

INTRODUCTION

This unit provides comfortable and effective sensible cooling to the space, featuring an optimized nozzle design that delivers high capacity while maintaining low noise levels. It is ideal for single-room hospitality environments and offers quick, simple installation. The system is available in nominal lengths up to 6 feet and includes 1/2" sweat or 1/2" MPT coil connections for flexible integration.

MODEL

BAB - Bulkhead Mounted Recessed Active Chilled Beam

FEATURES

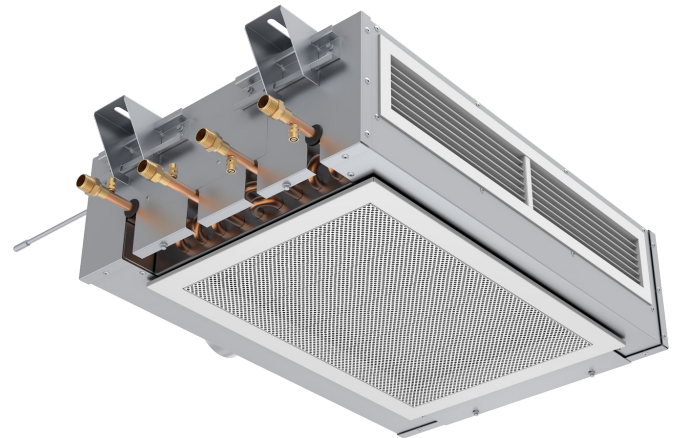
- 2' to 6' lengths
- Left hand or right hand coil connections
- Rear air inlet location
- Louvered supply grille
- Perforated return grille
- 2-pipe and 4-pipe coil configurations
- Configured nozzle geometry for capacity optimization
- Commissioning port with roomside access for balancing
- Mounting brackets with adjustments in two directions
- 1/2" Sweat water coil connections
- Coil air vent

OPTIONS

- Internal closed cell foam insulation
- Coil drain valve
- 1/2" or 3/4" MPT water coil connections
- 12", 18" or 24" stainless steel braided hoses
- Coil lint screen
- Constant volume regulator

ADVANTAGES

- Removal of high thermal loads is possible in this air/water system
- The height of the air duct system is reduced to a minimum, due to the low supply of primary air
- Substantial reduction in operating costs, due to low primary air volume
- Improvement of thermal comfort inside the room
- Contributing sound levels below NC-30



APPLICATION

Krueger active chilled beams benefit from the use of using hydronic coils and induced air to reduce energy consumption associated with removal of sensible thermal loads. The primary air is supplied to the chilled beam subsequent to it being discharged through a series of nozzles located along the length of the beam. The nozzles inject the primary air into the mixing chamber at velocities capable of inducing plenum or soffit air through the water coil, where it mixes with the primary supply air. This mixture of air is then discharged into the space through bar grilles. This provides high cooling outputs with low amounts of primary air. The reduced volume of air results in the reduction of the air handler capacity and size, smaller duct sizes, and the overall energy consumption.

The supplied air from the air handling unit is tempered and dehumidified to handle the latent load. The remaining loads in the space are addressed with the heat exchanger which is incorporated into the chilled beam. Applications with low latent cooling loads could use 100% outdoor air allowing for use of a dedicated outdoor air system with energy recovery, further reducing total system energy consumption.

The BAB bulkhead beams are the ideal solution for single room hospitality spaces, such as hotel, dorm, and hospital rooms. With their shallow height, ceiling heights can be maximized creating an open and inviting space. Bulkhead chilled beams are great for use in retrofit of buildings which were not originally built with HVAC systems installed.