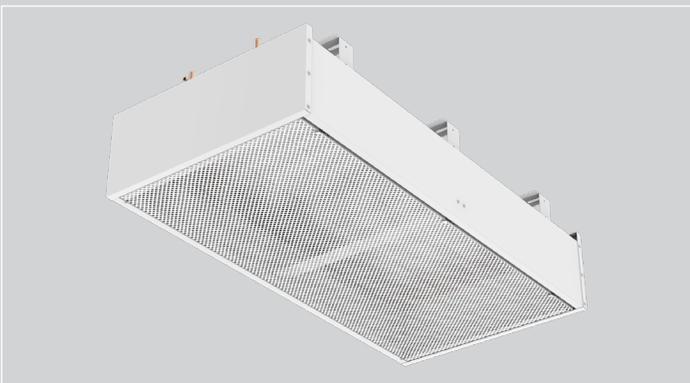


# PASSIVE CHILLED BEAMS

INSTALLATION, OPERATION  
& MAINTENANCE MANUAL



CBPE



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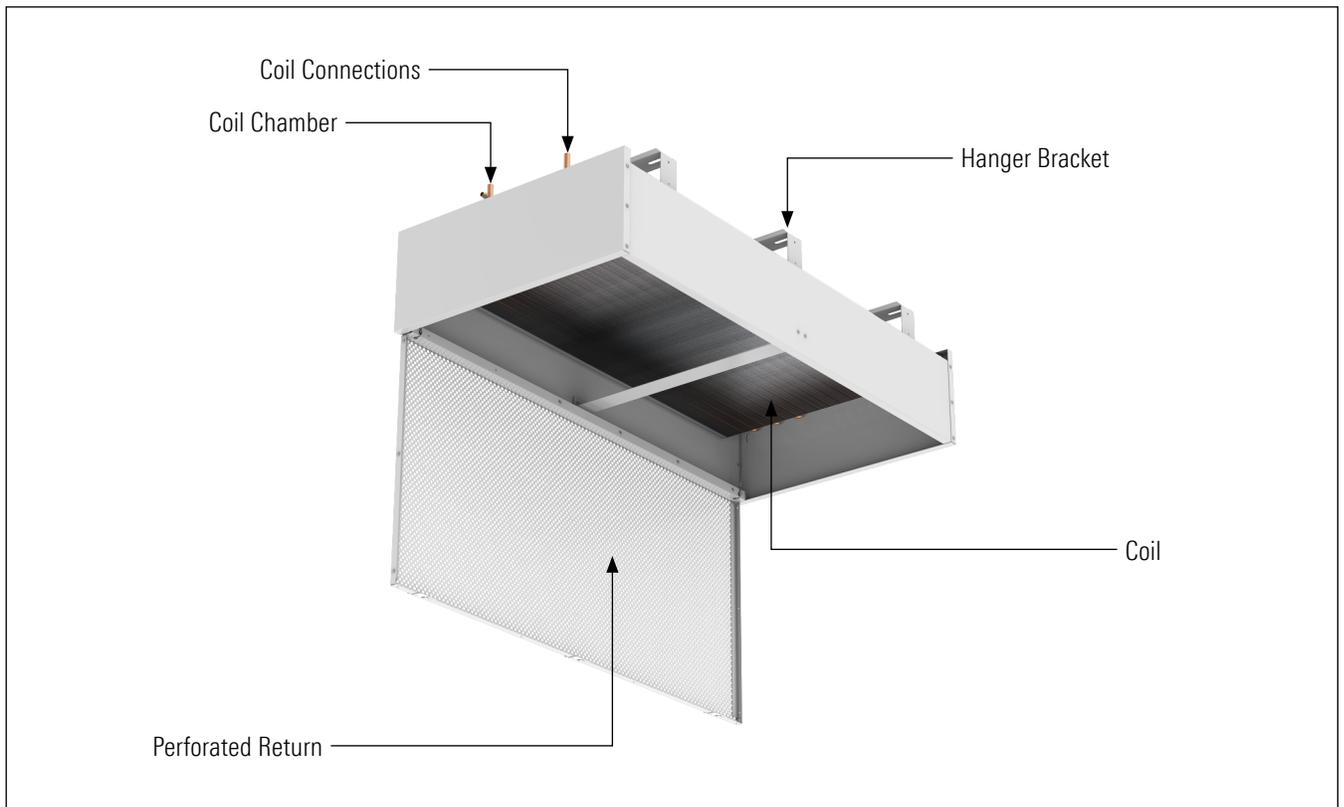
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# CRITICAL OPERATIONS

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Passive Chilled Beam CBPE optimizes performance and high level of thermal comfort for spot cooling or additional thermal load applications. For improved serviceability and flexibility, install isolation valves on both the supply and return lines of each individual beam



# HANDLING WARNINGS

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1. Team Lift Required
  - A minimum of two (2) people is required for safe handling and installation.
2. Safety Cable
  - Each Titus chilled beam is equipped with two factory-installed safety cables—refer to drawing below for proper usage.
3. Storage
  - Store beams in their original packaging in a dry, sheltered location until ready for installation.
4. Protective Film
  - Leave the protective film on the beam face during construction to prevent dust or debris from causing damage. Remove only after the workspace is clean.
5. Code Compliance
  - All installations must comply with local codes and regulations.
6. Pre-Installation Checklist
  - Before beginning, gather all required tools and materials, including:
    - Isolation valves
    - Threaded rods
    - Suspension cables or hanging wire
    - Unistrut
    - Flexible duct
    - Surface-mount frames (if required)
    - Bracket securing screws

# CBPE INSTALLATION

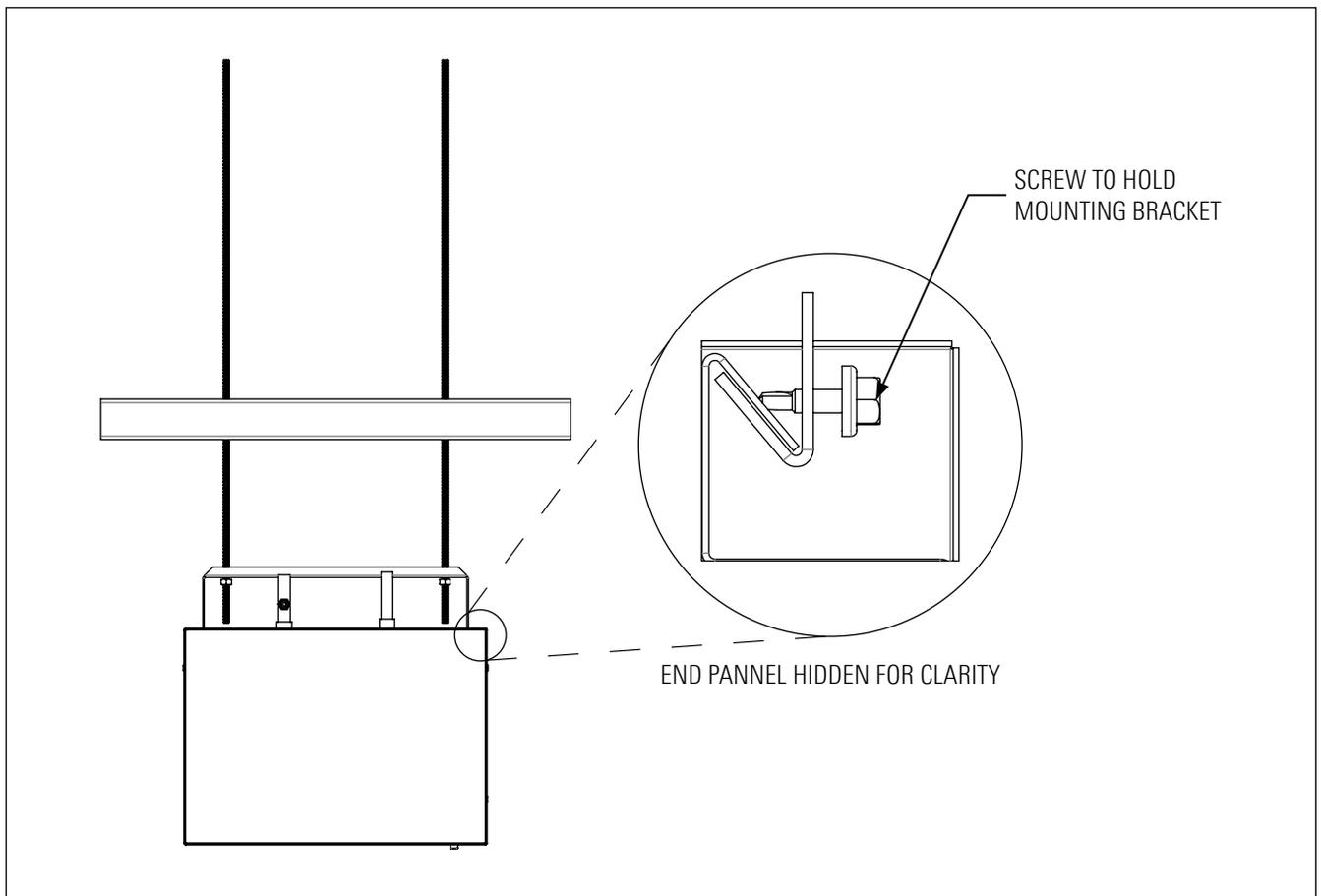
Chilled Beams are best applied when installed no higher than 14 feet above the floor, but can remain effective with installation heights up to 20 feet. When installed above these heights, it is difficult to effectively get heating and cooling into the occupied space.

## 1. Pre-Installation Check

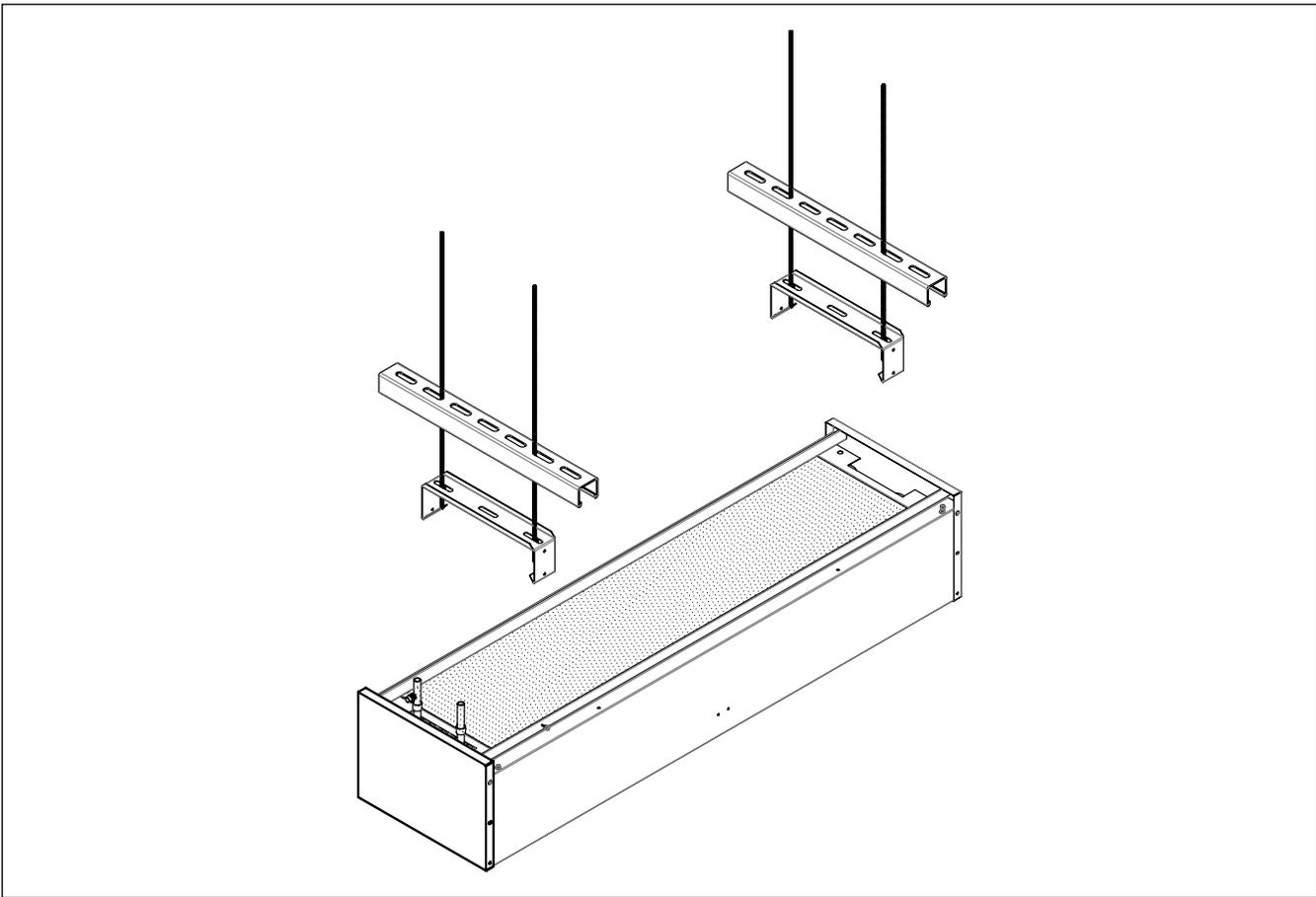
- The unit is shipped with two mounting brackets on beams up to 7 feet. Chilled beams above 7 feet in length come with three or four mounting brackets. Brackets are adjustable along length of unit.
- Verify that all components have been received and are in good condition.

## 2. Mounting

- Place mounting rails along plenum length
- Insert screws straight into mounting bracket hole to secure against the plenum
- Mount the beam using mounting brackets, and threaded rod or hanging wire (not included).
- After securing to the ceiling, level the beam and verify orientation for piping and inlet placement. Ensure water coil accessibility to supply and return piping.

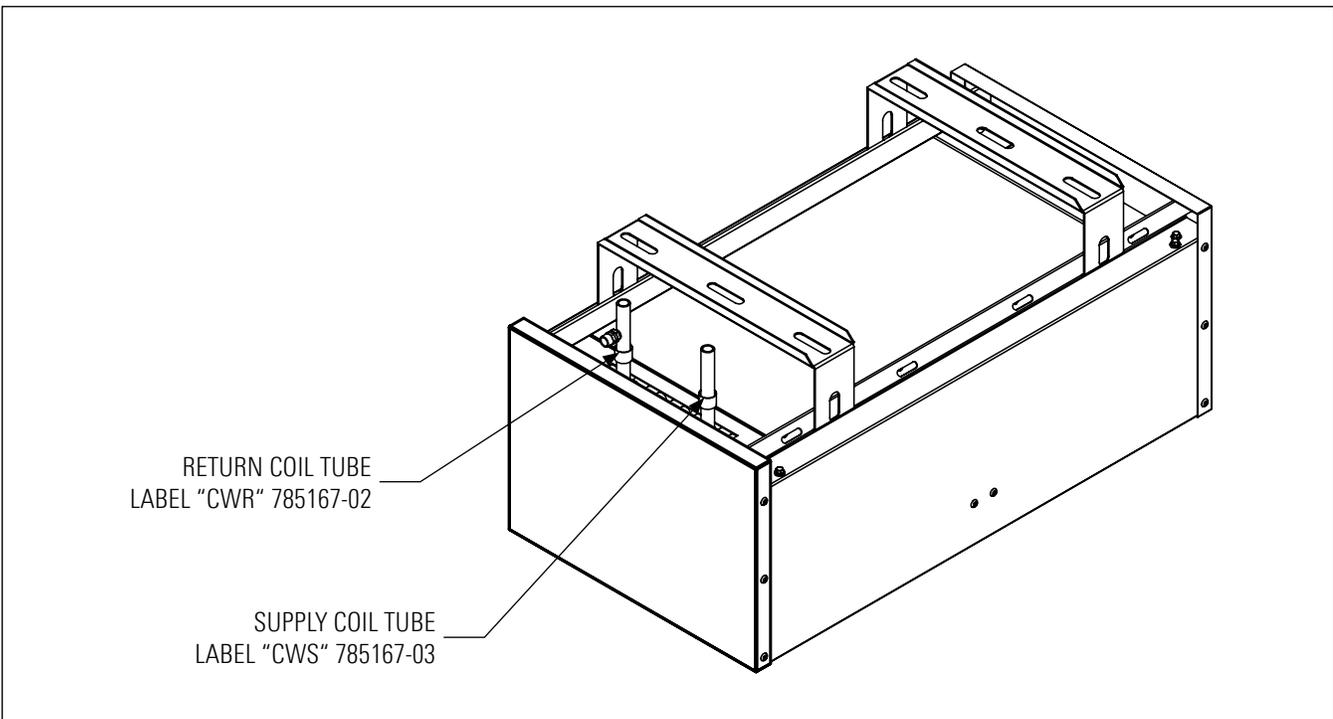


# CBPE INSTALLATION



### 3. Piping

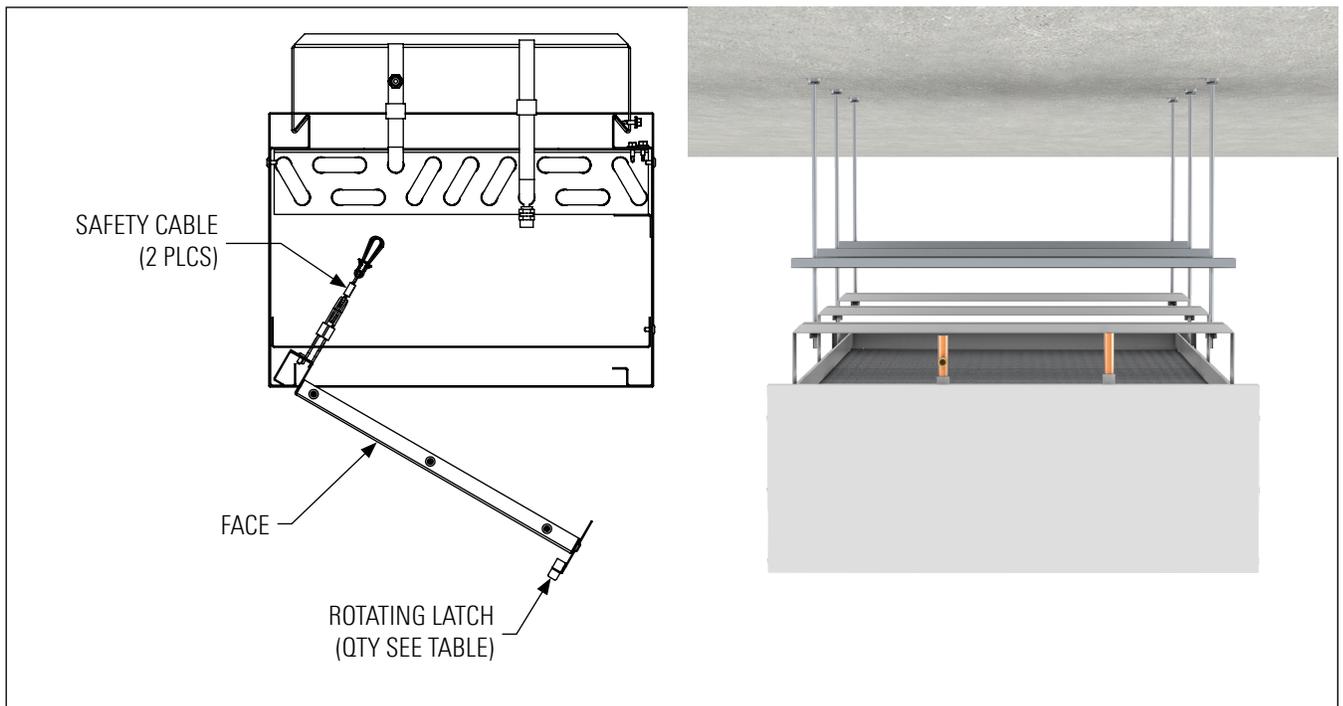
- Pipe locations are as shown below.



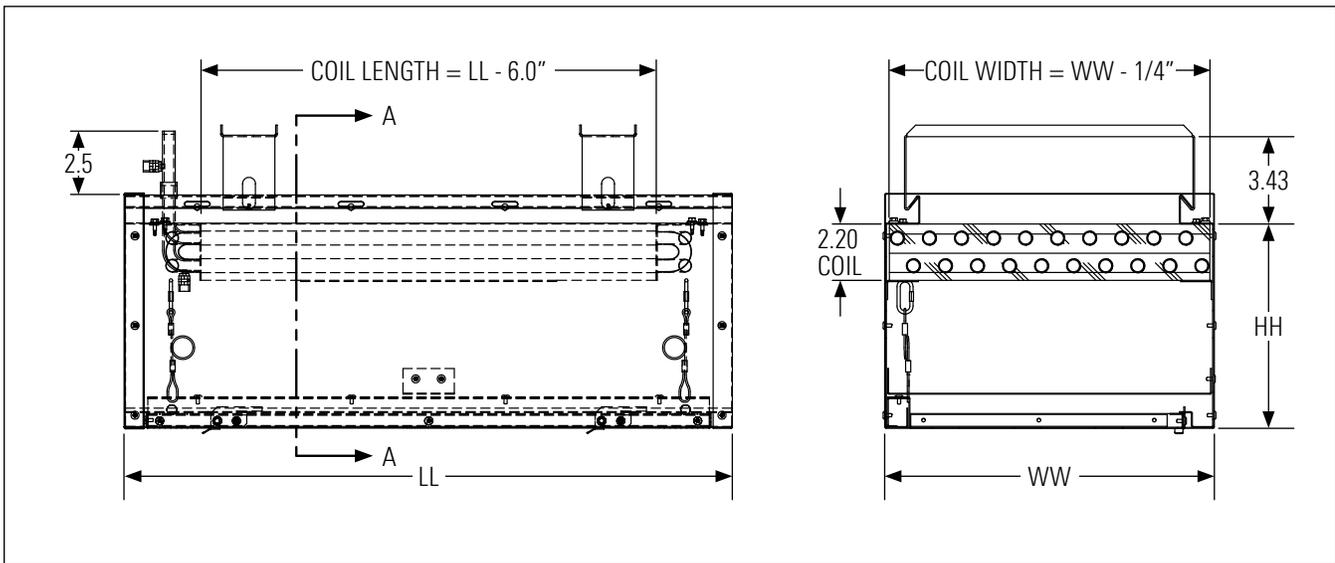
# CBPE INSTALLATION

## 4. Maintenance

- Titus chilled beams contain no moving parts, reducing ongoing maintenance. The primary task is cleaning the water coil.  
Coil Cleaning Procedure:
  1. Release the spring-loaded pin latches.
  2. Fold the grille fully down for access.
  3. Clean using a vacuum with soft brush attachment. Do not use abrasive agents—they may damage the coil surface or painted finish.
  4. Inspect the suspension system and brazed copper joints for damage or leaks.
  5. After cleaning, return the grille to its original position and engage all safety locks
- Coil Removal Procedure
  1. Remove the Face Panel - Detach the face panel to access the internal components.
  2. Detach Coil Covers - Remove the coil covers on each side by loosening the two (2) screws. This step provides clearance for coil vent access.
  3. Remove Saddle Support (for units 8 ft or longer) - On units measuring 8 feet or longer, remove the saddle support by unscrewing the two (2) securing screws.
  4. Detach the Coil from the Support Bracket - Gloves required to handle sharp fins. - Remove the three (3) screws on each side securing the coil to the coil support bracket. Carefully extract the coil from the unit.
  5. Utilize the Symmetrical Coil Feature (If Needed) - The coil's symmetrical design allows it to be flipped in the field if required. Note that flipping the coil also necessitates flipping the coil covers upon reinstallation.
  6. Reinstall Components - Securely replace the coil, coil covers, and face panel in the reverse order of removal.

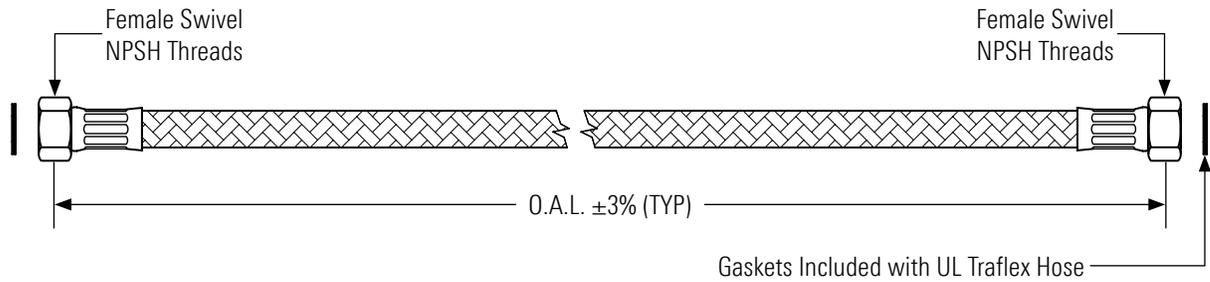


# CBPE DIMENSIONS



| Length [ft] | LL [in] | Number of brackets | Dry Coil Weight [lbs] | Nominal Width [in]  | WW [in] |
|-------------|---------|--------------------|-----------------------|---------------------|---------|
| 2 Ft        | 23.75   | 2                  | 33                    | 12                  | 11.80   |
| 3 Ft        | 35.75   | 2                  | 48                    | 18                  | 17.80   |
| 4 Ft        | 47.75   | 3                  | 64                    | 24                  | 23.80   |
| 5 Ft        | 59.75   | 3                  | 78                    | Nominal Height [in] | HH [in] |
| 6 Ft        | 71.75   | 3                  | 94                    | 10                  | 9.98    |
| 7 Ft        | 83.75   | 3                  | 108                   | 12                  | 11.98   |
| 8 Ft        | 95.75   | 3                  | 122                   |                     |         |
| 9 Ft        | 107.75  | 4                  | 138                   |                     |         |
| 10 Ft       | 119.75  | 4                  | 150                   |                     |         |

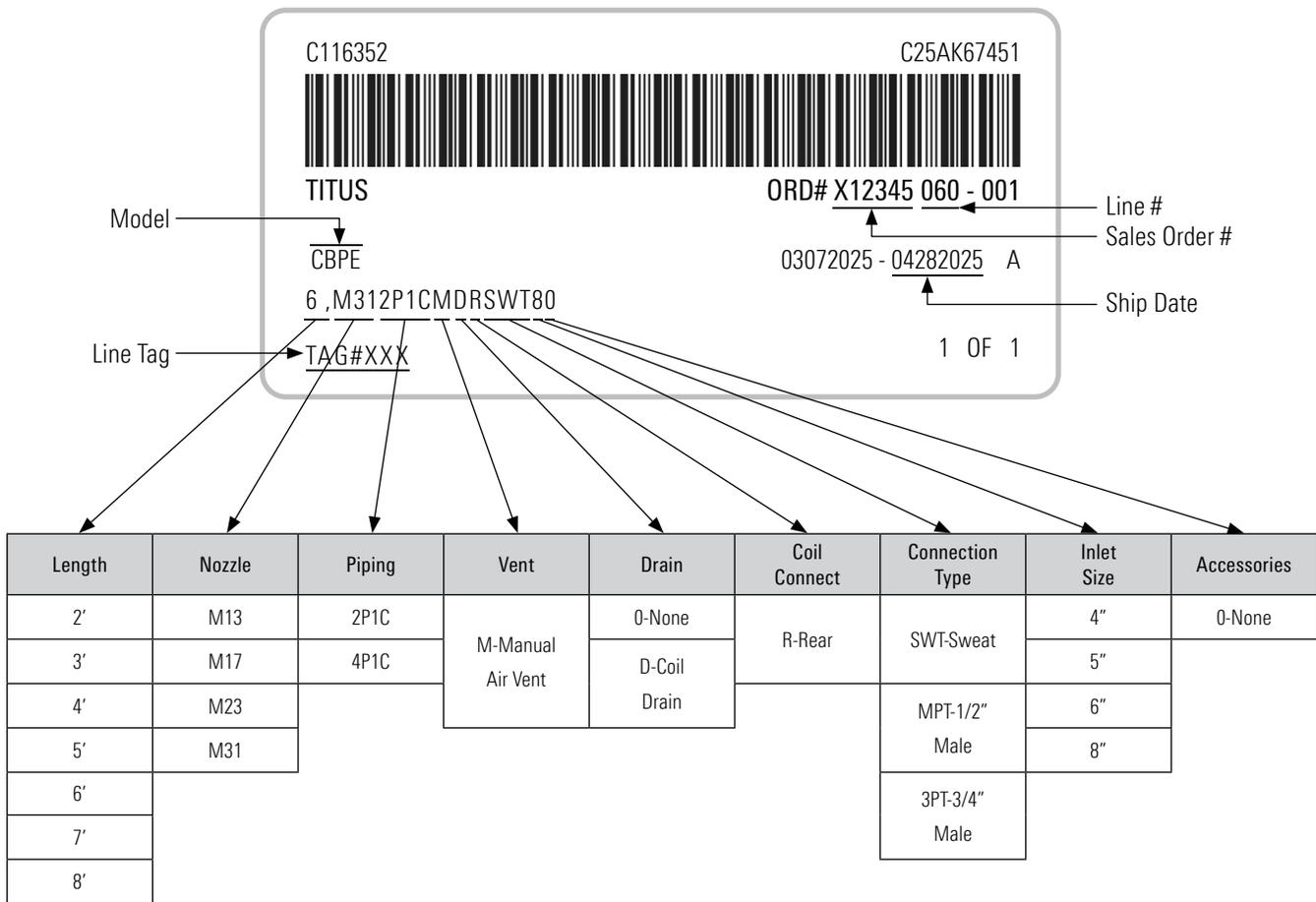
# HOSE INSTALLATION



| Connection Size | Length |
|-----------------|--------|
| 1/2" F          | 12     |
|                 | 18     |
|                 | 24     |
| 3/4" F          | 18     |
|                 | 24     |

| Materials |                        |
|-----------|------------------------|
| Core      | Fabric Reinforced EPDM |
| Braid     | Stainless Steel        |
| Fitting   | Brass OT58             |
| Ferrule   | Stainless Steel        |
| Real      | EPDM                   |
| Adapter   | Brass                  |

# MANUFACTURING TAG DETAIL



## CONTACT SUPPORT

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Email: [specialtyprod@titus-hvac.com](mailto:specialtyprod@titus-hvac.com)

## LIMITED WARRANTY

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### LIMITED WARRANTY:

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