



**BALTIMORE
AIRCOIL COMPANY**



FXT

FXT Cooling Tower

RIGGING & ASSEMBLY INSTRUCTIONS



FXT Cooling Towers should be rigged and assembled as outlined in this bulletin.

These procedures should be thoroughly reviewed prior to the actual rigging and assembly of the equipment to acquaint all personnel with procedures to be followed and to assure that all necessary equipment will be available beforehand.



Be sure to have a copy of the certified drawing available for reference. If you do not have a copy of this drawing, or if you need additional information about this unit, contact your local BAC Representative whose name and telephone number are on a label adjacent to the access door. The model number and serial number of the unit are also located in this area.



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Introduction

WARNING: In the event of extended lifts or where hazards exist, the lifting devices should be used in conjunction with safety slings placed under the unit.

CAUTION: Only personnel qualified to do so should undertake operation, maintenance and repair of this equipment. Proper care, procedures and tools must be used in handling, lifting, installing, operating, maintaining and repairing this equipment to prevent personal injury and/or property damage.



Safety

Adequate precautions appropriate for the installation and location of these products should be taken to safeguard the equipment and the premises from damage and the public from possible injury. **The procedures in this manual must be thoroughly reviewed prior to rigging and assembly. Read all warnings, cautions, and notes detailed in the margins.**



When the fan speed of the unit is to be changed from the factory set speed, including the use of a variable speed device, steps must be taken to avoid operating at or near the fan's "critical speed" which could result in fan failure and possible injury or damage. Consult with your local BAC Representative on any such applications.

Shipping

BAC Cooling Towers are factory assembled to assure uniform quality and minimum field assembly. All FXT models ship in one section per cell. For the dimensions and weights of a specific unit or section, refer to the certified drawings.

Pre-Rigging Checks

When the unit is delivered to the jobsite, it should be checked thoroughly to ensure all required items have been received and are free of any shipping damage prior to signing the bill of lading.

The following parts should be inspected:

- Sheaves and Belts
- Bearings
- Bearing Supports
- Fan Motor(s)
- Fan(s) and Fan Shaft(s)
- Float Valve Assembly(s)
- Water Distribution System
- Fill
- Cold Water Basin Accessories
- Interior Surfaces
- Exterior Surfaces
- Air Intake Screens
- Optional Air Discharge Screens (when provided)
- Miscellaneous Items: All bolts, nuts, washers, and sealer tape required to assemble sections or component parts are furnished by BAC and shipped with the unit. A checklist inside the envelope marked "Customer Information Packet" indicates what miscellaneous parts are included with the shipment and where they are packed. This envelope will be attached to the side of the unit or located in a box inside the unit.



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Unit Weights

Before rigging any unit, the weight of each section should be verified from the unit certified drawing. Some accessories add additional weight as shown on the respective accessory drawings.

Anchoring

Five-eighths (5/8") diameter holes are provided in the bottom flange of the basin section for bolting the unit to the support beams. Refer to the suggested support location drawing included in the submittal for location and quantity of the mounting holes. **The unit must be level for proper operation.** Anchor bolts must be provided by others.

Cold Weather Operation

These products must be protected by mechanical and operational methods against damage and/or reduced effectiveness due to possible freeze-up. Please refer to the *Common Operation and Maintenance Manual* on www.BaltimoreAircoil.com, or contact your local BAC Representative for recommended cold weather operation strategies.

Location

All evaporative cooling equipment must be located to ensure an adequate supply of fresh air to the unit air intakes. When units are located adjacent to walls or in enclosures, care must be taken to ensure the warm, saturated, discharge air is not deflected and recirculated back to the air intakes.

Each unit should be located and positioned to prevent the introduction of discharge air into the ventilation system of any building. For detailed recommendations on BAC equipment layout, see our website at www.BaltimoreAircoil.com or contact your local Representative.

Warranties

Please refer to the Limitation of Warranties (located in the submittal package) applicable to and in effect at the time of the sale/purchase of these products.



WARNING: Before an actual lift is undertaken, ensure no water, snow, ice, or debris has collected in the basin or elsewhere in the unit. Such accumulations will add substantially to the equipment's lifting weight.



NOTE: Each unit must be located and positioned to prevent the introduction of discharge air into the ventilation systems of the building on which the unit is located and of adjacent buildings.

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FXT COOLING TOWER

Rigging & Assembly

Rigging

Refer to **Table 1** and **Figures 1 and 2** for the recommended vertical dimension “H” from the lifting device at the top of each unit to the lifting point.

In the event of extended lifts or where hazards exist, the lifting devices should be used in conjunction with safety slings placed under the unit.

Model Number	Dimensions (for each cell)	
	Section	Min. H
FXT-58 to 95	1 Section	8'
FXT-115 to 257	1 Section	12'

Table 1. Minimum Vertical Dimension and Spreader Bar Length

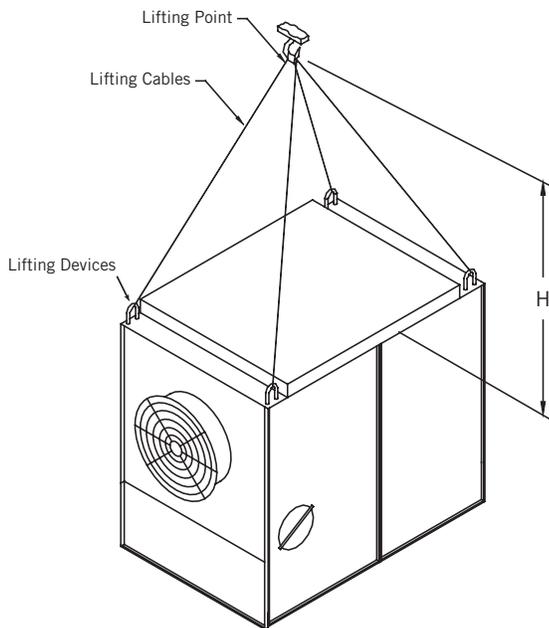


Figure 1. Rigging of Models FXT-58 and FXT-68

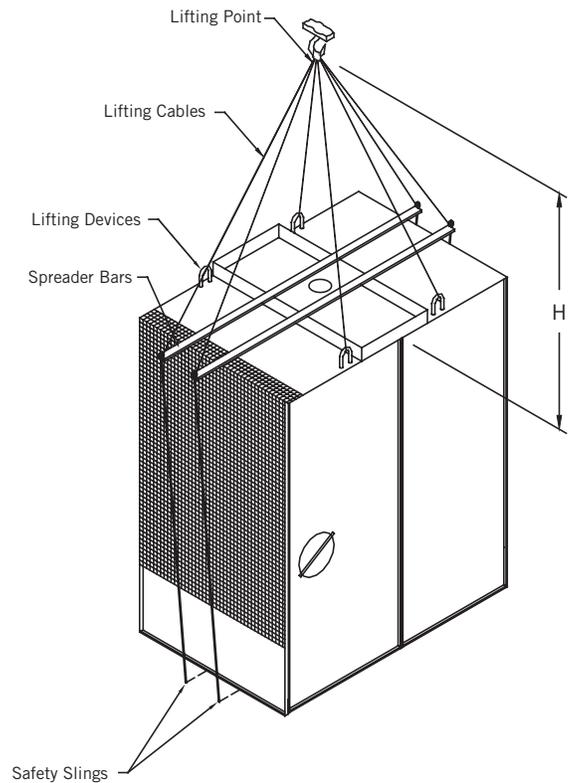


Figure 2. Rigging of All FXT Models Except for FXT-58 and FXT-68

Top Inlet Piping Installation

Use the following drawings and notes when installing top inlet piping on FXT Cooling Towers.

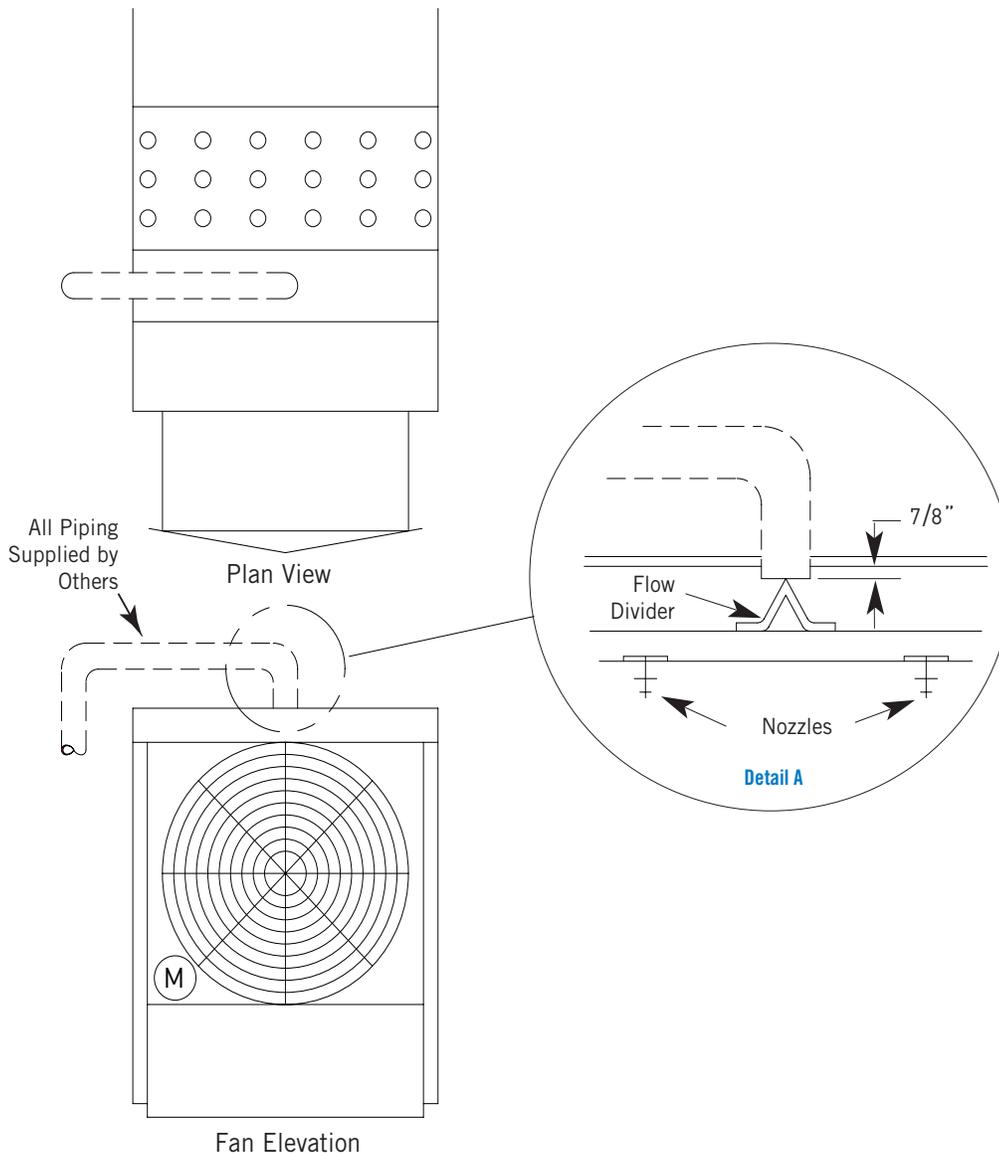


Figure 3. Top Inlet Piping Installation



FXT

Rigging

Top Inlet Piping Installation



NOTES:

1. All piping must be supported external to the cooling tower and restraint provided to insure no vertical or horizontal movement of the inlet piping. All piping and supports are to be furnished by others, refer to the certified drawing for details on the tower connection size, etc.
2. Inlet piping should rest on the flow divider located 7/8 inch below the top of the water distribution box. The piping that enters the opening must be of proper size (see **Figure 3, Detail A**). Refer to the certified drawing for details on the cooling tower connection size.
3. Flow control valves are recommended on multi-cell towers to insure proper water distribution and are to be furnished by others.
4. If vibration isolation rails are provided by others, the tower piping must be independently supported, since no provision has been made for the weight of the piping in the selection of the rails.
5. For units installed on vibration isolation rails (provided by others), flexible connections should be installed in the piping just before the tower perimeter.

COOLING TOWERS

CLOSED CIRCUIT COOLING TOWERS

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