

TOROMONT

CIMCO

**ELEVATE EFFICIENCY,  
SAFETY, AND SAVINGS.**



 GREEN SERIES

# PENTHOUSE EVAPORATOR

HEATING, COOLING AND  
VENTILATION SYSTEM



At CIMCO, our foremost commitment is to understand and alleviate the challenges that you encounter when it comes to large installations. The intricacies of managing budgets, adhering to stringent timelines, and the unwavering demand to achieve sustainability milestones, all while ensuring the seamless continuity of production operations, are challenges we are familiar with. To empower you to overcome these hurdles and safeguard your core priorities, CIMCO proudly introduces the Green Series.

The Green Series is more than a product line; it's a paradigm shift designed to redefine industry standards. Through the integration of sustainable technology and our prowess in manufacturing, we present modular units that extend unparalleled advantages, saving you both precious financial resources and contributing to the preservation of our environment.



# PENTHOUSE EVAPORATOR

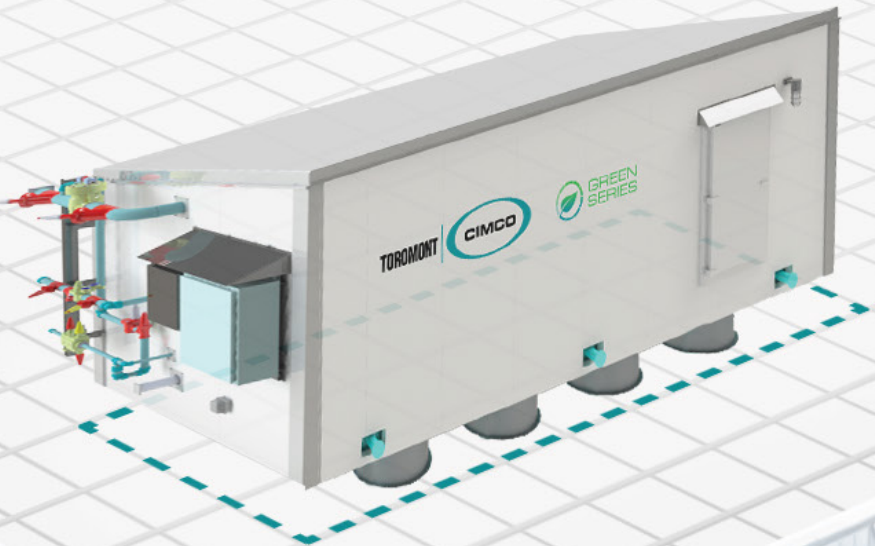
PROVIDING THE **LOWEST INSTALL COST**  
FOR YOUR FACILITY.

**Designed to provide efficient and reliable heating, refrigeration and ventilation for commercial and industrial buildings**

The CIMCO Penthouse Evaporator is fully engineered, pre-wired, pre-piped, and pre-valved for easy installation. Say goodbye to the need for an evaporator taking up valuable pallet space, as these systems come with their own enclosure, offering flexible mounting options. With built-in automation, they can operate independently or seamlessly integrate with other systems.

Discover a new era of cooling excellence with CIMCO Penthouse Evaporators.

**Our Penthouse Unit is designed to fit within the standard structural dimensions to ensure easy installation, and reduce the need for coordination with structural design.**





### EVAPORATOR COILS

Coils made of 304L stainless steel tubes with aluminum fins, providing high heat transfer efficiency and durability. The refrigerant type is either CO2 or ammonia, and the system type is either recirculated liquid or direct expansion (DX) for additional safety. Design includes hot gas defrost in the coil and insulated pan to ensure efficient operation.



### ENCLOSURE PANELS

Our enclosure panels are made of insulated metal paneling with 4" standard thickness (5" optional), providing superior thermal insulation and sound absorption. The exterior and interior face of the panels is made of 26 GA G-90 steel in white embossed finish. The interlocking tongue-and-groove joint ensures a tight seal for maximum energy efficiency. The roof membrane is made of 60 MIL PVC or TPO heat welded to IMP panels, caulked, and fitted with aluminum trim, providing excellent weather resistance and durability.



### STRUCTURAL CONSTRUCTION

Built with a robust structural steel base and framing that is epoxy painted, providing long-lasting protection against corrosion and wear. The base mounting feet make it easy to ship, handle, and install on the building structure. The galvanized steel floor plates offer superior strength and stability. The lifting lugs ensure safe and efficient transport and installation.



### UTILITIES

Interior and exterior lighting and a 120V GFI socket for service, providing added convenience and safety.



### VALVE GROUPS

Factory-fabricated valve stations that are ASME B31.5 compliant and factory tested for superior performance and reliability. The valves are designed for either recirculated or DX systems to provide optimal performance of the unit.



### CONTROL PANEL

NEMA 4X panel with weather hood, rated for outdoor use, that is CSA/UL rated and comes with a PLC controller for stand-alone or central plant operation.

**Instrumentation includes:** air temperature, gas leak detection, suction temperature & pressure (DX system only).

**Control includes:** Full control valve and fan operating providing cooling runtime initiated defrosts, fan cycling when not cooling, and automatic or manually initiated pumpdown of unit on a gas leak.

**Monitoring includes:** Room temperature, Fan motor status and current, heat trace operation, and gas leak detection.



### DOORS

Features two 36" x 60" doors with plastic clad framing in 24 GA white embossed metal finish. The doors are 4" thick, providing excellent insulation and energy efficiency. The polished chrome hardware and perimeter anti-sweat heater add a touch of elegance and functionality. The wind chain and rain hood offer additional protection against harsh weather conditions.



### FANS

Equipped with fans that have hot dip galvanized steel casing and composite blades with aluminum hub, providing excellent durability and efficiency. The motor type is TEFC, ensuring quiet and reliable operation. The fan/motor davit arm is included for easy maintenance and repair.



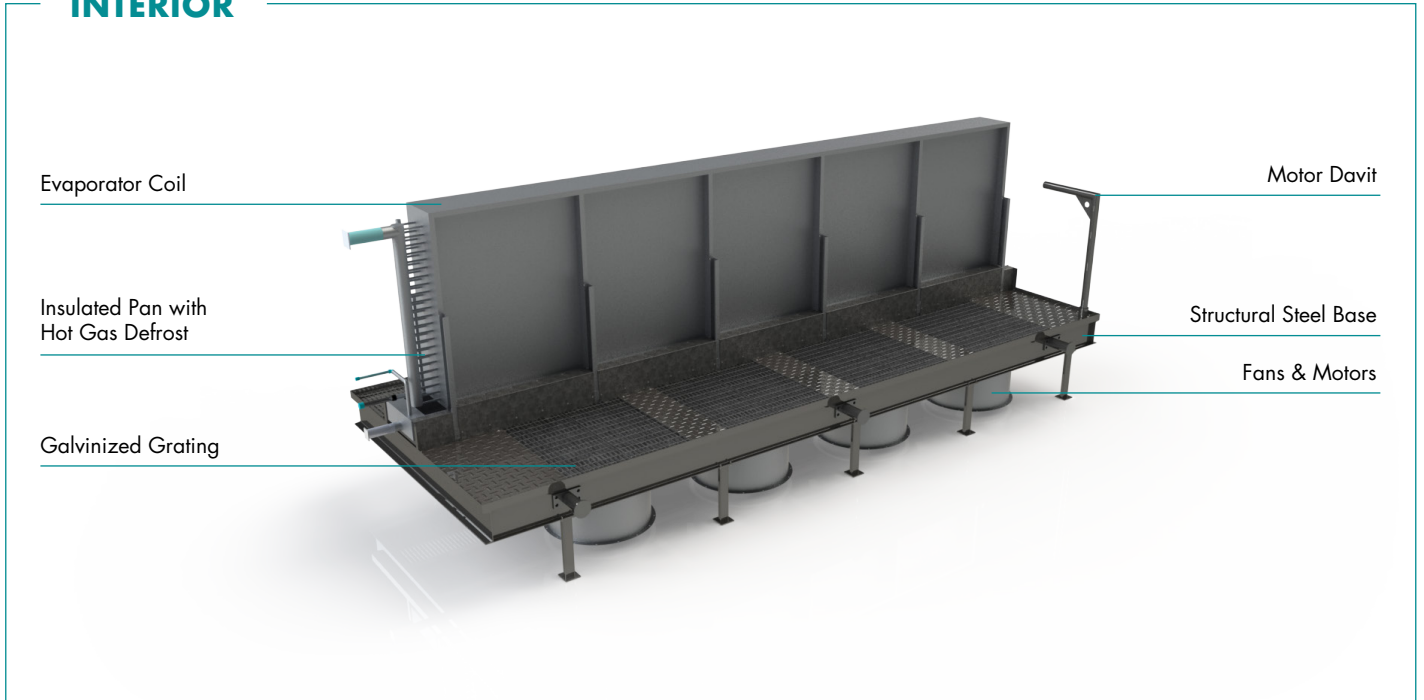
### ELECTRICAL STARTER PANEL

Our Penthouse Evaporator features a NEMA 4X panel with weather hood, rated for outdoor use, that is CSA/UL rated and comes with motor fuses and overloads, touch-safe components, and a fusible disconnect switch. The FVNR starter, VFD or EC motors optional (for energy savings), is factory wired and tested, ensuring easy installation and operation. All electrical wiring is performed by a qualified electrician and certified in our factory.

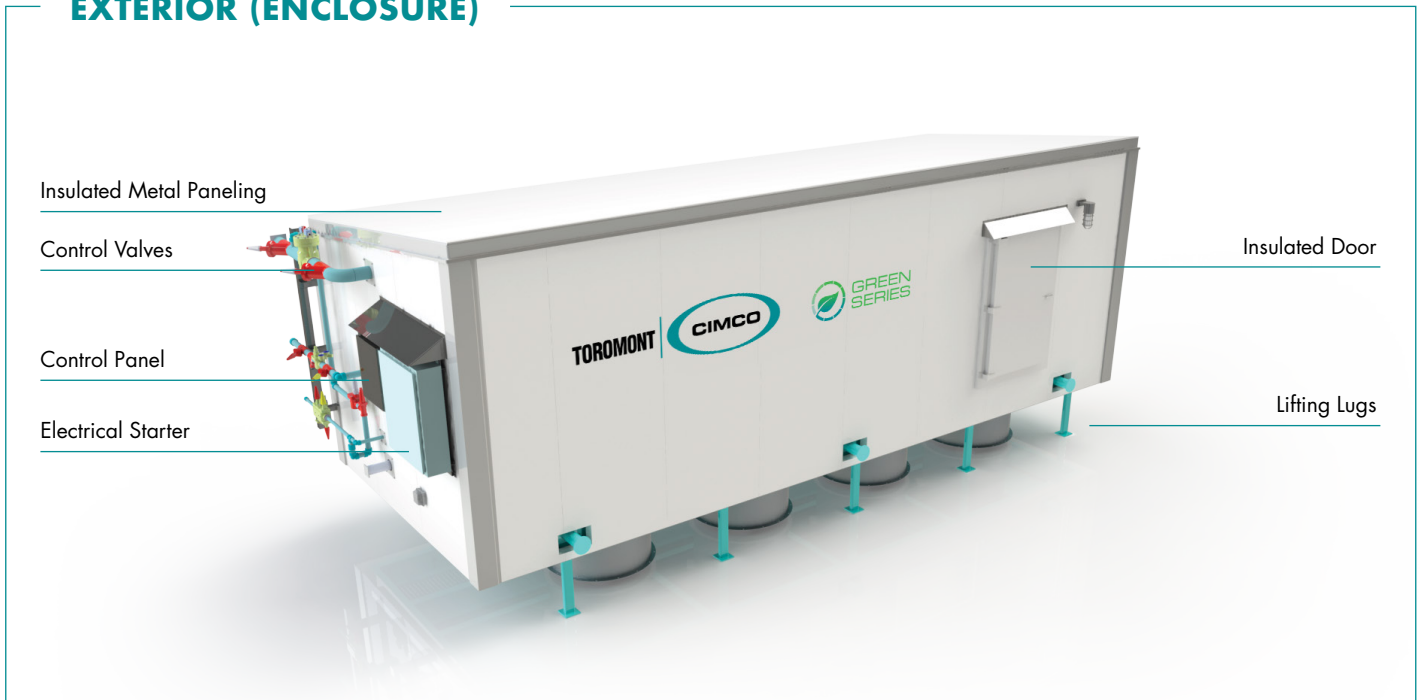


# PENTHOUSE EVAPORATOR: SPECIFICATIONS

## INTERIOR



## EXTERIOR (ENCLOSURE)



✓ Turnkey Installation

✓ Corrosion Resistance

✓ Natural Refrigerants

✓ Weather Tight

✓ Easy Access & Servicing

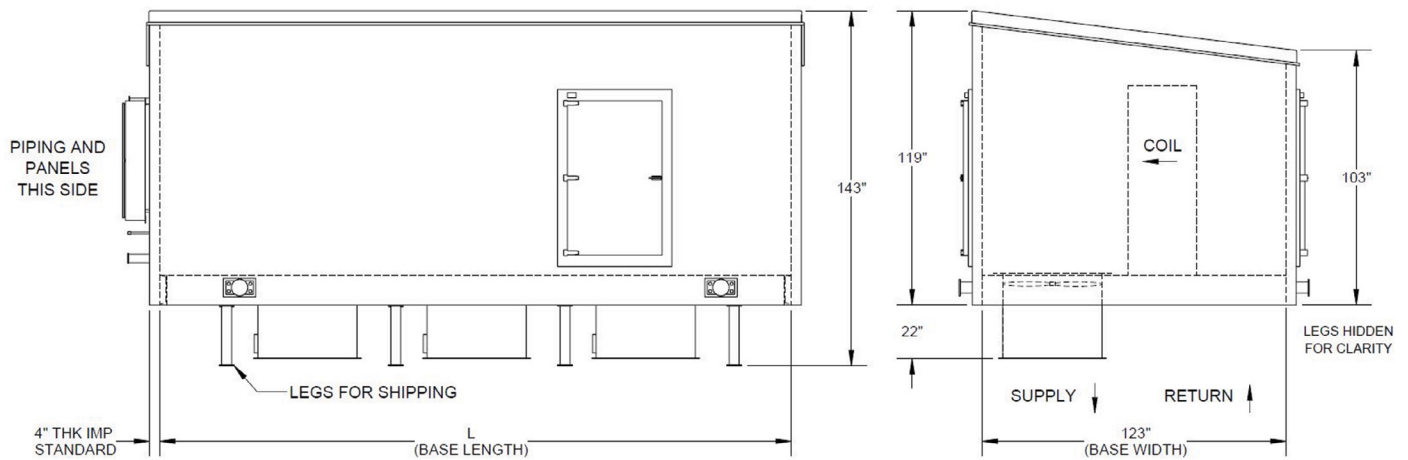
✓ Safety & Compliance

✓ Durability

✓ Energy Efficiency

✓ Automation

## PENTHOUSE EVAPORATOR: SPECIFICATIONS



1. Height and width constant across all models. Length varies between three enclosure sizes.
2. 3 fan unit pictured, 4 and 5 fans required as size increases. Variable fan spacing available.

Model No.	Refrigerant & Feed	Evaporating Temperature (°F)	Nominal Capacity (TR)	L (in)	Weight (lbs)	# of Fans
PH-NH3-DX-C-1-32.1	Ammonia Dx	24 (Coolers)	32.1	254	14400	3
PH-NH3-DX-C-1-34.7			34.7	254	14400	3
PH-NH3-DX-C-1-39.9			39.9	254	15000	3
PH-NH3-DX-C-2-45.5			45.5	322	17200	4
PH-NH3-DX-C-3-47.8			47.8	391	19800	5
PH-NH3-DX-C-3-50.8			50.8	391	20100	5
PH-NH3-DX-C-3-52.1			52.1	391	20100	5
PH-NH3-DX-C-3-65			65	391	21900	5
PH-NH3-DX-F-1-27.8		-20 (Freezers)	27.8	254	13900	3
PH-NH3-DX-F-1-34.7			34.7	254	14200	3
PH-NH3-DX-F-1-41.5			41.5	254	14800	3
PH-NH3-DX-F-3-52			52	391	20200	5
PH-NH3-DX-F-3-62.3			62.3	391	21000	5
PH-NH3-RL-C-1-32.1			Ammonia Recirculated	24 (Coolers)	32.1	254
PH-NH3-RL-C-1-34.7	34.7	254			13500	3
PH-NH3-RL-C-1-39.9	39.9	254			13900	3
PH-NH3-RL-C-2-45.5	45.5	322			16600	4
PH-NH3-RL-C-2-47.8	47.8	322			16600	4
PH-NH3-RL-C-2-50.8	50.8	322			16600	4
PH-NH3-RL-C-2-52.1	52.1	322			16600	4
PH-NH3-RL-C-2-65	65	322			17900	4
PH-NH3-RL-F-1-27.8	-20 (Freezers)	27.8		254	12800	3
PH-NH3-RL-F-1-34.7		34.7		254	13200	3
PH-NH3-RL-F-1-41.5		41.5		254	13600	3
PH-NH3-RL-F-2-52		52		322	16300	4
PH-NH3-RL-F-2-62.3		62.3		322	16800	4

Consult factory for CO<sub>2</sub> selection or custom ammonia applications.



## WE DESIGN, ENGINEER, MANUFACTURE AND INSTALL **NET-ZERO REFRIGERATION SYSTEMS**

Recognized as a leader in environmental sustainability, CIMCO Refrigeration is the largest industrial refrigeration contractor in North America and the largest vendor for most major refrigeration suppliers in the industry, with more than 7,000 customers, 1,500 active service contracts, and 1,200 employees dedicated to the art and science of refrigeration. As part of Toromont, CIMCO is also the only industrial refrigeration company to be publicly traded on the Toronto Stock Exchange. We've built half of the world's ice rinks, and have installed more than \$3 billion worth of projects over the past decade. In addition to our broad geographic reach—with offices, and a network of account managers and technicians, across Canada and the United States—we have a \$3-million-dollar critical parts inventory, allowing our team to simultaneously source parts worldwide while mechanics are on site, which saves our customers time and money.







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