Titus
Redefine your comfort zone.™

AIR DISTRIBUTION

PRODUCTS

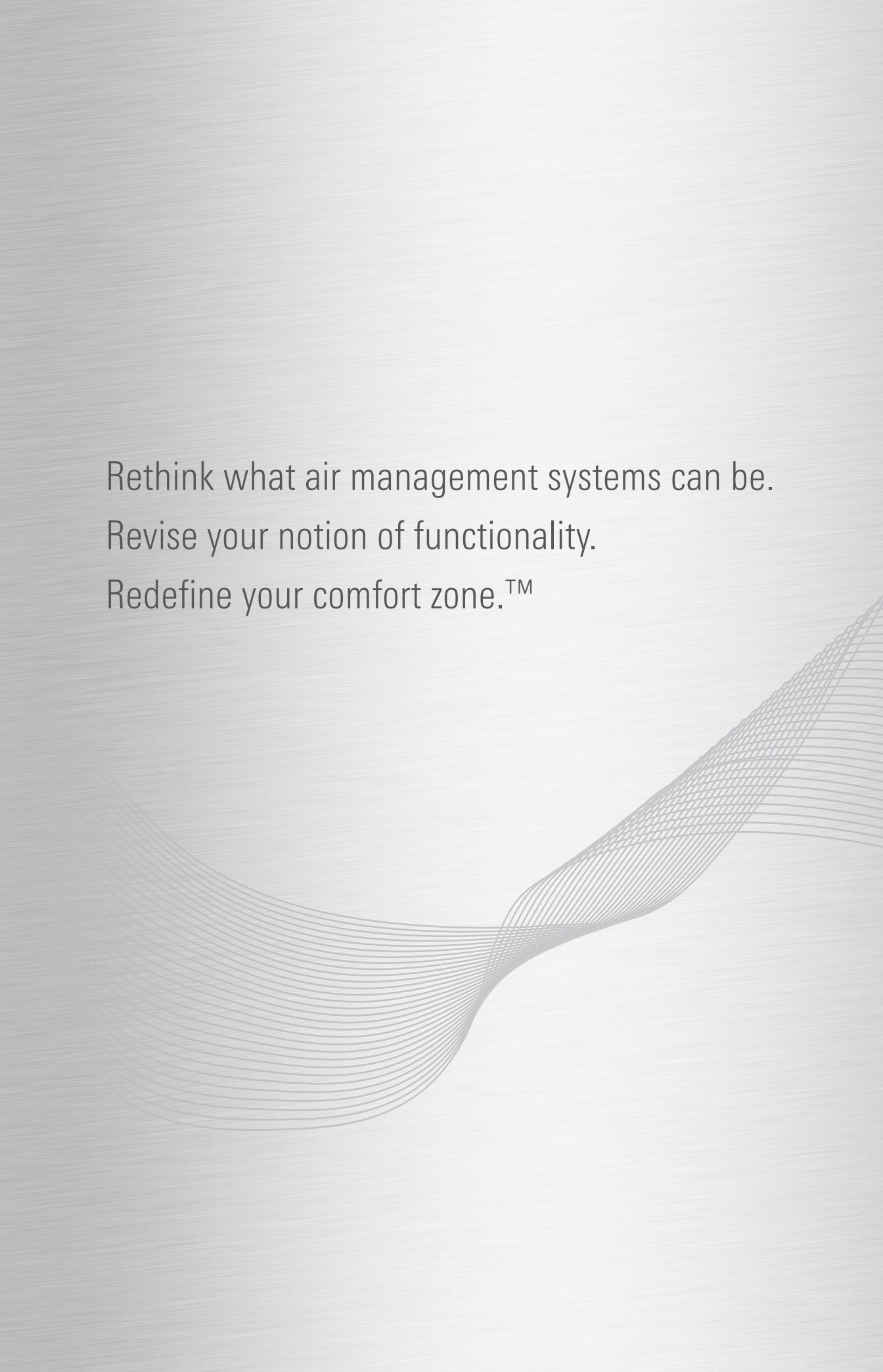
CORE

05

ADVANCING THE SCIENCE OF AIR DISTRIBUTION

CHILLED BEAMS

Rethink what air management systems can be.
Revise your notion of functionality.
Redefine your comfort zone.™



Comfort,Redefined.

Since 1946, Titus has focused on technologically advanced products that create the highest degree of comfort.

We've consistently led the industry by breaking the barriers of expectation and convention when it comes to technology. We've redefined how technology drives, influences and supports air management. And by being first to market with the most innovative approaches to air distribution, we're proud to say that the marketplace has taken notice, and is counting on us to lead the way into the next decade. A challenge we're more than happy to accommodate.

Titus has raised the bar on design, proving that functional can also be beautiful. And we've redefined what it means to be energy efficient, with a collection of smart technology products that optimize the use of natural resources.

Titus has also redefined what it means to work with an air management products partner. We pride ourselves on listening and responding so that we can not only meet expectations, but also exceed them. Service has been, and will always be, our main focus at Titus. And, it's why so many of our customers keep coming back.

Welcome to your new comfort zone. It starts here.

Overview

The Titus chilled beam product line is comprised of a variety of active and passive model offerings. These products offer optimized performance and provide high levels of thermal comfort for the occupant. In addition to increased occupancy comfort, use of the chilled beam products reduces the amount of energy required to heat and cool a building.

The chilled beam products provide sensible cooling and heating to the space by utilizing the more efficient heat transfer capacity of water, as opposed to air. This decouples the latent and sensible loads, reducing the energy cost of sensible cooling. With passive beams and radiant products, an additional system is necessary to meet the ventilation and latent cooling needs of the space. The Titus active chilled beams integrate the supply of ventilation air creating an active diffuser. Using the ventilation air to pressurize a plenum with aerodynamically designed nozzles, high velocity jets of air are created forcing induction of room air over the water coils integral to the units. Forced induction dramatically improves the heating and cooling capacity over passive beams and radiant products. Titus active chilled beams harness the energy of the supply air to further reduce total energy consumption.

Titus offers a chilled beam product to meet the requirements of any design or installation. The CBPE model of passive beam accomodates both exposed and recessed mounting applications. Active chilled beams are available in 1, 2, and 4-way throw patterns. There is even a model for high sidewall applications. In addition to the variety of product solutions available, the appearance of the units can be customized through standard options, which enables seamless integration into any architectural style, traditional or contemporary.

ACTIVE CHILLED BEAMS

All Titus Chilled Beam products can contribute towards achieving the following credits:

- LEED EA Credit 1: Optimize Energy Performance
- IEQc2: Increased Ventilation
- IEQc7.1: Thermal Comfort - Design

CBAL2

ACTIVE LINEAR CHILLED BEAMS

» 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 24-inch ceiling systems
» Optimized diffuser geometry maximizes occupant comfort
» Multi-inlet option and field reversable coils provide installation flexibility

CBAL2

The CBAL2 is offered for both cooling and heating, in 24-in width, and lengths from 2 to 10 ft. This unit can be easily integrated into different grid styles within a suspended ceiling or even in drywall ceilings. The low overall height of the CBAL2 product line is ideal for reducing the space required for false ceilings in any application.

CBAL2 STANDARD FEATURES

- 24-inch width
- 1-way or 2-way air distribution patterns
- 2 foot to 10 foot lengths, 1 foot increments
- Perforated induced air grille
- Left hand or right hand coil connections
- 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 and drain
- Top, side, or multi-inlet options
- Field reversible coil

OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, antimicrobial external insulation
- Lint screen
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses
- Lay-in or tegular border types

Rendering of CBAL2 installed in a ceiling

CBE2

EXPOSED ACTIVE LINEAR CHILLED BEAM

- Exposed 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
- Integral Coanda plates for ceiling independent operation
- Optimized diffuser geometry maximizes occupant comfort

CBE2-12

CBE2-24

The CBE2 is offered for both cooling and heating, in 12-inch or 24-inch widths, and lengths from 2 to 10 ft. The low overall height of the CBE2 is ideal for open ceiling or retrofit applications with limited floor height.

CBE2 STANDARD FEATURES

- 12 or 24-inch width
- 1-way or 2-way air distribution patterns
- 2 foot to 10 foot lengths, 1 foot increments
- Integral Coanda plates for ceiling independent operation
- Perforated induced air grille
- Left hand or right hand coil connections
- 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 and drain
- Top, side, or multi-inlet options (for CBE2-24)
- Field reversible coil (for CBE2-24)

OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, antimicrobial external insulation
- Lint screen
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses
- Lay-in or tegular border types

Rendering of CBE2-24 installed in a ceiling

CBLV-12

ACTIVE LINEAR CHILLED BEAM WITH VERTICAL COILS

- 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 ceiling systems
- Vertical coil with condensate pan
- Optimized diffuser geometry maximizes occupant comfort

CBLV-12

The CBLV-12 is offered for both cooling and heating, in 12-inch width, and lengths from 2 to 10 ft. This unit can be easily integrated into different grid styles within a suspended ceiling or even in drywall ceilings.

CBLV-12 STANDARD FEATURES

- 12-inch width
- 1-way or 2-way air distribution patterns
- 2 foot to 10 foot lengths, 1 foot increments
- Perforated induced air grille
- Left hand or right hand coil connections
- 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 and drain
- Top or side air inlet configurations
- Condensate tray with drain connection for field plumbing

OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, antimicrobial external insulation
- Lint screen
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses
- Lay-in or tegular border types

CBAM

ACTIVE MODULAR CHILLED BEAM

- Active modular chilled beam with 4-way air distribution pattern
- Optimized nozzle design provides high capacity and low noise levels
- Modular design matching commercial architectural styling
- Designed to fit in standard 24 inch ceiling systems
- Optimized diffuser geometry maximizes occupant comfort

CBAM

The CBAM is offered for both cooling and heating, in 24-inch x 24-inch and 48-inch x 24-inch module sizes. This unit can be easily integrated into different grid styles within a suspended ceiling or even in drywall ceilings. The low overall height of the CBAM product line is ideal for reducing the space required for false ceilings in any application.

CBAM STANDARD FEATURES

- 4-way air distribution pattern
- 24-inch x 24-inch or 48-inch x 24-inch module sizes
- Perforated induced air grille
- Top coil connections
- 2-pipe and 4-pipe coil configurations
- Configured nozzle geometry for capacity optimization
- Removable 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 and drain
- Top or side air inlet configurations

OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, antimicrobial external insulation
- Lint screen
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses
- Lay-in or tegular border types

CBAV

ACTIVE VERTICAL RECESSED CHILLED BEAM

- Active chilled beam for use in recessed applications
- Optimized nozzle design provides high capacity and low noise levels
- Vertical coil with condensate pan
- Designed to integrate with Titus slot diffusers
- Optimized diffuser geometry maximizes occupant comfort

CBAV

The CBAV is offered for both cooling and heating, in lengths from 2 to 8 ft. This unit can be easily integrated with many of Titus' slot diffusers. Units can have single slot diffusers installed directly to the discharge of the chilled beam, or CBAV beams can be located in specific locations above a long run of slot differs creating active and inactive sections.

CBAV STANDARD FEATURES

- 2 foot to 8 foot lengths
- Left hand or right hand coil connections
- Rear air inlet location
- 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
- ½" Sweat water coil connections
- Coil air vent
- Condensate tray with drain connection for field plumbing

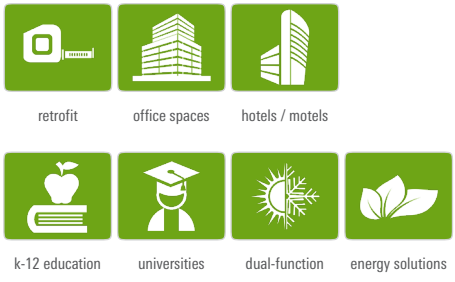
OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, antimicrobial external insulation
- Coil drain valve
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses

CBAS

ACTIVE SILL MOUNTED CHILLED BEAM

- Provides comfortable, effective sensible cooling to the space
- Optimized nozzle design provides high capacity and low noise levels
- Ideal for induction unit and unit ventilator retrofit projects
- Quick and simple installation
- Available in nominal lengths up to 6 feet



CBAS

The CBAS is offered for both cooling and heating, in lengths from 2 to 6 ft. The unit can be easily integrated in retrofit projects where induction units, unit ventilator, or other under sill units are being replaced. Under sill active beams save significant energy and reduce sound levels compared to other under sill mounted products. Additionally, the utilization of most or all of the existing piping and duct work minimizes project costs.

CBAS STANDARD FEATURES

- 2 foot to 6 foot lengths
- Left hand or right hand coil connections
- Left hand, right hand, or rear air inlet locations
- 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
- ½" sweat water coil connections
- Coil air vent
- Condensate tray with drain connection for field plumbing

OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, antimicrobial external insulation
- Coil drain valve
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses

CBAB

ACTIVE BULKHEAD MOUNTED CONCEALED CHILLED BEAM

- Provides comfortable, effective sensible cooling to the space
- Optimized nozzle design provides high capacity and low noise levels
- Ideal for single room hospitality spaces
- Quick and simple installation
- Available in nominal lengths up to 6 feet

CBAB

The CBAB bulkhead chilled beam is 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 originally installed.

CBAB STANDARD FEATURES

- 2 foot to 6 foot 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
- ½" Sweat water coil connections
- Coil air vent

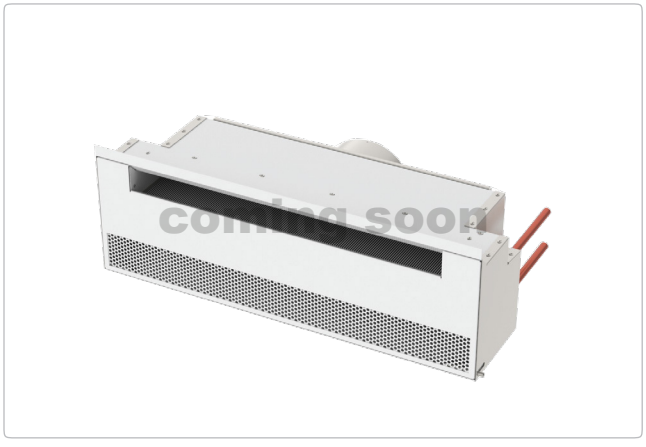
OPTIONS AND ACCESSORIES

- ½" thick foil-faced EcoShield, antimicrobial external insulation
- Coil drain valve
- ½" or ¾" MNPT water coil connections
- 12-inch, 18-inch or 24-inch stainless steel braided hoses

CBAW

ACTIVE SIDEWALL CHILLED BEAM

- Provides comfortable, effective sensible cooling to the space
- Optimized nozzle design provides high capacity and low noise levels
- Ideal for multi-story residential and hospitality spaces
- Quick and simple installation
- Available in nominal lengths up to 10 feet



hotels / motels | universities | dual-function | energy solutions

CBAW

In multi-story residential and hospitality spaces, the CBAW sidewall beams complement modern architectural styling and minimize installed space, as well as minimizing energy consumption. Superior comfort and near maintenance free operation of the CBAW product family, combined with energy efficiency are an ideal solution in such demanding applications.

CBAW STANDARD FEATURES

- 2 foot to 10 foot lengths, 1 foot increments
- 2-pipe and 4-pipe coil configurations
- Configured nozzle geometry for capacity optimization
- Commissioning port with roomside access for balancing
- ½" sweat water coil connections
- Coil air vent
- Perforated grille

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

PASSIVE CHILLED BEAMS

All Titus Chilled Beam products can contribute towards achieving the following credits:

- LEED EA Credit 1: Optimize Energy Performance
- IEQc2: Increased Ventilation
- IEQc7.1: Thermal Comfort - Design

CBPE

EXPOSED PASSIVE CHILLED BEAMS

- Provides comfortable, effective sensible cooling to the space
- Ultra quiet, natural convection driven operation
- Perforated face
- Exposed, recessed or concealed installation
- Quick and simple installation
- Available in nominal lengths up to 10 feet

k-12 education universities energy solutions

CBPE

Comfortable, effective, ultra-quiet sensible cooling technology

Passive chilled beams are primarily used to provide sensible cooling in perimeter zones and comfortable sensible cooling within interior zones. The primary mode of heat transfer is by natural convection, with a percentage of heat transfer transmitted through radiation. During cooling, warm room air rises to the ceiling area; cool air around the coil sinks down to the occupied area as a result of the higher density. As the cool air descends in to the space, more warm air is drawn over the coil creating a convective current that drives the system.

The CBPE is ideal for exposed installations or can be integrated into lay-in ceiling systems for concealed installations. For applications with low ceilings or limited ceiling plenum height the low profile design excels at satisfying sensible cooling.

More Information

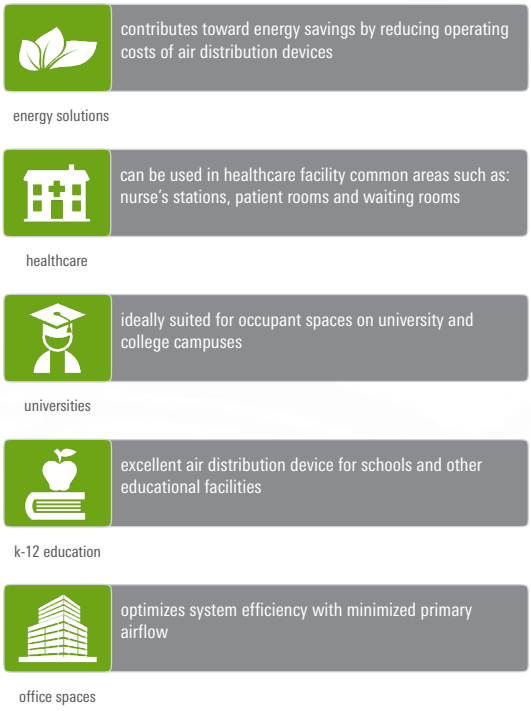
Additional information on our chilled beam products and their best applications can be found on the URLs listed below:

https://www.titus-hvac.com/Products/Chilled%20Beam

https://www.titus-hvac.com/file/13124/Chilled%20Beam%20Catalog_April-2025_V5.pdf

https://www.titus-hvac.com/main/software/chilled%20beam%20selection%20software

Icons



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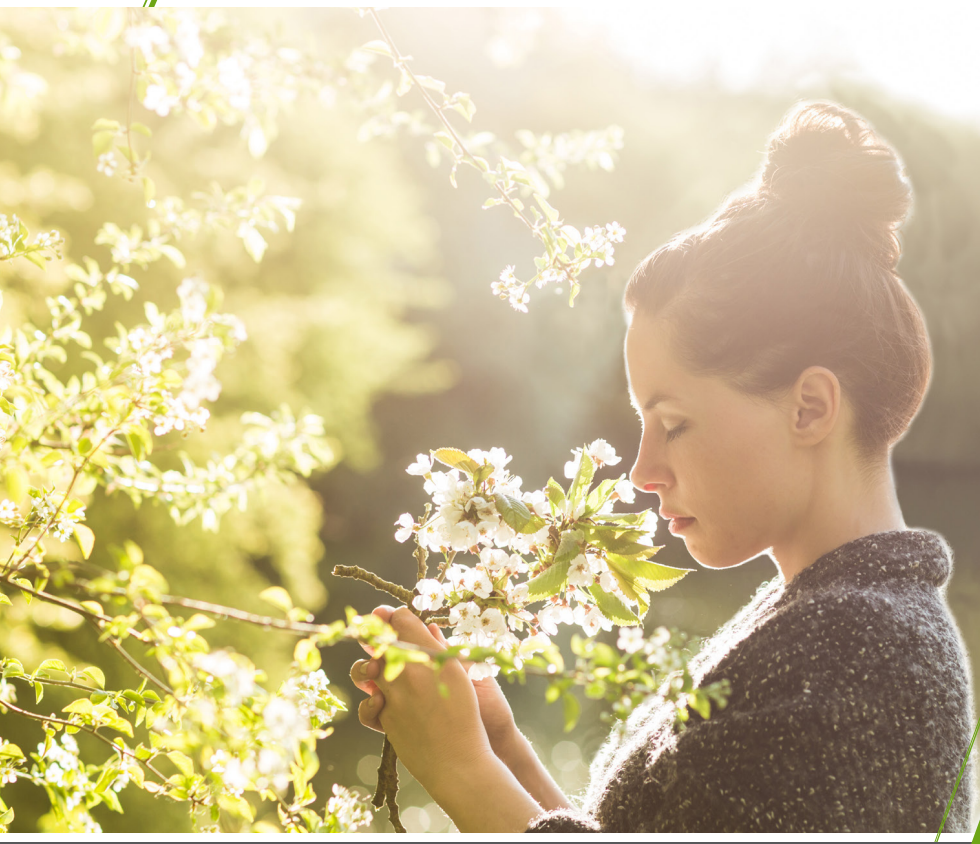
AIR DISTRIBUTION PRODUCTS



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