

Bulkhead Mounted Exposed Active Chilled Beams

chilled beams

CBAC

- · Provides comfortable, effective sensible cooling to the space
- Optimized nozzle design provides high capacity and low noise levels
- Durable powder coated steel cabinet with tool-less access panels
- Quick and simple installation
- Available in nominal lengths up to 6 feet





MODEL:

CBAC / Bulkhead Mounted Exposed Active Chilled Beam

FINISHES:

Standard Finish - #26 White Optional Finish - #84 Black

OVERVIEW

Titus 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 and where it mixes with the primary supply air. This mixture of air is then discharged into the space through ceiling slot diffusers. 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 percent outdoor air allowing for use of a dedicated outdoor air system with energy recovery further reducing total system energy consumption.

The CBAC bulkhead beams are the ideal solution for single room hospitality spaces, such as hotel, dorm, and hospital rooms. With their

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shallow height, ceiling heights can be maximized creating an open and inviting space. Exposed bulkhead chilled beams are great for use in retrofit of buildings which were not originally built with HVAC systems originally installed.

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 the operating costs, due to low primary air volume
- Improvement of the thermal comfort inside the room
- Contributing sound levels below NC-30

U77



Bulkhead Mounted Exposed Active Chilled Beams (continued)

CBAC STANDARD FEATURES

- 2 foot to 6 foot nominal lengths
- Left hand or right hand coil connections
- Rear air inlet location
- Durable powder coated steel cabinet
- · 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 AND ACCESSORIES

- Linear Bar supply grille
- Linear Bar return grille
- Louvered return grille
- Eggcrate return grille
- 1/2" thick foil-faced EcoShield, anti-microbial external insulation
- Coil drain valve
- 1/2" or 3/4 MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses
- Coil lint screen
- Constant volume regulator

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