



BALTIMORE AIRCOIL

ONE OF THE
Amsted
INDUSTRIES

SUBMITTAL DATA FORM

| | | | |
|--------------------------------------|---|---|---|
| C U S T O M E R | SOUTHLAND INDUSTRIES 1661 EAST 32 ND . STREET LONG BEACH, CA 90807 | DATE P.O. NO. B.A.C. NO. MODEL NO. | REVISED 1/15/2001 TV 11/8/2000 U012674701/02-MAD F1463-P |
|--------------------------------------|---|---|---|

| | |
|-------------|--|
| PROJECT: | 360 NETWORKS - SAN DIEGO, CA |
| ENGINEER: | SOUTHLAND INDUSTRIES - LONG BEACH, CA |
| B.A.C. REP: | AIR TREATMENT CORPORATION - WALNUT, CA |

F1 CLOSED CIRCUIT COOLING TOWER
"ALL INFORMATION IS PER UNIT"

CERTIFIED CAPACITY: 762.51 USGPM OF WATER FROM 95 F TO 85 F AT 73 F ENTERING WET BULB AND 12.36 PSI FLUID PRESSURE DROP.

FAN MOTOR(S): (1) 40 HP, 1800 RPM, 3 PHASE, 60 HERTZ, 460 VOLTS, INVERTER DUTY, TEFC ENCLOSURE. FAN DRIVES BASED ON 0" ESP.

PUMP MOTOR(S): (1) 5 HP, 1800 RPM, 3 PHASE, 60 HERTZ, 230/460 VOLTS, TEFC ENCLOSURE.

NOTE: Two speed fan motors and/or Energy Miser Fan Systems require a starter that incorporates a 15 second time delay when switching from high to low speed. Inverter Duty Fan Motors, furnished in accordance with NEMA Standard MG.1Part 31 are required for applications using Variable Frequency Drives for fan motor control.

13 COPIES OF SUBMITTAL DATA FOR APPROVAL

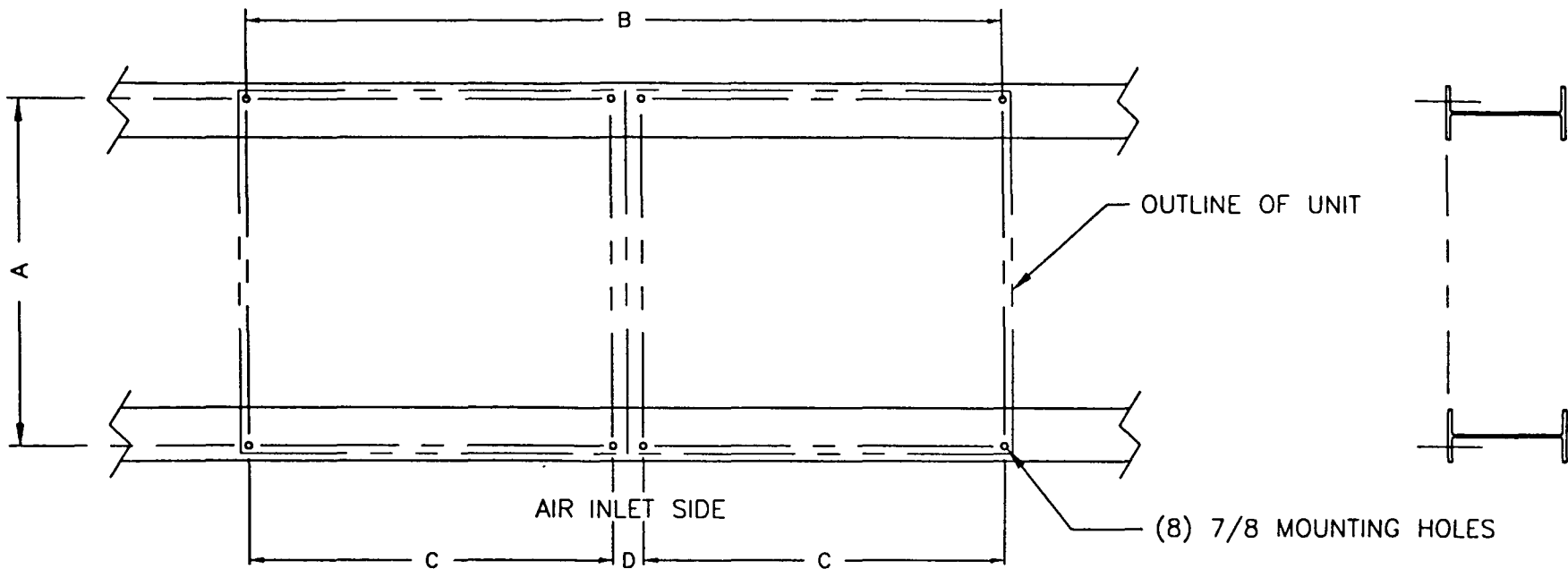
| FEATURE | FEATURE |
|--|---------|
| UNIT DIMENSIONS & SUPPORT DATA BAC-10502A BAC-10516A BAC-10613A | |
| MECHANICAL SPECIFICATIONS (1) RIGHT HAND & (1) LEFT HAND ARRANGEMENT 4" FOR MAIN WATER CONNECTIONS | |

THANK YOU FOR YOUR ORDER ACCEPTED AT THE B.A.C. MADERA PLANT ON: 11/7/2000.

FURTHER PROCESSING OF THIS ORDER IS CONTINGENT UPON RECEIPT OF APPROVED SUBMITTALS. SHIPMENT WILL BE APPROXIMATELY 8/9 WEEKS FROM RECEIPT OF A FIRM RELEASE.

AIR TREATMENT CORPORATION - SAN DIEGO, CA

P.O. BOX 7322, BALTIMORE, MARYLAND 21227 / TELE: (410) 799-6200 / FAX: 410-799-6416
P.O. BOX 960, MADERA, CALIFORNIA 93639 / TELE: (559) 673-9231 / FAX: 559-673-5095
P.O. BOX 317, PAXTON, ILLINOIS 60957 / TELE: (217) 379-2311 / FAX: 217-379-3522
P O BOX 402, MILFORD, DELAWARE 19963 / TELE: (302) 422-3061 / FAX: 302-422-9269



NOTES:

1. THE RECOMMENDED SUPPORT ARRANGEMENT FOR F1000 UNITS CONSISTS OF TWO PARALLEL I-BEAMS EXTENDING THE FULL LENGTH OF THE UNIT. SUPPORTS AND ANCHOR BOLTS ARE TO BE DESIGNED AND FURNISHED BY OTHERS.
2. ALL SUPPORTING BEAMS ARE TO BE FLUSH AND LEVEL AT TOP AND MUST BE ORIENTED RELATIVE TO GAGE LINE AS SHOWN.
3. RECOMMENDED DESIGN LOADS FOR EACH BEAM SHOULD BE 70% OF THE TOTAL UNIT OPERATING WEIGHT APPLIED AS A UNIFORM LOAD TO EACH BEAM. BEAMS SHOULD BE DESIGNED IN ACCORDANCE WITH STANDARD STRUCTURAL PRACTICE. THE MAXIMUM ALLOWABLE DEFLECTION OF BEAMS UNDER THE UNIT SHALL BE * (REFER TO CHART) OF AN INCH.
4. ALL MOUNTING HOLES ARE 7/8 INCH DIA. AT THE LOCATIONS SHOWN.
5. IF VIBRATION ISOLATORS ARE USED, A RAIL OR CHANNEL MUST BE PROVIDED BETWEEN THE UNIT AND THE ISOLATORS TO PROVIDE CONTINUOUS UNIT SUPPORT. ADDITIONALLY THE SUPPORT BEAMS MUST BE DESIGNED TO ACCOMMODATE THE OVERALL LENGTH AND MOUNTING HOLE LOCATION OF THE ISOLATORS WHICH MAY DIFFER FROM THOSE OF THE UNIT. REFER TO VIBRATION ISOLATOR DRAWINGS FOR THESE DATA.

| MODEL NO. | DIMENSION | | | | * |
|---|-----------|----------|----------|---------|-----|
| | A | B | C | D | |
| F1461-P F1461-Q F1462-P F1463-P | 91 5/8" | 199 3/4" | 97 7/8" | 4" | 1/2 |
| F1481-M F1482-N F1482-O F1483-O | 91 5/8" | 272 1/4" | 127 1/2" | 17 1/4" | 1/2 |
| F1661-N F1662-O F1663-O | 139 1/4" | 199 3/4" | 97 7/8" | 4" | 1/2 |
| F1681-P F1682-P F1683-P | 139 1/4" | 272 1/4" | 127 1/2" | 17 1/4" | 1/2 |

B.A.C.
ORDER NO: *U012674701/02 MAD*



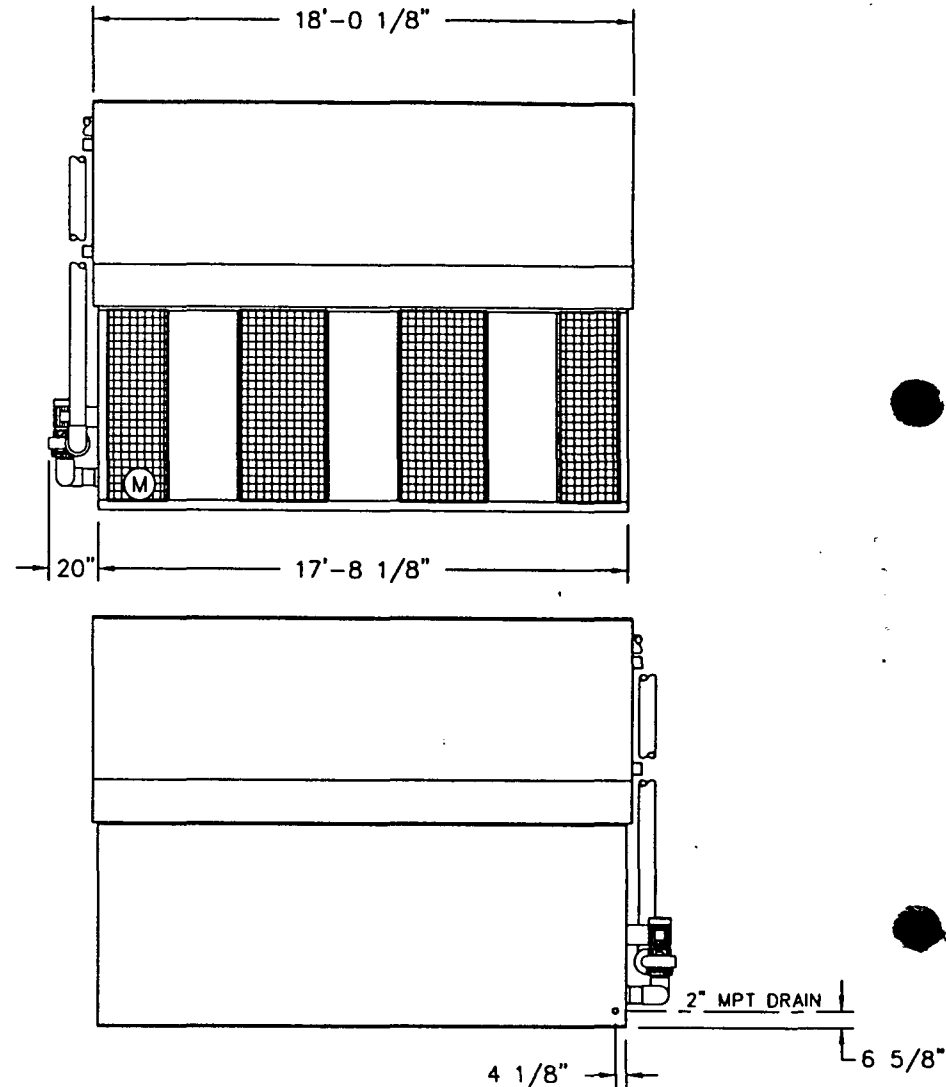
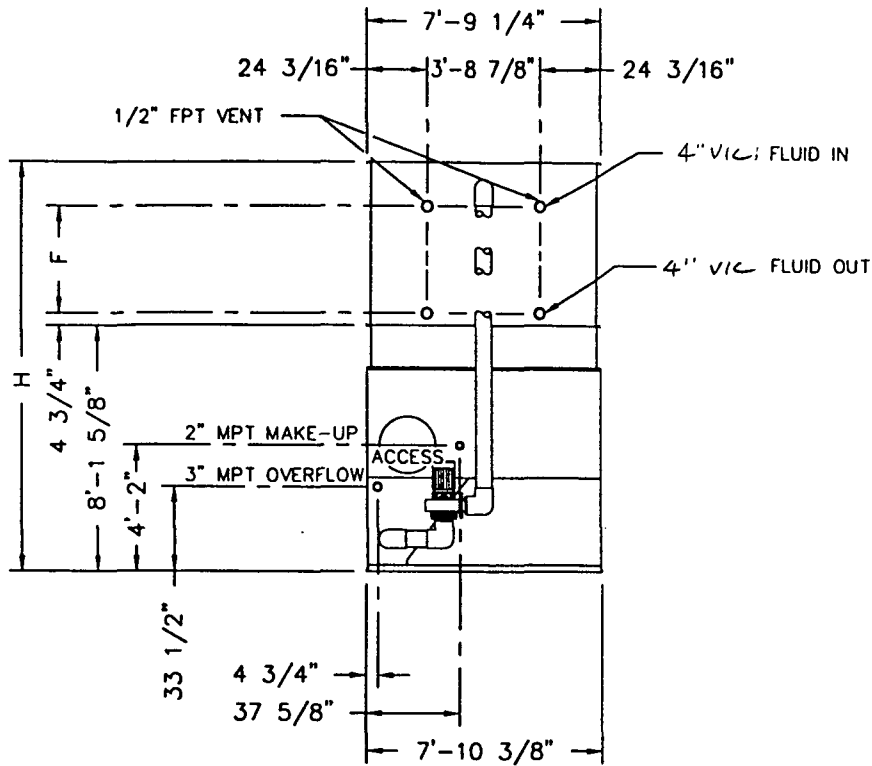
BALTIMORE AIRCOIL
COMPANY

SUGGESTED STEEL SUPPORT
FOR F1000 UNITS

DRAWING NUMBER:
BAC-10613A

DATE:

D



(M) FAN MOTOR LOCATION.

| MODEL NO. | APPROX. SHIPPING WEIGHT | APPROX. OPERATING WEIGHT | HEAVIEST SECTION (COIL) | F | H |
|--------------------|-------------------------|--------------------------|-------------------------|--------------------|-----------------------|
| F1461-P | 13820 | 22180 | 8320 | 24" | 11'-11 7/8" |
| F1461-Q | 13860 | 22220 | 8320 | 24" | 11'-11 7/8" |
| F1462-P | 15890 | 25070 | 10390 | 33 1/4" | 12'-0 1/8" |
| F1463-P | 18070 | 28060 | 12570 | 42 1/2" | 13'-6 3/8" |
| F1464-P | 20250 | 31060 | 14750 | 51 3/4" | 14'-3 5/8" |

NOTES:

1. ALL DIMENSIONS ARE IN FEET AND INCHES. WEIGHTS ARE IN POUNDS.
2. UNLESS OTHERWISE INDICATED, ALL CONNECTIONS 6 INCHES AND SMALLER ARE MPT AND CONNECTIONS 8 INCHES AND LARGER ARE BEVELED FOR WELDING.
3. DIMENSIONS SHOWING LOCATION OF COIL CONNECTIONS ARE APPROXIMATE AND SHOULD NOT BE USED FOR PREFABRICATION OF CONNECTING PIPING.
4. FOR SUPPORT REQUIREMENTS, REFER TO THE SUGGESTED STEEL SUPPORT DRAWING.

B.A.C.
 ORDER NO. *U01267470-MAD*
 DATE: *11/8/00*

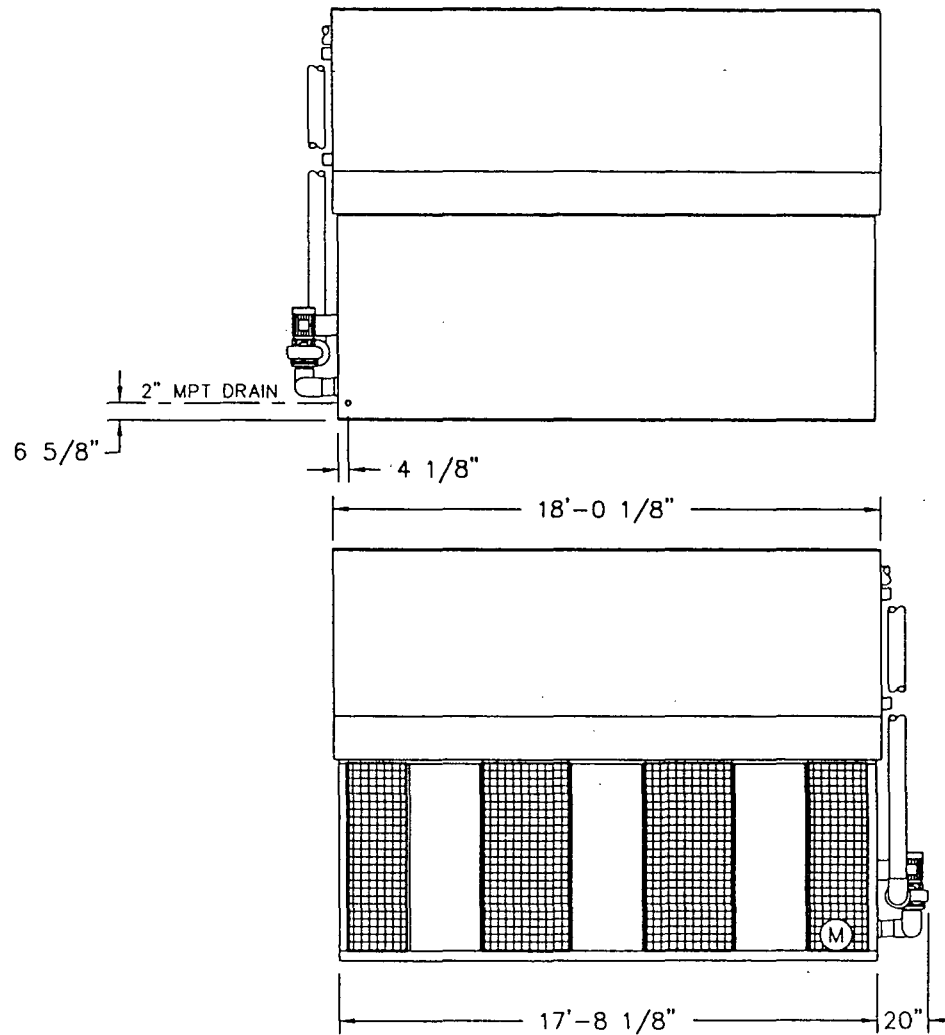
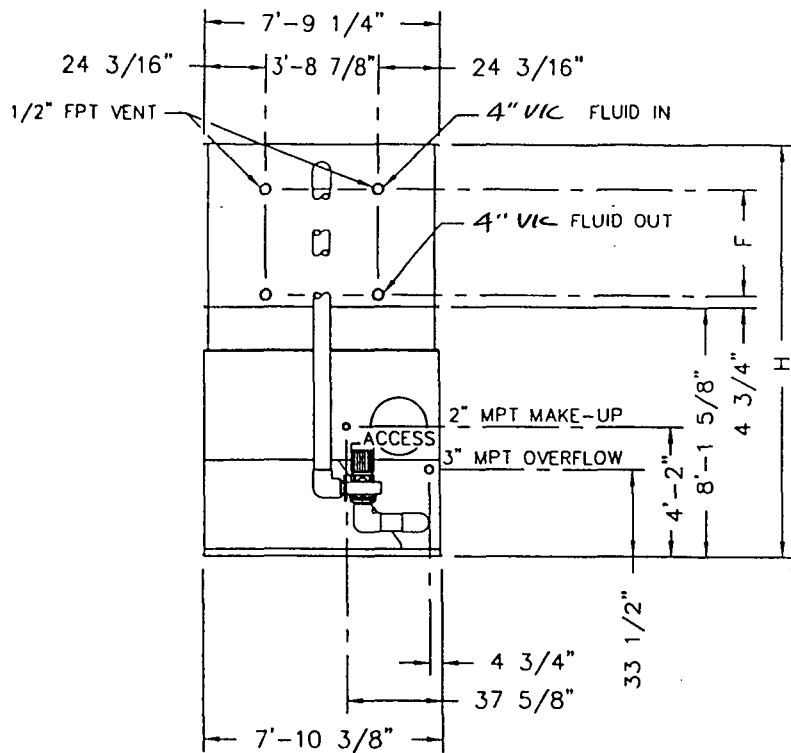


BALTIMORE AIRCOIL
 COMPANY

INDUSTRIAL FLUID COOLER
 RH UNIT

DRAWING NUMBER:
 BAC-10502A

A

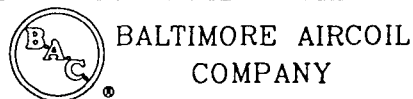


(M) FAN MOTOR LOCATION.

| MODEL NO. | APPROX. SHIPPING WEIGHT | APPROX. OPERATING WEIGHT | HEAVIEST SECTION (COIL) | F | H |
|--------------------|-------------------------|--------------------------|-------------------------|--------------------|-----------------------|
| F1461-P | 13820 | 22180 | 8320 | 24 " | 11'-11 7/8" |
| F1461-Q | 13860 | 22220 | 8320 | 24 " | 11'-11 7/8" |
| F1462-P | 15890 | 25070 | 10390 | 33 1/4" | 12'-9 1/8" |
| F1463-P | 18070 | 28060 | 12570 | 42 1/2" | 13'-6 3/8" |
| F1464-P | 20250 | 31060 | 14750 | 51 3/4" | 14'-3 5/8" |

- NOTES:
1. ALL DIMENSIONS ARE IN FEET AND INCHES. WEIGHTS ARE IN POUNDS.
 2. UNLESS OTHERWISE INDICATED, ALL CONNECTIONS 6 INCHES AND SMALLER ARE MPT AND CONNECTIONS 8 INCHES AND LARGER ARE BEVELED FOR WELDING.
 3. DIMENSIONS SHOWING LOCATION OF COIL CONNECTIONS ARE APPROXIMATE AND SHOULD NOT BE USED FOR PREFABRICATION OF CONNECTING PIPING.
 4. FOR SUPPORT REQUIREMENTS, REFER TO THE SUGGESTED STEEL SUPPORT DRAWING.

B.A.C.
 ORDER NO. U012674702 MAD
 DATE:



INDUSTRIAL FLUID COOLER
 LH UNIT
 DRAWING NUMBER:
 BAC-10516A

A

Terms and Conditions of Sale

Pricing: Prices will remain firm, provided the order is released for fabrication within six (6) months after receipt of the order by the Seller and shipped within Seller's standard published factory lead times. For each additional month or portion thereof, one percent (1%) of the price per month will be added for a period not to exceed six (6) months, after which the price in effect at time of shipment will apply. If an order is released but shipment is not accepted when produced, pricing will be subject to the same adjustments.

Payments: If the Buyer shall fail to make any payments in accordance with the terms and conditions of sale, the Seller, in addition to its other rights and remedies, but not in limitation thereof, may at its option defer shipments or deliveries hereunder, or under any other contract with the Buyer, except under receipt of satisfactory security or cash from the Buyer before shipment.

Taxes: Prices do not include any sales or use tax, either federal, state, or local payable on the transaction under any applicable statute or regulation. All such taxes must be paid by the Buyer.

Warranties: Seller warrants that the equipment sold under this contract shall be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup or eighteen (18) months from the date of shipment, whichever occurs first. The following mechanical equipment components only are warranted against defects in materials and workmanship for a period of five (5) years from date of shipment: fans, fan shaft, bearings, sheaves, gearboxes, drive shafts, couplings, mechanical equipment support and fan motors.

Written notice of any defect shall be given to Seller immediately upon discovery by Purchaser, and shall fully describe the claimed defect. Defective parts shall be repaired or replaced F.O.B. point of shipment, provided that inspection by Seller verifies the claimed defect(s). This warranty does not cover the costs of removing, shipping or reinstalling the equipment. Repairs made without the prior written approval of Seller shall void all warranties covering material and workmanship. Any descriptions of the product(s) in the contract are for the sole purpose of identification and do not constitute a warranty. In the interest of product improvement, Seller reserves the right to change specifications and product design without incurring any liability therefor. The foregoing express warranties are the only warranties of Seller applicable to the product(s) sold under this contract. All other warranties, whether verbal or written, and all warranties implied by law, including any warranties of merchantability or fitness for a particular purpose, are hereby excluded. Failure on the part of Purchaser or of other parties to properly maintain the product(s) sold under this contract, or the operation of such product(s), by Purchaser and/or other parties under conditions more severe than those for which such product(s) were designed, shall void all warranties covering materials and workmanship. Seller's warranties do not apply to defects in product(s) for which payment in full has not been received by Seller, and said warranties do not cover normal wear and tear or the erosion, corrosion and/or deterioration of the product(s) from unusual causes. Seller shall in no event be liable for consequential, incidental or special damages arising out of a breach of any of its warranties or obligations hereunder. No warranties by Seller shall apply to accessories manufactured by others, inasmuch as they are warranted separately by their respective manufacturers, except as stated above. Purchaser assumes liability for and shall bear the costs of compliance with all laws, regulations, codes standards or ordinances applicable to the location, operation and maintenance of the product(s) sold under this contract, including those requirements pertaining to the distances between such product(s) and air-conditioning system duct intakes. No representative or agent of Seller is authorized to enlarge upon the express warranties of Seller.

Shipping Dates: Shipping dates are estimated only. No agreement will be made to deliver in a specified time unless in writing by an official of the Seller. Seller shall under no circumstances be responsible for failure to fill any order or orders when due to: fires, floods, war, riots, strikes, freight embargoes or transportation delays, shortage of labor, inability to secure fuel, material, supplies or power at current prices, or on account of shortages thereof; acts of God or of the public enemy; any existing or future laws or acts of the Federal or of any State Government (including specifically, but not exclusively, any orders, rules or regulations issued by any official or agency of any such government) affecting the conduct of Seller's business with which Seller in its judgment and discretion deems it advisable to comply as a legal or patriotic duty, or to any case beyond the Seller's reasonable control.

Allocation of Risk: The responsibility of the Seller ceases upon delivery of products to the carrier. The Buyer assumes all risks of loss, damage or shortage in transit, and any claims based thereon must be filed by the Buyer with the carrier.

Returns: Products may not be returned except by permission of authorized factory officials of the Seller and when so returned will be subject to a handling charge and transportation costs payable by Buyer.

Government Contracts: If Buyer's purchase order is for products to be used in the performance of a U.S. Government contract, those clauses of applicable procurement regulations mandatorily required by federal law to be included in U.S. Government subcontracts shall be incorporated herein by reference.

Agreement of Sale: All orders are subject to review and acceptance by the Seller, including all terms and conditions related thereto. Any of the terms and conditions of Buyer's order, or amendments or additions thereto, which are inconsistent with the terms and conditions herein shall not be binding on the Seller and shall not be considered applicable to the sale and shipment of the products. No waiver, alteration, or modification of the provisions hereof shall be binding on the Seller unless made in writing and agreed to by a duly authorized official of the Seller. Waiver by either party of any default by the other hereunder shall not be deemed a waiver by such party of any default by the other which may thereafter occur. Orders accepted by the Seller are subject to cancellation only upon written consent of the Seller and after payment by buyer of reasonable costs and expenses for the effort expended thereon. The agreement of sale shall be governed by and construed in accordance with the laws of the State of Maryland.

(Revised 2/23/96)



November 8, 2000

Baltimore Aircoil Company

Series F1 Closed Circuit Cooling Tower Mechanical Specifications

G-235 (Z700 metric) Hot-Dip Galvanized Steel Construction

| | |
|------------------------------|---|
| Project Name: | 360 NETWORKS - SAN DIEGO, CA |
| Customer Name: | SOUTHLAND INDUSTRIES - LONG BEACH, CA |
| Purchase Order No.: | |
| Engineer Name: | SOUTHLAND INDUSTRIES - LONG BEACH, CA |
| Model Number: | F1463-P |
| B.A.C. Serial No.: | U012674701/02-MAD |
| Unit Type: | Factory-assembled, counterflow, blow-through design closed circuit cooling tower. All steel panels and structural members are constructed from G-235 (Z700 metric) hot-dip galvanized steel. The edges are given a protective coat of zinc-rich compound. |
| Quality Assurance: | Each unit is manufactured under closely-controlled conditions using standardized parts to ensure each unit is built precisely to the same high-quality design and construction standards. The design, manufacture, and business processes are ISO 9001 certified. |
| Pan/Fan Construction: | Heavy gauge panel construction of G-235 (Z700 metric) hot-dip galvanized steel. The centrifugal fans and motors are located in the dry entering airstream beneath the sloping side of the pan. |
| Access: | Circular access doors constructed of G-235 (Z700 metric) hot-dip galvanized steel are held in place with phenolic knob screws. |
| Water Level Control: | Bronze make-up valve with unsinkable polystyrene filled plastic float arranged for easy adjustment. The make-up valve is suitable for water supply pressures between 15 psig (103 kPa) and 50 psig (345 kPa). |
| Bleed-Off: | Waste water bleed line with adjustable valve provided. |
| Pump: | Close-coupled, vertically-installed, bronze-fitted, centrifugal pump(s) with mechanical seal is oriented to drain when the pan/fan section is drained. The pump motor(s) is totally enclosed, fan-cooled (TEFC), suitable for outdoor operation. |
| Strainer: | Large area, lift out, G-235 (Z700 metric) hot-dip galvanized steel strainer screens have perforated openings sized smaller than the water distribution nozzle orifices. Strainer includes anti-vortexing baffle to prevent air entrainment. |

Fan Wheels: Forwardly curved, centrifugal, squirrel cage type fan wheels, constructed from G-235 (Z700 metric) hot-dip galvanized steel, are statically and dynamically balanced. Fan housings have curved inlet rings for efficient air entry.

Fan Discharge Cowls: Fan discharge cowls, constructed of G-235 (Z700 metric) hot-dip galvanized steel, are provided on each fan. They extend within the pan to protect the fans from falling water.

Fan Shaft and Bearings: Models F17XX
Solid shaft of ground and polished steel with exposed surface coated with a rust preventative. Self-aligning, heavy-duty, grease-packed, ball bearings with eccentric locking collars are provided on each end of the fan shaft. Where intermediate bearings are required, self-aligning, oil lubricated, sleeve type bearings with split, cast iron, pillow-block housing are furnished.

Models F18XX and Larger
Hollow steel shaft, protected with two part epoxy, with bearing journals at each end. Solid polished steel journals are coated with a rust preventative. Self-aligning, heavy-duty, grease-packed ball bearings with eccentric locking collars are furnished at each end of the shaft.

TEFC Fan Motor(s): Fan motor(s) is totally enclosed, fan-cooled (TEFC) ball bearing type with 1.15 service factor, one speed, one winding, suitable for outdoor service and mounted on an adjustable motor base. Motor is designed per NEMA MG1-Part 31 for Inverter Duty service. Motor base is adjusted by means of a single threaded bolt-and-nut arrangement.

Drive: V-belt sheaves, selected for 150% motor nameplate horsepower, are mounted and aligned at the factory.

Fan Guard Screens: G-235 (Z700 metric) hot-dip galvanized steel screens are provided.

Heat Transfer Section: Heavy gauge panel construction of G-235 (Z700 metric) hot-dip galvanized steel. Heat transfer section is separable from pan/fan section.

Coil: Continuous 1.05" (27 mm) O.D. all prime surface steel encased in steel framework with entire assembly hot-dip galvanized after fabrication. Tubes sloped for liquid drainage. Coil has a maximum allowable working pressure of 300 psig (2170 kPa) and is tested at 375 psig (2685 kPa) air pressure under water.

Water Distribution System: Schedule 40 PVC spray header and branches. Removable branches and 360° spray pattern plastic spray nozzles are held in place with snap-in rubber grommets.

Drift Eliminators: Eliminators are constructed of polyvinyl chloride (PVC) and are removable in easily handled sections. They impart three distinct changes in air direction to effectively strip entrained moisture from the leaving airstream with minimum air resistance, and to direct discharge air away from fans.