ACBR

RECESSED ACTIVE CHILLED BEAM





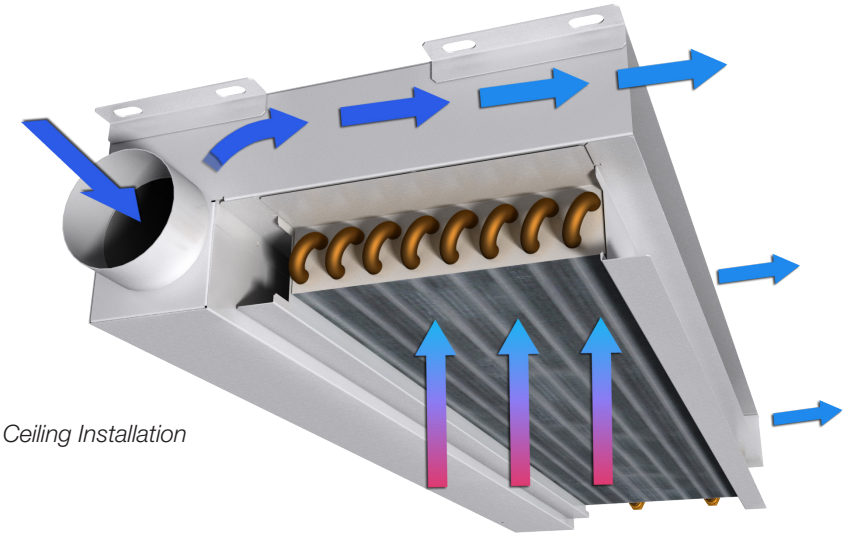
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ACBR
Recessed Active Chilled Beam

The Recessed Active Chilled Beam (ACBR) can be used in a vertical or horizontal configuration. The induced airflow can either be drawn from the room side or from the plenum space. The primary air and induced air are mixed together in the beam and discharged vertically or horizontally into the space to provide conditioned and comfortable air.

When used in a horizontal application, the active chilled beam has a low profile and is an ideal product for spaces with low ceiling height, curtain wall construction, or bulkheads, making it a great alternative to fan coils. Ideal applications include perimeters, office spaces, dormitories, and hotel rooms.

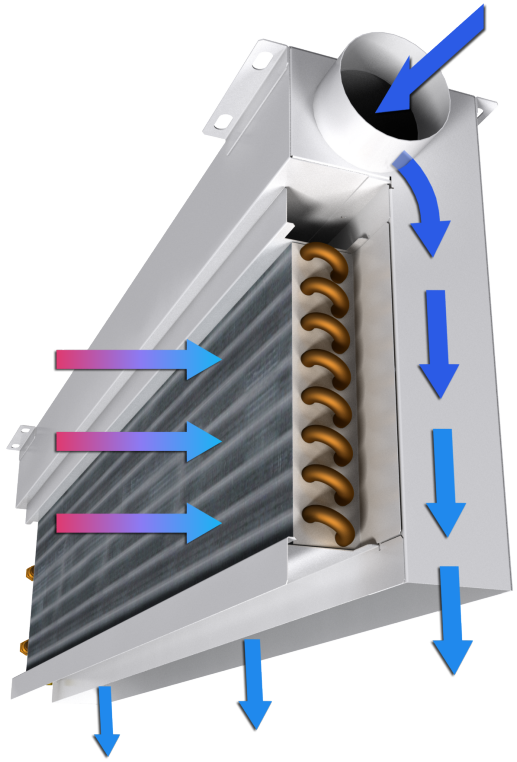
When used in a vertical application, the narrow profile of the active chilled beam makes the unit ideal for installations in narrow, tight spaces along perimeters.



Horizontal Ceiling Installation



Horizontal application



Vertical Ceiling Installation



Vertical application

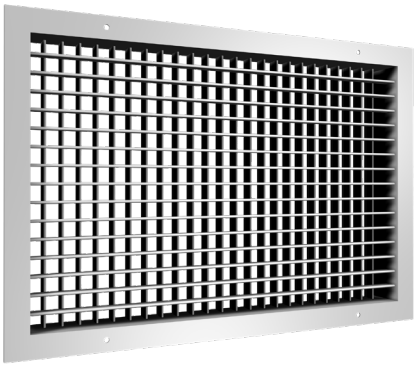
AESTHETIC OPTIONS

The ACBR is typically installed concealed behind the ceiling/bulkhead and combined with transitions to discharge and return grilles. There are a wide variety of architectural discharge and return grilles available from Price. (Reference the below model catalogs for additional information)





Single and dual slot AS diffusers



620 Egg Crate



10A Egg Crate



600 Series Supply Grille



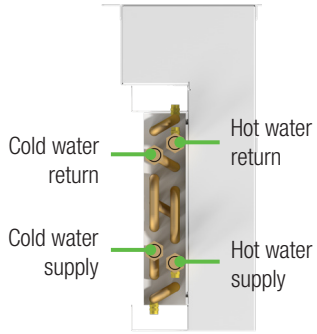
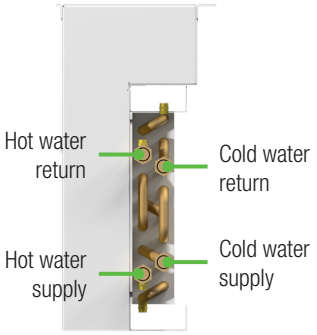
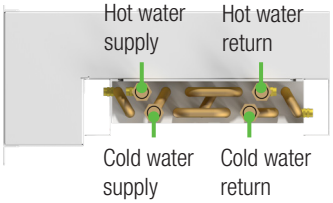
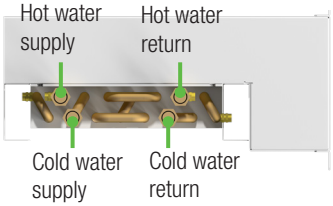
JS - Jet Slot

WATER COIL OPTIONS

The ACBR 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.

	4-Pipe Right Hand Coil Connection	4-Pipe Left Hand Coil Connection
Vertical Down Discharge		
Horizontal Discharge		

DAMPER OPTIONS

Three damper options allow for fine tuning of static pressure.

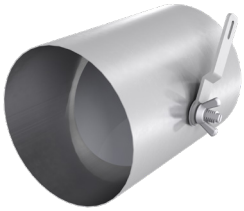
Volume Flow Regulator (VFR) – Maintains a constant airflow over a range of static pressures.

Manual Quadrant (MQ) Damper – For onsite fine tuning.

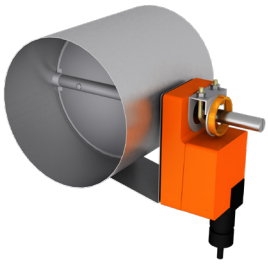
VAV Damper – Can be electronically actuated for VAV applications.



Volume Flow Regulator



Manual Quadrant Damper



VAV Damper



APPLICATIONS

Office Buildings

+ Typically installed along the perimeter in a bulkhead or soffit.
+ Can be utilized in both interior and perimeter zones.
+ Typically combined with architectural grilles and discharge slots for various aesthetic options.

K12 Schools

+ Multiple space uses available including libraries, classrooms, offices, and corridors.

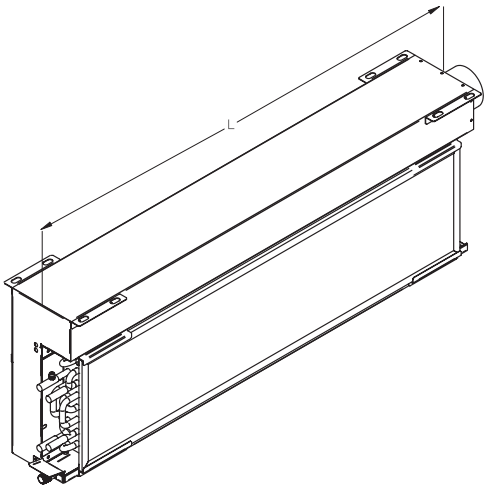
Post Secondary

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

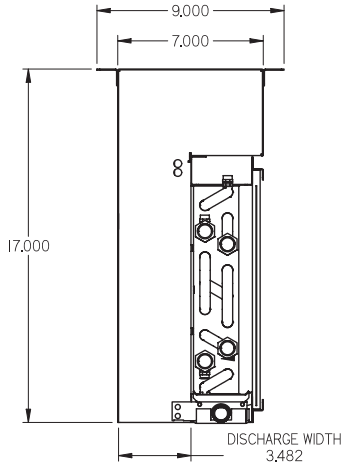
Dormitories

+ Typically installed above entry doorway in bulkhead or soffit and discharging towards the perimeter.
+ Special exposed casing option available when bulkhead or soffit is not present.

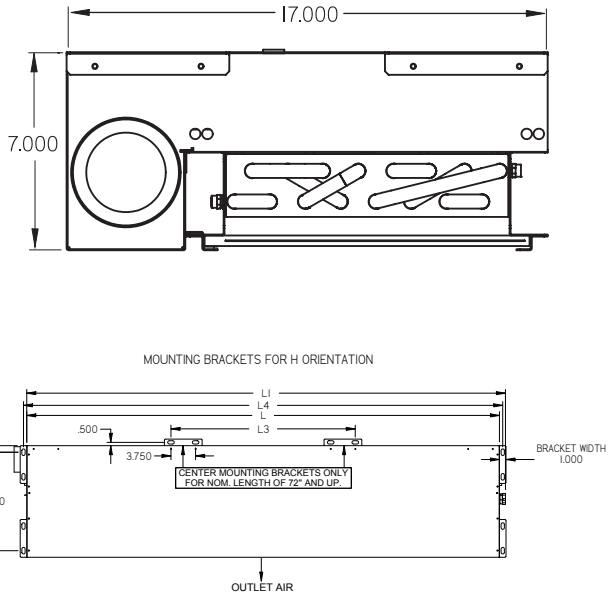
DIMENSIONAL DATA



VD (Vertical Down) Orientation



H (Horizontal) Orientation



Nominal Length	Unit Size (L)	Overall Length (L1)	VD, VU Mounting Length (L2)	Support Mounting Length (L3)	H Mounting Length (L4)
24	24	24.906	21.924	14.357	25
36	36	36.906	33.924	17.786	37
48	48	48.906	45.924	21.214	49
60	60	60.906	57.924	24.643	61
72	72	72.906	69.924	28.071	73
84	84	84.906	81.924	31.5	85
96	96	96.906	93.924	34.929	97

PERFORMANCE DATA

Performance Range

Performance	
Total Sensible Cooling (Btu/h per Active Lineal Foot)	380 to 1,190*
Total Sensible Heating (Btu/h per Active Lineal Foot)	690 to 1,850*
Sound Level	NC < 15 to 35

*Performance data range is for a standalone ACBR unit. De-rates may possibly need to be applied to the performance data when used with discharge and return grilles. The de-rate is determined by the grille type and size selected.
Contact Beamteam ( ) for additional information.

Design Parameters

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

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