# CXVT Evaporative Condenser

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The CXVT Evaporative Condenser is perfect for applications where size matters. The CXVT provides the added value of reduced operating costs, improved reliability, and a cost effective solution to both the owner and the installing contractor for large projects. Newly redesigned, the CXVT offers XE (Extreme Efficiency) models which are on average 3 times more efficient than the minimum energy requirements in ASHRAE Standard 90.1-2013 and 2 times more efficient than the minimum energy requirements in California Title 24.





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## **BAC's CXVT**: When Size Matters

## 540 to 2,114 R-717 Tons in a Single Unit

Lower Installation Cost

Lower Operating Cost

Fewer Piping **Connections** 

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Layout Refrigerant Flexibility









Lowest

Charge

Per Ton



The CXVT Evaporative Condenser offers a cost effective solution for both the owner and the installing contractor by reducing operating cost, improving reliability and reducing installation costs. The CXVT Evaporative Condenser is now available with XE (Extreme Efficiency) models to further reduce operating costs. These benefits can best be illustrated in the following example.

## **Actual Project:** Food Processing Facility in the Northwest U.S. 100,732 MBH, 85°F CT, 66.7°F WBT

## Solution #1: Reduce Total Cost of Ownership, Best Selection – CXVT XE Models

	Induced Draft Counterflow Style	Old CXVT	New CXVT	XE Model: Best Choice
Number of Units	12	8	7	8
Total HP (Fan & Pump)	840	720	630	440
<b>Refrigerant Connections (Total)</b>	48	32	28	32



**Annual Operating Cost Savings** 

### New CXVT

- \$1.7M in operating cost savings over the life of the equipment from HP reduction
- ✓ 25% annual operating cost savings

### **CXVT XE Model**

- \$3M in operating cost savings over the life of the equipment from HP reduction
- ✓ 48% annual operating cost savings

**NOTE:** Annual operating costs based on fan and pump kW x \$0.12kWh x 8760 hours x 50% average load for the year.



## **Solution #2: Reduce Installation Cost, Best Selection – New CXVT**

	Induced Draft Counterflow Style	CXVT XE Model	New CXVT: Best Choice
Number of Units	12	8	7
Plan Area (ft²)	3,744	2,912	2,548
Total HP (Fan & Pump)	840	440	630
<b>Refrigerant Connections (Total)</b>	48	32	28

## Layout Plan Area Required Selection

## > Induced Draft Counterflow Style



156'

### > Better Selection for Reducing Installation Cost: CXVT XE Model



### > Best Selection for Reducing Installation Cost: New CXVT



8 Cells: Reduced by 4! 32 Refrigerant Connections: Reduced by 16!

## **CXVT Benefits**

## > Reduced Operating Costs

- The highest capacity in the industry in a single unit (540 - 2,114 R-717 tons)
- Combined Flow Technology provides the highest capacity at the lowest refrigerant charge
- Up to 40% reduction of total cost of ownership with the XE Models
- On average, 60% lower refrigerant charge when compared to other evaporative condensers

## Improved Reliability

- Upgraded seismic and wind load capabilities to meet requirements in North America
- Largest standard access doors in the industry (64" x 34")
- Welded, not bolted, Stainless Steel basin reduces potential for leaks and increases the life of the unit (optional)
- Coils fabricated per ASME B31.5 standards
- Coils shipping into Canada are available with CRN
- Scale reducing technology increases system efficiency
- Heavy duty premium efficient motors are standard
- Meets wind and seismic requirements of the International Building Code (IBC)

## Cost Effective Installation

- Dual air intakes allow for simple steel designs and layout flexibility
- Half the number of coil connections save time and material on piping, welding and valves
- Flexibility of coil connection location simplifies piping
- Lower operating weight reduces steel sizing and lower shipping weight reduces crane sizing
- Single fan and motor reduces wiring and controls
- Built in rigging guides allow for fast rigging
- Factory pre-assembled external platforms reduces installation time (optional)



Multi-Cell CXVT Installation Showing Simplified Piping



Now Even Larger Oversized Access Doors



Standard Rigging Guides



The CXVT XE models are the newest addition to BAC's CXVT Evaporative Condenser portfolio. They are tailored for projects that require extreme efficiency units to minimize operating cost, provide application assurance, and reduce sound levels. The CXVT XE models are on average 3 times more efficient than the minimum energy requirements in ASHRAE Standard 90.1-2013 and 2 times more efficient than the minimum energy requirements in California Title 24.



## ) Lowest Operating Costs

- 40% reduction in operating cost for an 860-Ton system
- Payback of less than 1 year



### **Application Assurance**

- On average 3 times more efficient than minimum energy requirements in ASHRAE 90.1-2013
- On average 2 times more efficient than minimum energy requirements in California Title 24
- Extends the life of the mechanical drive components (minimum L<sub>10</sub> bearing life 190,000 hours, 40% longer than the standard CXVT)

## Reduced Sound Levels

- Sound reduction up to 50% (3 dB)
- Fans optimized to minimize sound levels and maximize efficiency
- Additional sound reducing options available

Comparison of First & Operating Cost \$4,000,000 \$4,000,000 \$3,000,000 \$2,000,000 \$1,000,000 \$0 New CXVT CXVT XE Model Operating Costs First Costs

860 Ton Selection CXVT vs. CXVT XE Model

**NOTE:** Operating costs based on fan and pump kW x \$0.12kWh x 8760 hours x 50% average load for the year x 20 years.



## **CXVT Construction Details**



## **Heavy-Duty Construction**

- ▶ G-235 (Z700 metric) mill galvanized steel is the heaviest galvanizing available ensuring durability
- Meets wind and seismic requirements of the International Building Code (IBC)

## <sup>2</sup> FRP Casing Panels

- Corrosion resistant, UV resistant finish ensuring long life
- ▶ Maintenance free

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## **BALTIDRIVE®** Power Train

- Premium quality, solid backed, multi-groove belt to ensure reliable operation
- Corrosion resistant cast aluminum sheaves reduce drive maintenance compared to cast iron sheaves
- Heavy-duty bearings with a minimum L<sub>10</sub> of 80,000 hours (200,000 hour average life) ensures reliable drive operation
- Premium efficient/inverter duty fan motors as standard
- 5-year motor and drive warranty



## Low HP Axial Fan

- High efficiency fans maximize the capacity for each model
- Quiet operation to minimize sound levels from the discharge of the unit

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## Water Distribution System

- Visible and accessible during operation to increase inspection frequency and reduce maintenance
- Overlapping spray patterns ensure proper water coverage over the coil and reduce scale formation and maintain the thermal efficiency for the life of the unit
- ► Large orifice, non-clog 360 Spray Nozzles

## Coil Sections

- Continuous serpentine, steel tubing increases reliability of the coil
- Hot-dip galvanized after fabrication (HDGAF) increases reliability of the coil
- Maximum allowable working pressure is 300 psig (2,068 kPa)
- Sloped tubes allow for free drainage of condensed refrigerant
- Fabricated per ASME B31.5 standards
- Canadian shipments are supplied with CRN
- BACross<sup>®</sup> Fill with Integral Drift Eliminators
  - ► High efficiency heat transfer surface optimizes thermal performance and energy efficiency
  - Polyvinyl chloride (PVC) is impervious to rot, decay, and biological attack
  - Flame spread rating of 5 per ASTM E84
  - Elevated off of the water basin to reduce maintenance

## FRP Air Intake Louvers

- Corrosion resistant, UV resistant finish ensuring long life
- Maintenance free
- Separate from the fill which allows for clear inspection of the fill-air interface which is where scale build up occurs first

**Basin** 

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

### Hinged Access Doors

- Inward hinged door on each end wall allows easy, safe access to the interior of the unit
- 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<sup>®</sup> Corrosion Protection System and EVERTOUGH<sup>™</sup> Construction provide superior corrosion resistance and durability at a tremendous value.



Standard Construction Installation

#### STANDARD CONSTRUCTION

G-235 mill galvanized steel is the heaviest commercially available galvanized steel, universally recognized for its strength and corrosion resistance. To assure long life, a G-235 mill galvanized steel frame with fiberglass reinforced polyester (FRP) casing panels and louvers is used as the standard material of construction. The structural integrity of the unit is provided by its strong steel frame. With proper maintenance and water treatment, G-235 galvanized steel and FRP will provide an excellent service life under the operating conditions normally encountered in refrigeration applications.



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

The TriArmor<sup>®</sup> Corrosion Protection System consists of heavy gauge G-235 mill 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 within the basin, such as the strainer and submerged structural supports, will be constructed of stainless steel. The TriArmor<sup>®</sup> 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 thousands of successful installations in North America. Every basin is leak tested at the factory and warranted against leaks and corrosion for five years.



TriArmor<sup>®</sup> Corrosion Protection System Triple Layer Protection of the Basin



Application of TriArmor® Corrosion Protection System



#### EVERTOUGH™ CONSTRUCTION (OPTION)

EVERTOUGH<sup>™</sup> Construction combines the most corrosion resistant materials to provide the best value in corrosion protection for most water chemistries. EVERTOUGH<sup>™</sup> Construction is backed by a comprehensive 5-year warranty which covers ALL components from the fan to the cold water basin, from louver to louver, including the motor (excluding the coil).

The following materials are used in EVERTOUGH<sup>™</sup> Construction:

- The basin is constructed with the TriArmor<sup>®</sup> Corrosion Protection System. The basin is leak tested at the factory and warranted against leaks and corrosion for 5 years.
- Fiberglass reinforced polyester (FRP) casing panels are corrosion and UV resistant, ensuring long life.
- Designated steel components above the basin are constructed of heavy-gauge G-235 mill galvanized steel and further protected with a thermosetting hybrid polymer.
- The distribution system is non-corrosive Schedule 40 PVC.
- Other components within the basin, such as the strainer and submerged structural supports, will be constructed of stainless steel.

#### THERMOSETTING HYBRID POLYMER (OPTION)

A thermosetting hybrid polymer, used to extend equipment life, is applied to select G-235 mill galvanized steel components of the unit. The polymerized coating is baked onto the G-235 mill 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 losing adhesion.

#### STAINLESS STEEL (OPTION)

Several stainless steel options are available.

WELDED STAINLESS STEEL BASIN

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



Welded Stainless Steel Basin



Thermosetting Hybrid Polymer



Welded Stainless Steel Basin

5-year, leak-proof warranty.

ALL STAINLESS STEEL CONSTRUCTION (OPTION)
 All unit structural elements and the basin are constructed of stainless steel. Seams between panels inside the basin are welded, providing an extreme advantage over bolted 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. Casing panels and air intake louvers are constructed of corrosion and UV-resistant fiberglass reinforced polyester (FRP).

#### BASINLESS UNIT CONSTRUCTION (OPTION)

The basinless unit construction option enables CXVT Evaporative Condensers to be directly installed on new or existing basins. This custom feature reduces maintenance costs by eliminating the integral basin from traditional units. It simplifies piping and pumping requirements of multi-cell installations, eliminates concern for basin corrosion, and provides a cost-effective solution for many fielderected replacement projects. BAC is the only leading evaporative cooling equipment manufacturer to provide basinless construction for factory assembled equipment.

#### STANDARD FIBERGLASS REINFORCED POLYESTER (FRP) CASING PANELS

Used with BAC's durable steel frame construction, FRP casing panels offer a more durable corrosion resistant unit. FRP casing panels are a key component due to their corrosion resistant properties.

#### STEEL CASING PANELS AND LOUVERS (OPTION)

Steel casing panels and louvers are available in G-235 mill galvanized steel, thermosetting hybrid polymer, and stainless steel.

## > Coil Configurations

BAC offers a large selection of coil configuration options to fulfill any thermal and pressure drop requirements.



Basinless Unit Construction



Standard Serpentine Coil

#### STANDARD SERPENTINE COIL

The standard coil is constructed of continuous lengths of all prime surface steel. The coil is hot-dip galvanized after fabrication (HDGAF) to apply a thick, zinc corrosion barrier over the entire exterior surface of the coil. The coil is designed for low pressure drop with sloping tubes for free drainage of fluid. Each coil has a maximum allowable working pressure of 300 psig (2,068 kPa) and is fabricated per ASME B31.5 standards to ensure the highest quality and complete integrity.

#### STAINLESS STEEL COIL (OPTION)

Coils are available in stainless steel for specialized applications. The coil is designed for low pressure drop with sloping tubes for free drainage of fluid. Each coil has a maximum allowable working pressure of 300 psig (2,068 kPa) and is fabricated per ASME B31.5 standards to ensure the highest quality and integrity.

#### ASME U DESIGNATOR COIL (OPTION)

BAC offers coils that are certified in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII, Division I. ASME U designated coils are available for projects requiring ASME certified pressure vessels and involve 3rd party inspection and certification. Standard ASME U designated coils are rated at 340 psig (2,344 kPa) maximum allowable working pressure, and they are pneumatically tested at 375 psig (2,586 kPa).

#### MULTIPLE CIRCUIT COILS/AUXILIARY COOLING CIRCUIT (OPTION)

Split coil configurations are available to allow separate process fluid or refrigerant loops through the same unit. Separate loops may be needed for multiple applications requiring different temperature processes or multiple types of process fluids or refrigerants. Multiple refrigerant circuit coils are generally required on halocarbon refrigerant systems, where it is common practice to maintain individual compressor systems. The quantity of circuits, capacity per circuit, and desired connection size and type should be specified when requesting this option.

#### COPPER SWEAT FITTINGS (OPTION)

Factory installed copper sweat fittings are available to simplify field piping.

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Stainless Steel Coil



Multiple Circuit Coil

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**NOTE:** A Canadian Registration Number (CRN) is required for all pressure vessels over 15 psig entering Canada. The CRN identifies that the design of a boiler, pressure vessel, or fitting has been accepted and registered for use in Canada. CRN is available for all BAC Dual and TriCoil configurations in Canada.

## > 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 an evaporative condenser 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.



#### STANDARD BALTIDRIVE® POWER TRAIN

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. When compared to a gear drive system, this specially engineered belt drive system provides many advantages. 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. Only fan bearing lubrication is required for routine maintenance. Belt drive systems also have the added advantage of being suitable for variable frequency drive (VFD) applications without requiring expensive optional accessories.

#### GEAR DRIVE SYSTEM, CLOSE-COUPLED MOTOR (OPTION)

A gear drive system is available as a fan drive option on the CXVT. Both the gear drive and couplings are selected with a 2.0 service factor. Gear construction includes a nickel-alloy steel shaft, case hardened gears, self lubrication, and a single piece, gray iron housing. This drive system ships completely installed and aligned.



BALTIDRIVE® Power Train Fan System

#### GEAR DRIVE SYSTEM, EXTERNALLY MOUNTED MOTOR (OPTION)

A gear drive system with a TEFC motor mounted outside the airstream is also available on the CXVT. A non-corrosive carbon-fiber composite drive shaft with stainless steel hubs is selected with a 2.0 service factor. The motor and drive shaft ship separately for easy field installation.



#### **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 (OPTION)

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.



### 🕨 Basin

The spray water collects in the basin and then is pumped back over the condensing coil. During operation, the sloped CXVT basin eliminates any 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 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-the-art, 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 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 sub-freezing conditions.

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

Evaporative cooling equipment exposed to below freezing ambient temperatures require protection to prevent freezing of the water in the 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

	0°F (-17.8°C) Ambient Heaters		-20°F (-28.9°C) Ambient Heaters	
Model Number	Number of Heaters	kW per Heater	Number of Heaters	kW per Heater
CXVT-x-1224-x and XECXVTx-1224-x	2	12	2	15
CXVT-x-1426-x and XECXVTx-1426-x	2	14	2	20
CXVT-x-2424-x and XECXVTx-2424-x	4	12	4	15
CXVT-x-2826-x and XECXVTx-2826-x	4	14	4	20



**Basin Heater** 

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**NOTE:** 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 basin. A complete piping system, including nozzles, is provided in the basin to connect to side stream filtration equipment (provided by others). For more information on filtration systems, consult "Filtration Guide" found on **page J241**.

#### LOW AND HIGH LEVEL ALARM FLOAT SWITCH (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.

## Water Distribution System

#### STANDARD SPRAY WATER PUMP

The CXVT comes standard with two integral spray water pumps sized to distribute the recirculating water over the coils, maximizing capacity. The patented BAC 360 Spray Nozzles are non-clog, ensure even flow over the coil area, and are simple to remove for maintenance. Parallel flow of air and spray water allow for inspection and access to the top of the coils during operation.



Standard Spray Water Pump

## > Fill

BACross<sup>®</sup> Fill, BAC's patented crossflow hanging fill, was developed after years of extensive research. BACross<sup>®</sup> Fill is made of PVC and is optimized to provide the highest thermal capacity. PVC is virtually impervious to rot, decay, and biological attack. The fill is elevated above the basin floor to facilitate cleaning and maintenance. The integral eliminators effectively strip entrained moisture from the leaving air stream with minimum pressure drop to prevent water loss with negligible impact on efficiency.

#### STANDARD FILL

Standard fill can be used in applications with spray 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 5 per ASTM E84.

#### HIGH TEMPERATURE FILL (OPTION)

An optional high temperature fill material is available which increases the maximum allowable spray water temperature to 140°F (60°C). The online selection program automatically determines if high temperature fill is necessary based on the design requirements.



BACross® Fill Manufacturing

## > 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.

#### STANDARD RIGGING GUIDES

Rigging guides allow easy alignment and engagement of the coil sections, the fan (plenum) section, and lower section of units. The guides ensure proper placement of the coil sections to the fan section making rigging much simpler and reducing the time required.

#### KNOCKDOWN UNITS (OPTION)

Knockdown units are available for jobs where access to the evaporative condenser 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 unit is excessive. All materials of construction and design features are the same as those of a factory assembled unit. Welded stainless steel basins are excluded from knockdown due to the need for in-plant assembly.

### Sound Options

Recognition of the importance of sound reduction 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 CXVT Evaporative Condensers is selected to optimize low sound levels and maximize thermal performance.

#### LOW SOUND FAN (OPTION)

The Low Sound Fan option reduces sound up to 9 dBA. Adding a high solidity fan decreases fan speeds, which proportionally decreases sound levels.



Low Sound Fans



Standard Rigging Guides

#### SOUND ATTENUATION (OPTION)

Factory designed, tested, and rated sound attenuation options are available for both the air intake and discharge. Consult your local BAC Representative regarding available options.

## > Access Options

BAC provides a broad offering of access options. Our evaporative equipment is designed to be easily maintained for sustaining capacity over a longer life.



Standard Internal Walkway



#### STANDARD INTERNAL WALKWAY

An internal walkway is standard allowing access to the spacious plenum area for maintenance and inspection of the basin, make-up, fill, and drive system.

#### MOTOR REMOVAL SYSTEM (OPTION)

The removal system includes davit arm(s) to facilitate motor replacement.



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#### **EXTERNAL PLATFORM (OPTION)**

Every external platform is preassembled and pre-fitted at the factory to ensure that every component will fit and function exactly as described. The platform will ship secured in the basin and attach quickly in the field with minimum fasteners. Safety gates are available for all handrail openings. Motor Removal System

**NOTE:** Platforms, ladders, handrails, safety gates, and safety cages can be added at the time of order or as an aftermarket item.



External Motor Platform, Ladder, Handrails, and Safety Cage

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

An access door platform is available to allow access to the unit when installed on elevated supports. This option allows for safe access to the unit, as well as a working platform to stage tools for maintenance.

#### HANDRAIL PACKAGES (OPTION)

Handrail packages are available to provide safe access to the top of the unit for maintenance to the distribution system. Fan deck extensions are available for passage around the fan on units designed with maximized fan diameters or discharge sound attenuation. The specially designed handrail packages are secured for compact shipping in the basin to minimize shipping costs and are ready for field assembly. NOTE: Partial or full grating above the coil air intake is recommended with this option.

#### INTERNAL SERVICE PLATFORM AND LADDER PACKAGES

(OPTION FOR TWO PIECE UNITS)

For access to the motor and drive assemblies, an internal ladder and upper service platform with handrails is available on larger units. Safety gates are available for all handrail openings. An internal walkway is required with this package.



Internal Ladder, Service Platform, and Walkway