

Introduction: Active Chilled Beams

The *Krueger by Halton* active chilled beams are water assisted air distribution devices designed to maximize on thermal comfort, indoor air quality, and energy savings. They accomplish this through the combined use of pressurized supply air, sensible cooling or heating water coils, and induced room air.

These devices are best suited for use in areas such as office buildings, health care facilities, or any other type of building with open spaces or individual offices. Active chilled beams work in rooms with up to 12 ft. ceilings and where both heating and cooling may be needed. They are available for both lay-in and exposed mounting applications in various widths and lengths, making them a flexible option for just about any architectural preference. Low sound levels coupled with peak energy efficiency make these chilled beams the ideal choice for not only new building construction, but retrofit projects as well.

MODELS

- ASB - Active High Capacity
- ABD - Active 12" Wide Sustainable
- AHH - Active Bulkhead
- AHB - Active Bulkhead, Booster Fan
- ABH - Active Corner Mounted, Exposed
- ABX - Active 4-Way Discharge

STANDARD FEATURES

- Standard finish is Polyester Painted White (RAL 9010).
- Combined cooling and heating coil.
- 2 and 4 pipe coil configuration.
- Cooling/heating water pipe connections are copper 1/2" and 3/8" diameter, respectively.
- Aluminum fins on water coil.
- Multiple nozzle sizes available for demand based performance.
- 1-way and 2-way supply.
- Perforated, hinged access panel for easy room side access to coil.
- 20 gauge, galvanized steel casing.
- 5" diameter primary air duct connections. (6.4" on ASB, 4" on ABD)
- Low sound levels.
- *Krueger by Halton* Velocity Control (HVC). (Available on most active models)



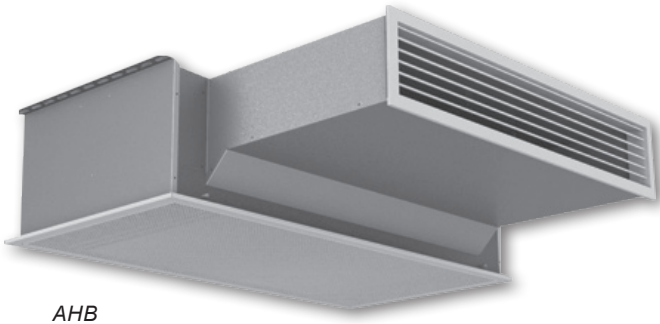
Open Office Application



Bulkhead Application

PERFORMANCE DATA:

Unlike a typical grille, register, or diffuser; chilled beams have a level of complexity which demands a more robust presentation of performance. Download KHIT, our chilled beam software, from our website at www.krueger-hvac.com. This powerful tool provides an accurate representation of a given product's performance. Each input allows you to understand the room and/or unit performance based on your exact input parameters. For further assistance in selecting or specifying *Krueger by Halton* chilled beams, contact your local representative or send us an email at kruegerinfo@krueger-hvac.com.



AHB

Introduction: AHB

The Krueger by Halton AHB bulkhead chilled beam is the ideal solution where horizontal throw is required. These chilled beams are typically located in a soffit, but are not limited to this location. In some applications, this model can serve as a great alternative to fan coils. It also has several options available to meet different engineering requirements and building needs.

MODEL

AHB - Active Chilled Beam (Bulkhead) with Boost Option

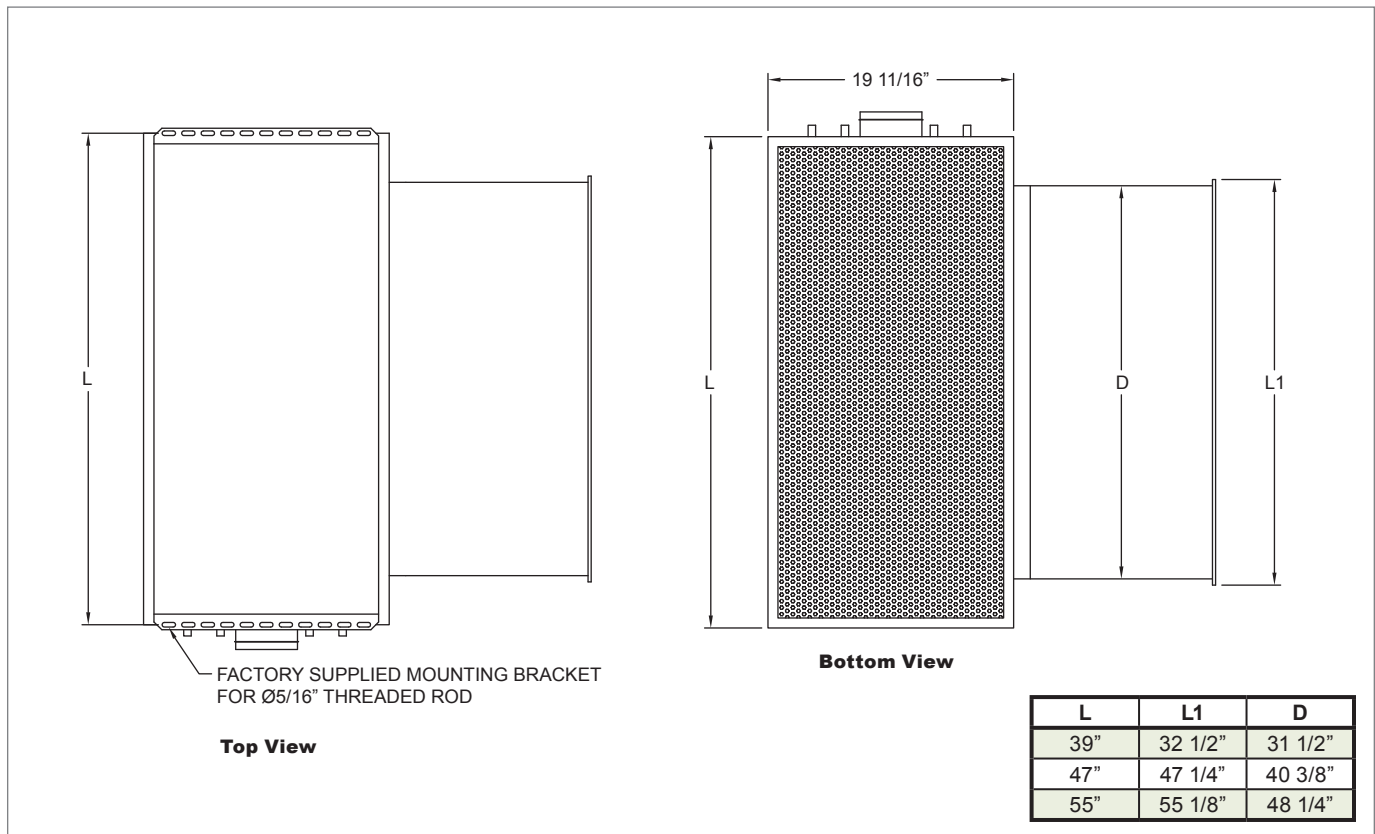
FEATURED OPTIONS

(See **STANDARD OPTIONS** on Page C3-17)

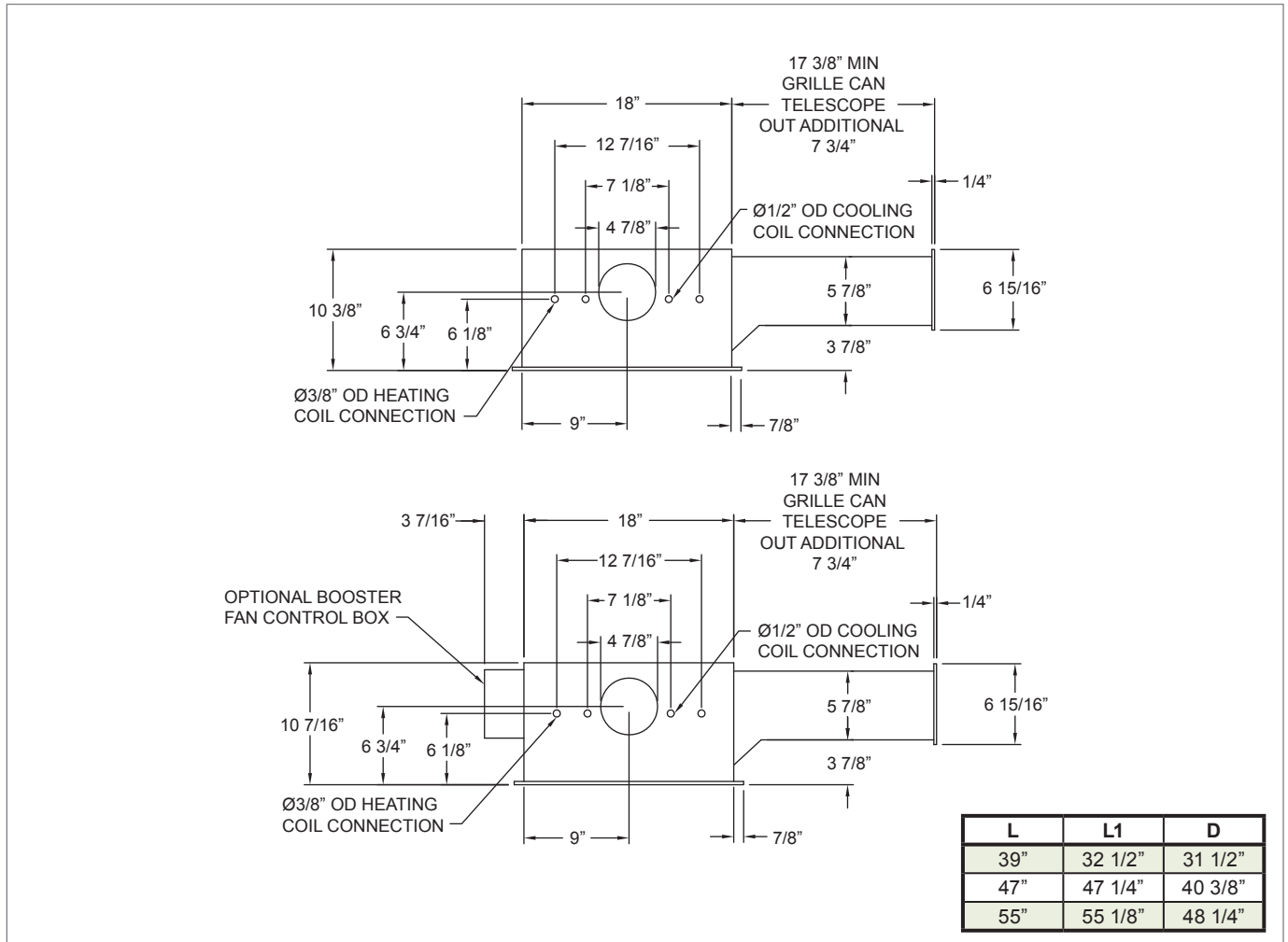
- Booster fan option.
- 3 Nozzle sizes available for more precise performance.
- Available widths: 39", 47", and 55".
- Right, middle, and left side duct connections available.
- Right and left hand coil connection available.
- Specialized controls options available upon request.

AHB Dimensional Information

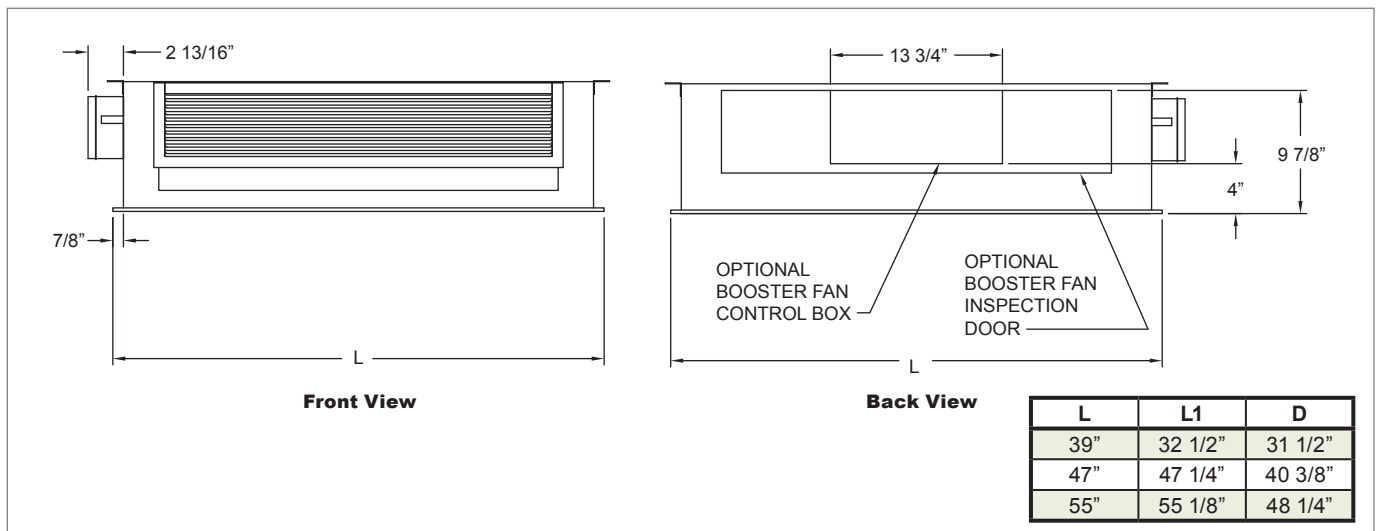
AHB TOP & BOTTOM VIEWS



NOTES: All dimensions in inches. Cooling/heating water pipe connections are copper 1/2" and 3/8" with wall thickness of 0.04". The maximum chilled/hot water circuit operating pressure is 150 psi.

AHB Dimensional Information
AHB SIDE VIEWS


NOTES: All dimensions in inches. Cooling/heating water pipe connections are copper 1/2" and 3/8" with wall thickness of 0.04". The maximum chilled/hot water circuit operating pressure is 150 psi.

AHB FRONT & BACK VIEWS


NOTES: All dimensions in inches. Cooling/heating water pipe connections are copper 1/2" and 3/8" with wall thickness of 0.04". The maximum chilled/hot water circuit operating pressure is 150 psi.

AHB Suggested Specification & Configuration

- 1. MODEL: (XXX)**
AHB - Active Chilled Beam with Boost
- 2. AIR PATTERN / NOZZLE TYPE: (X)**
A - Nozzle 5
B - Nozzle 6
C - Nozzle 7
- 3. UNIT WIDTH: (XX)**
39", 47", 55"
- 4. DUCT CONNECTION: (X)**
R - Right
L - Left
M - Middle
- 5. COIL CONNECTION LOCATION: (X)**
R - Right
L - Left
- 6. GRILLE COLOR: (X)**
W - White (RAL-9010)
X - Special
- 7. COIL TYPE: (X)**
C - Cooling Only
H - Cooling and Heating
- 8. BOOST FAN: (X)**
N - No
Y - Yes
R - Retrofit
- 9. CONTROLS: (X)**
N - No
X - Special
- 10. BUS CONNECTION: (X)**
N - No
X - Special
- 11. CONTROL VALVES: (X)**
N - No
X - Special
- 12. VALVE ACTUATOR: (X)**
N - No
X - Special
- 13. ACCESSORIES: (X)**
N - No
X - Special

AHB

The Krueger by Halton AHB unit is an active chilled beam for bulkhead and enclosed installation with return and supply air grilles. The AHB has an option of a boost fan integrated into the unit. The AHB has an option of a condensate pan integrated into the unit.

The active chilled beam shall have an integral recirculation air path through the perforated bottom panel.

The bottom return panel shall be telescoping up to 2" and the supply connection shall be telescoping up to 8".

The supply air to the room space shall be 1-way.

The active chilled beam shall be 39" wide and 10" high. The active chilled beam shall have an inlet duct diameter of 5". The position of the duct connection shall be changeable and be able to be located at the right, left, or middle of the supply air plenum.

The frame, front, and side panels shall be made of galvanized steel. All visible parts shall be white, painted to #44 White (RAL 9010), 20% gloss.

All pipes shall be manufactured from copper, and connection pipes with a wall thickness of 0.04". The fins shall be manufactured from aluminum. Coil fins shall be spaced at 6 FPI. Optionally, heating shall be incorporated within the heat exchanger by means of two 3/8" pipes, connected in series. The heat exchanger shall be oriented such that the water connections may be located on either the right or left side of the beam.

All joints shall be soldered and factory pressure-tested. The pipework's maximum operation pressure is 150 psi.

Active chilled beams shall be protected by a removable plastic coating and individually packed in a plastic bag. The duct connection and pipe ends shall remain sealed during transport.

The active chilled beams shall be identified by a serial number printed on a label attached to the beam.