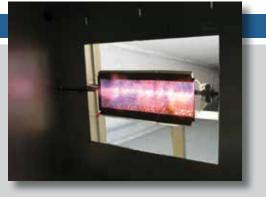
- Double wall insulated construction
- Control options for makeup air & discharge air
- Thermostat control
- Horizontal or vertical discharge
- Discharge dampers
- Single-stage, two-stage or electronic modulation gas control
- Multiple damper control options
- Open dripproof or TEFC motor (motors meet EISA specifications for efficiency)
- Variable frequency drives
- High and/or low gas pressure switches
- Firestat and freezestat high ambient cutoff
- Convenience outlet
- Makeup air controls/dampers
- Evaporative cooling module
- Exhaust fan overhead door interlock
- Roof curb
- Outside air hood with filters
- Filter rack for 2" filters
- Disconnect switch UL Listed

	Air Volume	Maximum	Maximum Discharge		Maxim	um Hea	ting Ca	pacity	(MBH)	by Size	
Model	Range (CFM)	Temp. Rise (°F)	Air Temp (°F)	1-20	1-40	1-50	1-65	2-80	2-120	2-180	3-260
RDF	1,000 - 28,000	120	120	400	600	750	750	1500	1500	2500	3000
	Air Volume	Maximum	Maximum Discharge		Maxim	um Hea	ting Ca	pacity	(MBH)	by Size	
Model	Air Volume Range (CFM)	Maximum Temp. Rise (°F)	Maximum Discharge Air Temp (°F)	3	Maxim 00	um Hea 5(•		(MBH) 00		00
Model ADF			•	-		50	•	7	· /	12	

Advantages of Direct Fired Heating Equipment

When you need a heating solution for large volumes of ventilation air, then direct fired units may be the right solution. Direct fired heating equipment offers:

- Good heat-to-air volume value
- High thermal efficiencies approaching 92%
- Excellent temperature control with 25:1 modulation capabilities
- No venting or flue piping required



ANSI Z83.4 Non-Recirculating Industrial Air Heaters ANSI 783 18 Recirculating Industrial Air Heaters

Cooling

Condensing Units for DX Cooling Coils

Reznor Model MASA condensing unit is designed to match the cooling capacities for Reznor air handling units.

- Environmentally conscious
 - » Energy saving allows three capacity stages to match changes in load demand
 - » Sustainable up to 12.3 EER
 - » Ozone friendly R410A refrigerant
- Easy installation and service
- Dependable
- Safety certified
- Capacity modulation



Model MASA



Evaporative Cooling

Are you dealing with an area containing equipment or a process that constantly creates excessive heat? How about an area requiring makeup air during the hot summer months? Then you know that, unfortunately, making these areas comfortable with traditional mechanical cooling can be an expensive proposition.

So you're stuck with a tough choice - mechanical cooling or no cooling at all...unless you decide on a Reznor evaporative cooling system. Using evaporative cooling is also comfortable to the people paying the monthly energy bill.



Evaporative Cooling Module

Evaporative cooling is ideal for:

- Factories / industrial applications
- Agricultural buildings
- Garages / welding shops
- Commercial kitchens
- Foundries
- Laundromats / dry cleaners

How Evaporative Cooling Works

Ever notice how your body cools off when you first step out of a pool? This is caused by water evaporating off your skin. When water changes from a liquid to a vapor, it absorbs energy - heat energy. So when it evaporates, it takes heat away from your body. You're left feeling cool. This is very much like what happens in a Reznor evaporative cooling system.

Adiabatic cooling using high tech media pads can be 80% efficient. If the difference between dry bulb and wet bulb temperatures is 12°F, there will be a 10°F drop in the sensible temperature. Blowing this cooled air over people makes them feel more comfortable.



Solutions

No matter if your job is very large or just large, there's a Reznor high capacity air handler that can meet your need.

Reznor furnaces, air handlers and split systems can provide many solutions for your demanding applications.









The photos on this page illustrate just some of the places where Reznor equipment has been installed.

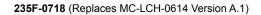
Why Reznor HVAC Air Handlers?

Reznor HVAC equipment is manufactured in a half dozen facilities around the world. You get global support from a company with the most models and options available.

With over 125 years of innovation and technological advancements, you can trust Reznor HVAC equipment to help you solve your HVAC challenges.

For complete catalog information including submittals, energy calculations, dimension drawings, and more go to ReznorHVAC.com or call 800-695-1901.

Specifications & illustrations subject to change without notice or incurring obligations. © Nortek Global HVAC, LLC 2018. All rights reserved. Reznor is a registered trademark of Nortek Global HVAC, LLC.





Note: In keeping with our policy of continuous product improvement, we reserve the right to alter, at any time, the design, construction, dimensions, weights, etc., of equipment information shown here.

