



Baltimore Aircoil

HXI – Hybrid Evaporative Fluid Coolers

Rigging and Assembly Instructions

Introduction

The HXI – Hybrid Fluid Coolers should be rigged and assembled as outlined in this bulletin. These procedures should be thoroughly reviewed prior to the rigging operation to acquaint all personnel with the procedures to be followed and to assure that all necessary equipment will be available.

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 the local B.A.C. representative whose name and phone number are on a label attached to the unit adjacent to the access door. The model number and serial number of the unit are also located in this area.

SHIPPING

HXI – Hybrid Fluid Coolers are factory assembled to assure uniform quality and minimum field assembly. The HXI – Hybrid Fluid Coolers are always shipped in 3 single sections per cell. For the dimensions and weight of a specific cell or section, refer to the certified drawing.

INSPECTION BEFORE RIGGING

- Sheaves and Belts
- Bearings
- Bearing Supports
- Fan Motor(s)
- Fan(s) and Fan Shaft(s)
- Float Valve Assembly(s)
- Water Distribution System
- Wet Deck Surface
- Strainer(s)
- Interior Surfaces
- Exterior Surfaces
- Louvers
- Sound Attenuators (if applicable)
- Finned Coil
- Cooling coil
- Removable Drift Eliminators
- Spray Pump
- Intake Hood Assembly (if applicable)
- HXI Control Package
 - Three Way Valve
 - Terminal Box
 - Temperature Controller
 - Thermostat Dry Operation
- Miscellaneous Items :
 - All selftapping screws and sealer tape required to assemble sections or component parts are furnished by B.A.C. and shipped with the unit. A checklist inside the envelope attached to the side of the unit marked "For Rigger" indicates what miscellaneous parts are included with the shipment and where they are packed.

UNIT WEIGHTS

Before rigging any HXI – Hybrid Fluid Cooler unit, the weight of each section should be verified from the unit certified drawing.

ANCHORING

22 mm diameter holes are provided in the bottom flange of the pan section for bolting the unit to the support beams.

Refer to the suggested support location drawing included in the submittal for location of the mounting holes. The units must be level for proper operation. Anchor bolts must be provided by others.

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

WARNING – For extended lifts or where hazards exist, use lifting devices with safety slings placed under the unit.

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.

Notice

Operation, maintenance and repair of this equipment should be undertaken only by personnel qualified to do so. 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.

Warranties

Please refer to the Limitation of Warranties applicable to and in effect at the time of the sale/purchase of these products.

Freeze Protection

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 product catalogue or contact the local B.A.C. Representative for recommended protection alternatives.

Location

HXI units must be located to insure an adequate supply of fresh air to the fans. When units are located adjacent to walls or in enclosures, care must be taken to ensure that the warm, saturated discharge air is not deflected and short-circuited back to the air intakes.

Additionally, each unit should be located and positioned to prevent the introduction of discharge air into the ventilation systems of the building on which the tower is located and of adjacent buildings.

For detailed recommendations on HXI layout, please consult your local Baltimore Aircoil Representative.

Connecting piping

All refrigerant piping external to the evaporative condenser(s) must be supported separately from the equipment. In case the evaporative condenser(s) are installed in vibration rails or springs, the piping must contain compensators to eliminate vibrations carried through the refrigerant piping.

Purge requirements

The installer of this equipment must ensure proper system purging of air, prior to operation of the installation. Air entrained in the system can obstruct the proper drainage of liquid refrigerant, reduce condensing capacity and result in higher operating pressures than design. To verify absence of non-condensibles in the system, follow the instructions of the B.A.C. Evaporative Condenser Manual E115.

Refrigerant connections on site

All connections in the external refrigerant pipework (installed by others) must be leak free and tested accordingly.

RIGGING

Refer to table 1 and Figure 1 for the recommended minimum size and the positioning of the spreader bar (dimensions "W1" and "W2") and the recommended vertical dimension "H" from the lifting device to the center of the lifting ears.

Note : All units must be rigged one section at the time.

Table 1

Unit Model	Dimensions (for each cell)			
	Section	H	W1	W2
HXI 42X	Upper	2100	2400	-
	Middle	2000	2400	950
	Lower	2100	2400	-
HXI 43X	Upper	2700	2400	-
	Middle	2600	2400	950
	Lower	2700	2400	-
HXI 44X	Upper	3400	2400	-
	Middle	3200	2400	950
	Lower	3400	2400	-
HXI 54X & HXI Q 54X	Upper	3400	2400	-
	Middle	3200	2400	950
	Lower	3400	3000	-
HXI 56X & HXI Q56X	Upper	5500	3000	-
	Middle	5300	3000	1150
	Lower	5500	3000	-
HXI 64X & HXI Q64X	Upper	3400	3600	-
	Middle	3200	3600	1350
	Lower	3400	3600	-
HXI 66X & HXI Q66X	Upper	5500	3600	-
	Middle	5300	3600	1350
	Lower	5500	3600	-

SECTION ASSEMBLY

Position the bottom section on the HXI Cooler support and bolt in place. Wipe down the top horizontal flanges of the lower section to remove dust, dirt or moisture that may have accumulated during shipment and storage. Apply the 25 mm flat (trapezoidal cross section) tape sealer around the periphery of the top flange of the lower section. This tape sealer must be centered directly over the centerline of the taper holes and on the centerline of the end flanges where there are no taper holes. The sealer is to be spliced only along the flanges with taper holes. When it is necessary to splice sealer, miter and press the two ends together so as to form a smooth, continuous bead. Using drift pins in the bolt holes provided, build the top section onto the bottom section. Match marks must line up as shown on the sections. Bolt in place as illustrated in Figure 2 (Detail A). Repeat this action for the top section.

OPTIONAL LADDERS, SAFETY CAGES, HANDRAIL PACKAGES, PLATFORMS AND SOUND ATTENUATORS

All optional accessories such as ladders, safety cages, deck grating, platforms and sound attenuators should be installed as shown on the appropriate reference drawings in the submittal package from Baltimore Aircoil. The drawing is included with the unit in the envelope attached to the side of the unit marked "For Rigger".

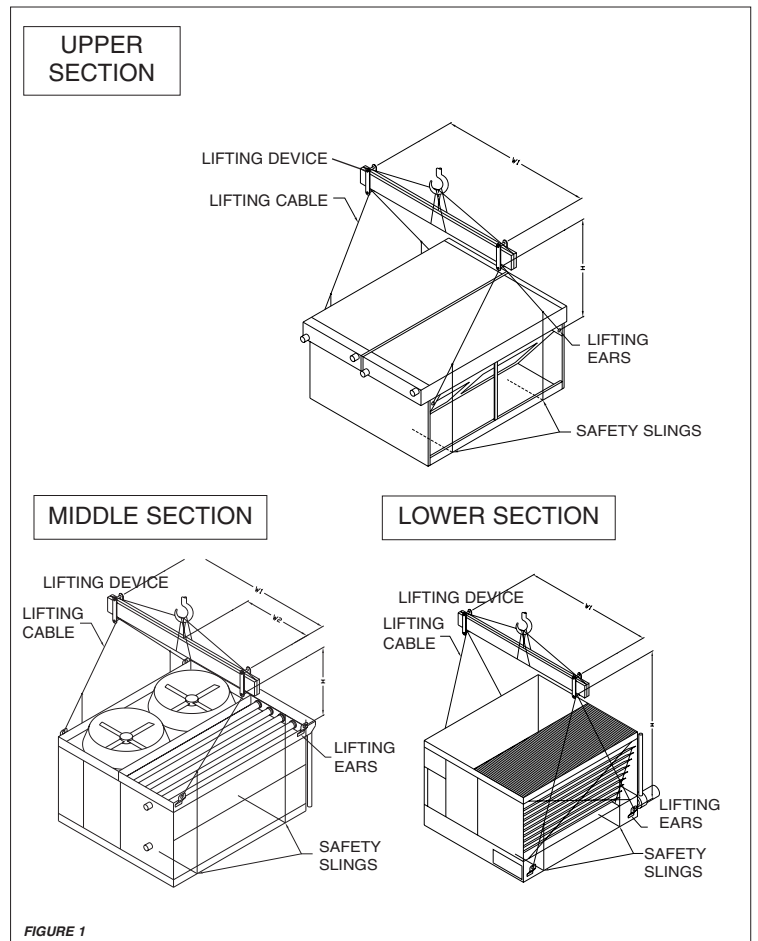


FIGURE 1

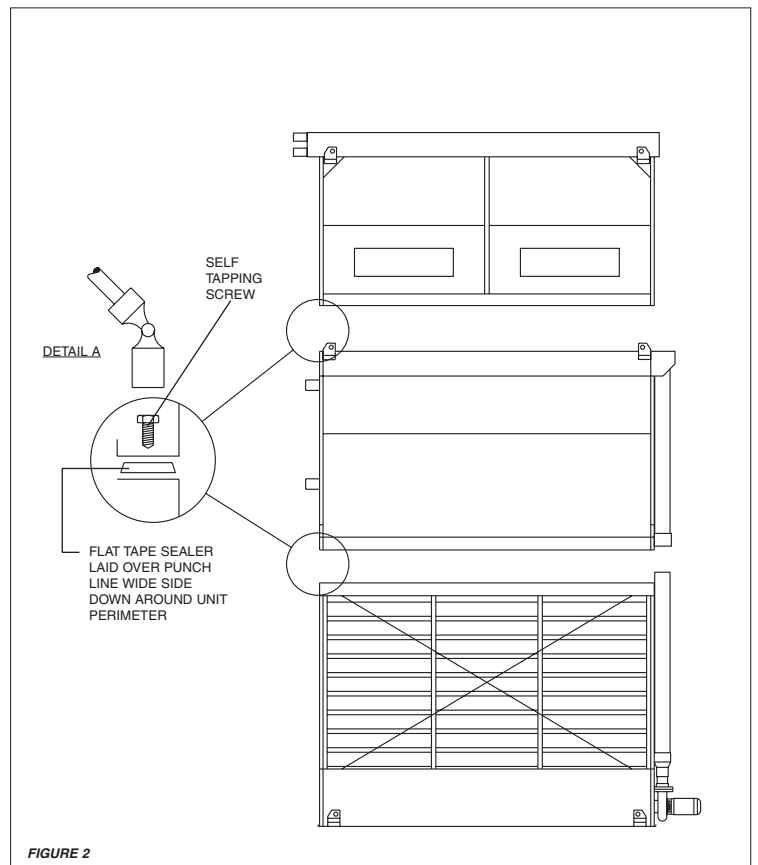


FIGURE 2



Baltimore Aircoil

BALTIMORE AIRCOIL INTERNATIONAL N.V., Industriepark-Zone A, B-2220 Heist-op-den-Berg, Belgium

BALTIMORE AIRCOIL LTD., Princeswood Road, Corby, Northants, NN17 4AP, U.K.

BALTIMORE AIRCOIL ITALIA S.R.L., Località Giardini, 23030 Chiuro (Sondrio), Italy

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