Introduction: Passive Chilled Beams

The *Krueger by Halton* passive chilled beams are the perfect solution for perimeter zone cooling or complementary cooling in areas such as open office spaces or hallways. Due to their silent operation, they are a great fit for libraries and classrooms as well. Using only a cooling coil, passive chilled beams provide sensible cooling for a space, making them a great fit for retrofit applications or where additional sensible cooling may be necessary due to changes in room layout and demand. Because the passive beams do not receive any ventilation air from an air handler or VAV terminal unit, they use a negligible amount of energy, making them an energy efficient alternative for space cooling.

Retail Application

MODELS
APA - Passive, Exposed Chilled Beam
APT - Passive, Above Ceiling Mount Chilled Beam

STANDARD FEATURES
- Standard finish is Polyester Painted White (RAL 9010, APA Only).
- Pre-painted sheet metal, modular perforated screen with 50% free area (APA only).
- Steel outer mounted end cap (APA only).
- Galvanized steel side panels (APT only).
- 1/2” diameter copper coiling coil pipes.
- Aluminum fins on water coil.
- Low sound levels.

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.

APA

Introduction: APA

The APA exposed chilled beam is the perfect solution for spaces requiring sensible cooling loads where ceiling space may be limited. Additionally, the aesthetics of this chilled beam make it a great choice for architects.

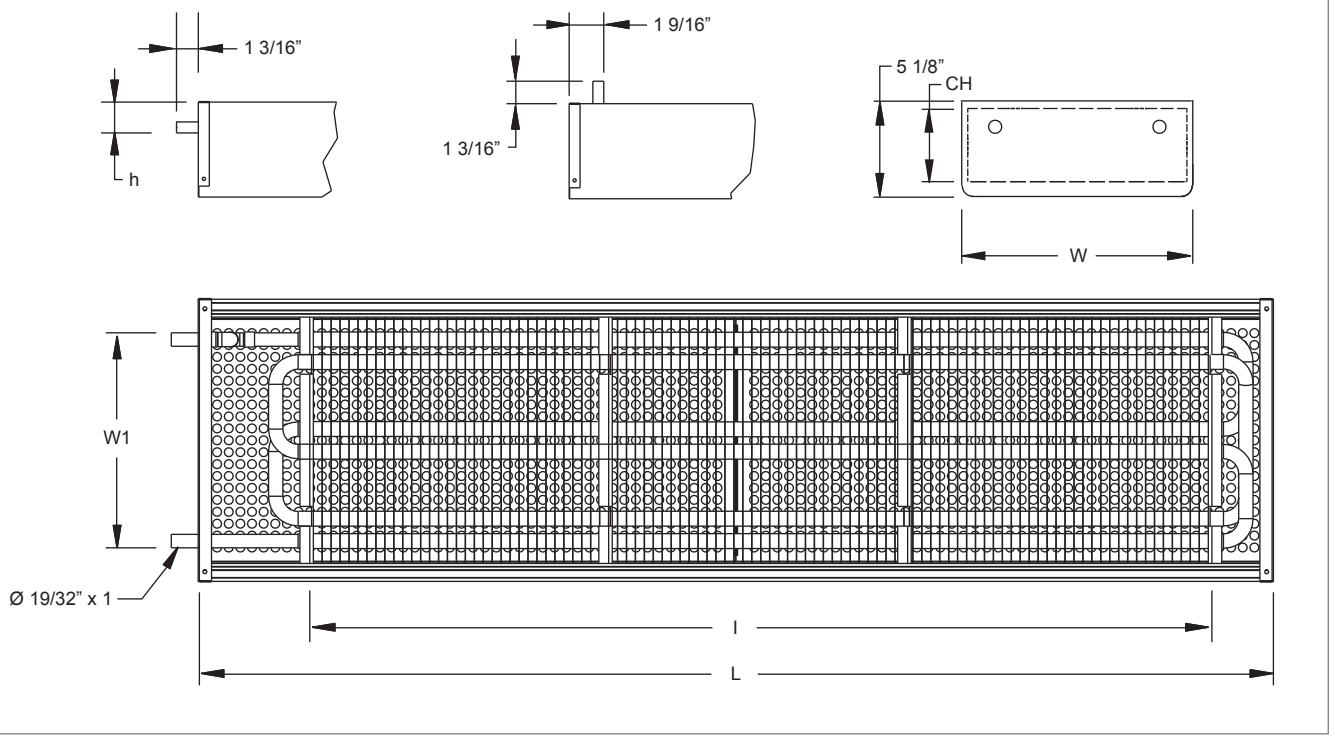
MODEL
APA - Passive Exposed Chilled Beam

FEATURED OPTIONS
(See STANDARD OPTIONS on Page C3-37)

- 3” or 4” coil height.
- Available in lengths from 48” to 200” (4” increments).
- 12”, 18”, or 24” unit width.
- 1 or 2 loop water coil.
- Custom color matching available.
- Front or top coil connection.
- Factory mounted 2-way control valve.
- Rounded or angular edges on casing.

APA Dimensional Data

APA TOP & SIDE VIEWS



APA DIMENSIONAL REFERENCES

W	CH	h	W1	l	L
12”	3”	1 19/32”	9”	40” - 189”	l + 8”
18”			15”		
24”			21”		
12”	4”	1 3/16”	9”	40” - 189”	l + 8”
18”			15”		
24”			21”		

APA Suggested Specification & Configuration

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

The hinged bottom panel can easily be opened and detached from either side for general maintenance and cleaning. The bottom panel shall be removable without any special tools.

The supply air to the room space shall be 2-way.

The passive chilled beam shall be 5 1/8" high.

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.

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

Passive chilled beams shall be protected by a removable plastic coating and individually packed in a plastic bag.

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

1. **MODEL: (XXX)**
   APA - Passive Chilled Beam

2. **COIL HEIGHT: (X)**
   3 - 3" Coil Height
   4 - 4" Coil Height

3. **BEAM LENGTH: (XXX)**
   48" - 200" (Increments of 4")

4. **BEAM WIDTH: (XX)**
   12 - 12" Beam Width
   18 - 18" Beam Width
   24 - 24" Beam Width

5. **COIL LOOP: (X)**
   1 - 1 Loop
   2 - 2 Loops

6. **COIL CONNECTION LOCATION: (X)**
   S - Front End
   U - On Top

7. **CONTROL VALVE: (XX)**
   00 - None
   A1 - 2-Port Valve, Danfoss RA-C DN15

8. **APPEARANCE: (X)**
   A - Rounded Edges
   B - Angular Edges

9. **FINISH: (XXX)**
   WHT - White (RAL-9010)
   BLK - Black
   GRY - Gray
   SPL - Special

SAMPLE CONFIGURATION: APA - 4 - 72 - 24 - 2 - U - 00 - A - WHT