

BID SOLICITATION



City of Chattanooga
101 East 11th Street, Suite G13
Chattanooga, TN 37402

BID OPENING DATE AND TIME:

13-JUN-17 at 2:00 PM

BID NUMBER: 304754

SEALED BIDS

Mail or submit two (2) signed copies of bid form to this office in the enclosed envelope. Retain one copy for your file.

BUYER:

PHONE #: (423) 643-7230
DELIVERY REQUIRED:

**V
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RFQ

**M
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City of Chattanooga
101 East 11th Street, Suite G13
Chattanooga, TN 37402

Item	Class-Item	Quantity	Unit	Unit Price	Total
Requisition No: 152740 Ordering Dept: Chattanooga Police Department Buyer: William Tucker Fax: 423-643-7244 Email: wtucker@chattanooga.gov ***** Items Being Purchased: Cooling Towers ***** ATTACHMENTS: Specifications (6 pages) Instructions to Bidders (2 pages) ***** ***BIDS MUST BE RECEIVED NO LATER THAN ** *** 02:00 PM EST on JUNE 13, 2017 *** ***** SEALED BID: All Bids must be delivered to the Purchasing Office in a sealed envelope on or before the time and date specified above. DO NOT email or fax your Bid; such Bids cannot be considered. ***** Items being purchased are to be delivered to: Police Services Center 3410 Amnicola Avenue Chattanooga, TN 37406 Delivery Contact: Sue Poole, Tel. 423-643-5014 ***** ALL ITEMS MUST BE QUOTED F.O.B DESTINATION ***** The City of Chattanooga Standard Terms and Conditions are incorporated herein by reference, and are available for review on the City's website at http://www.chattanooga.gov/purchasing/standard-terms-and-conditions . If you cannot access the document online, contact the Purchasing Office for a copy. ***** NOTE: ALL BIDS MUST BE SIGNED All bids received are subject to the terms and conditions contained herein and as listed in the above-referenced website. By submission of a Bid, the bidder acknowledges having reviewed the Standard Terms and Conditions, and agrees to be bound by such terms. Any requested changes to the City's Terms and Conditions MUST be submitted with the Bid. ***** Any manufacture's names, trademarks, brand names, or catalog numbers used in the specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive. Bids will be considered for any brand which meets or exceeds the quality in the specifications listed for each item. ***** The City of Chattanooga reserves the right to reject any and/or all Bids, waive any informalities in the Bids received, and to accept any Bid which in its opinion may be for the best interest of the City. The City of Chattanooga will be non-discriminatory in the purchase of all goods and services on the basis of race, color, or national origin.					

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Item	Class-Item	Quantity	Unit	Unit Price	Total

Vendor Contact Information:					
Vendor Name _____					
Contact Person _____					
Tel.: _____					
Fax: _____					
Email: _____					
Mailing Address: _____					
City, State, Zip: _____					

NOTE: ALL BIDS RECEIVED ARE SUBJECT TO THE TERMS AND CONDITIONS

ALL BIDS MUST BE SIGNED – The undersigned offers the above quoted prices under the conditions contained herein.

The City is Exempt from all Federal and State Tax.
Bids will be received at the above mentioned address.

TERMS OF PAYMENT: _____

TELEPHONE NUMBER: _____

COMPANY: _____

SIGNATURE: _____

NAME AND TITLE: _____

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City of Chattanooga
101 East 11th Street, Suite G13
Chattanooga, TN 37402

Item	Class-Item	Quantity	Unit	Unit Price	Total
1	Cooling Tower for PSC-specs for similar model attached- unit of measure-Imperial. Water flow rate per unit-460.00 Entering water temp-95.00 leaving water temp-82.00 entering wet-bulb-78.00 Electrical frequency 60Hz volt 200V phase 3.	1	Each		

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Baltimore Aircoil Company

UNIT ORDER LINE DETAILS

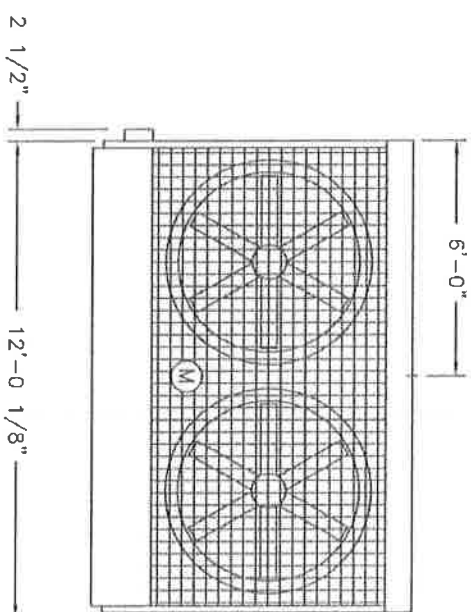
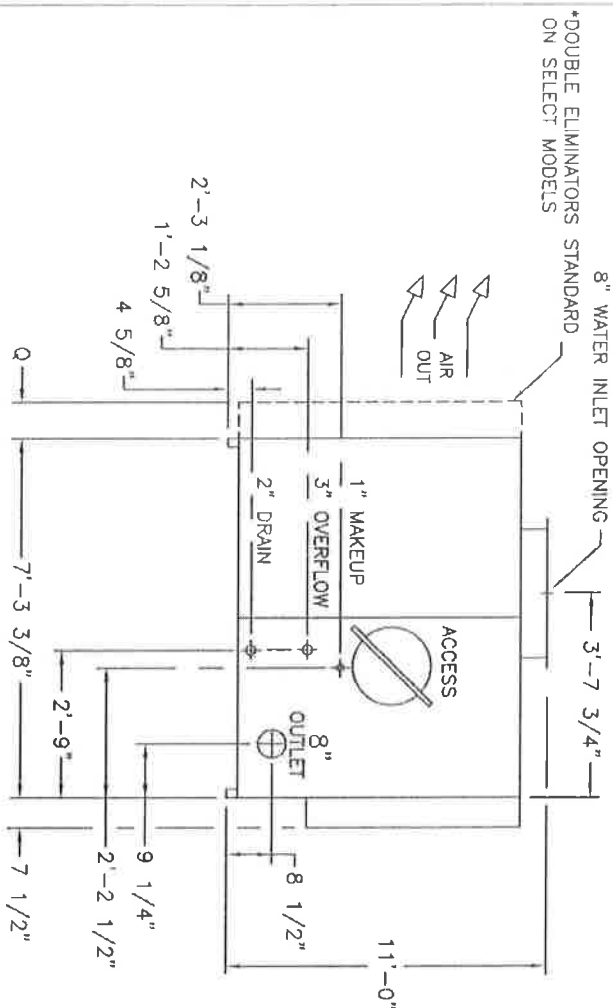
TO

BAC Order # Q170448082
Project: Police Services FXT
Date: 4/11/2017

Order Line Configuration Details Q17044808201

Thermal Operating Conditions	FXT Model Number	FXT-257
	Currency	USD
	Units of Measure	Imperial
	Water Flow Rate per Unit (USGPM)	460.00
	Entering Water Temperature (°F)	95.00
	Leaving Water Temperature (°F)	82.00
	Entering Wet-Bulb Temperature (°F)	78.00
	The approach is less than 5°F (2.8°C), which is outside the range of the CTI certified the	
Electrical Characteristics	System Frequency	60 Hz
	System Voltage	200 V
	System Phase	3
Basic Equipment Characteristics	Unit Orientation	Right Hand
Materials of Construction	Materials of Construction	Galvanized Steel
	Fill Material	PVC
Water Connections and Equipment Support/Anchorage	Inlet/Outlet Connections	Top Inlet - End Outlet - Pump Suction
	Anchorage	Plan A Steel Support - Standard Spacing
Motor Characteristics	Enclosure	Totally Enclosed, Fan Cooled (TEFC)
	Manufacturer	BAC Choice
Motors	Horsepower	20 hp
	Speed	1800 rpm
	Quantity	1
	Type	1 Speed/1 Winding - Premium Efficiency (Inverter Duty)
	Options	Space Heater
Basin Freeze Protection	Add Shaft Grounding Ring?	No
	Basin Heaters	Electric Heater Element(s) (Sized for 0°F ambient)
Electric Basin Heater Options	Heater Element Material	Copper
	Heater Controls	Electric Heater Controls with (1) Low Water Cutout and Thermostat
Water Distribution System Accessories		

Air Discharge and Mechanical System Accessories	Basin Water Level Control	Mechanical Float Valve
	Air Discharge Configuration	None
Equipment Controls	Vibration Cutout Switch (VCOS)	None
	Do You Want Equipment Controls?	No
Connection Options	Inlet Connection Size	8"
	Inlet Connection Options	None - Standard Connection(s)
Additional Connection Options	Outlet Connection Size	8"
	Outlet Connection Options	None - Standard Connection(s)
Packaging Options	Equalizer Connection	None
	Bypass Connection	None
Shipping Information	Include Crating for Export Shipments?	No
	Type of Crating	None
Ship To Information	CTI Certified Unit	NO
	Ship To Country	United States
	Shipping Method	Bestway Freight Allowed
	Ship To State	TENNESSEE
	City Closest to Shipping Destination	Chattanooga
	Unit subject to the Pennsylvania Steel Products Pr	No



(M) FAN MOTOR LOCATION

MODEL NO.	WEIGHT (LB.)		DIMENSIONS
	APPROXIMATE OPERATING	APPROXIMATE SHIPPING	
FXT-216	9420	3560	Q
FXT-240*	9470	3610	4 1/2"
FXT-257*	9490	3630	4 1/2"

- NOTES: 1. ALL DIMENSIONS ARE IN FEET AND INCHES. WEIGHTS ARE IN POUNDS.
 2. UNLESS OTHERWISE INDICATED, ALL CONNECTIONS 4 INCHES AND SMALLER ARE MPT AND CONNECTIONS 6 INCHES AND LARGER ARE BEVELLED FOR WELDING.
 3. FIELD PIPING SHOULD BE FABRICATED AT THE TIME OF UNIT INSTALLATION.
 4. (*) DENOTES STANDARD DOUBLE ELIMINATORS

CONN SIZE	REMOTE SUMP CONN (GPM)	REMOTE END CONN (GPM)
3"	6 - 80	60
4"	81 - 140	90
6"	141 - 320	180
8"	321 - 560	230
10"	561 - 880	-
12"	881 - 1150	-

B.A.C.
ORDER NO:



BALTIMORE AIRCOIL
COMPANY

MODEL:
FXT COOLING TOWER
DRAWING NUMBER:
BAC-8837 A

C

Baltimore Aircoil Company, Inc.
Cooling Tower Selection Program

Version: 8.8.4 NA
Product data correct as of: February 22, 2017

Project Name:
Selection Name:
Project State/Province: Tennessee
Project Country: United States
Date: April 11, 2017

Model Information

Product Line: FXT
Model: FXT-257
Number of Units: 1
Fan Type: Standard Fan
Fan Motor: (1) 20.00 = 20.00 HP/Unit
Total Standard Fan Power: Full Speed, 20.00 BHP/Unit
Intake Option: None
Internal Option: None
Discharge Option: None

Design Conditions

Flow Rate: 460.00 USGPM
Hot Water Temp.: 95.00 °F
Cold Water Temp.: 82.00 °F
Wet Bulb Temp.: 78.00 °F
Tower Pumping Head: 4.76 psi
Reserve Capability: 4.94 %

Engineering Data, per Unit

Unit Length: 12' 00.25"
Unit Width: 07' 03.50"
Unit Height: 11' 00.00"
Air Flow: 67,200 CFM
Approximate Shipping Weight: 3,630 pounds
Heaviest Section: 3,630 pounds
Approximate Operating Weight: 9,490 pounds
Heater kW Data (Optional)
0°F (-17.8°C) Ambient Heaters: (2) 4 kW
-20°F (-28.9°C) Ambient Heaters: (2) 6 kW

Minimum Distance Required for Single Unit:

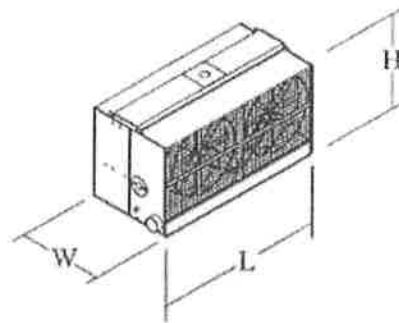
(For multiple units, refer to Layout Guidelines)

From Solid Wall: 5.9 ft.
From 50% Open Wall: 3 ft.

Energy Rating:

46.55 per ASHRAE 90.1, ASHRAE 189 and CA Title 24.

Note: These unit dimensions account for the selected fan type for the standard cataloged drive configuration, but they do not account for other options/accessories. Please contact your local BAC sales representative for dimensions of units with other options/accessories.



Warning

1. One or more selection parameters are outside of CTI Certification limits.

Baltimore Aircoil Company, Inc.
Cooling Tower Selection Program

Version: 8.8.4 NA
 Product data correct as of: February 22, 2017

Project Name:
 Selection Name:
 Project State/Province: Tennessee
 Project Country: United States
 Date: April 11, 2017

Model & Fan Motor

Product Line: FXT
 Model: FXT-257
 Number of Units: 1
 Fan Motor: (1) 20.00 = 20.00 HP/Unit
 Total Standard Fan Power: Full Speed, 20.00 BHP/Unit

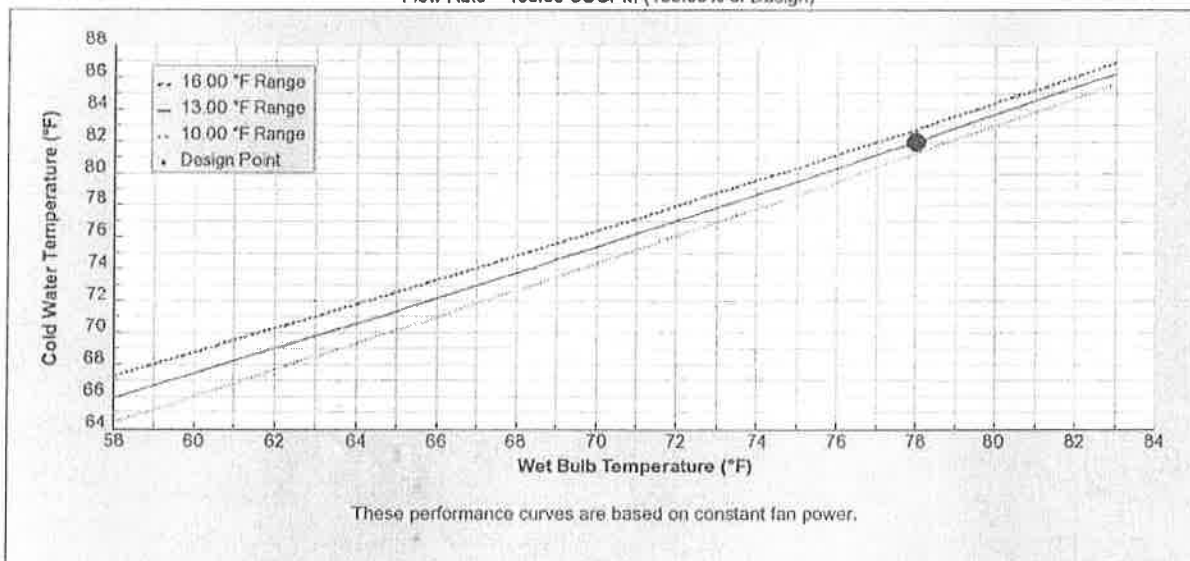
Model Accessories

Intake Option: None
 Internal Option: None
 Discharge Option: None
 Fan Type: Standard Fan

Design Conditions @ Standard Total Fan Motor Power per Unit (20.00 HP)

Flow Rate: 460.00 USGPM
 Hot Water Temp.: 95.00 °F
 Cold Water Temp.: 82.00 °F
 Wet Bulb Temp.: 78.00 °F

Predicted Performance
 Fan Motor Alternative = Full Speed, 20.00 BHP
 Flow Rate = 460.00 USGPM (100.00% of Design)



Warning	Applies to Design Conditions	Applies to Off Design Conditions
1. One or more selection parameters are outside of CTI Certification limits.	Yes	Yes

Baltimore Aircoil Company, Inc.
Cooling Tower Selection Program

Version: 8.8.4 NA
 Product data correct as of: February 22, 2017

Project Name:
 Selection Name:
 Project State/Province: Tennessee
 Project Country: United States
 Date: April 11, 2017

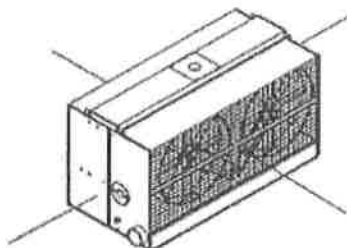
Model Information

Product Line: FXT Intake Option: None
 Model: FXT-257 Internal Option: None
 Number of Units: 1 Discharge Option: None
 Fan Type: Standard Fan
 Fan Motor: (1) 20.00 = 20.00 HP/Unit
 Total Standard Fan Power: Full Speed, 20.00 BHP/Unit

Octave band and A-weighted sound pressure levels (Lp) are expressed in decibels (dB) reference 0.0002 microbar. Sound power levels (Lw) are expressed in decibels (dB) reference one picowatt. Octave band 1 has a center frequency of 63 Hertz.

Top Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	84	74
2	85	70
3	80	70
4	74	63
5	68	58
6	65	55
7	62	52
8	60	50
A-wgtd	77	66

Back Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	88	81
2	86	77
3	85	72
4	82	71
5	76	67
6	69	63
7	62	55
8	60	51
A-wgtd	83	73



End Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	87	79
2	82	75
3	78	70
4	71	65
5	64	58
6	55	50
7	53	48
8	51	46
A-wgtd	74	67

End Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	87	79
2	82	75
3	78	70
4	71	65
5	64	58
6	55	50
7	53	48
8	51	46
A-wgtd	74	67

Sound Power (dB)		
Octave Band	Center Frequency (Hertz)	Lw
1	63	111
2	125	107
3	250	103
4	500	101
5	1000	96
6	2000	92
7	4000	85
8	8000	82

Air Inlet Sound Pressure (dB)		
Octave Band	Distance	
	5 ft.	50 ft.
1	88	79
2	88	76
3	87	73
4	87	72
5	83	67
6	77	63
7	73	57
8	69	52
A-wgtd	88	73

Note: The use of frequency inverters (variable frequency drives) can increase sound levels.

Instructions to Bidders

(1) Bid documents can be downloaded from the City's website at www.chattanooga.gov. At the left side of that page is a link labeled "Bid Solicitations." Click that link, and a page will open with a list of the City's current Bid Solicitations, with links that will display a PDF version of the bid documents suitable for printing.

(2) Any Addenda will be published in the list of Bid Solicitations mentioned above. Bidders should check this list before submitting their bids, to see whether any Addendum has been issued.

(3) Bid documents should be submitted to the following address:

Purchasing Office, Suite G-13
City Hall
101 East 11th Street
Chattanooga, TN 37401

(4) Sealed Bids should be submitted in a sealed envelope. No particular envelope is required, but the Bid Solicitation number should be marked on the outside of the envelope. This is a six-digit number starting with a "3".

(5) Any questions regarding the specifications or bidding process should be directed to the Buyer, **preferably by email**, to the following address: wtucker@chattanooga.gov.

The Buyer will, if possible find answers to the submitted questions and will issue an Addendum so that all potential bidders will have access to the answers.

(6) Tennessee law prohibits municipalities from contracting with business entities which engage in investment activities in Iran. A list of such prohibited entities can be viewed at

[https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List of persons pursuant to Tenn. Code Ann. 12-12-106, Iran Divestment Act-July.pdf](https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List%20of%20persons%20pursuant%20to%20Tenn.%20Code%20Ann.%2012-12-106,%20Iran%20Divestment%20Act-July.pdf).

A form entitled "Vendor Disclosure and Acknowledgement" is attached, which asks the Bidder to affirm that it is not on the list of prohibited entities. This form should be completed and submitted with your Bid.

Chapter No. 817 (HB0261/SB0377). "Iran Divestment Act" enacted.
Vendor Disclosure and Acknowledgement

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to § 12-12-106.

(SIGNED) _____

(PRINTED NAME) _____

(BUSINESS NAME) _____

(DATE) _____