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The PT2 brings you the most advanced counterflow, induced draft cooling tower in the industry. Engineered with input from end users, the PT2's design highlights BAC's commitment to ease of maintenance, low installation costs, reduced energy consumption and durable construction. Offering a compact footprint for low to medium tonnage requirements, the PT2 provides an efficient solution for installations with space constraints.













# BAC's PT2: The Superior Counterflow Unit

Designed for Small to Medium Tonnage Requirements 99 to 787 Nominal Tons in a Single Cell Up to 3,100 USGPM for Process Applications

Reduced Environmental Impact Variety of Materials of Construction Easy to Maintain

 $\nabla$ 

Continuous Engineering Refinement Low Installed Cost







# **PT2 Benefits**

### Low Environmental Impact

#### ENERGY EFFICIENT

- All units meet or exceed ASHRAE Standard 90.1 energy efficiency requirements
- Premium efficient/inverter duty fan motors
- PT2-0412A and PT2-1218A models provide capacity control and redundancy from the two independent motors

#### SOUND REDUCTION OPTIONS

- Standard fan optimizes sound and thermal performance
- For further reduced sound levels, Low Sound Fans, Whisper Quiet Fans, and sound attenuation are available



Whisper Quiet Fan

### Durable Construction

- Enhanced longevity with a variety of materials of construction (see page B71 for details)
- Designed to withstand wind loads of up to 30 psf, upgraded units designed to withstand 130 psf
- Seismically verified through dynamic shake table testing up to a S<sub>DS</sub> of 2.93g
- Meets wind and seismic requirements of the International Building Code (IBC)
- Listed on California's Office of Statewide Health Planning and Development (OSHPD) pre-approved equipment list



Shake Table Testing

### Reliable Year-Round Operation

#### ► BALTIDRIVE® POWER TRAIN FAN SYSTEM (EXCEPT DIRECT DRIVE FOR PT2-0412A)

- Backed by BAC's comprehensive 5-year motor and drive warranty
- Corrosion resistant cast aluminum sheaves with specially designed powerband belts
- Cooling tower duty motors designed for hostile environment
- Extended lubrication lines are standard
- Eliminates the need for expensive winterization accessories
- Automatic bearing greasers (option)



BALTIDRIVE® Power Train



# Easy Maintenance

- ▶ BranchLok<sup>™</sup> Removal System allows for spray branch removal without tools
- External motor adjustment with included integral belt tensioning device
- Inward sliding access doors provide larger workspace
- Easily accessible cleanout port flushes water distribution debris to outside the unit
- Louvers are easily removed without tools
- Sloped cold water basin for easy cleaning
- External platforms and ladders improve accessibility (option)
- Removable panels allow for easy inspection and access to the fill (option)
- ▶ Basin sweeper piping to facilitate sediment collection (option)

# **> Low Installed Cost**

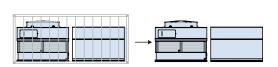
- ▶ Single piece lift available on all models
- Models ship in multiple sections to optimize the size and weight of the heaviest lift, allowing for use of smaller, less costly cranes
- BAC's InterLok™ System aligns the casing and the basin to expedite rigging and requires no sealer tape
- The PT2-0412A and PT2-0709A are designed to fit in standard export containers
- Factory pre-assembled platforms reduce installation time (option)
- Adaptable steel to fit existing support structure
- ▶ Knockdown units available for field assembly

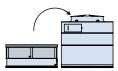


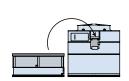
BranchLok<sup>™</sup> Removal System

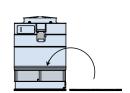


Single Piece Lift









Easily Assembled Containerized Units

# PT2 Construction Details



# Heavy-Duty Construction

- ▶ G-235 (Z700 metric) hot-dip galvanized steel panels
- Meets wind and seismic requirements of the International Building Code (IBC)
- ► Shake table tested and verified with seismic ratings up to a S<sub>ps</sub> of 2.93g
- ▶ Designed to withstand wind loads of up to 130 psf
- Base structure withstands higher seismic loading than any other induced draft counterflow tower on the market

# BALTIDRIVE® Power Train

- Available on all models except direct drive model PT2-0412A
- Premium quality, solid backed, multi-groove belt
- ▶ Corrosion resistant cast aluminum sheaves
- Heavy-duty bearings with a minimum L<sub>10</sub> of 80,000 hours
- Premium efficient/VFD duty motors are standard
- ▶ 5-year motor and drive warranty
- Extended lubrication lines

### 3 Low HP Axial Fan(s)

- ▶ High efficiency
- Quiet operation
- Corrosion resistant

### Water Distribution System

- ► Exclusive BranchLok™ Removal System for tool free branch removal
- ► External header cleanout port
- ▶ Schedule 40 PVC spray header and branches
- ► Large orifice, non-clog nozzles
- ▶ Nozzles grommeted for easy removal

### **BAC Pak™ Fill**

- ► Guaranteed thermal performance
- ▶ Polyvinyl chloride (PVC)
- ▶ Impervious to rot, decay, and biological attack
- Flame spread rating of 25 per ASTM E84

### **6** Combined Air Inlet Shields

- ▶ Corrosion resistant
- Maintenance free
- UV-resistant finish
- Easy to remove sections

### 7 Cold Water Basin

- ▶ Sloped for easy cleaning
- ▶ Suction strainer with removable anti-vortex hood
- ► Adjustable water make-up assembly

### 8 Access Door(s)

- Inward sliding door(s)
- Permanently attached to the unit

### Materials of Construction

Determining the appropriate material of construction for a project depends on several factors, including water quality, climate and environmental conditions, availability of time and manpower for maintenance, unit lifetime requirements, and budget. BAC provides the widest variety of material of construction options in the industry and has the ability to provide a solution to meet all conditions and budgets. Options such as the TriArmor® Corrosion Protection System and EVERTOUGH™ Construction provide superior corrosion resistance and durability at a tremendous value.

#### STANDARD CONSTRUCTION

G-235 hot-dip galvanized steel is the heaviest commercially available galvanized steel, universally recognized for its strength and corrosion resistance. To assure long-life, G-235 hot-dip galvanized steel is used as the standard material of construction for all PT2 units. Standard PT2 unit construction has been seismically certified by an independent laboratory up to an  $\rm S_{\rm DS}$  of 1.0g by shake table testing and can withstand wind loads of up to 30 psf, proving it's durability and strength. With proper maintenance and water treatment, G-235 galvanized steel products will provide an excellent service life under the operating conditions normally encountered in comfort cooling and industrial applications.

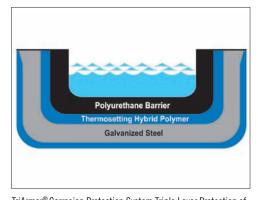


#### TRIARMOR® CORROSION PROTECTION SYSTEM (OPTION)

The TriArmor® Corrosion Protection System consists of heavy gauge G-235 galvanized steel panels fully encapsulated by a thermosetting hybrid polymer and further protected by a polyurethane barrier applied to all submerged surfaces of the cold water basin. The triple layers of protection form a completely seamless cold water basin for the most leak resistant and durable basin in the industry. Other components, such as the strainer, within the basin will be constructed of Type 304 Stainless Steel. The TriArmor® Corrosion Protection System was specifically designed for evaporative cooling applications and released in 2006 after a decade of extensive R&D and field testing. To date, there are over 1,000 successful installations in North America. Every basin is leak tested at the factory and warranted against leaks and corrosion for 5 years.



Standard Construction Installation



TriArmor® Corrosion Protection System Triple Layer Protection of the Cold Water Basin



Application of TriArmor® Corrosion Protection System





#### **EVERTOUGH™ CONSTRUCTION (OPTION)**

EVERTOUGH™ Construction combines the most corrosion resistant materials to provide the best value in corrosion protection. Specifically, a combination of the TriArmor® Corrosion Protection System and thermosetting hybrid polymer are used. EVERTOUGH™ Construction is backed by a comprehensive Louver-to-Louversм 5-year warranty, which covers ALL components from the fan to the cold water basin, from louver to louver, including the motor. A 5-year leak and corrosion warranty for the basin is also included for the TriArmor® Corrosion Protection System.

#### THERMOSETTING HYBRID POLYMER (OPTION)

A thermosetting hybrid polymer, used to extend equipment life, is applied to select G-235 hot-dip galvanized steel components of the unit. The polymerized coating is baked onto the G-235 hot-dip galvanized steel and creates a barrier to the already corrosion resistant galvanized steel. The thermosetting hybrid polymer has been tested to withstand 6,000 hours in a 5% salt spray without blistering, chipping, or loosing adhesion.

#### STAINLESS STEEL (OPTION)

Several Type 304 stainless steel material of construction options are available.

#### WELDED TYPE 304 STAINLESS STEEL COLD WATER BASIN

A Type 304 welded stainless steel cold water basin is available. All steel panels and structural members of the cold water basin are constructed from Type 304 stainless steel. Seams between panels inside the cold water basin are welded, providing an advantage over bolted stainless steel cold water basins for minimizing susceptibility to leaks at basin seams. The basin is leak tested at the factory and welded seams are provided with a 5-year, leak-proof warranty.

#### ALL TYPE 304 STAINLESS STEEL CONSTRUCTION

All steel panels and structural elements are constructed of Type 304 stainless steel.

#### **▶** SEISMIC/WIND UPGRADED STRUCTURE

Select steel panels and structural members are upgraded for higher seismic and wind load applications. An upgraded PT2 unit is certified to withstand up to an  $S_{\rm DS}$  of 2.93g and wind loads of 130 psf. All BAC upgraded units are shake table tested by an independent laboratory to certify the most accurate seismic ratings ensuring that the unit will remain operable following a seismic event.



EVERTOUGH™ Construction Installation



Welded Type 304 Stainless Steel Cold Water Basin



PT2 During Shake Table Testing

# > Drive System Options

The fan drive system provides the cooling air necessary to reject unwanted heat from the system to the atmosphere. All BAC drive systems use premium efficient cooling tower duty motors and include BAC's comprehensive 5-year motor and drive warranty. Cooling tower duty motors are specially designed for the harsh environment inside a cooling tower and have permanently lubricated bearings, drastically decreasing the maintenance requirement of the motor. BAC belt drive systems are the most durable and maintenance friendly drive systems on the market, including single nut adjustment for belt tensioning to make belt tensioning simple.





#### **ONE-FAN BALTIDRIVE® POWER TRAIN**

Standard on All Models Except PT2-0412A Direct Drive Models and PT2-1218A, Optional on PT2-1218A

The BALTIDRIVE® Power Train utilizes special corrosion resistant materials of construction and state-of-the-art technology to ensure ease of maintenance and reliable year-round performance. This BAC engineered drive system consists of a specially designed powerband and two cast aluminum sheaves located at minimal shaft centerline distances to maximize belt life. The BALTIDRIVE® Power Train requires only periodic inspection of components and belt tensioning, which is simple with a single nut adjustment, and requires less downtime.



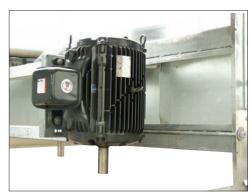
One-Fan BALTIDRIVE® Power Train Externally Mounted Motor Models PT2-0709A, PT2-0809A, and PT2-0812A



#### TWO-FAN BALTIDRIVE® POWER TRAIN

STANDARD ON PT2-1218A

BAC's largest PT2 box size is standard with a two-fan drive system. The PT2-1218A standard drive system is provided with independent fans and motors for capacity control and redundancy in critical applications. Each fan and motor combination is supplied with the BALTIDRIVE® Power Train fan drive system and includes all the same benefits of the one-fan BALTIDRIVE® Power Train (see description above) with the added capability of independent fan operation.



BALTIDRIVE® Power Train Internally Mounted Motor Models PT2-1009A, PT2-1012A, PT2-1212A, and PT2-1218A





#### INDEPENDENT DIRECT DRIVE MOTORS

Standard on Models PT2-0412A

The direct drive dual motor system with TEAO motors is factory mounted, alleviating the need for field installation and includes independent fans and motors for capacity control and redundancy in critical applications. Direct drive systems have the benefit of simplicity by having fewer moving parts, which reduces maintenance requirements and friction loses within the drive system.

#### VIBRATION CUTOUT SWITCH (OPTION)

A factory mounted vibration cutout switch is available to effectively protect against rotating equipment failure. BAC can provide either a mechanical or solid-state electronic vibration cutout switch in a NEMA 4 enclosure to ensure reliable protection. Additional contacts can be provided on either switch type to activate an alarm. Remote reset capability is also available on either switch type.



#### **EXTENDED LUBRICATION LINES**

Extended lubrication lines are available for lubrication of the fan shaft bearings. Fittings are located on the exterior casing panel next to the access door.

#### ► AUTOMATIC BEARING GREASER (OPTION)

Automatic Bearing Greasers come with BAC recommended grease, compatible with all BAC bearings and provide a continuous supply of new grease to eliminate the need for periodic bearing maintenance. Life of the bearing is extended by eliminating under and over greasing problems. Positive displacement pumps allow for mounting up to 30 feet away from the bearing. When the grease pouch is nearly depleted, three months to a year depending on bearing size, simply replace the pouch.



**Direct Drive Motors** 



**Vibration Cutout Switch** 



**Automatic Bearing Greasers** 

### Cold Water Basin

The cooling tower water collects in the cold water basin which provides the required head pressure for the cooling system pump. The PT2 cold water basin utilizes a sloped pan design to eliminate stagnant water zones, which are susceptible to biological growth.

#### STANDARD MECHANICAL WATER LEVEL CONTROL

Mechanical make-up valves must operate continuously in the moist and turbulent environment existing within evaporative cooling equipment. Due to this environment, the operation of the valve must be simple, and the valve must be durable. BAC's high quality mechanical water level control assembly is standard with all units, and has been specially designed to provide the most reliable operation while being easy to maintain. This accessory is omitted for remote sump applications.



Mechanical Water Level Control



#### **ELECTRIC WATER LEVEL CONTROL (OPTION)**

BAC's Electric Water Level Control (EWLC) is a state-of-theart conductivity actuated, probe type liquid level control. The hermetically sealed EWLC is engineered and manufactured specifically for use in evaporative cooling systems and is equipped with an error code LED which illuminates to indicate status, including when the water and/or probes are dirty. The EWLC option replaces the standard mechanical make-up valve, and includes a slow closing, solenoid activated valve in the make-up water line to minimize water hammer. EWLC is recommended when more precise water level control is required and in areas that experience subfreezing conditions.

#### SIDE OUTLET DEPRESSED SUMP BOX (OPTION)

A side outlet depressed sump box is available for field installation below the base of the tower. This option facilitates horizontal piping below the basin, and is a compact alternative to using an elbow in the piping arrangement, saving on both installation time and cost. The outlet connection is designed to mate with an ASME Class 150 flat face flange. See the "Connection Guide" on page J176 for more information on standard and optional unit connection types.



Electric Water Level Control





#### **BASIN HEATERS (OPTION)**

Evaporative cooling equipment exposed to below freezing ambient temperatures require protection to prevent freezing of the water in the cold water basin when the unit is idle. Factory-installed electric immersion heaters, which maintain 40°F (4.4°C) water temperature, are a simple and inexpensive way of providing such protection.

#### HEATER kW DATA

| Model Number | 0°F (-17.8°C) Ambient<br>Heater's kW | -20°F (-28.9°C) Ambient<br>Heater's kW |  |  |
|--------------|--------------------------------------|--|--|--|
| PT2-0412A    | 6                                    | 6                                      |  |  |
| PT2-0709A    | 6                                    | 8                                      |  |  |
| PT2-0809A    | 8                                    | 10                                     |  |  |
| PT2-0812A    | 10                                   | 12                                     |  |  |
| PT2-1009A    | 8                                    | 10                                     |  |  |
| PT2-1012A    | 10                                   | 14                                     |  |  |
| PT2-1212A    | 12                                   | 16                                     |  |  |
| PT2-1218A    | 18                                   | 24                                     |  |  |



Basin Heater



**NOTE:** One heater element is required. This table is based on 460V/3 phase/ 60 Hz power.

#### **BASIN SWEEPER PIPING (OPTION)**

Basin sweeper piping is an effective method of reducing sediment that may collect in the cold water basin of the unit. A complete piping system, including nozzles, is provided in the cold water basin to connect to side stream filtration equipment (provided by others). For more information on filtration systems, consult the "Filtration Guide" found on page J233.

#### LOW AND HIGH LEVEL ALARMS (OPTION)

Low and high level alarm float switches are available to provide added control to your equipment operation. Level alarms can alert operators to an abnormal operating condition to ensure the highest system efficiency with minimal water usage.



Basin Sweeper Piping

# > Multi-Cell Unit Options

Special care must be taken for multi-cell installations to ensure balanced water levels in the cold water basins across cells. If measures are not put in place to ensure balanced basin water levels, a potential exists that one basin may overflow and dump water, while the water level in another tower goes low and requires make-up. This leads to unnecessary water waste. To prevent this from occurring, BAC provides two options for balancing water levels and recommends that the installation be designed to ensure balanced flows to and from each tower.

#### FLUME BOX – STANDARD ON ALL MULTI-CELL UNITS

A flume box is provided as standard for multi-cell units to balance the water level in the cold water basins. See the "Connection Guide" on page J176 for more information.

#### **EQUALIZER (OPTION)**

Equalizer connections are available as an option for multi-cell cooling towers in lieu of a flume box. Use of an equalizer allows for easy isolation of a cell for winter operation, maintenance, or inspection while continuing system operation. See "Cooling Towers in Parallel" on page J167 for more information.



Flume Box Prepared for Shipping

# > Water Distribution System

The PT2 distribution system was specially designed for accessibility and maintainability. This includes the exclusive BranchLok™ Removal System, BAC non-clogging grommeted nozzles for easy removal and replacement, and a cleanout port that is conveniently located outside the unit for flushing the distribution system.

#### > STANDARD SIDE INLET CONNECTION

The PT2 is provided with a single inlet connection and an external header cleanout. This easily accessible cleanout port flushes any water distribution debris to the outside of the unit.



Side Inlet Connection





#### BRANCHLOK™ REMOVAL SYSTEM

The BranchLok™ Removal System is a water distribution branch removal system that requires no tools, allowing for easy inspection and maintenance of the water distribution. Maintainability ensures continued even flow over the heat transfer surface for maximum capacity.



PT2's BAC Pak<sup>TM</sup> Fill is exclusively designed to provide you guaranteed thermal performance and is made of PVC making it virtually impervious to rot, decay, and biological attack.



BranchLok™ Removal System



#### STANDARD FILL

Standard BAC Pak<sup>™</sup> Fill can be used in applications with entering water temperature up to 130°F (54.4°C). The fill and drift eliminators are formed from self-extinguishing PVC having a flame spread rating of 25 per ASTM E84.



An optional high temperature fill material is available which increases the maximum allowable entering water temperature to 140°F (60°C).



PT2 with One Fill Inspection Panel Removed

# Air Intake Options

In a cooling tower, airborne debris can be entrained in the water through the unit's air intake. Reducing the amount of debris that enters the tower lowers maintenance requirements and helps to maintain thermal efficiency.



#### **COMBINED INLET SHIELDS (CIS)**

The Combined Inlet Shields' (CIS) bent flow path blocks sunlight from the cold water basin and acts as a screen to prevent debris from entering the unit. These benefits result in a significant reduction in algae growth, debris accumulation, and scale build-up. CIS are constructed from corrosion and UV resistant PVC, are CTI certified, and are installed in easy to handle sections to facilitate removal, inspection, and replacement. The use of CIS results in lower maintenance costs and ease of maintenance over the life of the unit.



Combined Inlet Shields

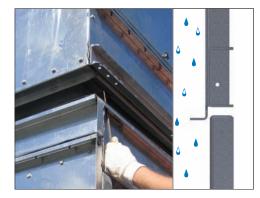
# **>** Shipping and Rigging

BAC units are factory-assembled to ensure uniform quality with minimum field assembly. Each unit has been designed with rigging and assembly in mind and includes features to minimize the number of tools required and installation time.



#### INTERLOK™ SYSTEM

The InterLok™ System is a self-aligning casing/basin joint that makes assembly easier. The alignment of the casing and basin joint determines the leak resistance of the joint. With the InterLok™ System, the joint is now inside the unit, therefore eliminating the possibility of water leakage at these seams. On the PT2, this specially designed joint eliminates the need for sealer tape and significantly reduces rigging time.



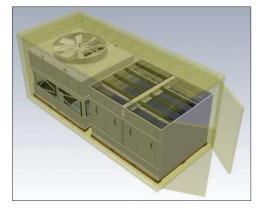
InterLok™ System

#### ► KNOCKDOWN UNITS (OPTION)

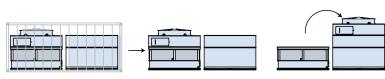
Knockdown units are available for jobs where access to the cooling tower location is limited by elevators, doorways, or similar obstacles, where lifting methods impose very strict weight limits, or where the shipping cost of a fully assembled tower is excessive. All materials of construction and design features are the same as those of a factory assembled unit. Welded Type 304 stainless steel cold water basins and TriArmor® Corrosion Protection System cold water basins are excluded due to the need for in-plant assembly.

#### ► CONTAINERIZED UNITS (OPTION)

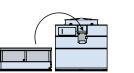
The PT2-0412A and PT2-0709A can be containerized in a standard shipping container for easy export, allowing for the lowest transportation cost possible when providing high quality BAC units to all parts of the world.

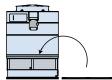


PT2-0709A in a Standard Shipping Container



Easily Assembled Containerized Units







# > Sound Options

Recognition of the importance of sound restriction is growing and can be a very important design criterion for any project. BAC maintains the widest selection of sound mitigating options in the market place and can provide the most cost effective option to meet any requirement.

#### STANDARD FAN

The fan provided for all PT2 Cooling Towers is selected to optimize low sound levels and maximize thermal performance.

#### **LOW SOUND FAN (OPTION)**

The Low Sound Fan option reduces sound up to 8 dBA. Adding a high solidity fan allows for decreased fan speed, which proportionally decreases sound levels. The thermal performance with the Low Sound Fan has been certified in accordance with CTI Standard STD-201.

Whisper Quiet Fan

#### WHISPER QUIET FAN (OPTION)

The Whisper Quiet Fan reduces sound up to 15 dBA. This single piece, high solidity fan is made from chemical resistant fiber reinforced polyester (FRP) and comes standard with blade leading protection. As a single piece fan, the non-corrosive blades are permanently pitched and require minimal maintenance. The thermal performance with the Whisper Quiet Fan has been certified in accordance with CTI Standard STD-201.

#### **▶ WATER SILENCERS (OPTION)**

Water silencers are available to reduce the sound of falling water inherent in induced draft counterflow cooling towers. When utilized with one of BAC's inherently Low Sound Fans, the sound contribution due to water noise can be reduced to negligible levels.



Water Silencers

### Access Options

BAC provides a broad offering of access options. Our evaporative equipment is designed to be the most easily maintained for sustaining capacity over a longer life. All BAC platforms and ladders are OSHA compliant to ensure personnel safety and code compliance.

#### MOTOR REMOVAL SYSTEM (OPTION)

All motor removal system options include davit arm(s) to facilitate motor replacement.

#### MODULAR EXTERNAL PLATFORMS AND LADDER PACKAGES (OPTION)

Every modular external platform is preassembled and pre-fitted at the factory to ensure that every component will fit and function exactly as described. The platform is rigged easily in the field with minimum fasteners, and drastically reduces the time required for rigging external access platforms.

#### ACCESS DOOR PLATFORM AND LADDER PACKAGES (OPTION)

An access door platform is available for safe access to the unit, as well as a working platform to stage tools for maintenance.

#### **EXTERNAL LADDER (OPTION)**

The PT2 can be furnished with an inclined ladder - a 75° angled ladder - extending from the base of the unit to the access door, providing safe access with minimal space requirements. All components are designed to meet OSHA requirements.



Motor Removal System with Davit Arms

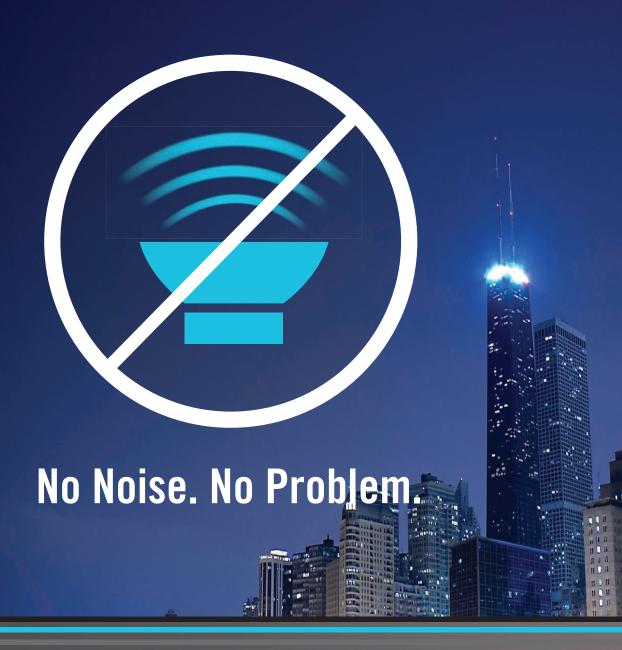


External Ladder



Access Door Platforms





BAC introduces the new ultra low sound Whisper Quiet Fan for the industry leading PT2 Cooling Tower. No more worrying about projects in residential areas or healthcare facilities with tight sound restrictions.

With **up to 15 dBA of sound reduction**, the Whisper Quiet Fan will make you wonder if the PT2 is even running.



# PT2 Engineering Data

### > Performance Data

|   | Airflow  | 1 Cell   |   | 2 Cell: PT2-   | XXXXA-XX2 <sup>[2]</sup>   | 2 Cell: PT2-   | 1218A-XXT <sup>[2]</sup>  | 3 0   | Cell  | 4 Cell  |   |
|---|--|--|---|--|--|--|---|---|---|---|---|
| Model Number <sup>[1]</sup>   | Per Cell   | Nominal  | Motor Qty.  | Nominal  | Motor Qty.   | Nominal  | Motor Qty.  | Nominal   | Motor Qty.  | Nominal   | Motor Qty.  |
|   | (CFM)  | Tonnage <sup>[3]</sup>   | and HP  | Tonnage <sup>[3]</sup>   | and HP   | Tonnage <sup>[3]</sup>   | and HP  | Tonnage <sup>[3]</sup>  | and HP  | Tonnage <sup>[3]</sup>  | and HP  |
| PT2-0412A-1H*<br>PT2-0412A-2J*  | 30,750<br>33,520   | 117<br>149   | (2) 5<br>(2) 7.5  | _<br>_   | _<br>_   | _  | _<br>_  | _<br>_  |   |   |   |
| PT2-0709A-1K*   | 43,910   | 157  | (1) 10  | 316  | (2) 10   | _  | _   | 481   | (3) 10  | _   | _   |
| PT2-0709A-2L*   | 46,500   | 199  | (1) 15  | 400  | (2) 15   | _  | _   | 606   | (3) 15  | _   | _   |
| PT2-0709A-3L*   | 43,520   | 210  | (1) 15  | 423  | (2) 20   | _  | _   | 640   | (3) 20  | _   | _   |
| PT2-0809A-1K*   | 47,000   | 168  | (1) 10  | 338  | (2) 10   | _  | _   | 514   | (3) 10  | _   | _   |
| PT2-0809A-2L*   | 50,340   | 215  | (1) 15  | 433  | (2) 15   | _  | _   | 656   | (3) 15  | _   | _   |
| PT2-0809A-3M*   | 51,820   | 250  | (1) 20  | 503  | (2) 20   | _  | _   | 761   | (3) 20  | _   | _   |
| PT2-0812A-1M*   | 74,360   | 265  | (1) 20  | 536  | (2) 20   | _  | _   | 816   | (3) 20  | _   | _   |
| PT2-0812A-2N*   | 73,720   | 315  | (1) 25  | 635  | (2) 25   | _  | _   | 963   | (3) 25  | _   | _   |
| PT2-0812A-30*   | 72,490   | 350  | (1) 30  | 704  | (2) 30   | _  | _   | 1,066   | (3) 30  | _   | _   |
| PT2-1009A-1L*   | 62,510   | 223  | (1) 15  | 446  | (2) 15   | _  | _   | 679   | (3) 15  | 901   | (4) 15  |
| PT2-1009A-2M*   | 62,860   | 268  | (1) 20  | 537  | (2) 20   | _  | _   | 814   | (3) 20  | 1,082   | (4) 20  |
| PT2-1009A-3N*   | 76,360   | 301  | (1) 25  | 602  | (2) 25   | _  | _   | 911   | (3) 25  | 1,211   | (4) 25  |
| PT2-1012A-1M*   | 81,730   | 292  | (1) 20  | 586  | (2) 20   | _  | _   | 890   | (3) 20  | 1,173   | (4) 20  |
| PT2-1012A-20*   | 86,260   | 368  | (1) 30  | 740  | (2) 30   | _  | _   | 1,120   | (3) 30  | 1,481   | (4) 30  |
| PT2-1012A-30*   | 80,690   | 389  | (1) 30  | 781  | (2) 30   | _  | _   | 1,182   | (3) 30  | 1,564   | (4) 30  |
| PT2-1212A-1N*   | 101,160  | 361  | (1) 25  | 721  | (2) 25   | _  | _   | 1,092   | (3) 25  | 1,441   | (4) 25  |
| PT2-1212A-20*   | 101,190  | 432  | (1) 30  | 863  | (2) 30   | _  | _   | 1,305   | (3) 30  | 1,726   | (4) 30  |
| PT2-1212A-3P*   | 104,080  | 502  | (1) 40  | 1,004  | (2) 40   | _  | _   | 1,515   | (3) 40  | 2,007   | (4) 40  |
| PTZ-1218A-1K* PTZ-1218A-1L* PTZ-1218A-1N* PTZ-1218A-1N* PTZ-1218A-1P* PTZ-1218A-2K* PTZ-1218A-2K* PTZ-1218A-2N* PTZ-1218A-2N* PTZ-1218A-2P* PTZ-1218A-2P* PTZ-1218A-2P* PTZ-1218A-3K* PTZ-1218A-3K* PTZ-1218A-3N* PTZ-1218A-3N* PTZ-1218A-3N* PTZ-1218A-3P* PTZ-1218A-3P* PTZ-1218A-3P* PTZ-1218A-3P* PTZ-1218A-3P* PTZ-1218A-3P* PTZ-1218A-3P* PTZ-1218A-3P* | 99,330<br>113,210<br>124,140<br>133,280<br>141,220<br>154,630<br>93,890<br>106,970<br>117,260<br>125,870<br>133,330<br>145,940<br>156,460<br>89,340<br>101,590<br>111,200<br>119,210<br>126,150<br>137,830<br>147,550<br>155,940 | 355<br>404<br>442<br>474<br>502<br>550<br>402<br>456<br>500<br>536<br>568<br>622<br>667<br>427<br>485<br>531<br>569<br>603<br>660<br>750 | (2) 5<br>(2) 7.5<br>(2) 10<br>(2) 15 <sup>[4]</sup><br>(2) 15<br>(2) 20<br>(2) 5<br>(2) 7.5<br>(2) 10<br>(2) 15 <sup>[4]</sup><br>(2) 15<br>(2) 20<br>(2) 25<br>(2) 7.5<br>(2) 10<br>(2) 15 <sup>[4]</sup><br>(2) 15<br>(2) 20<br>(2) 25<br>(2) 5<br>(2) 7.5<br>(2) 10<br>(2) 15 <sup>[4]</sup><br>(2) 15<br>(2) 20<br>(2) 25<br>(2) 20<br>(2) 25<br>(2) 30 | 713<br>811<br>887<br>952<br>1,008<br>1,104<br>805<br>914<br>1,001<br>1,074<br>1,137<br>1,245<br>1,336<br>854<br>971<br>1,063<br>1,140<br>1,207<br>1,322<br>1,418 | (4) 5<br>(4) 7.5<br>(4) 10<br>(4) 15 <sup>[4]</sup><br>(4) 15<br>(4) 20<br>(4) 5<br>(4) 7.5<br>(4) 10<br>(4) 15 <sup>[4]</sup><br>(4) 15<br>(4) 20<br>(4) 25<br>(4) 7.5<br>(4) 10<br>(4) 15 <sup>[4]</sup><br>(4) 15<br>(4) 20<br>(4) 25<br>(4) 7.5<br>(4) 10<br>(4) 15 <sup>[4]</sup><br>(4) 15<br>(4) 20<br>(4) 25<br>(4) 30 | 711<br>808<br>884<br>949<br>1,005<br>1,100<br>803<br>912<br>999<br>1,072<br>1,135<br>1,243<br>1,333<br>852<br>969<br>1,060<br>1,138<br>1,205<br>1,319<br>1,419 | (4) 5<br>(4) 7.5<br>(4) 10<br>(4) 15 <sup>(4)</sup><br>(4) 15<br>(4) 20<br>(4) 5<br>(4) 7.5<br>(4) 10<br>(4) 15 <sup>(4)</sup><br>(4) 15<br>(4) 20<br>(4) 25<br>(4) 5<br>(4) 7.5<br>(4) 10<br>(4) 15 <sup>(4)</sup><br>(4) 15<br>(4) 20<br>(4) 25<br>(4) 20<br>(4) 25<br>(4) 30 | 1,072<br>1,218<br>1,334<br>1,431<br>1,515<br>1,659<br>1,209<br>1,374<br>1,504<br>1,613<br>1,709<br>1,871<br>2,007<br>1,283<br>1,458<br>1,596<br>1,712<br>1,813<br>1,986<br>2,130<br>2,256 | (6) 5<br>(6) 7.5<br>(6) 10<br>(6) 15 <sup>[4]</sup><br>(6) 15<br>(6) 20<br>(6) 5<br>(6) 7.5<br>(6) 10<br>(6) 15 <sup>[4]</sup><br>(6) 15<br>(6) 25<br>(6) 7.5<br>(6) 10<br>(6) 15 <sup>[4]</sup><br>(6) 15<br>(6) 25<br>(6) 5<br>(6) 7.5<br>(6) 10<br>(6) 15 <sup>[4]</sup><br>(6) 15<br>(6) 25<br>(6) 25<br>(6) 25<br>(6) 30 | 1,400<br>1,591<br>1,742<br>1,869<br>1,979<br>2,167<br>1,587<br>1,803<br>1,974<br>2,117<br>2,243<br>2,455<br>2,634<br>1,687<br>1,917<br>2,099<br>2,252<br>2,385<br>2,611<br>2,801<br>2,967 | (8) 5<br>(8) 7.5<br>(8) 10<br>(8) 15 <sup>[4]</sup><br>(8) 15<br>(8) 20<br>(8) 5<br>(8) 7.5<br>(8) 10<br>(8) 15 <sup>[4]</sup><br>(8) 15<br>(8) 25<br>(8) 5<br>(8) 7.5<br>(8) 10<br>(8) 15 <sup>[4]</sup><br>(8) 15<br>(8) 15<br>(8) 20<br>(8) 25<br>(8) 20<br>(8) 25<br>(8) 30 |

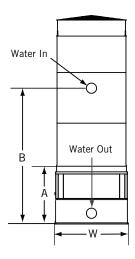


#### **NOTES:**

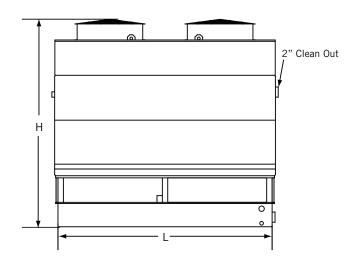
- 1. \* in Model Number above indicates number of cells.
- 2. For a plan view of Models PT2-1218A-\*\*2 and PT2-1218A-\*\*T, see **page B89**.
- 3. Nominal tons of cooling represents 3 USGPM of water from 95°F to 85°F at a 78°F entering wet-bulb temperature.
- 4. The cell will have a break horsepower of 25 HP.
- 5. Up-to-date engineering data, free product selection software, and more can be found at www.BaltimoreAircoil.com.



### **> Dimensional Data**



Face A: Models PT2-0412A



Single Cell Face C: Models PT2-0412A

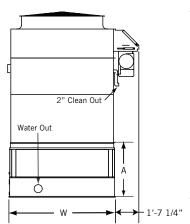
|                             | Nomin                    | al Weights ( | lbs)                | Dimensions |       |        |       |       |   |  |
|-----------------------------|--------------------------|--------------|---------------------|------------|-------|--------|-------|-------|---|--|
| Model Number <sup>(1)</sup> | Operating <sup>(2)</sup> | Shipping     | Heaviest<br>Section | L          | w     | Н      | A     | В     | F |  |
| PT2-0412A-1*1               | 5,670                    | 3,240        | 2,470               | 12'-0"     | 4'-0" | 10'-1" | 3'-3" | 6'-5" | _ |  |
| PT2-0412A-2*1               | 5,950                    | 3,520        | 2,600               | 12'-0"     | 4'-0" | 11'-1" | 3'-3" | 7'-5" | _ |  |

#### NOTES:

- 1. Data corresponds to all available motors for this model.
- 2. Operating weight is based on the water level in the cold water basin at overflow height. If a lower operating weight is needed to meet design requirements, your local BAC Representative can provide additional assistance.

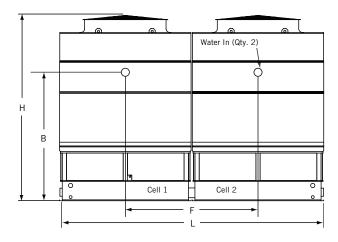
**Do not use for construction.** Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.

# PT2 Engineering Data



H Water In

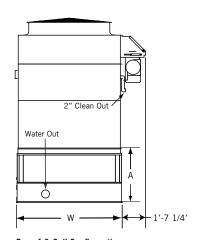
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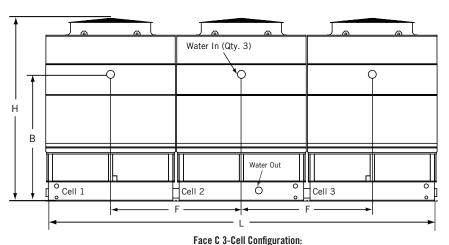
Face A: Models PT2-0709A, PT2-0809A, and PT2-0812A (For 2-Cell and 3-Cell Configurations, Connections Typical at Each End)

Single Cell Face C:
Models PT2-0709A, PT2-0809A, and PT2-0812A

Face C 2-Cell Configuration:
Models PT2-0709A, PT2-0809A, and PT2 0812A



Face A 3-Cell Configuration:
Models PT2-0709A, PT2-0809A, and PT2-0812A
(Connections Typical at Each End)



Models PT2-0709A, PT2-0809A, and PT2-0812A



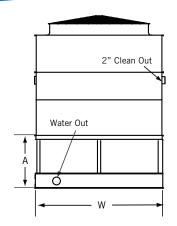
|                             | Nomin                    | al Weights ( | lbs)                |        |       | Dimen  | sions |         |        |
|-----------------------------|--------------------------|--------------|---------------------|--------|-------|--------|-------|---------|--------|
| Model Number <sup>(1)</sup> | Operating <sup>[2]</sup> | Shipping     | Heaviest<br>Section | L      | w     | Н      | A     | В       | F      |
| PT2-0709A-1*1               | 6,250                    | 3,490        | 2,380               | 9'-0"  | 7'-4" | 11'-5" | 3'-9" | 6'-10"  | _      |
| PT2-0709A-2*1               | 6,540                    | 3,780        | 2,840               | 9'-0"  | 7'-4" | 12'-5" | 3'-9" | 7'-10"  | _      |
| PT2-0709A-3*1               | 6,930                    | 4,170        | 3,240               | 9'-0"  | 7'-4" | 13'-5" | 3'-9" | 8'-10"  | _      |
| PT2-0709A-1*2               | 12,610                   | 7,100        | 2,550               | 18'-1" | 7'-4" | 12'-5" | 4'-9" | 7'-10"  | 9'-1"  |
| PT2-0709A-2*2               | 13,190                   | 7,680        | 2,840               | 18'-1" | 7'-4" | 13'-5" | 4'-9" | 8'-10"  | 9'-1"  |
| PT2-0709A-3*2               | 13,980                   | 8,470        | 3,240               | 18'-1" | 7'-4" | 14'-5" | 4'-9" | 9'-10"  | 9'-1"  |
| PT2-0709A-1*3               | 19,500                   | 11,230       | 2,680               | 27'-2" | 7'-4" | 13'-5" | 5'-9" | 8'-10"  | 9'-1"  |
| PT2-0709A-2*3               | 19,990                   | 11,720       | 2,840               | 27'-2" | 7'-4" | 14'-5" | 5'-9" | 8'-10"  | 9'-1"  |
| PT2-0709A-3*3               | 21,540                   | 13,270       | 3,240               | 27'-2" | 7'-4" | 15'-5" | 5'-9" | 10'-10" | 9'-1"  |
| PT2-0809A-1*1               | 6,920                    | 3,840        | 2,880               | 9'-0"  | 8'-6" | 11'-7" | 3'-9" | 6'-11"  | _      |
| PT2-0809A-2*1               | 7,220                    | 4,140        | 3,180               | 9'-0"  | 8'-6" | 12'-7" | 3'-9" | 7'-11"  | _      |
| PT2-0809A-3*1               | 7,550                    | 4,470        | 3,500               | 9'-0"  | 8'-6" | 13'-7" | 3'-9" | 8'-11"  | _      |
| PT2-0809A-1*2               | 14,030                   | 7,880        | 2,910               | 18'-1" | 8'-6" | 12'-7" | 4'-9" | 7'-11"  | 9'-1"  |
| PT2-0809A-2*2               | 14,570                   | 8,420        | 3,180               | 18'-1" | 8'-6" | 13'-7" | 4'-9" | 8'-11"  | 9'-1"  |
| PT2-0809A-3*2               | 15,230                   | 9,080        | 3,500               | 18'-1" | 8'-6" | 14'-7" | 4'-9" | 9'-11"  | 9'-1"  |
| PT2-0809A-1*3               | 21,180                   | 11,950       | 2,880               | 27'-2" | 8'-6" | 13'-7" | 5'-9" | 8'-10"  | 9'-1"  |
| PT2-0809A-2*3               | 22,080                   | 12,850       | 3,180               | 27'-2" | 8'-6" | 14'-7" | 5'-9" | 8'-10"  | 9'-1"  |
| PT2-0809A-3*3               | 23,450                   | 14,220       | 3,500               | 27'-2" | 8'-6" | 15'-7" | 5'-9" | 10'-11" | 9'-1"  |
| PT2-0812A-1*1               | 8,880                    | 4,750        | 3,460               | 12'-0" | 8'-6" | 11'-8" | 4'-2" | 7'-4"   | _      |
| PT2-0812A-2*1               | 9,200                    | 5,070        | 3,750               | 12'-0" | 8'-6" | 12'-8" | 4'-2" | 8'-4"   | _      |
| PT2-0812A-3*1               | 9,520                    | 5,390        | 4,040               | 12'-0" | 8'-6" | 13'-8" | 4'-2" | 9'-4"   | _      |
| PT2-0812A-1*2               | 17,950                   | 9,680        | 3,460               | 24'-1" | 8'-6" | 12'-8" | 5'-2" | 8'-4"   | 12'-1" |
| PT2-0812A-2*2               | 18,590                   | 10,320       | 3,750               | 24'-1" | 8'-6" | 13'-8" | 5'-2" | 9'-4"   | 12'-1" |
| PT2-0812A-3*2               | 19,230                   | 10,960       | 4,040               | 24'-1" | 8'-6" | 14'-8" | 5'-2" | 10'-4"  | 12'-1" |
| PT2-0812A-1*3               | 27,190                   | 14,790       | 3,460               | 36'-2" | 8'-6" | 13'-8" | 6'-2" | 9'-4"   | 12'-1" |
| PT2-0812A-2*3               | 28,150                   | 15,750       | 3,750               | 36'-2" | 8'-6" | 14'-8" | 6'-2" | 10'-4"  | 12'-1" |
| PT2-0812A-3*3               | 29,860                   | 17,460       | 4,160               | 36'-2" | 8'-6" | 15'-8" | 6'-2" | 11'-4"  | 12'-1" |

#### **NOTES:**

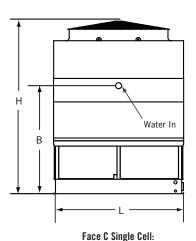
- 1. Data corresponds to all available motors for this model.
- 2. Operating weight is based on the water level in the cold water basin at overflow height. If a lower operating weight is needed to meet design requirements, your local BAC Representative can provide additional assistance.

**Do not use for construction.** Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.

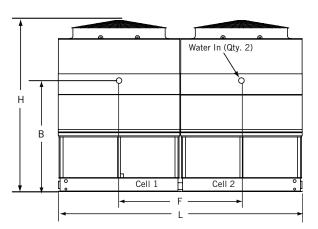
# PT2 Engineering Data



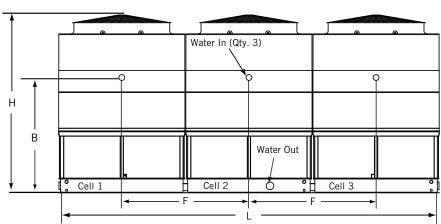
Face A: Models PT2-1009A, PT2-1012A, and PT2-1212A (For 2-Cell and 3-Cell Configurations, Connections Typical at Each End)



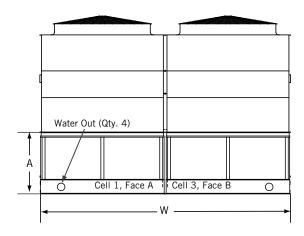
Models PT2-1009A, PT2-1012A, and PT2-1212A



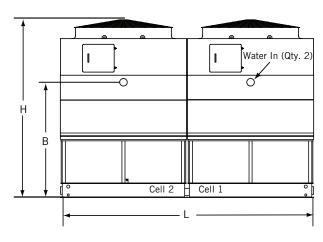
Face C 2-Cell:
Models PT2-1009A, PT2-1012A, and PT2-1212A



Face C 3-Cell: Models PT2-0709A, PT2-0809A, and PT2-0812A



Face A/B Quad Configuration: Models PT2-1009A, PT2-1012A, and PT2-1212A,
Connections Typical at Each End



**Face C Quad Configuration:** Models PT2-1009A, PT2-1012A, and PT2-1212A, Connections Typical at Each End



|                             | Nomin                    | al Weights ( | lbs)                |        |         | Dimer   | sions  |         |        |
|-----------------------------|--------------------------|--------------|---------------------|--------|---------|---------|--------|---------|--------|
| Model Number <sup>(1)</sup> | Operating <sup>(2)</sup> | Shipping     | Heaviest<br>Section | ı,     | w       | Н       | A      | В       | F      |
| PT2-1009A-1*1               | 7,770                    | 4,330        | 3,340               | 9'-0"  | 9'-10"  | 13'-1"  | 4'-2"  | 7'-3"   | _      |
| PT2-1009A-2*1               | 8,080                    | 4,640        | 3,630               | 9'-0"  | 9'-10"  | 14'-1"  | 4'-2"  | 8'-3"   | _      |
| PT2-1009A-3*1               | 8,670                    | 5,230        | 4,200               | 9'-0"  | 9'-10"  | 15'-1"  | 4'-2"  | 9'-3"   | _      |
| PT2-1009A-1*2               | 15,710                   | 8,820        | 3,340               | 18'-1" | 9'-10"  | 14'-1"  | 5'-2"  | 8'-3"   | 9'-1"  |
| PT2-1009A-2*2               | 16,330                   | 9,440        | 3,630               | 18'-1" | 9'-10"  | 15'-1"  | 5'-2"  | 9'-3"   | 9'-1"  |
| PT2-1009A-3*2               | 17,010                   | 10,120       | 3,950               | 18'-1" | 9'-10"  | 16'-1"  | 5'-2"  | 10'-2"  | 9'-1"  |
| PT2-1009A-1*3               | 23,800                   | 13,470       | 3,340               | 27'-2" | 9'-10"  | 15'-1"  | 6'-2"  | 9'-3"   | 9'-1"  |
| PT2-1009A-2*3               | 24,730                   | 14,400       | 3,630               | 27'-2" | 9'-10"  | 16'-1"  | 6'-2"  | 10'-3"  | 9'-1"  |
| PT2-1009A-3*3               | 26,130                   | 15,800       | 3,950               | 27'-2" | 9'-10"  | 17'-1"  | 6'-2"  | 11'-3"  | 9'-1"  |
| PT2-1009A-1*4               | 32,390                   | 18,610       | 3,370               | 18'-1" | 19'-9"  | 16'-1"  | 7'-2"  | 10'-3"  | _      |
| PT2-1009A-2*4               | 33,640                   | 19,860       | 3,630               | 18'-1" | 19'-9"  | 17'-1"  | 7'-2"  | 11'-3"  | _      |
| PT2-1009A-3*4               | 35,500                   | 21,720       | 3,950               | 18'-1" | 19'-9"  | 18'-1"  | 7'-2"  | 12'-3"  | _      |
| PT2-1012A-1*1               | 10,800                   | 6,210        | 4,900               | 12'-0" | 9'-10"  | 13'-5"  | 4'-5"  | 7'-6"   | _      |
| PT2-1012A-2*1               | 10,800                   | 6,210        | 4,900               | 12'-0" | 9'-10"  | 14'-4"  | 4'-5"  | 8'-6"   | _      |
| PT2-1012A-3*1               | 11,210                   | 6,620        | 5,280               | 12'-0" | 9'-10"  | 15'-5"  | 4'-5"  | 9'-6"   | _      |
| PT2-1012A-1*2               | 21,020                   | 11,830       | 4,520               | 24'-1" | 9'-10"  | 14'-4"  | 5'-5"  | 8'-6"   | 12'-1" |
| PT2-1012A-2*2               | 21,830                   | 12,640       | 4,900               | 24'-1" | 9'-10"  | 15'-4"  | 5'-5"  | 9'-6"   | 12'-1" |
| PT2-1012A-3*2               | 22,630                   | 13,440       | 5,280               | 24'-1" | 9'-10"  | 16'-4"  | 5'-5"  | 10'-6"  | 12'-1" |
| PT2-1012A-1*3               | 31,850                   | 18,070       | 4,520               | 36'-2" | 9'-10"  | 15'-4"  | 6'-5"  | 9'-6"   | 12'-1" |
| PT2-1012A-2*3               | 33,050                   | 19,270       | 4,900               | 36'-2" | 9'-10"  | 16'-4"  | 6'-5"  | 10'-6"  | 12'-1" |
| PT2-1012A-3*3               | 34,750                   | 20,970       | 5,280               | 36'-2" | 9'-10"  | 17'-4"  | 6'-5"  | 11'-6"  | 12'-1" |
| PT2-1012A-1*4               | 43,150                   | 24,780       | 4,900               | 24'-1" | 19'-9"  | 16'-4"  | 7'-5"  | 10'-6"  | _      |
| PT2-1012A-2*4               | 44,930                   | 26,560       | 4,900               | 24'-1" | 19'-9"  | 17'-4"  | 7'-5"  | 11'-6"  | _      |
| PT2-1012A-3*4               | 47,190                   | 28,820       | 5,280               | 24'-1" | 19'-9"  | 18'-4"  | 7'-5"  | 12'-6"  | _      |
| PT2-1212A-1*1               | 11,800                   | 6,560        | 4,760               | 12'-0" | 11'-10" | 13'-11" | 4'-11" | 8-0"    | _      |
| PT2-1212A-2*1               | 12,350                   | 7,110        | 5,310               | 12'-0" | 11'-10" | 14'-11" | 4'-11" | 9'-0"   | _      |
| PT2-1212A-3*1               | 12,900                   | 7,660        | 5,870               | 12'-0" | 11'-10" | 15'-11" | 4'-11" | 9'-12"  | _      |
| PT2-1212A-1*2               | 23,730                   | 13,260       | 4,760               | 24'-1" | 11'-10" | 14'-11" | 5'-11" | 8'-12"  | 12'-1" |
| PT2-1212A-2*2               | 24,840                   | 14,370       | 5,310               | 24'-1" | 11'-10" | 15'-11" | 5'-11" | 9'-12"  | 12'-1" |
| PT2-1212A-3*2               | 25,950                   | 15,480       | 5,870               | 24'-1" | 11'-10" | 16'-11" | 5'-11" | 10'-12" | 12'-1" |
| PT2-1212A-1*3               | 35,830                   | 20,120       | 4,760               | 36'-2" | 11'-10" | 15'-11" | 6'-11" | 9'-12"  | 12'-1" |
| PT2-1212A-2*3               | 37,490                   | 21,780       | 5,310               | 36'-2" | 11'-10" | 16'-11" | 6'-11" | 10'-12" | 12'-1" |
| PT2-1212A-3*3               | 39,150                   | 23,440       | 5,870               | 36'-2" | 11'-10" | 17'-11" | 6'-11" | 11'-12" | 12'-1" |
| PT2-1212A-1*4               | 47,910                   | 26,970       | 4,760               | 24'-1" | 23'-9"  | 16'-11" | 7'-11" | 10'-12" | _      |
| PT2-1212A-2*4               | 50,130                   | 29,190       | 5,310               | 24'-1" | 23'-9"  | 17'-11" | 7'-11" | 11'-12" | _      |
| PT2-1212A-3*4               | 52,340                   | 31,400       | 5,870               | 24'-1" | 23'-9"  | 18'-11" | 7'-11" | 12'-12" | _      |

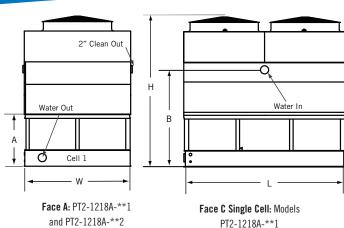


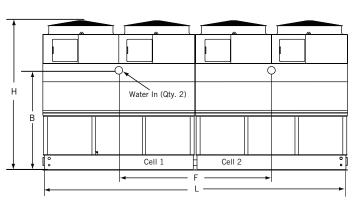
#### **NOTES:**

- 1. Data corresponds to all available motors for this model.
- 2. Operating weight is based on the water level in the cold water basin at overflow height. If a lower operating weight is needed to meet design requirements, your local BAC Representative can provide additional assistance.

**Do not use for construction.** Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.

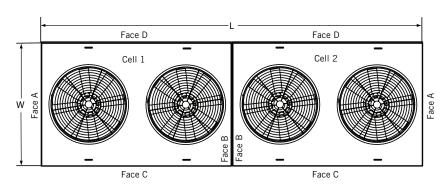
# PT2 Engineering Data



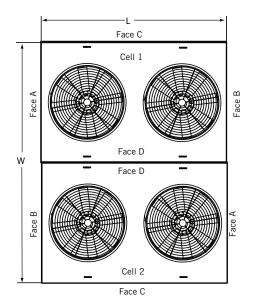


and PT2-1218A-\*\*2 (For 2-Cell Configurations, Connections Typical at Each End)

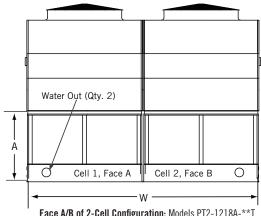
Face C 2-Cell: Models PT2-1218A-\*\*2



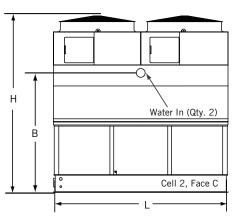
Plan View 2-Cell: Models PT2-1218A-\*\*2



Plan View 2-Cell: Models PT2-1218A-\*\*T

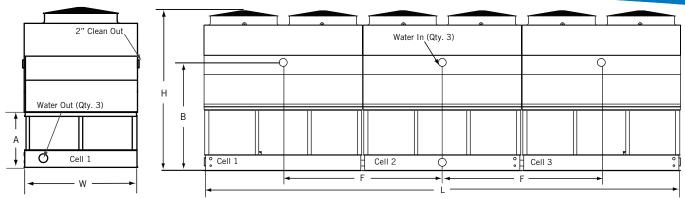


Face A/B of 2-Cell Configuration: Models PT2-1218A-\*\*T (Connections Typical at Each End)



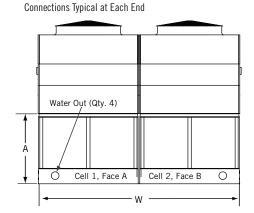
Face C 2-Cell Configuration: Models PT2-1218A-\*\*T



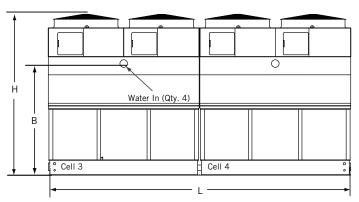


Face A 3-Cell Configuration: Models PT2-1218A-\*\*3

Face C 3-Cell Configuration: Models PT2-1218A-\*\*3



Face A/B Quad Configuration for Models PT2-1218A-\*\*4, Connections Typical at Each End



Face C Quad Configuration for Models PT2-1218A-\*\*4 , Connections Typical at Each End

|                             | Nomin                    | al Weights ( | lbs)                |        |         | Dimen  | sions  |         |        |
|-----------------------------|--------------------------|--------------|---------------------|--------|---------|--------|--------|---------|--------|
| Model Number <sup>(1)</sup> | Operating <sup>(2)</sup> | Shipping     | Heaviest<br>Section | L      | w       | Н      | A      | В       | F      |
| PT2-1218A-1*1               | 19,640                   | 10,250       | 6,540               | 18'-1" | 11'-10" | 14'-9" | 5'-10" | 8'-10"  | _      |
| PT2-1218A-2*1               | 20,310                   | 10,920       | 7,210               | 18'-1" | 11'-10" | 15'-9" | 5'-10" | 9'-10"  | _      |
| PT2-1218A-3*1               | 20,590                   | 11,200       | 7,490               | 18'-1" | 11'-10" | 16'-9" | 5'-10" | 10'-10" | _      |
| PT2-1218A-1*2               | 39,510                   | 20,740       | 6,540               | 36'-1" | 11'-10" | 15'-9" | 6'-10" | 9'-10"  | 18'-1" |
| PT2-1218A-2*2               | 40,860                   | 22,090       | 7,210               | 36'-1" | 11'-10" | 16'-9" | 6'-10" | 10'-10" | 18'-1" |
| PT2-1218A-3*2               | 41,420                   | 22,650       | 7,490               | 36'-1" | 11'-10" | 17'-9" | 6'-10" | 11'-10" | 18'-1" |
| PT2-1218A-1*T               | 39,640                   | 20,870       | 6,540               | 18'-1" | 23'-9"  | 16'-3" | 7'-4"  | 10'-4"  | _      |
| PT2-1218A-2*T               | 40,990                   | 22,220       | 7,210               | 18'-1" | 23'-9"  | 17'-3" | 7'-4"  | 11'-4"  | _      |
| PT2-1218A-3*T               | 41,550                   | 22,780       | 7,490               | 18'-1" | 23'-9"  | 18'-3" | 7'-4"  | 12'-4"  | _      |
| PT2-1218A-1*3               | 59,470                   | 31,310       | 6,540               | 54'-2" | 11'-10" | 16'-3" | 7'-4"  | 10'-4"  | 18'-1" |
| PT2-1218A-2*3               | 61,490                   | 33,330       | 7,210               | 54'-2" | 11'-10" | 17'-3" | 7'-4"  | 11'-4"  | 18'-1" |
| PT2-1218A-3*3               | 62,330                   | 34,170       | 7,490               | 54'-2" | 11'-10" | 18'-3" | 7'-4"  | 12'-4"  | 18'-1" |
| PT2-1218A-1*4               | 79,780                   | 42,230       | 6,540               | 36'-1" | 23'-9"  | 17'-3" | 8'-4"  | 11'-4"  | _      |
| PT2-1218A-2*4               | 82,480                   | 44,930       | 7,210               | 36'-1" | 23'-9"  | 18'-3" | 8'-4"  | 12'-4"  | _      |
| PT2-1218A-3*4               | 83,590                   | 46,040       | 7,490               | 36'-1" | 23'-9"  | 19'-3" | 8'-4"  | 13'-4"  | _      |



**NOTE:** See notes on **page B88**. **Do not use for construction.** Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.

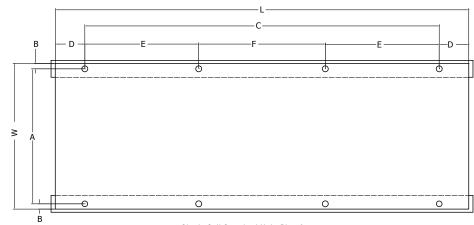
# PT2 Structural Support: Plan A

The recommended support arrangement for the PT2 Cooling Tower consists of parallel I-beams positioned as shown on the drawing below. Besides providing adequate support, the steel also serves to raise the unit above any solid foundation to assure access to the bottom of the tower. The PT2 Cooling Tower may also be supported on columns at the anchor bolt locations shown.

A minimum bearing surface of 12 in² must be provided under each of the concentrated load points. To support a PT2 Cooling Tower on columns with an alternate steel support arrangement, or the optional structurally upgraded unit, consult your local BAC Representative.

#### **NOTES:**

- Contact your local BAC Representative for multi-cell or structurally upgraded unit steel support.
- 2. Support beams and anchor bolts to be selected and installed by others.
- 3. All support steel must be level at the top.
- 4. Beam size should be calculated in accordance with accepted structural practice. Maximum deflection of beam under unit to be 1/360 of span, not to exceed 1/2". Use 65% of operating weight as a uniform load on each beam. The length of the beam must be at least equal to the length of the basin. Refer to engineering data for basin dimensions. Support data is tabulated in the table to the right.
- 5. If vibration isolation rails are to be used between the unit and supporting steel, be certain to allow for the length of the vibration rails when determining the length of the supporting steel, as vibration rail length and mounting hole locations may differ from those of the unit.

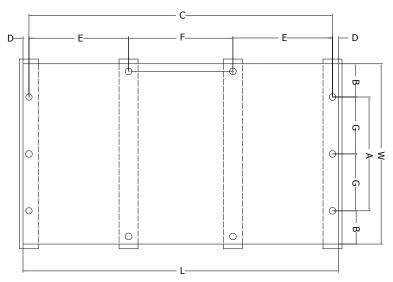


Single Cell Standard Unit: Plan A

#### SINGLE CELL STANDARD UNIT: PLAN A

| Model<br>Number | L           | w         | A          | В      | С          | D      | E          | F          |
|-----------------|-------------|-----------|------------|--------|------------|--------|------------|------------|
| PT2-0412A       | 11'-11 3/4" | 4'-0"     | 3'-9 3/4"  | 1 1/8" | 10'-5 1/4" | 9 1/4" | _          | _          |
| PT2-0709A       | 8'-11 3/4"  | 7'-3 1/4" | 7'-1"      | 1 1/8" | 7'-5 1/4"  | 9 1/4" | _          |            |
| PT2-0809A       | 8'-11 3/4"  | 8'-5 3/4" | 8'-3 1/2"  | 1 1/8" | 7'-5 1/4"  | 9 1/4" | _          | _          |
| PT2-0812A       | 11'-11 3/4" | 8'-5 3/4" | 8'-3 1/2"  | 1 1/8" | 10'-5 1/4" | 9 1/4" | _          | _          |
| PT2-1009A       | 8'-11 3/4"  | 9'-10"    | 9'-7 3/4"  | 1 1/8" | 7'-5 1/4"  | 9 1/4" | _          | _          |
| PT2-1012A       | 11'-11 3/4" | 9'-10"    | 9'-7 3/4"  | 1 1/8" | 10'-5 1/4" | 9 1/4" | _          | _          |
| PT2-1212A       | 11'-11 3/4" | 11'-10"   | 11'-7 3/4" | 1 1/8" | 10'-5 1/4" | 9 1/4" | _          | _          |
| PT2-1218A       | 17'-11 3/4" | 11'-10"   | 11'-7 3/4" | 1 1/8" | 17'-3 3/4" | 4"     | 5'-8 3/32" | 5'-11 1/2" |

# PT2 Structural Support: Plan B



Single Cell Standard Unit: Plan B

#### SINGLE CELL STANDARD UNIT: PLAN B

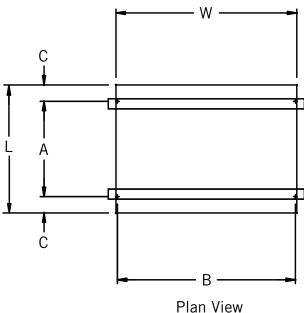
| Model<br>Number | L           | W         | A         | В  | C          | D      | E      | F          | G     |
|-----------------|-------------|-----------|-----------|----|------------|--------|--------|------------|-------|
| PT2-0412A       | 11'-11 3/4" | 4'-0"     | 3'-4"     | 4" | 11'-9 1/2" | 1 1/8" | _      | _          | _     |
| PT2-0709A       | 8'-11 3/4"  | 7'-3 1/4" | 6'-7 1/4" | 4" | 8'-9 1/2"  | 1 1/8" | _      | _          | _     |
| PT2-0809A       | 8'-11 3/4"  | 8'-5 3/4" | 7'-9 3/4" | 4" | 8'-9 1/2"  | 1 1/8" | _      | _          | _     |
| PT2-0812A       | 11'-11 3/4" | 8'-5 3/4" | 7'-9 3/4" | 4" | 11'-9 1/2" | 1 1/8" | _      | _          | _     |
| PT2-1009A       | 8'-11 3/4"  | 9'-10"    | 9'-2"     | 4" | 8'-9 1/2"  | 1 1/8" | _      | _          | _     |
| PT2-1012A       | 11'-11 3/4" | 9'-10"    | 9'-2"     | 4" | 11'-9 1/2" | 1 1/8" | _      | _          | _     |
| PT2-1212A       | 11'-11 3/4" | 11'-10"   | 11'-2"    | 4" | 11'-9 1/2" | 1 1/8" | _      | _          | _     |
| PT2-1218A       | 17'-11 3/4" | 11'-10"   | 11'-2"    | 4" | 17'-9 1/2" | 1 1/8" | 5'-11" | 5'-11 1/2" | 5'-7" |

#### **NOTES:**

- Contact your local BAC Representative for multi-cell or structurally upgraded unit steel support.
- 2. Support beams and anchor bolts to be selected and installed by others.
- 3. All support steel must be level at the top.
- 4. Beam size should be calculated in accordance with accepted structural practice. Maximum deflection of beam under unit to be 1/360 of span, not to exceed 1/2". Use 65% of operating weight as a uniform load on each beam. The length of the beam must be at least equal to the length of the basin. Refer to engineering data for basin dimensions. Support data and maximum allowed deflection is tabulated in the table to the left.
- 5. If vibration isolation rails are to be used between the unit and supporting steel, be certain to allow for the length of the vibration rails when determining the length of the supporting steel, as vibration rail length and mounting hole locations may differ from those of the unit.

# **PT2 Alternative** Structural Support

For replacement installations, the PT2 Cooling Tower has been designed to match the supporting steel of many existing counterflow and crossflow cooling towers without modifications. Shown below are the most common steel support arrangements which can be accommodated by the PT2. IBC wind and seismic load ratings are not available on alternate steel support arrangements. If individual point support is required, or if the steel arrangement is not shown as below, consult your local BAC Representative for assistance.



| Model Number | Unit                    | A           | В                             | C                             | L          | w            |
|--------------|-------------------------|-------------|-------------------------------|-------------------------------|------------|--------------|
| DT0 04404    | VT0-102 thru 116        | 3'- 9 3/8"  | 11'- 5 1/2"                   | 1 5/16"                       | 4'- 0"     | 11'- 11 3/4" |
| PT2-0412A    | VTL-103 thru 137        | 3'- 11"     | 13'- 11 1/2"                  | 1/2"                          | 4'- 0"     | 11'- 11 3/4" |
| PT2-0709A    | FXT-115 thru 142        | 7'- 1 7/8"  | 8'- 0"                        | 11/16"                        | 7'- 3 1/4" | 8'- 11 3/4"  |
| PT2-0809A    | VT1-N209 thru N270      | 7'- 7 5/8"  | 10'- 5 1/4"                   | 5 1/16"                       | 8'- 5 3/4" | 8'- 11 3/4"  |
|              | VT1-N209 thru N270      | 7'- 7 5/8"  | 10'- 5 1/4"                   | 5 1/16"                       | 8'- 5 3/4" | 11'- 11 3/4" |
|              | Series 15146 thru 15282 | 6'- 9 3/4"  | 11'- 7 3/4"                   | 10"                           | 8'- 5 3/4" | 11'- 11 3/4" |
| PT2-0812A    | VTL/VST                 | 8'- 3 1/2"  | 8'- 9 1/8"                    | 1 1/8"                        | 8'- 5 3/4" | 11'- 11 3/4" |
| P12-U01ZA    | CFT                     | 8'- 0"      | 8'- 3 1/2"                    | 2 7/8"                        | 8'- 5 3/4" | 11'- 11 3/4" |
|              | VXT-N215 thru N265      | 7'- 11 1/2" | 11'- 7 3/4"                   | 3 1/8"                        | 8'- 5 3/4" | 11'- 11 3/4" |
|              | Series 3000             | 8'- 3 1/4"  | 8'- 3 1/2"                    | 1 1/8"                        | 8'- 5 3/4" | 11'- 11 3/4" |
| PT2-1012A    | VXT-315 thru 400        | 9'- 10 1/8" | 11'- 7 3/4"                   | (0 1/16")                     | 9'- 10"    | 11'- 11 3/4" |
|              | Series 1500             | 11'- 7 3/4" | 10'- 5 1/4"                   | 1 1/8"                        | 11'- 10"   | 11'- 11 3/4" |
|              | Series 3000             | 9'- 6"      | 11'- 11"                      | 1'- 2"                        | 11'- 10"   | 11'- 11 3/4" |
| PT2-1212A    | VXT, VLT, VST           | 8'- 11 1/4" | 11'- 11"                      | 1'- 5 3/8"                    | 11'- 10"   | 11'- 11 3/4" |
|              | VXT, VXMT               | 9'- 7 1/2"  | 11'- 11"                      | 1'- 1 1/4"                    | 11'- 10"   | 11'- 11 3/4" |
|              | CFT                     | 8'- 0"      | 11'- 11"                      | 1'- 11"                       | 11'- 10"   | 11'- 11 3/4" |
| Pt2-1218A    |                         |             | Please contact your local BAC | Representative for assistance | e.         |              |