

Linear Active Chilled Beams

chilled beams

CBAL

- Active linear chilled beam with 1-way or 2-way air distribution patterns
- Optimized nozzle design provides high capacity and low noise levels
- Linear design matching commercial architectural styling
- Designed to fit in standard 12-inch and 24-inch ceiling systems
- Optimized diffuser geometry maximizes occupant comfort



CBAL-12



CBAL-24



healthcare

dual-function

k-12 education

universities

wood grains

energy solutions

MODELS:

CBAL: 12-inch / 24-inch

FINISHES:

Standard Finish - #26 White

Optional Finish - #84 Black

OVERVIEW

Titus active chilled beams features the aerodynamic properties of Titus ceiling diffusers and 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 room air through one or two coils and where it mixes with the primary supply air. This mixture of air is then discharged into the space through the 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.

Primary 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.

CBAL's are offered for both, cooling and heating, in 12" and 24" widths and lengths from 2 to 10 ft. They can be easily integrated into different grids styles within a suspended ceiling or even in drywall ceilings. The low overall height of the CBAL product line is ideal for reducing the space required for false ceiling in any application.



See website for Specifications



CBAL-24 installed in the ceiling of a school

ADVANTAGES

- Removal of high thermal loads is possible in this air/water system
- The size 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
- Suitable for several standard ceiling grids
- Contributing sound levels below NC-30

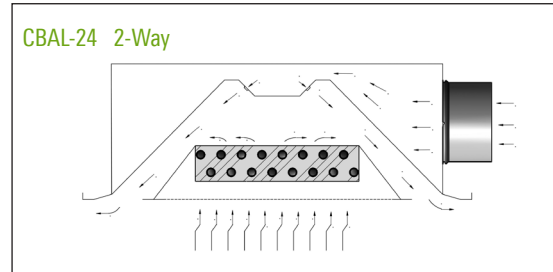
CBAL-24 STANDARD FEATURES

- 1-way or 2-way air distribution patterns
- 24-inch width
- 2 foot to 10 foot lengths, 1 foot increments
- Perforated or linear bar induced air grille
- Left hand or right hand coil connections
- Side or top air inlet locations
- 2-pipe and 4-pipe coil configurations
- Configured nozzle geometry for capacity optimization
- Hinged induced air grille for roomside coil access
- Commissioning port with roomside access for balancing
- Mounting brackets with adjustments in two directions
- Durable powder coat finish
- ½" Sweat water coil connections
- Coil air vent

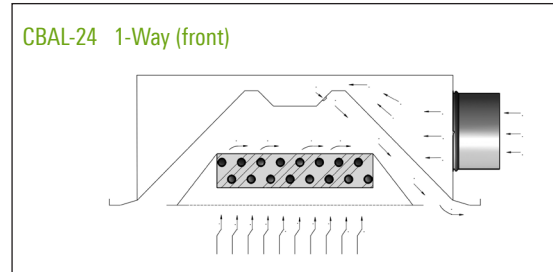
OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, anti-microbial external insulation
- Coil drain valve
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses
- Lay-in, narrow tee and drop face border types
- Coil lint screen
- Constant volume regulator

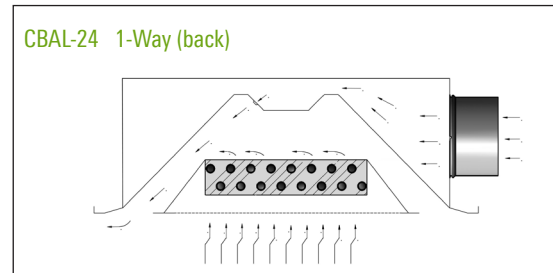
CBAL-24 2-Way



CBAL-24 1-Way (front)



CBAL-24 1-Way (back)



CBAL-12 STANDARD FEATURES

- 1-way or 2-way air distribution patterns
- 12-inch width
- 2 foot to 10 foot lengths, 1 foot increments
- Perforated or linear bar induced air grille
- Left hand or right hand coil connections
- Side or top air inlet locations
- 2-pipe and 4-pipe coil configurations
- Configured nozzle geometry for capacity optimization
- Hinged induced air grille for roomside coil access
- Commissioning port with roomside access for balancing
- Mounting brackets with adjustments in two directions
- Durable powder coat finish
- ½" Sweat water coil connections
- Coil air vent
- Condensate tray with drain connection for field plumbing (12-inch version only)

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- Lay-in, narrow tee and drop face border types

