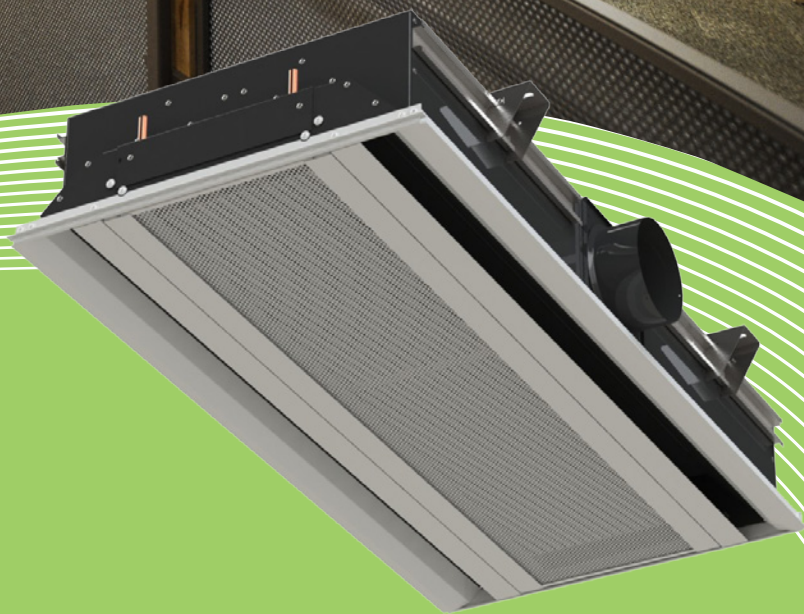


INSTALLATION & OPERATION MANUAL



Chilled Beam Products

CBAL / CBLE / CBLV



Linear Active Chilled Beams

To optimize performance and high level of thermal comfort for the room occupants, Linear Active Chilled Beams should be connected to the water distribution system in parallel. This will ensure that each beam receive same entering water temperature. For greater flexibility it is recommended that each beam is fitted with an isolation valve on both the supply and return water connections.

Chilled Beams are best applied when installed no higher than 14 feet above the floor, but can remain effective with installation heights up to 20 feet. When installed above these heights it is difficult to effectively get heating and cooling into the occupied space.

Linear Active Chilled Beams are connected to supply air duct systems via 2.5" thick neck with below mentioned nominal diameters. Linear Active Beams are designed to easily integrate into different grid styles within a suspended ceiling, drywall ceiling or exposed. They can be mounted into lay-in, NT or DF Tegular mounting frames.

SYSTEM INPUT CONNECTION:

Chilled (Water)	½" NPT Threaded or Sweat
Hot (Water)	½" NPT Threaded or Sweat
Air	4*, 5, 6 and 8** inch nominal round 10 inch nominal oval**

* - For CBAL-12 only

** - For CBAL-24 only

UNIT WEIGHT:

Unit	Length (in ft)	Weight (in lbs)
CBLE-12	2	24
	3	34
	4	48
	5	58
	6	70
	7	82
	8	94
	9	105
CBLE-24	2	34
	3	51
	4	72
	5	84
	6	110
	7	128
	8	142
	9	160
CBLV	2	51
	3	74
	4	113
	5	120
	6	133
	7	166
	8	194
	9	212
10	234	

Unit Configuration

Units are shipped with inlet neck loose which provides flexibility in the field installation. The inlet neck is connected to the unit with four #8 sheet metal screws (by others) either to front or the back of the unit in case of side inlet. For top inlet connect the inlet neck to the top of the unit using four screws. Seal the inlet to prevent any leaks. Depending on the placement of the inlet neck the unit will act as right hand or left hand. See detail in figure 1 (CBAL-24 side inlet shown)

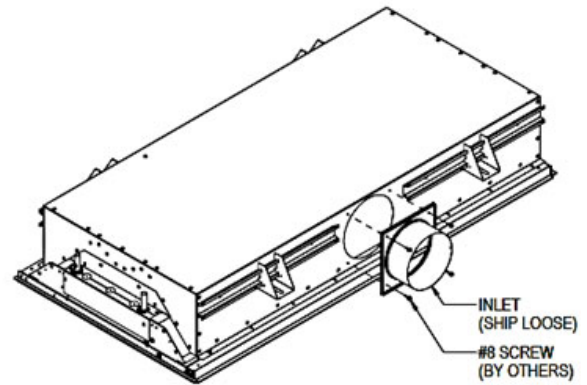


Figure 1 Chilled Beam Inlet mounting

Suspension

Titus ceiling mounted active beams up to 7 feet in length come standard with four mounting brackets; chilled beams above 7 feet in length come with eight mounting brackets. The mounting brackets are adjustable and can slide along the length of the unit to allow for better flexibility of location. Install the chilled beam into the ceiling using mounting brackets, threaded rod or hanging wires (by others) and other secure hanging system. All fasteners (by others), see figure 2 for details.

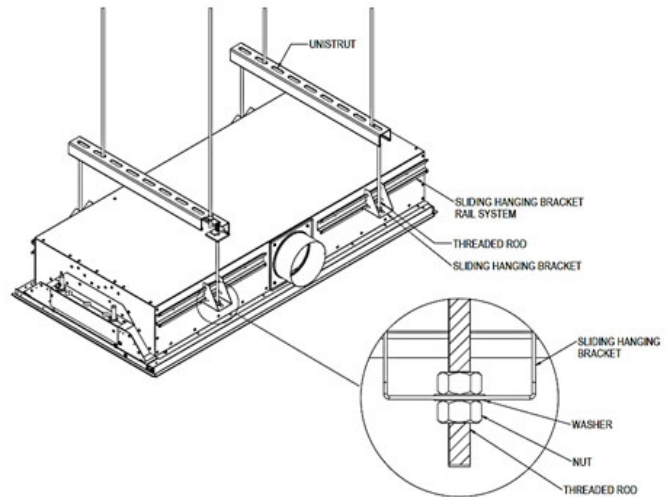


Figure 2 Chilled Beam Ceiling mounting

Coil Connections

CBAL / CBLE – 12 1-Way Airflow Coil Connection

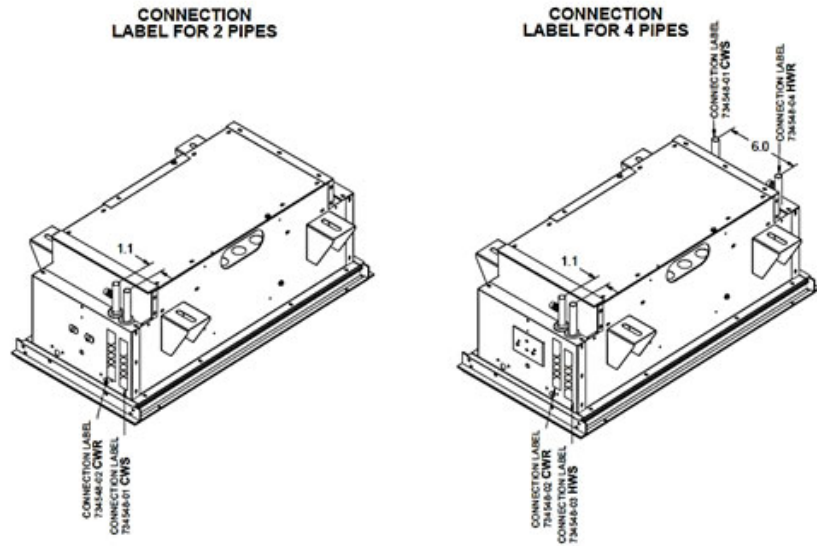


Figure 3 Water Coil Connections – CBAL-12 1 Way

Coil Connections (continued)

CBAL / CBLE – 12 2-Way Airflow Coil Connecti

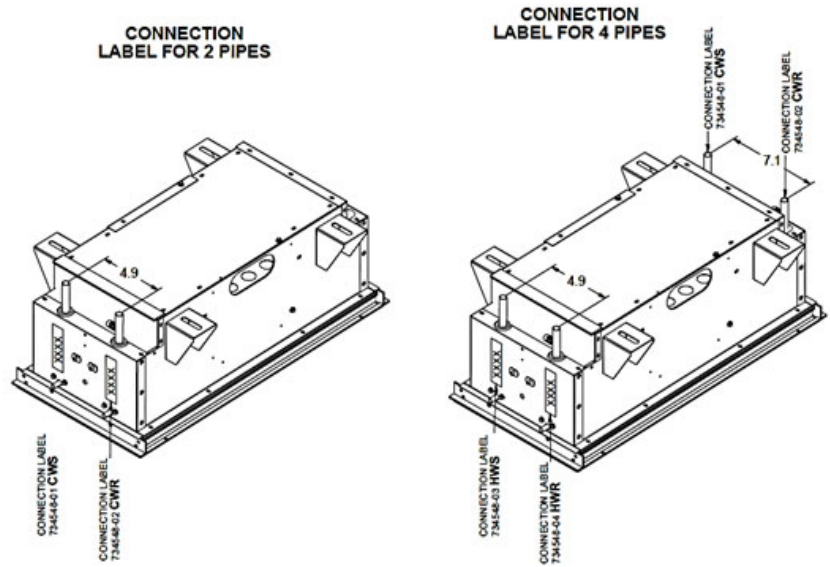


Figure 4 Water Coil Connections – CBAL-12 2-Way

CBAL / CBLE – 24 Coil Connection

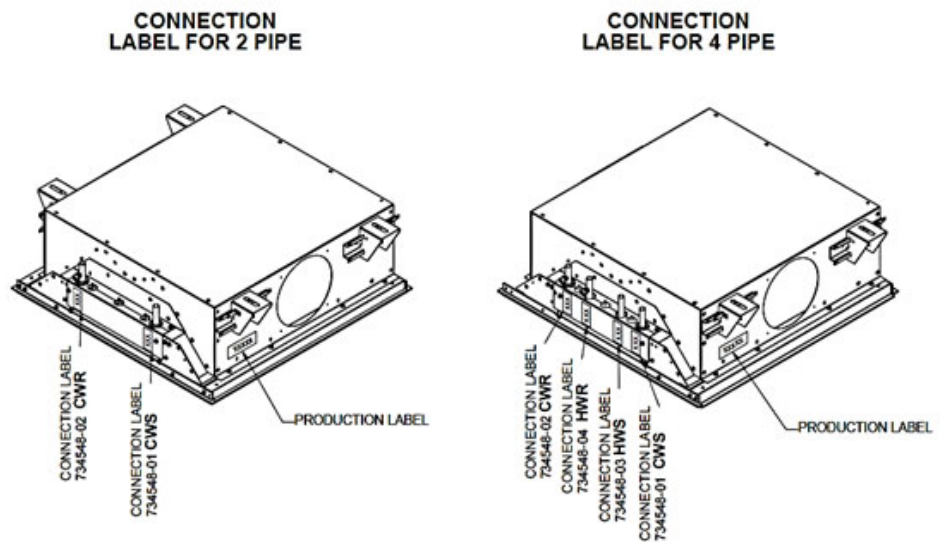


Figure 5 Water Coil Connections – CBAL-24

Casing Arrangement

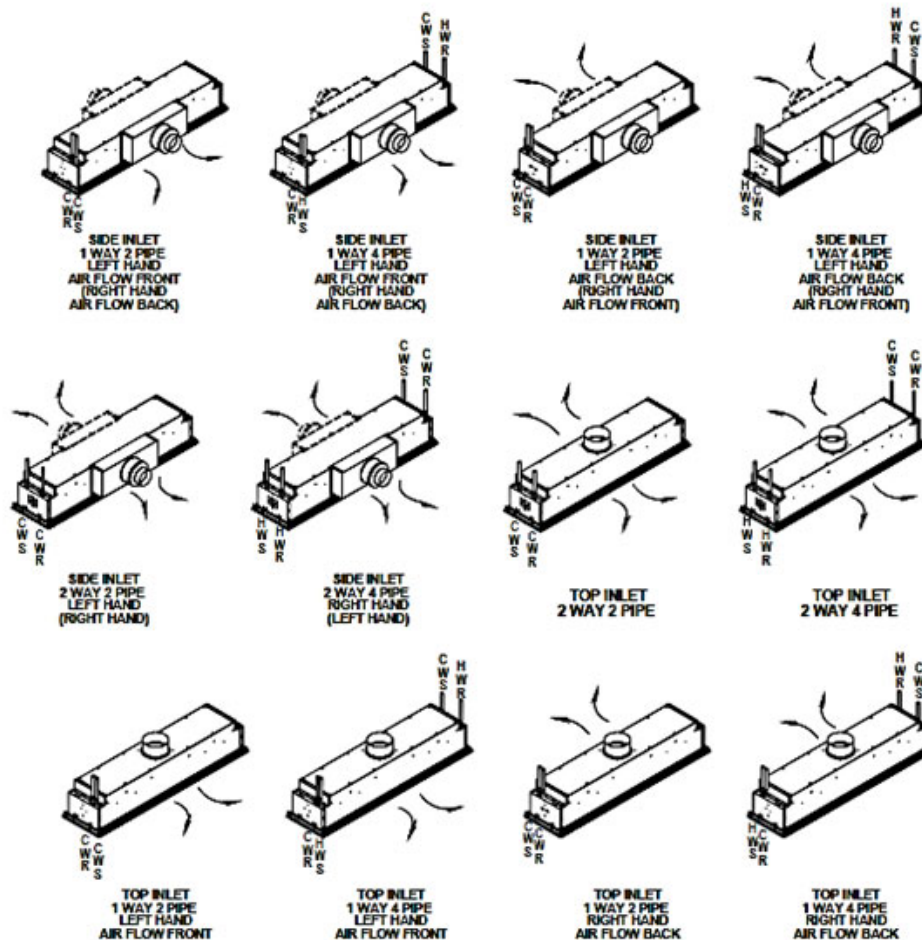
For side inlet, unit handing is determined by looking into the primary airflow inlet and locating the side that the coil connections are located; 1-way discharge unit's position can be either towards you or away from you.

For top inlet, unit handing is determined by standing in front of the throw discharge pattern and locating the side that the coil connections are

located; for top inlet and 2-way discharge the piping connection can be set up from either end. Actual positioning of the piping will change depending if it is done from the right or left side.

For all available coil connections, inlet and discharge locations refer to the attached diagrams.

12 INCHES CASING ARRANGEMENTS



HWR - Hot Water Return HWS - Hot Water Supply;
 CWR - Cold Water Return CWS - Cold Water Supply

Figure 6 Casing Arrangements – CBAL / CBLE-12

Casing Arrangement (continued)

24 INCHES CASING ARRANGEMENTS

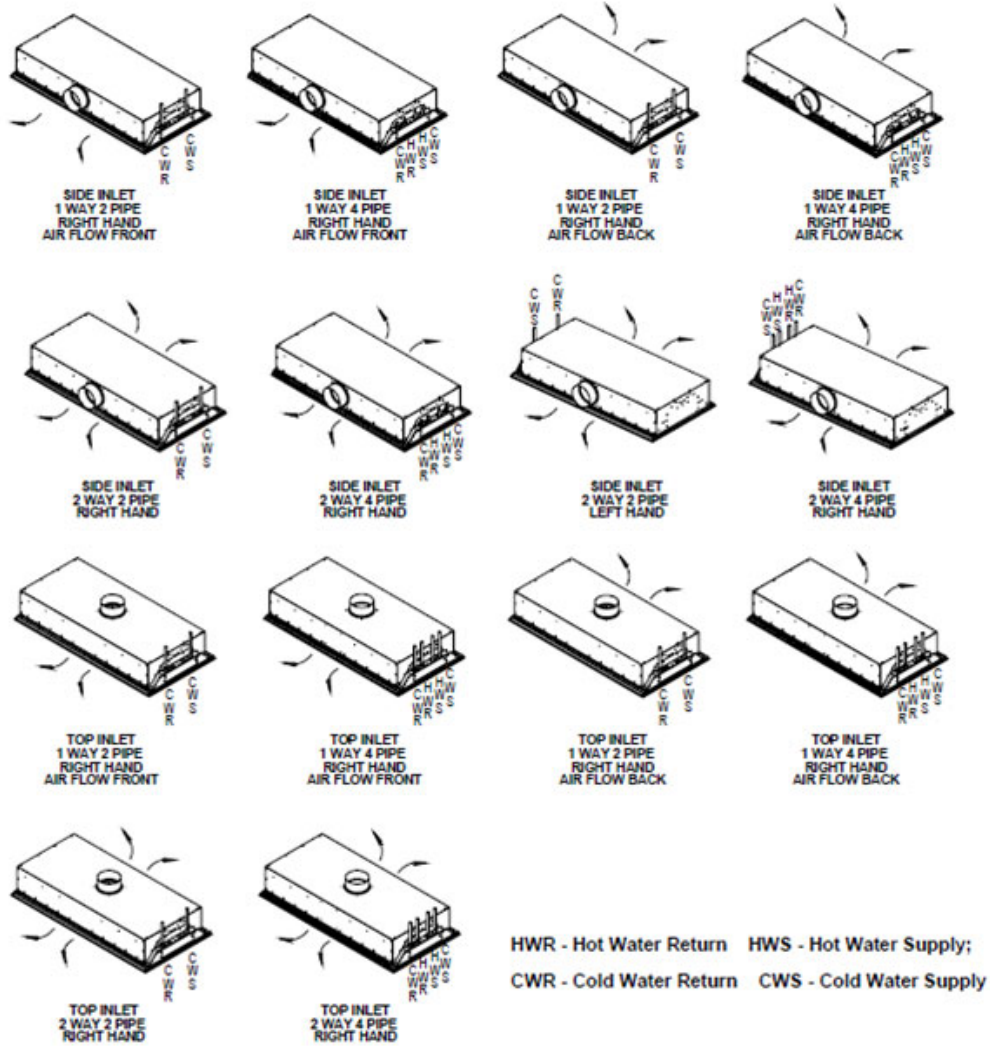


Figure 7 Casing Arrangements – CBAL / CBLE-24

Maintenance and Inspection

Titus Chilled beams are designed with no moving parts and hence the maintenance of the units is minimized to cleaning of the water coil. To clean the coil, release the spring loaded pin latches and the grille will be completely folded down for cleaning purpose, See the detail in Figure 9. Do not use any abrasive agents for cleaning as the material may damage the surface material of the unit or even the painted surfaces.

Inspection of the suspension and the brazed copper joints should be carried out at the time of cleaning. Any defects like water dripping or loose joints should be rectified. After the cleaning and inspection the grille/face must be returned to its original operating position and the safety locks engaged.

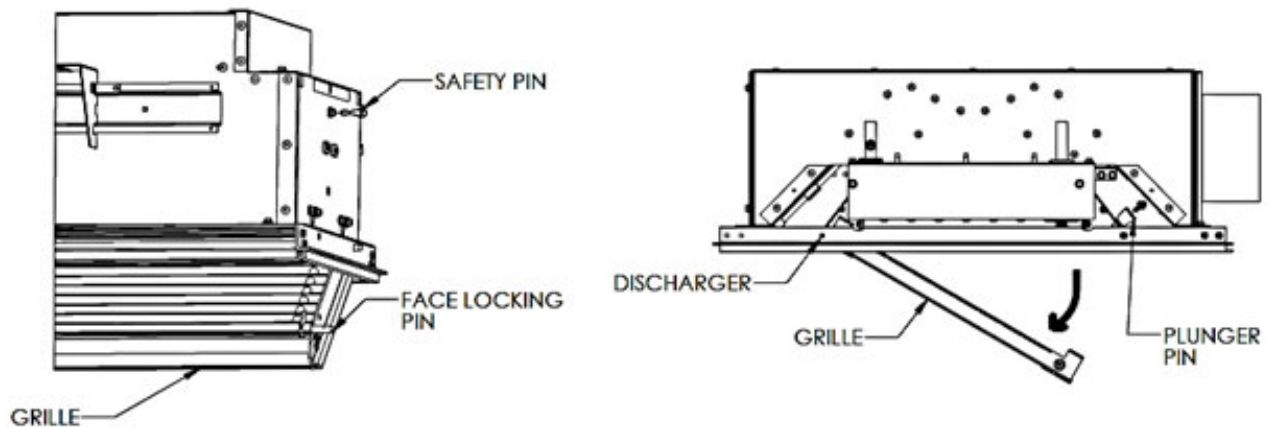


Figure 8 CBAL with return Grille/Face Open

Notes

Notes



605 Shiloh Rd
Plano TX 75074
ofc: 972.212.4800
fax: 972.212.4884

Redefine your comfort zone.™ | www.titus-hvac.com

