

FARRAR ECOFLEX







www.farrarscientific.com

1-800-242-7197

contactfarrar@tranetechnologies.com

FARRAR™ ECOFLEX ENVIRONMENTAL CHAMBER

UP TO 50% ENERGY SAVINGS OVER TRADITIONAL SYSTEMS*

DESIGNED WITH SUSTAINABILITY IN MIND

REDUCED COMPRESSOR LOAD PROMOTES LONGER LIFECYCLE VALUE



Evaporators and drain lines are eliminated from within the environmental room. All the service for the FARRAR EcoFlex prepackaged unit is external to the room helping to eliminate contamination risks and unnecessary temperature excursions.

*Up to 50 percent more energy efficient in standard use vs. traditional environmental rooms, dependent on loading.

CONTINUOUS AIR CIRCULATION PROMOTES TEMPERATURE UNIFORMITY PERFORMANCE



Modular approach enables the equipment to be redeployed after room modifications or relocation.



Optional fully coated cooling coils for anticorrosion and maximum lifecycle.



Modular prepackaged FAT cooling heating unit with variable speed evaporator fans and a variable speed compressor resulting in up to 50% energy savings over traditional system after designs*.



Very small refrigerant charge using R448. This ensures clients have a future proofed system that only requires a 6 pound charge of refrigerant. This eliminates the need for a larger refrigerant charge and potential leak risk.



Quiet and compact refrigeration system is factoryacceptance tested, charged, and operational before arrival.



All units are assembled in North America with quick-ship replacement parts available.

WHY VARIABLE SPEED?



Life Cycle

Longer compressor life due to reduced compression stresses.

Responsiveness

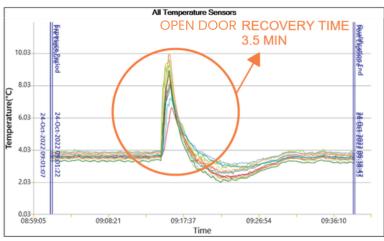
The variable speed compressor and variable frequency drive, enables extremely responsive changes in capacity control based on real-time cooling loads. The FARRAR™ EcoFlex controls temperature uniformity throughout the room and produces mapping results superior to the outdated egg-crate ceiling grid system.

Our supply and return air grill system and air delivery system provides excellent thermal stability within the environmental room!

Refrigerant Flow

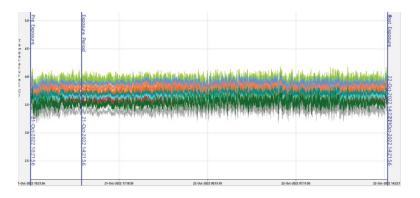
The variable speed compressor adjusts the refrigerant flow in response to the room's cooling load rather than turning hot gas bypass valves on and off. The traditional method of rapidly alternating the hot gas by pass valves can lead to premature failure by valves sticking in open positions and causing immediate room failure.





Open Door Recovery

Superior room temperature recovery as the system obtains an extra boost of cooling during rapid pulldown. The FARRAR EcoFlex EC Motor evaporator fans and variable speed compressor automatically respond to a spike in cooling load due to door openings and can recover within 3.5 minutes.



WHY A PREPACKAGED TOP-MOUNT UNIT?

Quiet and compact prepackaged unit that is fully tested, charged, and operational before delivery to site.

Helps eliminate the need for cosmetic egg crate ceiling which produces no net benefit.

Prepackaged modular approach eliminates field refrigeration piping.

The prepackaged top-mount refrigeration system can arrive and be installed within one day to provide a fully functioning environmental chamber.

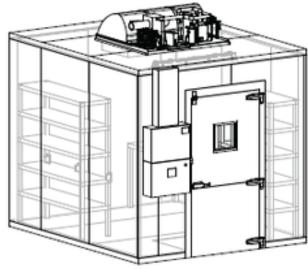
Our unique prepackaged unit provides 100% usable volume within the room.

FARRAR EcoFlex creates a secure environment. All service and maintenance is exterior to the room so that the stored, valuable product is untouched and undisturbed.



The FARRAR EcoFlex environmental chamber enables service access from ceiling so that stored, valuable product remains untouched and undisturbed.





FARRAR EcoFlex's compact, pre-manufactured design is the only refrigeration system that is factory-acceptance tested prior to delivery. All other traditional systems need to be assembled in place on site, resulting in increased risk of refrigerant piping leaks and electrical wiring mistakes.

COMPETITION DIFFERENTIATORS



Fig. 1: Competitor solution - showcasing ceiling mounted cooling coil.



Fig. 2: FARRAR™ 18-year-old environmental chamber supply and return grill.

The FARRAR EcoFlex utilizes a simple supply and return air grill at the ceiling (fig 2). Competitors (fig 1) typically use a ceiling-mounted cooling coil behind a egg crate ceiling grid system that essentially becomes wet due to condensation as soon as the door is opened. The cooling coils above the room chill the egg crate ceiling tiles making them perfectly ready for condensation development and mold development which becomes a wet filter.



Fig. 3: Competitor solution - Showcasing 18-year-old Egg Crate Ceiling.

Traditional competitor systems require extensive refrigeration piping and insulation and large refrigerant charges vs. the FARRAR EcoFlex unit which is a prepackaged modular top-mount style cooling and heating unit designed and manufactured specifically for controlled environmental rooms and does not require any field refrigeration piping or plumbing.

FARRAR EcoFlex typical refrigerant charge = 6 lbs.

Competitive designs utilize a constant speed compressor with hot gas bypass resulting in continuous compressor operation, energy inefficiencies, and loud systems.

FARRAR™ SERVICE



PREVENTATIVE AND PREDICTIVE MONITORING

At FARRAR, we ensure that your EcoFlex environmental chamber remains precise and reliable. Our team of expert technicians conduct regular maintenance on all parts of the chamber, carefully inspecting mechanical equipment, electrical equipment, and controls. To achieve optimal performance, we recommend annual calibration of temperature and humidity sensors. Our contractual agreements offer emergency service and repairs.

Our services extend to nationwide installation, project management, remote preventative and predictive monitoring, proactive rapid response service, technical support for service operations, and customizable maintenance plans. Trust FARRAR to maintain your environmental



• 24/hr, 7 days per week service response

• 24-hour onsite for emergency calls

chamber in excellent working condition.

- FARRAR 'next day' inventory for most common parts
- · On-line access to service manuals
- Preferred rates for system/component upgrades
- Preferred discounts for additional FARRAR products

PROACTIVE RAPID RESPONSE

FARRARTM ECOFLEX













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800-B Beaty Street Davidson, NC 28036