

annexAir

Tomorrow's Airflow



Welcome to Annexair

Annexair is a privately held North American company established in 1998. We are exclusively focused on designing and manufacturing high quality energy efficient air handling systems. Most of our product lines incorporate a variety of advanced energy recovery technologies that are designed for commercial, institutional and industrial applications.

Relying on our team of creative and qualified employees that are involved in everything from the design to the manufacturing of our products, Annexair continually strives to exceed customer expectations in terms of the quality and performance of our units. With over 5,000 installed systems in the United States, we have built our reputation on innovation and customer satisfaction; we are experts in what we master.

Starting from a standard Energy Recovery Ventilator equipped only with a heat wheel and two fans, we can also add every type of cooling and heating device and integrate the latest technologies of air cooled condensers or water source heat pump systems you could require. Our capacity range varies from 1,500 CFM to 80,000 CFM and can be combined with a condensing unit that provides between 15 to 180 tons of cooling.

Our elite sales team can provide you with all the plans, performance documents and specifications you require, quickly and effectively. They are also always available to provide you with the expert support you need, every step of the way.

Who we are

Expertise, Leadership
and Vision

At Annexair, our entire senior management team has extensive experience in the industry and are all recognized as leaders in their respective fields. The team, led by company founder, President – François Lemieux share a common vision of the company which is centered around four (4) principles:

- 1) Surrounding himself with highly qualified innovative employees committed to exceed customer expectations;
- 2) Creating and maintaining a modern environment which creates a spirit based on quality and continuous improvement;
- 3) Dedication to Innovation and technology development;
- 4) An uncompromising focus on quality and customer service.

Since founding Annexair in 1998, entrepreneur François Lemieux has been the driving force behind the success of the company. His extensive knowledge of the North American and European HVAC industries is reflected throughout the organization and our products. He represents a new generation of Presidents that doesn't follow conventional trends; everything is carefully thought out, evaluated, validated and the resulting products must be competitively priced. To achieve this objective, he has surrounded himself with a group of exceptional managers that are highly motivated and share the same passion.

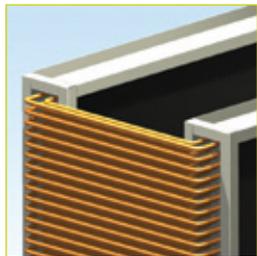
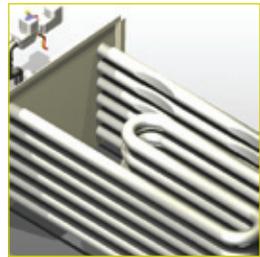
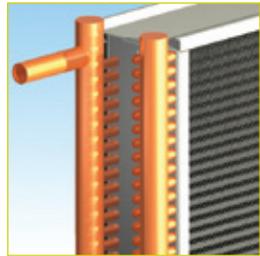
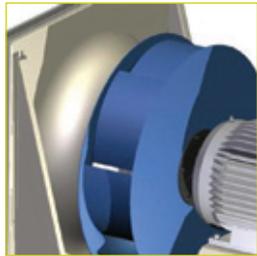
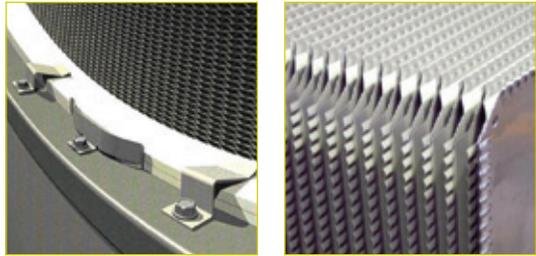




What we do

Competent, Specialized and Flexible





Our team of engineers are extremely competent in all fields of engineering from mechanical conception and electrical to controls and refrigeration. Their varied areas of expertise help Annexair create high quality systems in three (3) major categories: Energy Recovery Units (ERU), Makeup Air Units (MAU) and Air Handling Units (AHU).

When your project design requires one of these systems, Annexair can be your single source supplier. We are flexible with the integration of a wide variety of options and components, and can deliver a final working product that requires almost no field work.

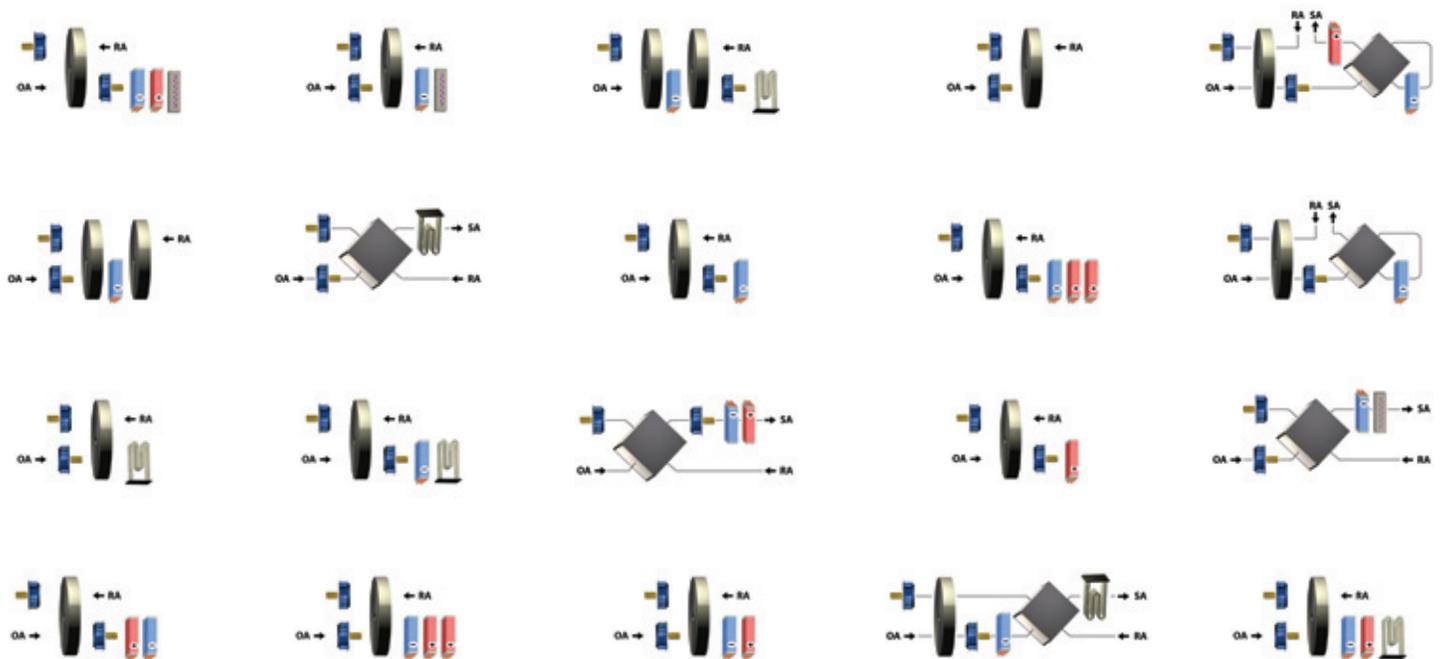
All of our products can be packaged with a recognized brand name condensing unit or with Annexair's advanced condensing units.

How we do it

Hundreds of Possible Configurations

ERU Series

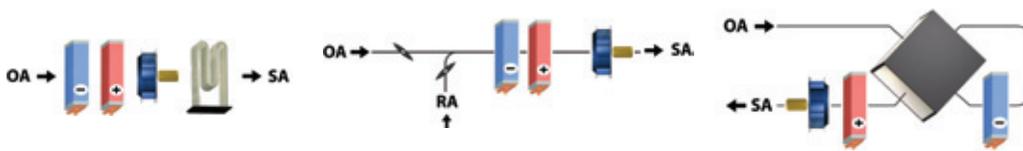
When it comes to energy recovery units, Annexair offers the largest variety of ERU's in the industry. Each series is available in multiple configurations including a variety of options. The V-SIO configurations on this page represent only our most popular design configurations. Our engineering sales team will be pleased to assist you in finding the perfect product for your project among the hundreds of configurations we offer.



Configuration Options for Different Applications

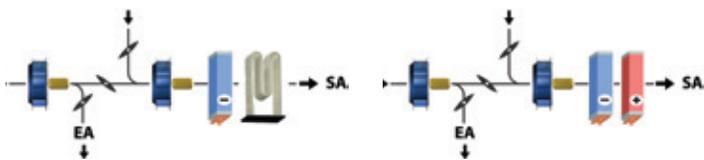
MAU Series

Annexair's makeup air units are perfect for projects that require 100% outside air. Our product line provides you with a large selection of models that can also be equipped with recirculation if needed. Some models are available with a fix plate heat exchanger for dehumidification applications.



AHU Series

For projects where a conventional air handling unit is required, we offer numerous possible configurations that will satisfy your requirements.



Retrofit Units

When your project requires a unique system, we can custom design and build a unit to your specifications and configuration for the replacement of existing equipment. All we need is a field survey to begin the engineering process.



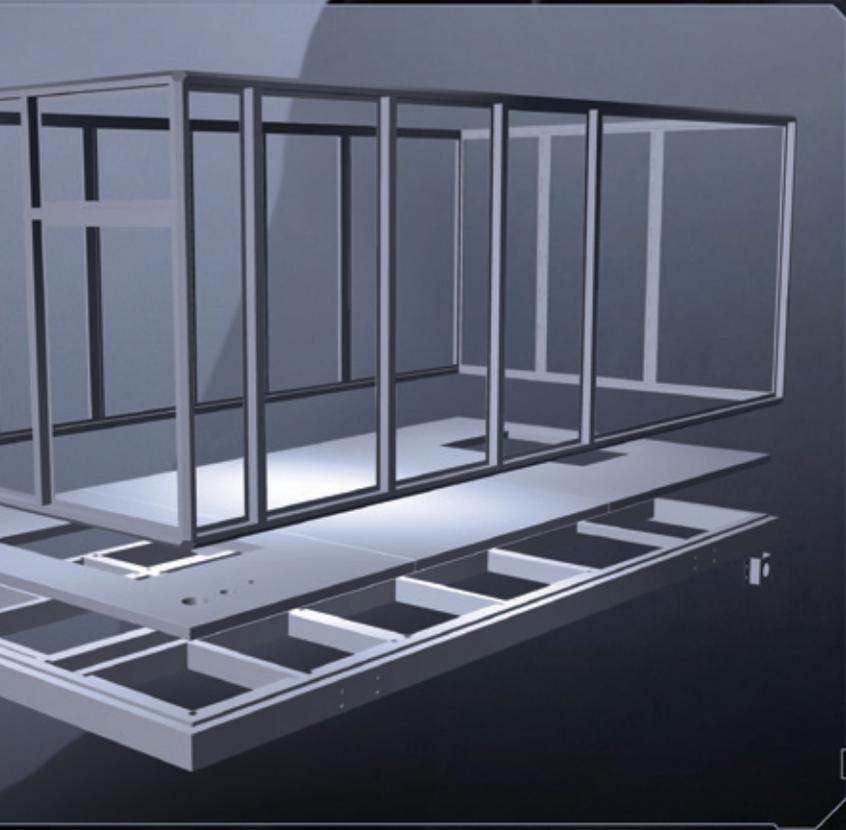
Tailored to Your Needs

At Annexair, our manufacturing flexibility allows us to design and manufacture all of our units with or without a compressorized section. Our designs are organized according to seven (7) distinct platforms. Our expert sales team will make it a pleasure to recommend the platform that is the most convenient for your project.

		ERU	MAU	AHU
Basic No package		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated low Ton ACCU 10 - 23T		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated mid/high Ton ACCU 23 - 84T		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add-on mid Ton ACCU 20 - 100T		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated high Ton ACCU 100 - 180T		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water source heat pump CU 10 - 160T		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vertical airflow with Integrated WSHP CU 16 - 84T		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Frame

Gas Heat



Coil

annexAir

Fan

Filters



Heat Wheel

Damper



Our Focus

Our commitment to quality
and innovation is more than just
a statement



At Annexair, our commitment to quality and innovation is more than just a statement; it is the central focus and culture of our organization. The dedicated staff in our engineering team, including our R&D division is constantly looking at ways to improve Quality, Efficiency, Life Cycle, Hygiene, Unit Construction, and Acoustical Performances amongst many other features based on our philosophy of continuous improvement.

When designing our products, we place tremendous value on input from our customers. Our comprehensive approach to designing and manufacturing combined with our enthusiasm for innovation ensures we deliver units of superior quality to our customers. This unique approach focused on not only matching, but exceeding your project specifications, has made us a recognized leader in the industry.

Keep it Simple

Our vision and philosophy is based on a "Keep it Simple" principle acquired from European influences over the years and focuses on smart ideas, eco-friendly units and durable construction. Driven by this vision, in 2007, Annexair was the first company in North America to eliminate common belt-driven fans and replace them with direct drive fans; a much more efficient concept.

We continually strive to be an industry leading green contributor by offering energy saving solutions and products which reflect the LEED philosophy and prepare us to face the HVAC challenges of the future.



All Annexair products are ETL labeled.

Intertek ETL SEMKO

AUTHORIZATION TO MARK

This authorizes the application of the Certification Marks shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to the multiple listed model(s) identified on the correlation page of the Listing Report.

Applicant: Annexair Inc.
1125 Bergeson
Dumfriesville, QC J2C 2Z5

Contact: Name: Carl St-Laurent Phone: (818) 475-2302
Fax: (818) 475-5882

Manufacturer: Same as applicant

Party Authorized To Apply Mark: Same as Manufacturer

Report Issuing Office: Intertek HVAC-Safety, Cortland, NY

Report No.: J20021318-002

Product Covered:
Products covered by this report are Energy Recovery Equipment, Series W, F, H, ERY, ERP, CRP, SRW, FRW-F and without energy recovery equipment series ASR and MSL, followed by the accessories which specify Insulation, Cabinet Size, Heat Exchanger Information, and Component Options.

Description:
The Air Handling and Energy Recovery units are versatile configurations with heating, Cooling and Energy Recovery options. Units are based around air-to-air heat recovery devices. The manufacturer is able to select from pre-designed Models with components such as heat-wheels, heat pipes, third plate, pleated fins, scroll fins, energy recovery wheels, water coils, evaporative coils, electric heat up to 100 kW, indirect gas fired furnace, condensing units and other refrigerative components. The units are available for interior or exterior applications and are offered in various sizes with an air throughput of 400 to 80,000 CFM. Units are shipped completely assembled and their main application is commercial.

Standard(s):
Standard for Safety Heating and Cooling Equipment (ANSI I US, 1991, CAN/CSA C22.2 236-01, 3rd edition, based 2182987). This standard contains revisions through and including 2182985.

This document is the property of Intertek Testing Services and is not transferable. Only the Applicant may reproduce this document. The certification mark(s) may be applied only at the above noted location of the Party Authorized To Apply Mark.



Authorized by:  **Date:** January 16, 2007
William T. Star, Certification Manager

Control Number: 2002042
This document supersedes all previous Authorizations to Mark for the noted Report number.

Intertek Testing Services NA Inc.
180 Main Street, Cortland, NY 13045
Telephone 800-540-5811 or 815-753-8111 Fax 815-756-6520
SD 16.3.106 (12/05) Madsbury

Our Manufacturing Facility

Our manufacturing facility is modeled according to contemporary management philosophies. The production process is based on the "Visual Manufacturing Concept". The plant has no interior walls, an abundance of windows, is well lit, air-conditioned and the entire floor is painted with a light color with assigned alleys. The factory is so clean that the common expression "So clean you can eat off the floor" is a reality.

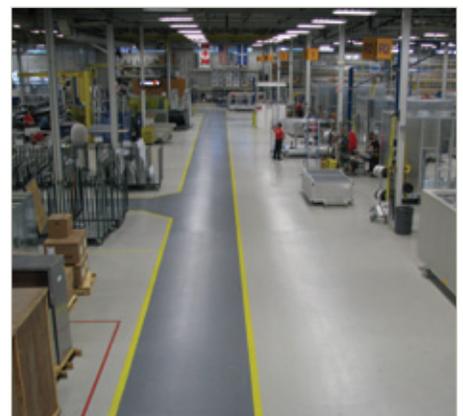
All our employees wear different coloured clothing depending on their department; this creates a clear visual definition of the different manufacturing areas. The facility layout is designed to maximize productivity and organized to promote safety at every step of our manufacturing process. All of our units are entirely manufactured in our state-of-the-art production facility with minimal outsourcing.

Qualified supervisors, including industrial engineers, maintain a rigorous quality control system in all departments.



"I believe that high quality products can only be created in a clean, safe, and positive work environment."

President, François Lemieux.





So Innovative,
it's Unique in The Industry

Quality and Performance Testing





We Build it, We Test it

Being energy conscious and environmentally responsible has had a tremendous impact in the industry; customers are demanding units that provide maximum performance while being extremely energy efficient. Units today have increasingly complex control panels that manage the many integrated electronic components and devices incorporated within the systems.

To manufacture and test these technologically advanced systems requires highly trained and knowledgeable employees. Annexair has always been a technological leader in the industry; we have continually adapted our manufacturing and testing processes as well as hired and trained competent employees, which is reflected in every product we build.



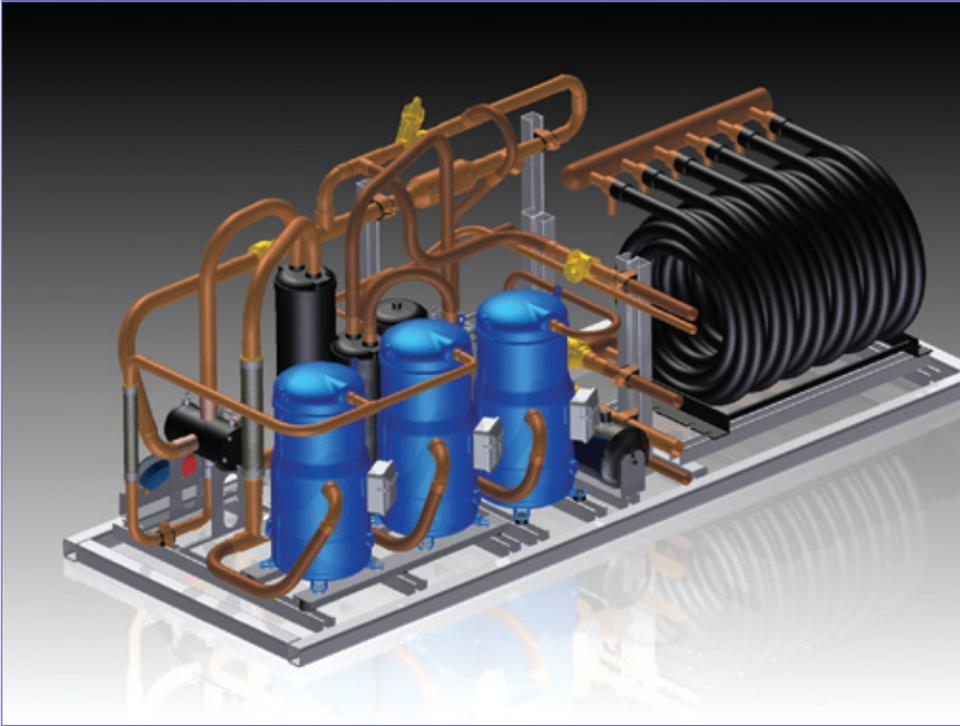
For testing water source heat pump units, a special factory closed-loop system that uses a 4,000 gallon underground water tank is connected to the unit to be tested. A technician will adjust water flow (gpm) to match exact project requirements before beginning the test procedures. An in-depth verification of the unit is performed to guarantee a problem free field start-up.

Annexair is one of the only manufacturers in North America with the capability of testing every size and type of unit. From a simple ERV to a complex dual wheel configuration equipped with a water source heat pump system, every unit we build is completely and thoroughly tested prior to shipping.

Our testing procedures include unit functionality, operation and refrigeration performance based on its operating sequence. All our Air-Cooled condensing units are also tested to ensure successful field start-up.

At Annexair, we are always focused on exceeding customer expectations and therefore rigorously update our unit testing policies and procedures. A delivered unit is a tested unit.





Annexair standard WSHP

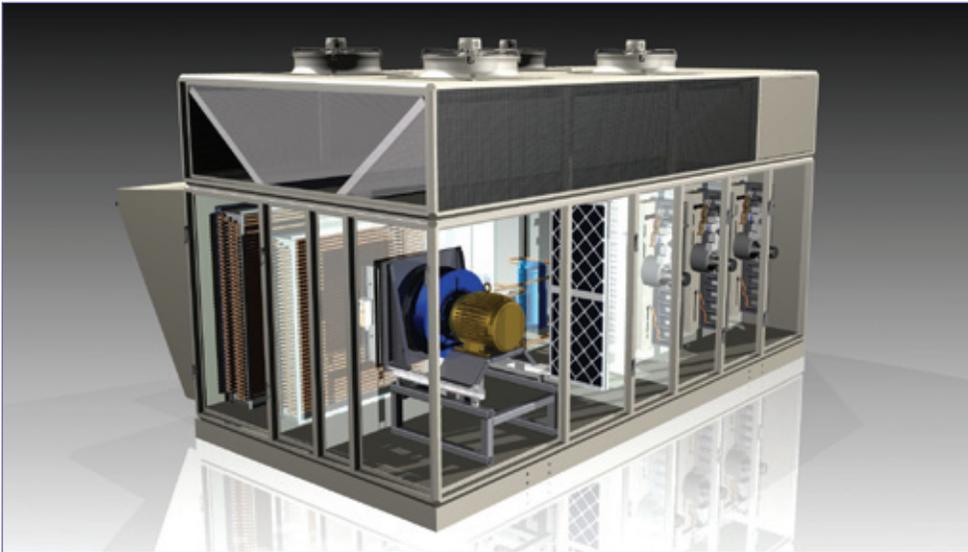
Advanced Refrigeration Systems

Technology so Hot, it Keeps you Cool

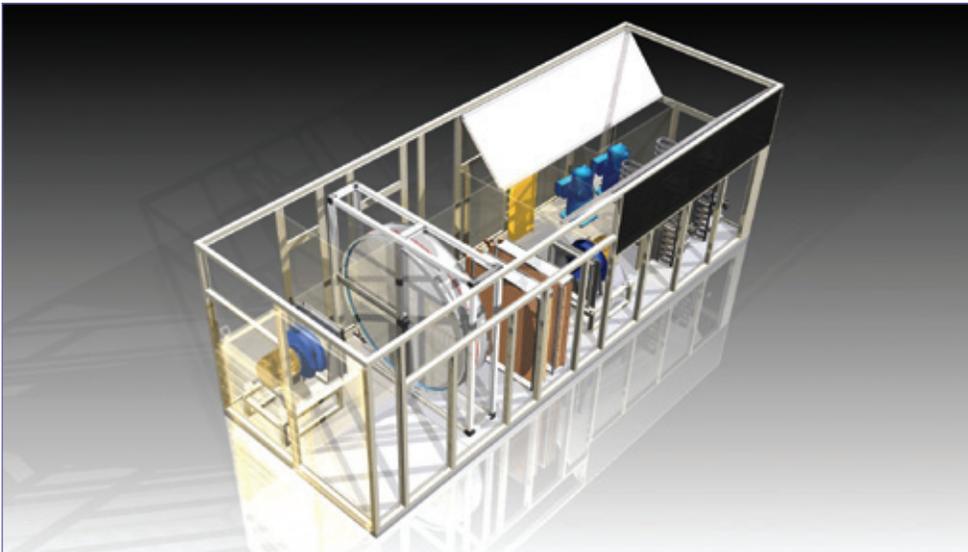
In the face of constantly increasing energy costs, Annexair has responded by creating smart, energy-conscious refrigeration systems. All Annexair developed condensing units are engineered with a unique concept: Smart Head Pressure Control. This type of control delivers optimal performance and minimizes operating costs.

Air-Cooled condensing systems incorporate variable speed condenser fans which modulate from 0 to 100% in order to keep compressor pressures at their optimal operational range. This smart design eliminates common axial fan cycling and dramatically reduces excessive acoustical noise.

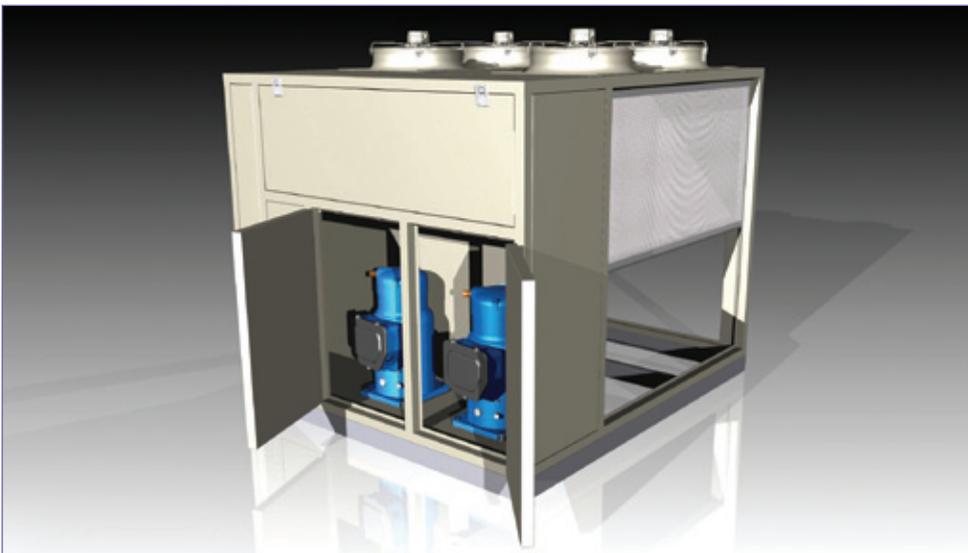
Annexair Water Source Heat Pump systems follow the same engineering concept as Air-Cooled condensing units by using head pressure control techniques that includes building water flow modulation.



Integrated ACCU on makeup system



Integrated ACCU on ERU unit



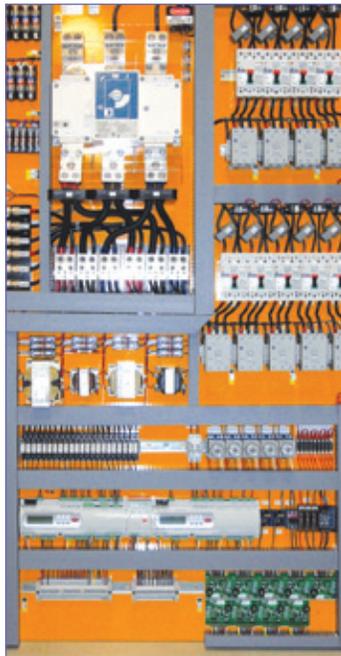
Annexair Air-Cooled Condensing units

State-of-the-art Unit Controls

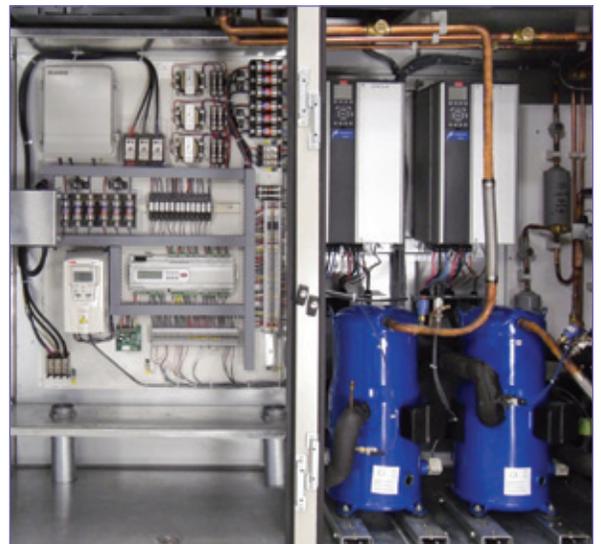
Annexair has always been recognized as an innovator in the design of intelligent and functional Unit Control Panels. The increased complexity of designing and assembling systems that include more advanced components and accessories provides manufacturers with a significant challenge. At Annexair, our engineering team has mastered the art of designing control panels that others can only envy.

The expert knowledge of our electrical and control engineers provides us with the flexibility to design a wide range of control panels from the very simple to extremely sophisticated ones based on your needs.

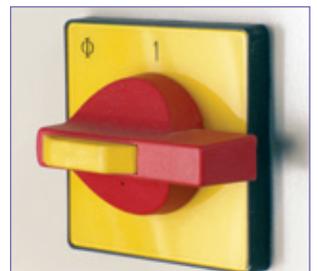
Designed and built in-house, our control panels include all the electrical wiring and components as well as low voltage accessories that are grouped together and connected to a single power source in the field. All our units are factory wired by qualified technicians that use only superior quality components and wiring. It doesn't matter if your unit has compressors, variable frequency drives, electrical heaters, sensors, gas heaters, valves, humidifiers; either in constant or variable airflow, room or discharge control, our experienced engineering team will design the perfect control panel for your system.



Similar to the production area, the electrical panel workshop is clean, well organized and functional.



Certain products are designed with a centralized service compartment which includes all electrical, controls and refrigeration systems for quick and easy maintenance.



Designed and Engineered

With Every Detail in Mind





Annexair's design flexibility allows us to build units as a single piece or with multiple modules. Example of a 25,000 CFM modular unit with heat wheel during the wiring process.

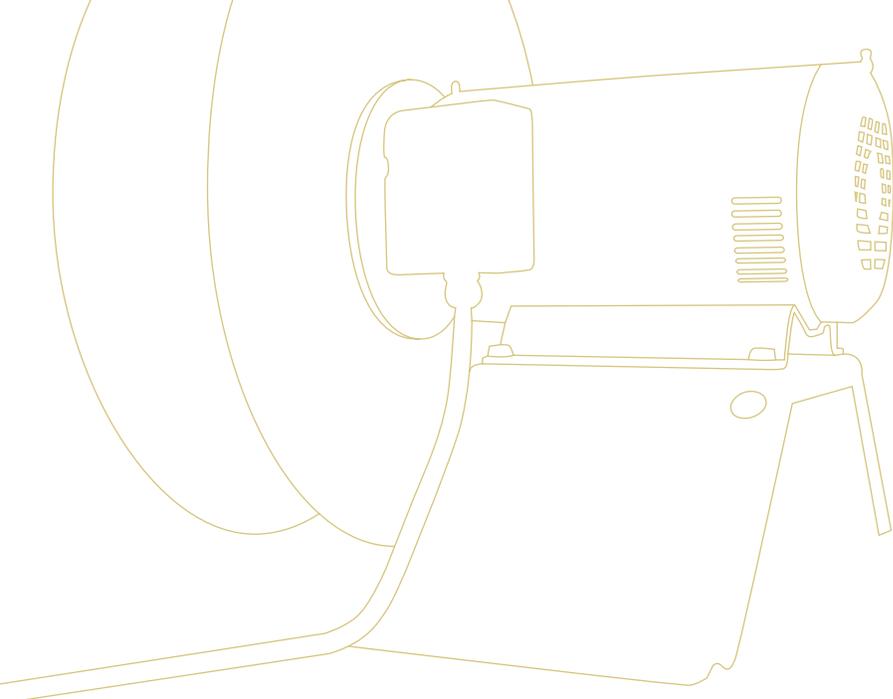


As an industry leader in the implementation of LEED recommendations in our manufacturing process, we choose components based on their environmentally friendly contribution to our units. As an example, all outdoor units come standard with a white reflective TPO membrane to reduce unit solar heat gains.



Our engineering team systematically ensures that all parts and components are accessible and easily serviceable. All of our doors are hinged as a standard. Example of a single side access door ERU with external coil connections.

At Annexair, every unit is assembled with attention to every detail according to our uncompromising quality standards. We take great care insuring every single component, part and design feature is installed properly to achieve maximum performance and provide the quality our customers expect from our units.



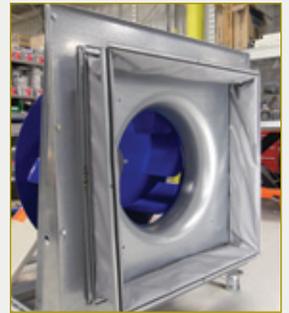
Moving Air Efficiently

Everyone knows that using a fan with a lot of parts will create more vibration and noise that is then transferred from the unit to the building. At Annexair, our direct drive fans use superior engineering to provide you with a simple fan concept that uses a minimum of components. We eliminate the most common sound transmissions, unlike other manufacturers, by accurately positioning the spring based on motor and wheel size. Our standard, perfectly balanced, epoxy coated wheel and motor base combined with a galvanized steel base makes this final assembly the perfect choice for any building owner.

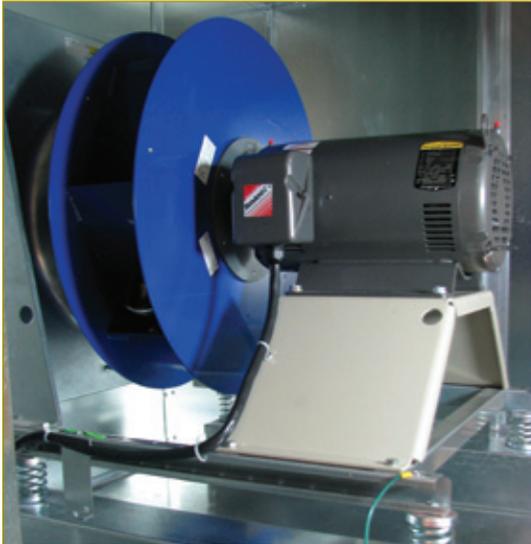
Each fan comes standard with a pressure port that can be used for airflow monitoring. In addition, Annexair has designed and integrated a unique airflow monitoring device; the EZBalancer, which is user friendly and can balance your CFM in seconds.

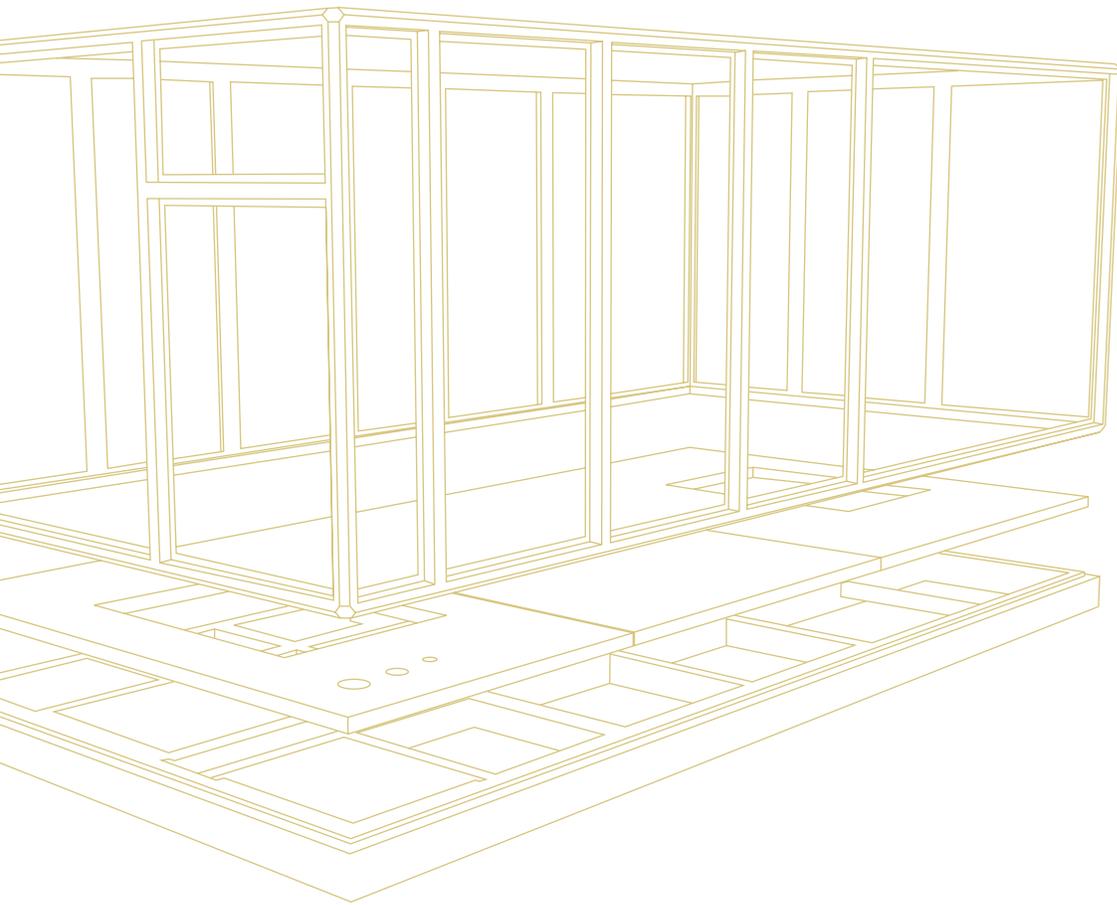


Example of an ERU that uses a 2 fan configuration to provide a total of 24,000 CFM.



Annexair uses high efficiency direct drive plug fans for all of our products. Our unit fan assemblies can vary from a large 25,000 CFM single fan to multiple fan configurations. Each unit comes with a factory programmed variable frequency drive to facilitate unit start-up. All fan assemblies can be manufactured with various motor types and efficiencies. Each fan is assembled with high efficiency spring isolators and flexible duct canvas.





Precise Standards

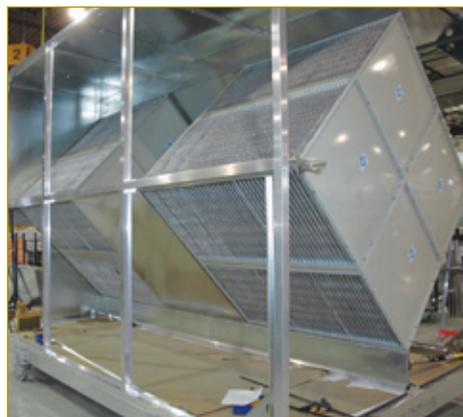
All of our units are manufactured to our precise standards that include aluminum profiles to form a solid structural frame and the panels are double wall G90 galvanized steel. Interior aluminum lining is also available as an option.

When projects have height restrictions, Annexair can design a unit that uses multiple heat wheels to fit within the mechanical room.

The manufacturing of our units follows a workflow based on the Kaizen system where units move from one station to the next until shipping. Every unit is subject to a quality control process before advancing to the next station or being shipped.



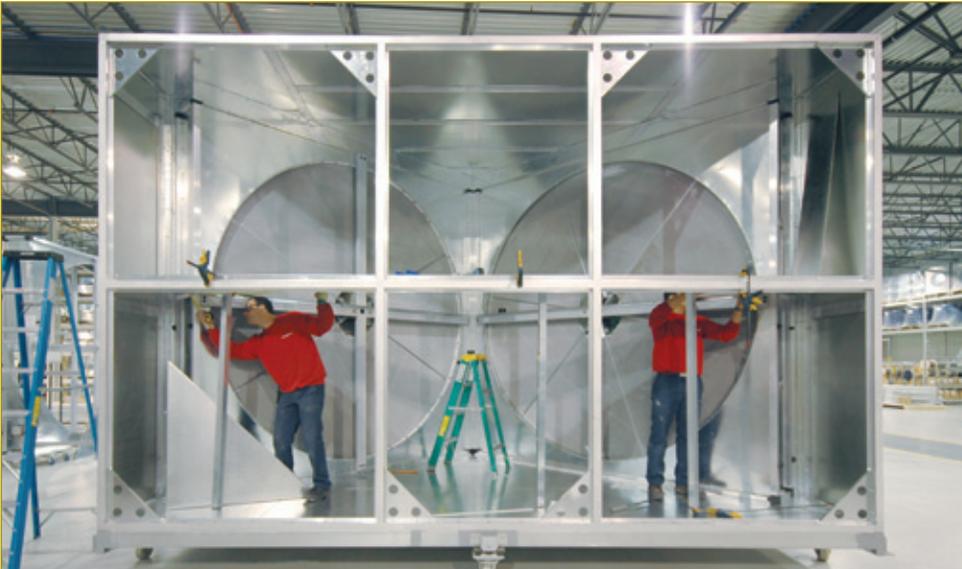
A unit with aluminum interior lining under construction on the assembly line.



Corrosion coated 40,000 CFM fix plate unit with a bypass in the center. Because of its size, the unit is being built in multiple modules.



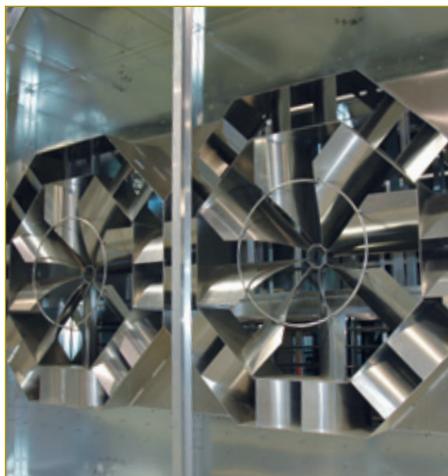
A standard unit construction incorporating aluminum profiles and double wall G90 galvanized steel panels.



Popular design configuration incorporating 2 wheels in parallel for units requiring 30,000 CFM and above.



Example of a 30,000 CFM AHU unit with 160 ton ACCU.



Example of a single fan airflow supply with smaller dual return airflow fans to accommodate height restrictions.

Proven Reliability at Every Rotation

Recognizing the importance of the wheel drive motor as a critical component of any system, Annexair has selected the German made Nord-Siemens drive motor which has proven its reliability and durability in the thousands of installations we have performed over the years.

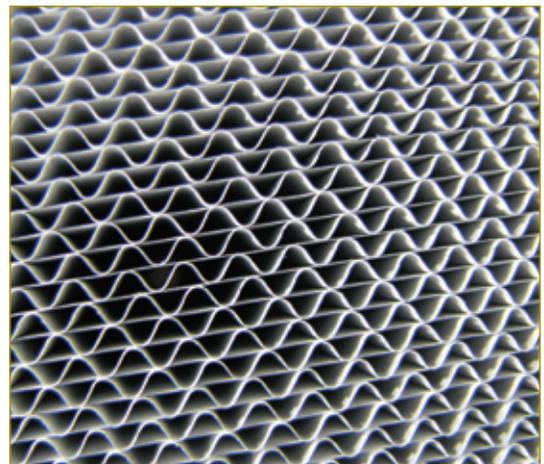
During production, our manufacturing employees ensure that all our heat exchangers; coils, wheels or delicate surface material, are protected against damage with rigid plastic boards in accordance with our quality assurance policy.



The reinforced fiberglass wheel belt is a Power Twist type from Fenner Drive. This belt is indestructible!

Annexair only uses wheels made by the best manufacturers in the world and we stock them in large quantities to guarantee fast delivery. All the wheels we use are coated with a silica gel desiccant type, have maintenance free integrated bearings, perfect winding matrix, low pressure drop and come with a 10-year warranty.

Annexair has developed an innovative and unique contact seal system that uses a UHMW strip mounted on each side of the wheel that is compressed by SS clips. Within a very short period, the system becomes air tight and leak proof. This unique seal system combined with the smooth surface of the wheel is the most advance sealing concept in the industry.



High Quality IAQ Drain pan



Our standard unit assembly consists of elevating all coils above the drain pan where they are supported by rigid stainless steel U-Beams. The arc shape eliminates water carryover and can support excessive coil weights.

When dehumidification is required, a 10 in. minimum space is placed between the coils to avoid any re-evaporation.



All condensate drain pans are built with a 3 sided incline slopes and are made of heavy gauge 304 stainless steel.



The condensate connection is a 1 1/4 in. MPT stainless steel pipe.



All condensate drains are carefully insulated with a self-adhesive 0.5 in. EPDM membrane also placed on the sides and a portion of the drain.

Durable, Rust-Free, Sound Absorbent Unit Floors

Almost all HVAC equipment produces noise caused mainly by the motors inside the unit. At Annexair, we have designed a unique floor system that virtually eliminates noise transmitted by our units. Our zero-transmitting floor system includes a thick EPDM membrane that separates floor panels from the structure. This layer absorbs unit vibrations and eliminates their transmission to the base.

Our standard floors are made of a G90 galvanized steel formed channel welded together with reinforcements. The floor panels are 2 in. double wall foam panels that are fastened from below. The result is a clean, smooth floor surface that prevents water infiltration into the building.



Lifting lugs are machined before being treated against corrosion and are then bolted through the floor structure using zinc grade 8 bolts. Sections are then coated with an industrial epoxy primer to protect the floor against corrosion. Annexair makes every conceivable effort to ensure the floor remains intact for the useful life of the unit.



“Built-in” Unit Control Panel Made Safer, Easier to Vent & Smarter



At Annexair, we quickly realized that mounting a separate NEMA 4 electrical panel on the outside of the unit, like others do, creates a significant number of problems that include: risk of damage during transportation, water infiltration, condensation build up, does not provide ventilation and can accumulate dirt if vented.

Our team of engineers designed our units with a centralized compartment that eliminates these problems and provides easy access to all major components and controls within the system. This standard construction feature creates a unit with a smooth exterior finish, makes hoisting simpler, eliminates condensation and the compartment can be vented easily.

Also, our focus on continuous improvement has recently led our electrical engineering team to reconfigure our control panel. The new design provides additional security for technicians during start-up, servicing, fine-tuning and troubleshooting. All equipment keypads are easily accessible and grouped together in one location. Annexair is gradually implementing this new feature across our complete product line.



Integrated Refrigeration Systems



Example of a 100% Outside Air MAU with an integrated 84 ton ACCU variable speed condensing unit. This unit has a wide modulation range from 7 to 84 tons that includes an ultimate linear logic control.



This 100% Outside Air MAU 46 ton unit can modulate from 7 to 46 tons. All integrated ACCU units include a protective nylon mesh in front of the condenser coil; this protective screen is auto-cleaning to ensure maximum coil performance.



One of our latest developments is to include microchannel coil technology in our standard products. Microchannel condenser coils, with their unique integrated receiver manifolds out-perform today's commonly used microchannel coils.



Interior of a 180 ton ACCU that has easy access to all refrigeration piping and components.



High efficiency, low noise condenser fans are standard for all Annexair ACCUs. The fans emit 77 db at maximum speed, the quietest in the industry. All fans modulate simultaneously to meet a supply setpoint of +/- 0.2°F and provide significant energy cost savings.

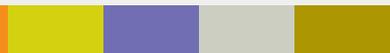


Example of an integrated 160 ton ACCU with a 7 ft. wide vestibule for compressor, control panel, receivers, sight glass and VFDs.



Professionals

Supporting Professionals



Our sales team
is unique in
North America
and recognized for
their unsurpassed
knowledge of
the industry.



Sales

At Annexair, our sales department is staffed with experienced engineers that are always available to assist you on any of your projects. Our team is led by multiple regional sales directors that each have a minimum of 15 years experience in the energy recovery industry. Our well structured team will respond to your requests quickly and efficiently to provide you with design requests, technical drawings, quotations, complete detailed specifications or any other information you may require for your project. Our sales team is unique in North America and recognized for their unsurpassed knowledge of the industry.



Quality Assurance

Annexair is focused on delivering superior quality products and has 2 dedicated professionals responsible for quality assurance. Their mandate is to ensure that all quality procedures and processes are strictly adhered to in the manufacturing of every unit we build. The company quality assurance program is based on ISO 9001 standards.

Our Professionals

Electrical and Controls

Our electrical and control panels are recognized throughout the industry for their sophistication and simplicity. They are designed by highly qualified engineers and produced internally. This is one of the main areas that distinguishes Annexair from others in the industry.



Refrigeration

Our experienced refrigeration team is constantly looking at ways to exceed customer expectations by selected the best parts and components available on the market. They continually strive to increase the performance, durability and efficiency of every unit we make.





R&D

Always a believer in innovation, Annexair knows that investing in R&D is profitable and necessary to ensure the company is well positioned for the future. Our 3 full-time R&D engineers, led by the Engineering Director are always testing new materials, components and manufacturing methods that can be integrated into our units to make them the most advanced systems available in the industry today.



Marketing & Product Development

Focused on innovation and inspired by our mission, our team of engineers develops smart, innovative products that keep Annexair ahead of the competition. In addition, their mandate is to create innovative marketing tools such as catalogs and software to promote Annexair products.



After-Sale Service

Annexair has a team of 4 technicians solely dedicated to after-sale service. They are always available to assist you with replacement parts, general inquiries, warranty claims or any other after sales request you might have.

Some of our Recent Projects



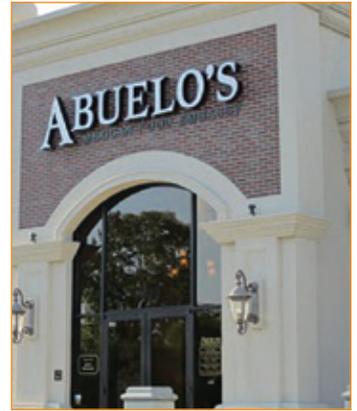
US Green Building Council Headquarters



Daimler/Freightliner, Saltillo, MX



Blue Cross Main Office, Philadelphia, PA



Abuelo's Restaurants



Lincoln Center, NYC



Massachusetts Institute of Technology



Dallas Cowboys Stadium



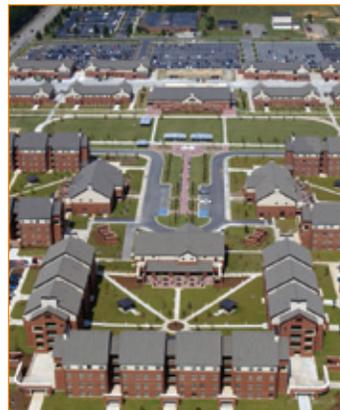
Mack/Volvo, MD



Harvard, MA



Proximity Hotel, NC



Fort Bragg, NC



West Point Military Academy, NY

Partnering With the Best...



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