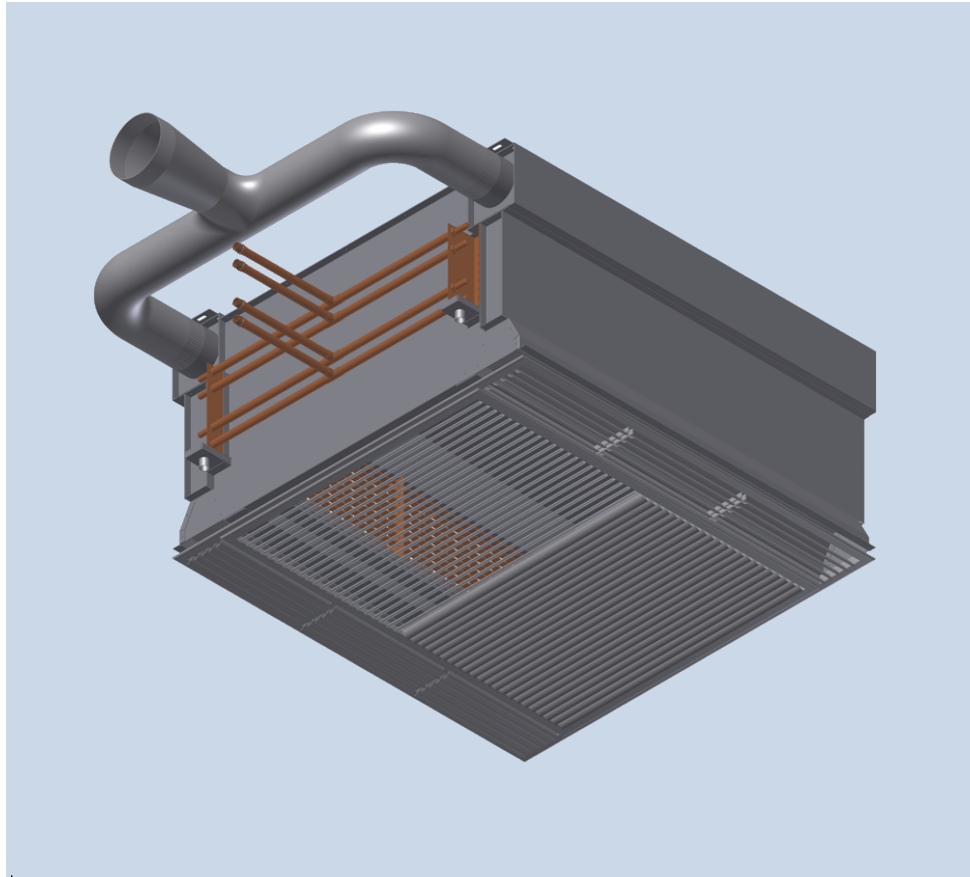


AIR TERMINAL CHILLED BEAM UNIT

- Suitable for New Projects Especially in Classrooms
- Low Noise & Static Pressure
- Great in Thermal Comfort
- Built-In Drain Pan to Collect Condensation

EBair
CONTROL INC.

Quality is Breathtaking



EB AIR CONTROL INC.

MANUFACTURERS OF INNOVATIVE HVAC PRODUCTS

COPYRIGHTS RESERVED



ISO 9001:2008 Certified
KTA 1401 Certified
(Nuclear Safety Standards)

6185 Tomken Road, Unit 1-2
Mississauga, ON, L5T 1X6, Canada
www.ebaircontrol.com
Ph. 905-670-2277
Fax. 905-670-2299

Benefits of Air Terminal Chilled Beam Unit (ATCBU)

1. First Cost

Significant First Cost savings (25-35%) in comparison to VAV Systems can be realized with application of ATCB Units

2. Lower Operating Cost

Specially developed efficient nozzles and aerodynamic design that lowers Static Pressure requirement of ATCB vis-à-vis energy consumption of Roof Top Unit (RTU).

3. Lower Maintenance Cost

No Fan and Motors

No Wiring

No Moving Parts

Only periodic cleaning of Coils and Lint Screen is recommended.

4. Additional Benefits

System qualifies for LEED accreditation.

Excellent IAQ Control

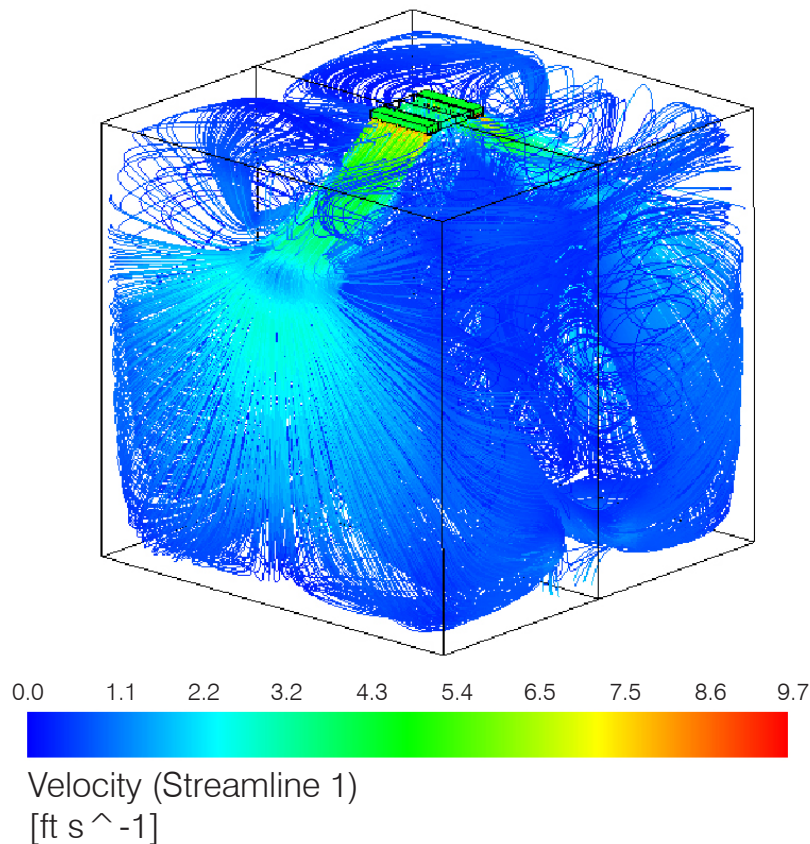
Low Noise Contribution to Space

Greater Thermal Comfort

ETL Tested Unit

Air Flow Distribution And Velocity Profile Of Linear Ceiling Induction Chilled Beam

(Model was formalized with inputted data from a live project requiring distribution pattern in a classroom environment) CFD - CFX Tascflow



Ceiling Mounted Down Flow Unit

Single Throw Unit – 1MLD 48/64/88/120 – (24 X 48) inches

Model Range: 4 length units to accommodate wide range of loads with 2/4 pipe systems.

The unit utilizes induction unit arrangement (ceiling 24 x 48 inches arrangement) where coil is vertically placed with air flow discharge down from the ceiling. The discharge pattern is adjustable to gain maximum footprint at a given velocity. Design consideration is given to minimize any down draft velocity that causes maximum air hitting a given spot. The unit can have variations to air and water connection. EWT to coil can be maintained as low as 45F and the unit has a full proof drain pan (IBC compliant) to collect any residue condensate. On account of aerodynamic discharge profile, the unit also maintains very low noise level at the same time operating at a modest pressure range.

Primary Air: 20-190 cfm

Primary Air Inlet Pressure: 0.4" - 1.5"wc

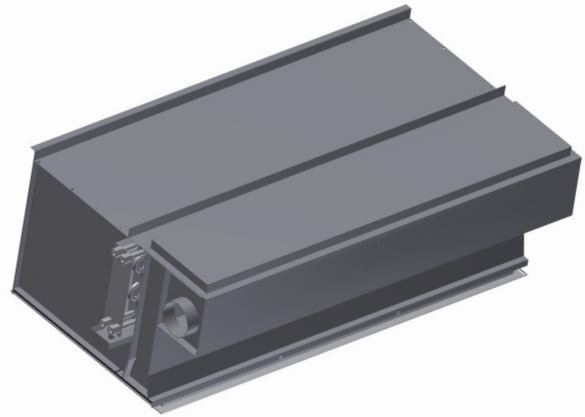
Sensible Cooling Range @ 50F EWT: 2350-6500 BTUH

Sensible Heating Range @ 180F EWT: 5450-16250 BTUH

Noise Level: NC 23-NC 33

ETL Tested Unit

Supply/Return Grille: (24 x 48) inches



Double Throw Unit – 2MLD 48/64/88/120 – Rectangular (24 x48) inches

Model Range: 4 length units to accommodate wide range of loads with 2/4 pipe systems.

The unit utilizes induction unit arrangement (ceiling 24 x 48 inches arrangement) where coil is vertically placed with air flow discharge down from the ceiling. The discharge pattern is adjustable to gain maximum footprint at a given velocity. Design consideration is given to minimize any down draft velocity that causes maximum air hitting a given spot. The unit can have variations to air and water connection. EWT to coil can be maintained as low as 45F and the unit has a full proof drain pan (IBC compliant) to collect any residue condensate. On account of aerodynamic discharge profile, the unit also maintains very low noise level at the same time operating at low pressure range. On account of its size the unit provides an architectural look on the ceiling corresponding to T-BAR grid. The placement of these is generally at the core of the room keeping in consideration the throw/velocity of air discharge.

Primary Air: 40-400 cfm

Primary Air Inlet Pressure: 0.4" - 1.5"wc

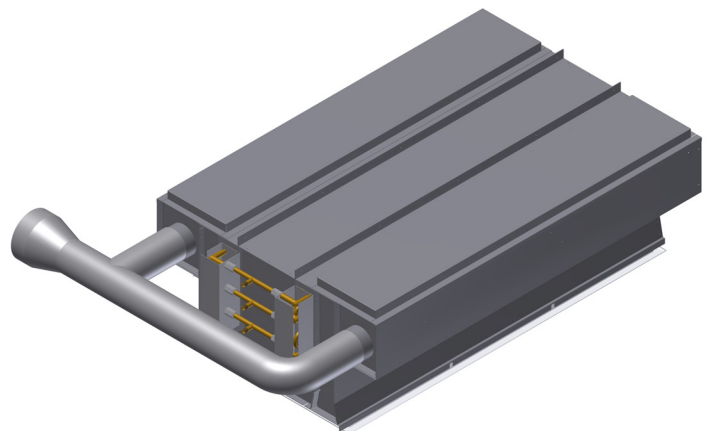
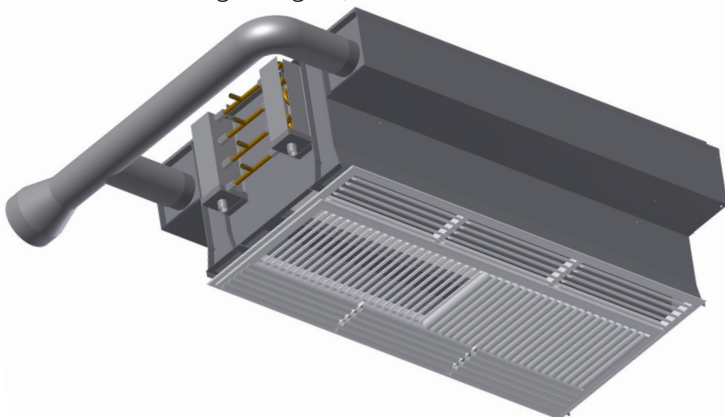
Sensible Cooling Range @ 50F EWT: 4700-12900 BTUH

Sensible Heating Range @ 180F EWT: 10900-32500 BTUH

Noise Level: NC 25-NC 35

ETL Tested Unit

Supply/ Return Grille: (24 x 48) inches



Single Throw Unit – 1MLD 48/64 – Square (24 X 24) inches

Model Range: 2 different length units to accommodate wide range of loads with 2/4 pipe systems.

The unit utilizes induction unit arrangement (ceiling 24x 24 inches arrangement) where coil is vertically placed with air flow discharge down from the ceiling. The discharge pattern is adjustable to gain maximum footprint at a given velocity. Design consideration is given to minimize any down draft velocity that causes maximum air hitting a given spot. The unit can have variations to air and water connection. EWT to coil can be maintained from 45F – 58F and the unit has a full proof drain pan (IBC compliant) to collect any residue condensate. On account of aerodynamic discharge profile, the unit also maintains very low noise level between NC 22-35 at the same time operating at pressure range of 0.5-1.0"WC. On account of its size the unit gives a symmetrical look on the ceiling through the T-BAR. The placement of these units is along the perimeter or in the core of the room keeping in consideration of the throw of air.

Primary Air: 20-115 cfm

Primary Air Inlet Pressure: 0.4" - 1.5"wc

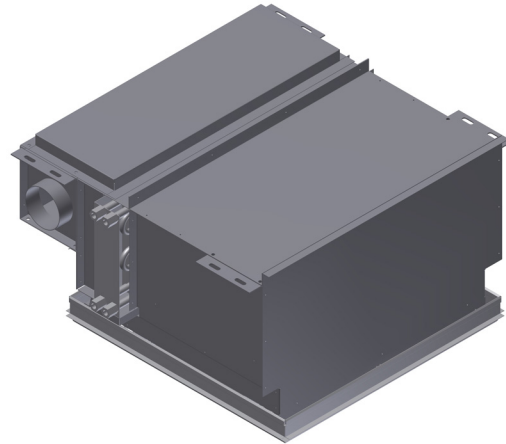
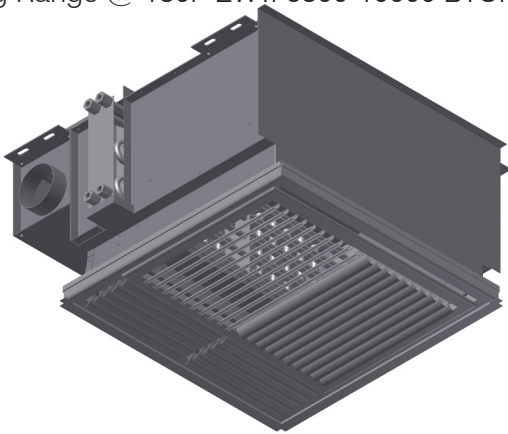
Sensible Cooling Range @ 50F EWT: 2200-3800 BTUH

Sensible Heating Range @ 180F EWT: 5800-10000 BTUH

Noise Level: NC 23-NC 33

ETL Tested Unit

Supply/ Return Grille: (24 x 24) inches



Double Throw Unit – 2MLD 48/64 – Square (24 x 24) inches

Model Range: 2 different length units to accommodate wide range of loads with 2/4 pipe systems.

The unit utilizes induction unit arrangement (ceiling 24 x 24 inches arrangement) where coil is vertically placed with air flow discharge down from the ceiling. The discharge pattern is adjustable to gain maximum footprint at a given velocity. Design consideration is given to minimize any down draft velocity that causes maximum air hitting a given spot. The unit can have variations to air and water connection. EWT to coil can be maintained as low as 45F and the unit has a full proof drain pan (IBC compliant) to collect any residue condensate. On account of aerodynamic discharge profile, the unit also maintains very low noise level at the same time operating at low pressure range. On account of its size the unit provides an architectural look on the ceiling corresponding to T-BAR grid. The placement of these is generally at the core of the room keeping in consideration the throw/velocity of air discharge.

Primary Air: 40-230 cfm

Primary Air Inlet Pressure: 0.4" - 1.5"wc

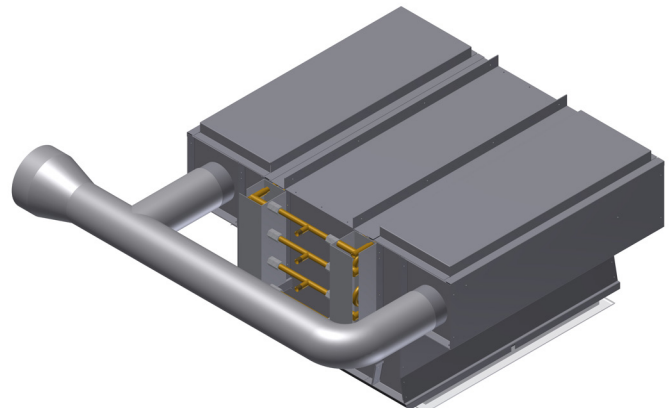
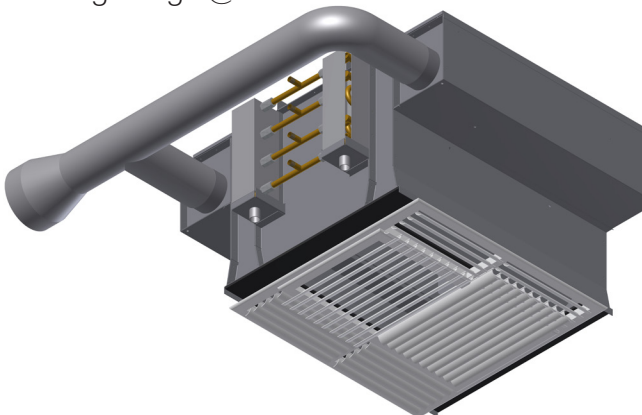
Sensible Cooling Range @ 50F EWT: 4700-9100 BTUH

Sensible Heating Range @ 180F EWT: 10900-19600 BTUH

Noise Level: NC 25-NC 35

ETL Tested Unit

Supply/ Return Grille: (24 x 24) inches



Single Throw Unit – 1MLD 48/64/88/120 – Slim Line (12 X 48) inches

Model Range: Different length unit to accommodate wide range of loads and long ceiling space..

The unit utilizes induction unit arrangement (ceiling 12 x 48 inches arrangement) where coil is vertically placed with air flow discharge down from the ceiling. The discharge pattern is adjustable to gain maximum footprint at a given velocity. Design consideration is given to minimize any down draft velocity that causes maximum air hitting a given spot. The unit can have variations to air and water connection. EWT to coil can be maintained as low as 45F and the unit has a full proof drain pan (IBC compliant) to collect any residue condensate. On account of aerodynamic discharge profile, the unit also maintains very low noise level at the same time operating at a modest pressure range.

Primary Air: 20-190 cfm

Primary Air Inlet Pressure: 0.4"- 1.5"wc

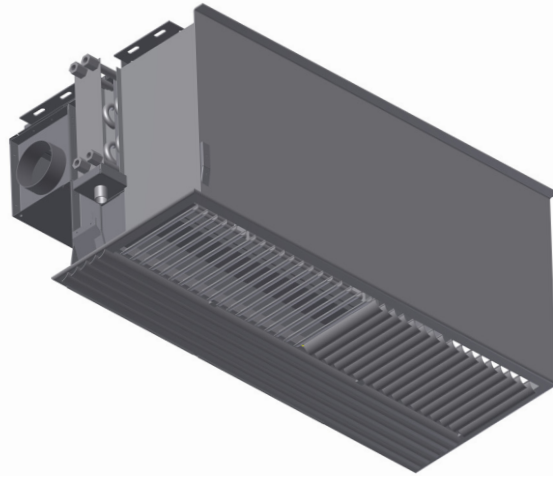
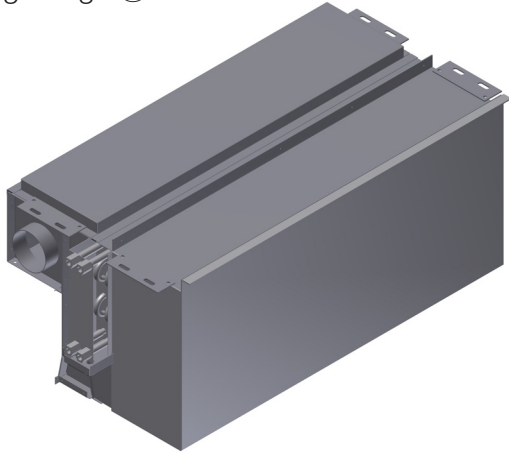
Sensible Cooling Range @ 50F EWT: 2350-6500 BTUH

Sensible Heating Range @ 180F EWT: 5450-16250 BTUH

Noise Level: NC 23-NC 33

ETL Tested Unit

Supply/Return Grille: (12 x 48) inches



Double Throw Unit – 2MLD 120 – Square (48 x 48) inches

Model Range: Large capacity unit to accommodate wide range of loads with 4 pipe systems.

The unit utilizes induction unit arrangement (ceiling 48 x 48 inches arrangement) where coil is vertically placed with air flow discharge down from the ceiling. The discharge pattern is adjustable to gain maximum footprint at a given velocity. Design consideration is given to minimize any down draft velocity that causes maximum air hitting a given spot. The unit can have variations to air and water connection. EWT to coil can be maintained as low as 45F and the unit has a full proof drain pan (IBC compliant) to collect any residue condensate. On account of aerodynamic discharge profile, the unit also maintains very low noise level at the same time operating at low pressure range. On account of its size the unit provides an architectural look on the ceiling corresponding to T-BAR grid. The placement of these is generally at the core of the room keeping in consideration the throw/velocity of air discharge.

Primary Air: 40-230 cfm

Primary Air Inlet Pressure: 0.4"- 1.5"wc

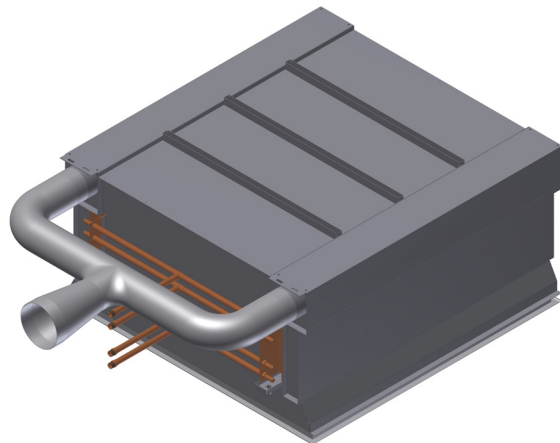
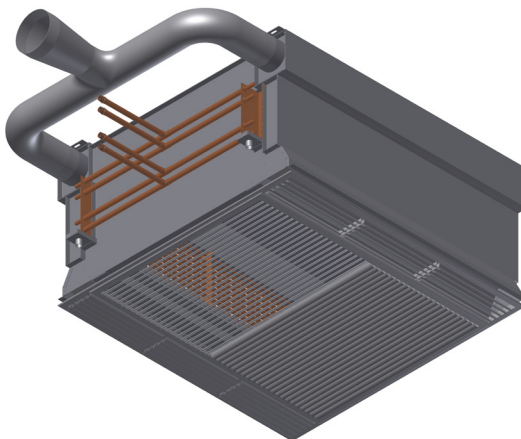
Sensible Cooling Range @ 50F EWT: 4700-12900 BTUH

Sensible Heating Range @ 180F EWT: 10900-32500 BTUH

Noise Level: NC 25-NC 35

ETL Tested Unit

Supply/ Return Grille: (48 x 48) inches



Soffit/ Bulkhead Unit – 1MLD-48/64/88/120 – Horizontal Throw Unit – EB Soffit

Model Range: 4 different length units to accommodate wide range of loads with 2/4 pipe system.

EB Air Bulkhead unit utilizes Induction principle by a different arrangement to which air is discharged out of the unit parallel to the ceiling. The aerodynamic nozzles eject air at a high velocity which accentuates a greater throw of 10-24 ft of the discharge grille at 100fpm velocity. The design characterizes better throw and capacity thus keeping the unit quiet in its operation. Rated noise level is within NC-20-32 varying with operating attributes.

Soffit Induction model has a variety of applications in classroom, hotel, board room etc for meeting optimum air flow, temperature and velocity as required for comfort cooling.

The unit can be customized to fit any size or opening along with alternating air water connection. Grilles colour can also be customized according to architect's requirement.

Primary Air: 20- 190 cfm

Primary Air Inlet Pressure: 0.4" - 1.5" wc

Sensible Cooling Range @ 50F EWT: 2350- 6500 BTUH

Sensible Heating Range @180F EWT: 5450- 16,250 BTUH

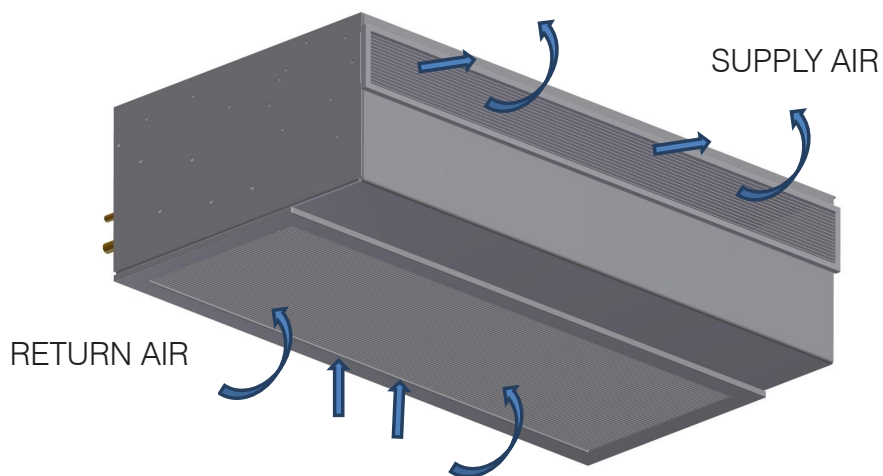
Noise Level: NC 23-33

ETL Tested Unit

Built in drain pan complying to IBC code (condensate collect for low EWT)

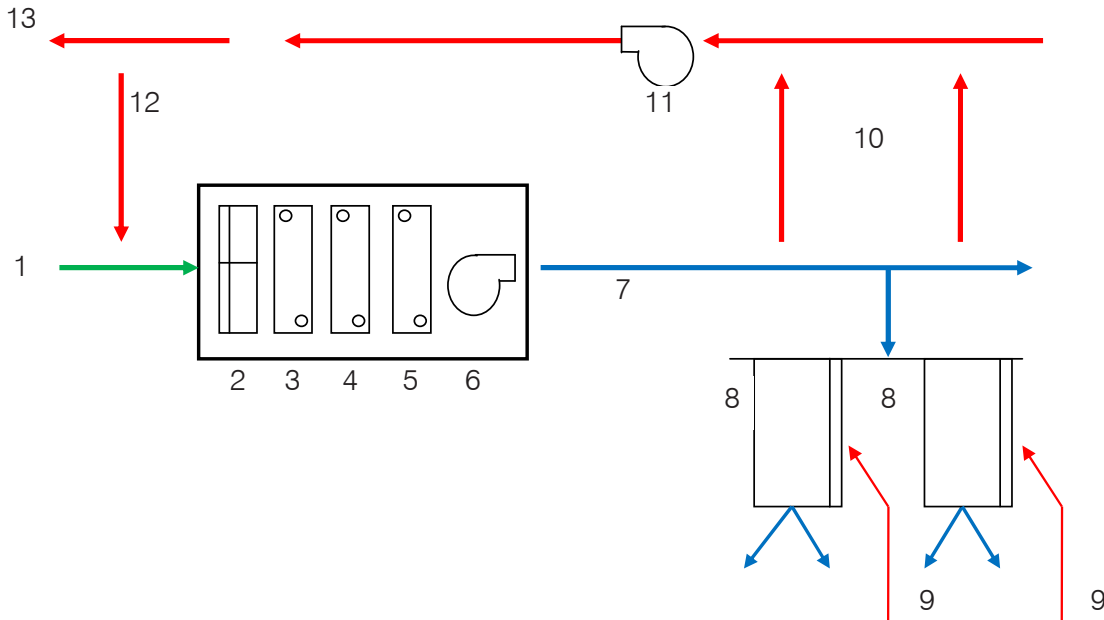
Return Grille: (12 x 24) or (12 x 48) inches

Supply Grille: (4 x 24) or (4 x 48) inches



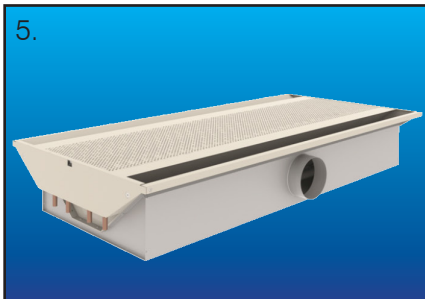
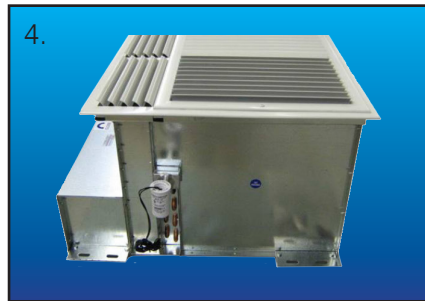
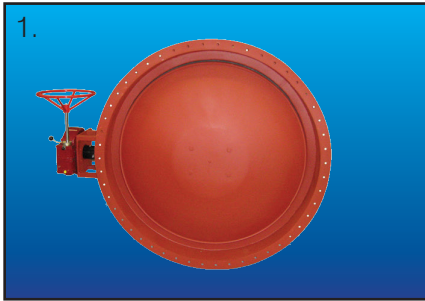
ATCBU System Overview:

ATCBU is a ceiling mounted high capacity air supply terminal with no moving parts. Ventilation air, conditioned in a central air apparatus is filtered, dehumidified and cooled or heated, ducted to the ATCBU units. Treated Primary air from the ATCBU is released through special nozzles, inducing room air through a cooling coil which offsets sensible heat from occupants, lights, equipments outside sun transmitted to the space. The mixture of ventilation air with the conditioned room air is jetted down to provide high level of invigorating air movement at the occupant's breathing level.



1. Outside air intake
2. High efficiency filter
3. Preheat exchanger
4. Cooling & dehumidification coil removes some of latent heat from outside air and occupied zone
5. Reheat Coil : Temperature Scheduled by outside temperature
6. Supply Air Fan : Supplies Primary / Ventilation Air
7. Medium Pressure Duct
8. ATCB units: Discharges medium pressure primary air through nozzles creating jet flow effect which inducts room air through terminal unit coils. Mixed air stream is supplied through directional ceiling diffusers to occupied zone
9. Room return air
10. Relief air from occupied zone to ceiling plenum above corridor
11. Relief/central return fan
12. Optional return air: Unoccupied or Partially occupied periods
13. Relief air to outside

OUR INNOVATIVE QUALITY PRODUCTS



1. Industrial Circular Damper
2. Square Positive Seal Damper
3. Damper Bank
4. Air Terminal Chilled Beam Unit
5. Active Chilled Beam
6. Floor / Ceiling Induction Unit
7. Venturi Air Valve
8. Constant Volume Controller

EBair
CONTROL INC.

Quality is Breathtaking

EB AIR CONTROL INC.

6185 Tomken Road, Unit 1-2
Mississauga, ON, L5T 1X6,
Canada
www.ebaircontrol.com
Ph. 905-670-2277
Fax. 905-670-2299



ISO 9001:2008 Certified
KTA 1401 Certified
(Nuclear Safety Standards)

Your Local Representative: