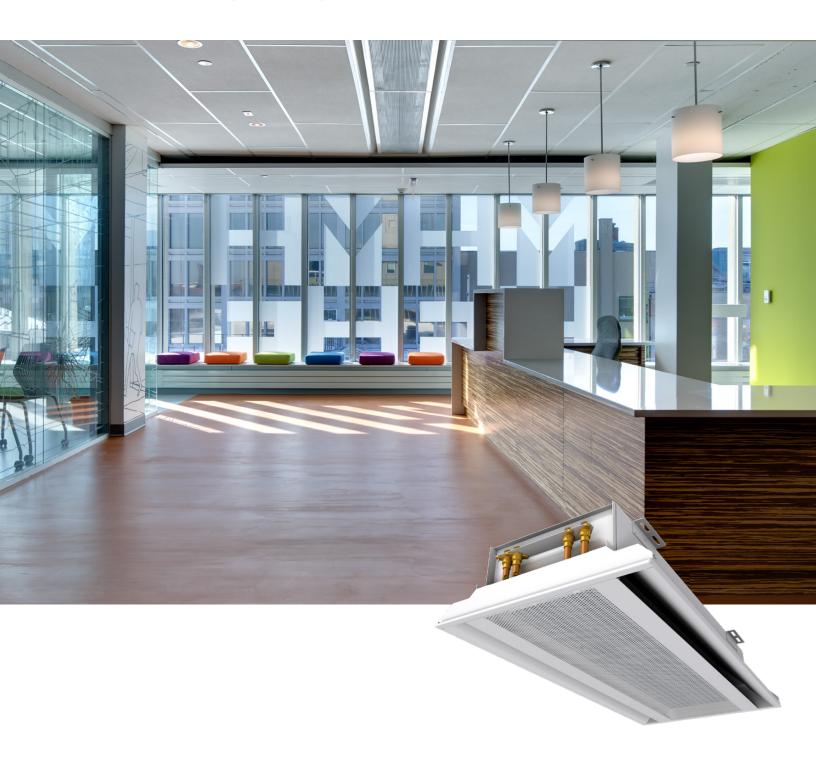
# ACBL LINEAR ACTIVE CHILLED BEAM







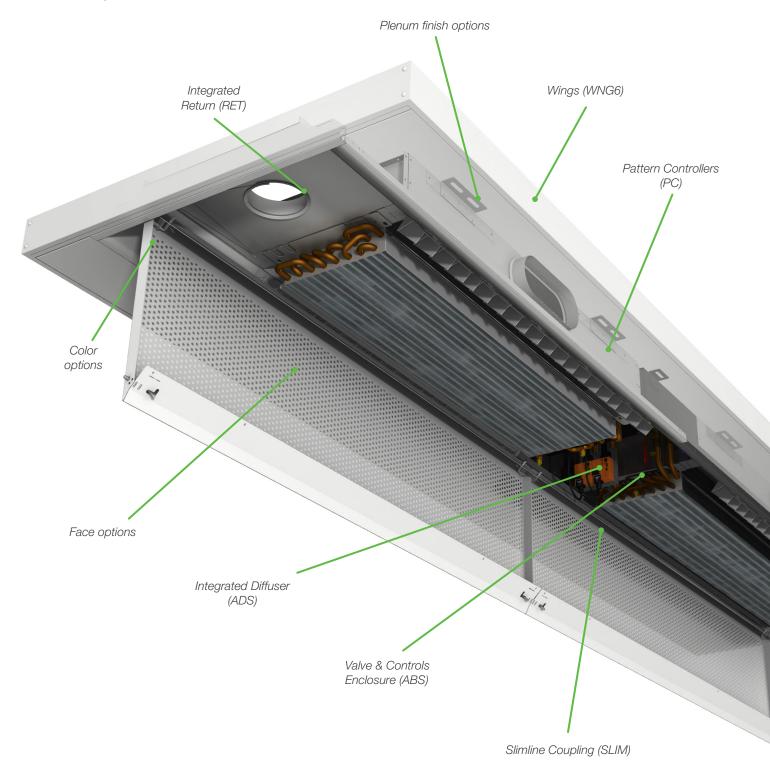
#### **Linear Active Chilled Beam**

The Linear Active Chilled Beam (ACBL) is Price Industries' most versatile beam. With the option of either 1-way or 2-way throw patterns and pattern controllers to guide the discharged air (only on 24 in. wide unit), the ACBL can be utilized in room centers, perimeters or both to provide optimum thermal comfort. The ACBL is designed to provide a high cooling and heating output by conditioning the room air induced through the beams hydronic coil while simultaneously supplying fresh, conditioned air to the occupied area.



# **ACBL OPTIONS**

Linestrings shown in brackets.



# **OPTION DETAILS**

### Integrated Return (RET)

The integrated return allows for a ducted or plenum style return, and places it in the most optimal location. This also provides a continuous linear aesthetic.

### Color Options

In addition to the standard white option (B12), the exterior can be ordered in a variety of special (SPL) paint finishes. The coil can be unpainted or black (BLK).

# Integrated Diffuser (ADS)

The integrated diffuser includes a separate air inlet that can be combined with a manual or VAV damper. When more airflow is required, an integrated diffuser can be used to adjust the airflow to the zone.

# Valve & Controls Enclosure (ABS)

The enclosure section allows for room side access to the plumbing, valves, and electronic controls to simplify maintenance.

### Plenum Finish Options

The plenum is not visible from the room side, but finishes may still be selected. Plenum comes in a standard galvanneal finish (GLV), or can be painted to match (MATCH) the exterior of the beam typical of open ceiling applications where the plenum can be seen.

### Wings (WNG6)

When beams are installed in an open ceiling, wings ensure a horizontal air pattern and hide services such as plumbing, power, and ductwork.

### Pattern Controllers (PC)

Pattern controllers govern the direction of the discharge air and can be used to shorten throw by up to 50% and help reduce any drafts felt by the occupants. This option is only available on the 24 in. model.



# Slimline Coupling (SLIM)

The slimline coupling option allows multiple beams to be connected in series so that they appear as a single, continuous unit.



# Face Options

**Perforated Face** - Greater than 50% free area facilitates the induction process.

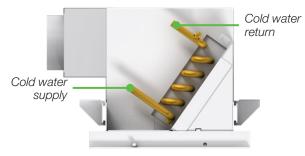
**Grille Face** - Provides linear aesthetics for alternate styling options.

**T-bar ceiling grid** - Standard or Tegular compatibility.

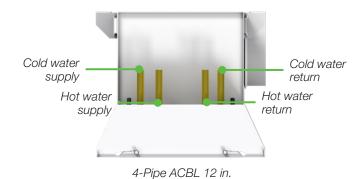
# WATER COIL OPTIONS

The ACBL is available with two water coil configurations.

- **2-Pipe Configuration** Can be used in heating or cooling applications.
- **4-Pipe Configuration** Includes a dedicated heating circuit.



2-Pipe ACBL 12 in.









Volume Flow Regulator

# DAMPER OPTIONS

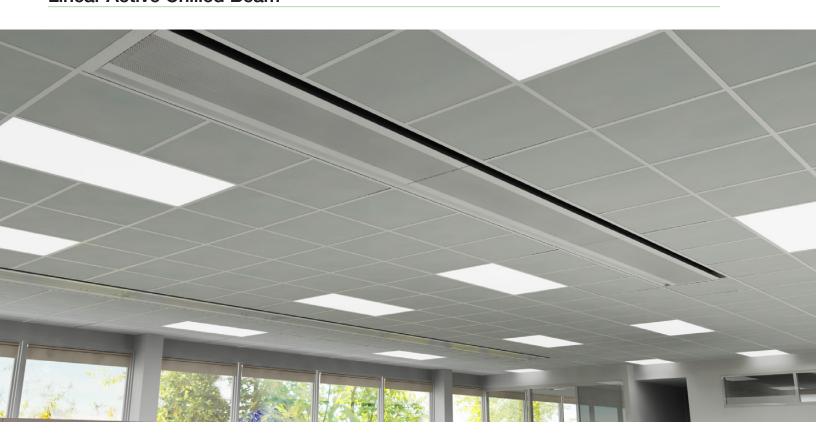
Three damper options allow for fine tuning of static pressure.

Volume Flow Regulator (VFR) - Maintains a constant airflow over a range of static pressures.

#### Manual Quadrant (MQ) Damper

- For onsite fine tuning.

VAV Damper - Can be electronically actuated for VAV applications.



# **APPLICATIONS**

#### Office Buildings

- + Typically installed in open office areas, private offices, conference rooms, hallways, and storage rooms.
- + Can be utilized in both interior and perimeter zones.
- The slimline configuration allows for a row of beams to be installed adjacently without interruption in open office areas.

#### Healthcare

- Typically installed in patient rooms and administrative areas.
- + Small footprint of the beams and ductwork can lead to additional usable space.

#### Laboratories

- Beams are typically applied in load driven labs.
- The air diffuser (ADS) option can be utilized in lab spaces to provide demand control ventilation as well as makeup air during occupied hours.
- The pattern controller (PC)
  option can be used to spread
  the air in small footprint
  layouts.

#### K12 Schools

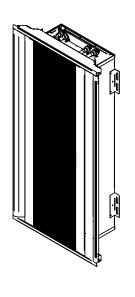
 Multiple space uses available including libraries, classrooms, offices, and labs.

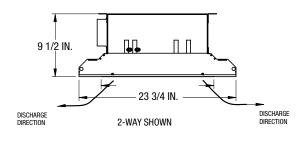
#### Post Secondary

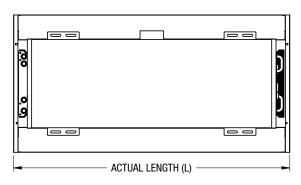
- Multiple space uses available including libraries, classrooms, offices, lecture hall, and labs.
- Excellent waterside efficiency opportunity by utilizing the district loop from the central plant to supply the water to the beams.

# DIMENSIONAL DATA

## 24 in. Linear Active Chilled Beam

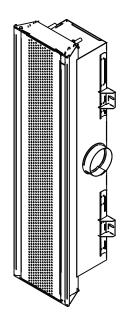


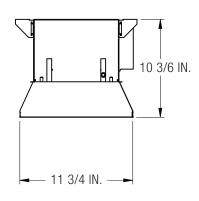


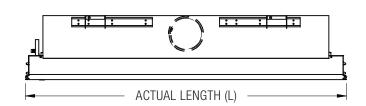


Nominal Width	Actual Width (W)	
24	23.75	
Nominal Length	Actual Length (L)	
24	23.75	
36	35.75	
48	47.75	
60	59.75	
72	71.75	
84	83.75	
96	95.75	
108	107.75	
120	119.75	

## 12 in. Linear Active Chilled Beam







	Nominal Size	Actual Width (W)
Width	12	11.75
	Nominal	Actual
	Size	Length (L)
Length	24	23.75
Length	36	35.75
Length	48	47.75
Length	60	59.75
Length	72	71.75
Length	84	83.75
Length	96	95.75
Length	108	107.75
Length	120	119.75

# PERFORMANCE DATA

# Performance Range

Performance	24 in. ACBL 2-Way Discharge	24 in. ACBL 1-Way Discharge	12 in. ACBL 2-Way Discharge	12 in. ACBL 1-Way Discharge
Total Sensible Cooling (Btu/h per Active Lineal Foot)	300 to 1,600	400 to 1,300	200 to 1,100	200 to 650
Total Sensible Heating (Btu/h per Active Lineal Foot)	500 to 2,000	550 to 1,750	350 to 950	350 to 800
Sound Level	NC < 15 to 35			

# Design Parameters

Design Parameters	Cooling	Heating	
SAT	55 – 65°F	60 – 90°F	
Airflow Rate	3 – 25 cfm/ft. (2-Way Discharge) 3 – 15 cfm/ft. (1-Way Discharge)		
EWT	Dew point + 2°F	90 – 140°F	
Water ΔT	2 – 6°F	10 – 20°F	
Water Flow Rate	<b>min</b> : 0.5 gpm <b>max</b> : 3 gpm (Optimal ≥ 1 gpm)		
Water ΔP	0 – 10 ft.		
Air ΔP	0.2 – 0.8 in. (Target 0.4 – 0.6 in.)		



Product Improvement is a continuing endeavour at Price. Therefore, specifications are subject to change without notice. Consult your Price Sales Representative for current specifications or more detailed information. Not all products may be available in all geographic areas. All goods described in this document are warranted as described in the Limited Warranty shown at **priceindustries**.com. The complete Price product catalog can be viewed online at **priceindustries**.com.