



Today's solution for tomorrow's efficiency and environmental requirements



R-410A Rooftop Systems



Engineered for flexibility and performance™



Excellent Energy Efficiencies



McQuay R-410A rooftop systems are available with EERs that exceed ASHRAE 90.1-2007 requirements for the year 2010, which are approximately 6% more efficient than ASHRAE 90.1-2004 requirements.



Model RPS applied packaged rooftop systems.

Perfect for LEED

High-efficiencies combined with robust, microchannel condensers and low volumes of HFC refrigerant make **McQuay R-410A** rooftop units ideal for projects seeking LEED® certification.

McQuay has the most complete line in the industry of VAV rooftop systems that use HFC-410A (R-410A)—a non-ozone-depleting refrigerant with no phase-out concerns. All are available with efficiencies that exceed ASHRAE 90.1-2007 requirements for the year 2010. And they are competitively priced. These products include:

- **Maverick II™** commercial packaged rooftop systems, from 30 to 75 tons. These units are ideal for standard commercial HVAC applications where installed cost is a primary concern. EERs as high as 11.5 set them apart from most competitive systems.
- **Model RPS and RDT** applied packaged rooftop systems, from 50 to 140 tons. Select these units when job requirements call for additional capabilities such as make-up air, advanced filtration, energy recovery, ultra-quiet operation, higher capacities and precise ventilation control.



Maverick II commercial rooftop systems.

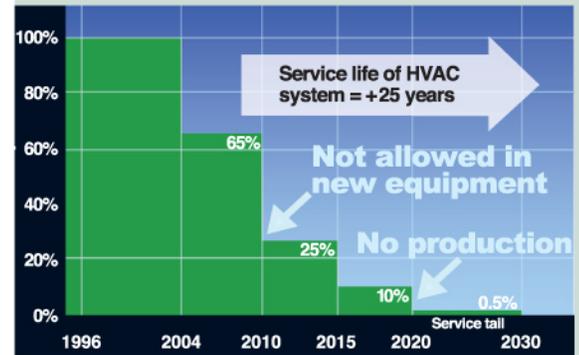
Protecting the Environment & Your Investment

Using chlorine-free R-410A with zero Ozone Depletion Potential (ODP) helps protect both the environment and your investment. That's because new equipment using R-410A faces no mandated phase-out date over a 20 to 30 year equipment life expectancy.

Most competitive VAV rooftop systems still use HCFC-22 (R-22) refrigerant, which has a phase-out date mandated by the U.S. Environmental Protection Agency (EPA). As of January 1, 2010, R-22 can no longer be used in new equipment. As of January 1, 2020, it can no longer be produced or imported, which means all service work will require recycled, and likely expensive, R-22 refrigerant.

When does your project ship?

With the 2010 deadline fast approaching, it could affect projects you are designing today. Any unit that uses R-22 refrigerant will be illegal if it's shipped after December 31, 2009. The same may be true of units that do not meet 2010 efficiency requirements.



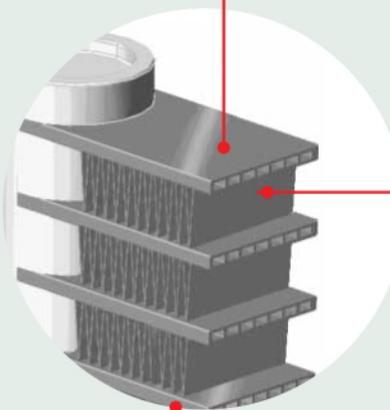
HCFC phase-out schedule — HCFC refrigerants, including R-22, will no longer be available in new equipment as of 2010. By 2020, R-22 will only be available as recycled refrigerants, increasing service costs.

All-Aluminum Microchannel Condensers

All **McQuay** R-410A rooftop products are equipped with all-aluminum microchannel condenser coils, which are constructed of the following items, oven-brazed together:

- Extruded flat tubes with many small flow channels arranged in a two-bypass configuration. These tubes provide better fluid-to-tube heat transfer than traditional round tubes and more heat transfer per square foot than traditional coils. They also require much less refrigerant charge per ton of cooling.
- Aluminum fins brazed between the adjoining tubes. This arrangement protects the fins from the surface damage that is common in traditional coil arrangements which can inhibit cooling performance and is difficult to comb out.

This all-aluminum construction eliminates galvanic corrosion (which occurs when dissimilar metals, such as copper and aluminum, are in contact with each other). As a result, all-aluminum condensers are more resistant to corrosion in any environment, including seacoast applications.



Flat aluminum tubes with many microchannels increase fluid-to-tube heat transfer and reduce refrigerant charge requirements.

Aluminum fins brazed between adjoining tubes protect the fins from surface damage, which can inhibit cooling.



McQuay's Unique Features and Options

2"/4" Combination Filter Track

- Provides more flexibility to meet building filtration requirements
- 2" MERV 6 filters shipped with unit, owner preference thereafter

Airfoil Plenum Fan

- Energy efficient and quiet
- 1" seismic spring isolators for superior vibration control
- Class II construction
- Premium efficiency motor is standard

Economizer

- CO₂ control for building IAQ
- DCV control for efficient VAV operation

Low Leak Outside Air Dampers

- 4 cfm/ft² to meet ASHRAE Standard 90.1-2004
- Class 1A leakage rated
- Double-wall blades
- Blade edge and jam seals

Exhaust Fans with Building Pressure Control

- Provide better building operations, higher customer satisfaction

Hinged Access Doors

- On both sides of unit for easy access to all components
- Easy-open, quarter-turn latches
- Double-wall construction protects insulation during maintenance

Polymer, Double-Sloped Drain Pan

- Prevents corrosion
- Avoids standing water for high IAQ
- Slides out for easy cleaning

MicroTech™ II Unit Controller

- Open Choices™ feature provides interoperability with BACnet or LonMark certified communications for easy integration into your building automation system of choice.
- Outdoor air and humidity control logic maintains minimum fresh air intake and optimum humidity levels.

Maverick II Commercial Rooftop Systems

Durable Construction

- Pre-painted exterior cabinet panels pass 750-hour ASTM B 117 Salt Spray Test for durability
- Weather-resistant construction with capped seams and sloped top panels
- Double-wall construction protects R-4 insulation and provides wipe-clean surface

Microchannel Condenser Coils

- Proven technology from the automotive industry
- Suited for R-410A
- All aluminum design
- No corrosion between fins, tubes and header

Scroll Compressors

- Provide maximum dependability, efficiency and quiet operation
- Five stages of capacity control for efficient DAT control
- Optional compressor isolation valves

Gas Heat

- Tubular heat exchanger for maximum heat transfer
- Four-stage capacity control
- Optional 4-to-1 modulation control on low heat
- Optional 8-to-1 modulation control on high heat

R410A Refrigerant

- No ozone depletion potential or phase-out date
- 10.0 EER, meets ASHRAE 90.1-2007 energy requirements for the year 2010
- Dual refrigerant circuits provide redundancy for high unit reliability

McQuay's Unique Features and Options

Blow Through System Design (shown)

- High sensible heat ratio for optimized cooling performance and energy efficiency
- Quieter tenant environment by putting distance between fan and building occupants

Draw-Through System Design (not shown)

- High latent cooling for make-up air systems or systems with high humidity loads

Return or Exhaust Fan

- Customize the unit to fit the application and return duct pressure drop
- Exhaust fans typically save energy at low return duct pressure drops
- Return fans provide better building pressure and ventilation control as return duct pressure drop increases



Airfoil Fans

- DWDI airfoil fans with housings provide maximum efficiency
- Flexible selection allows larger diameter, lower RPM choices and quieter operation

Economizer

- Outside air enters from both sides, improving mixing for better temperature control
- DesignFlow™ Precision Ventilation Air Measurement System measures incoming air volume with an accuracy of $\pm 5.0\%$ for optimum control of minimum outdoor air intake and good IAQ
- Patented UltraSeal™ low-leak dampers minimize air leakage, reducing energy costs

Hinged Access Doors

- On both sides of every section for easy access to all components
- Single lever latch and door holders provide easy entry
- Double-wall construction protects insulation during maintenance

Durable Construction

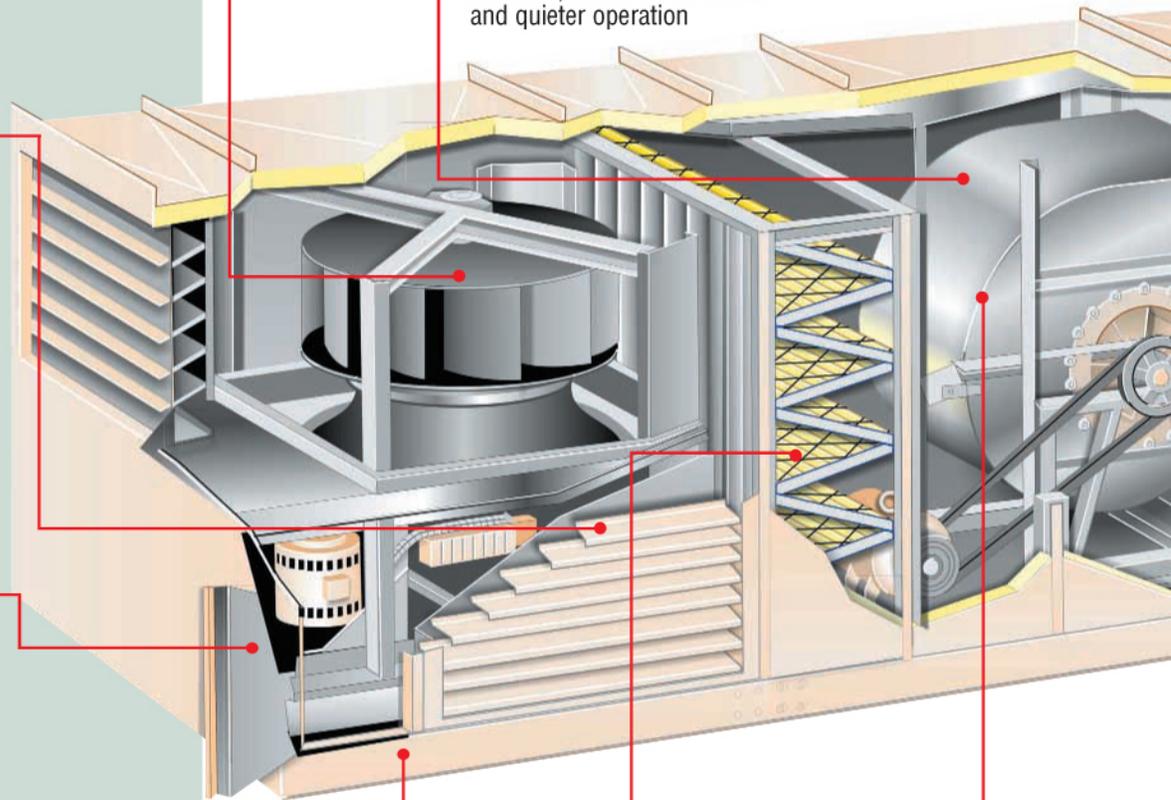
- Pre-painted exterior cabinet panels pass 750-hour ASTM B 117 Salt Spray Test for durability
- Weather-resistant construction with capped seams and sloped top panels
- Double-wall construction protects R-6.5 insulation and provides wipe-clean surface
- Stainless steel, sloped drain pans to avoid standing water

Extended Face Area Filters

- 2" pleated or rigid cartridge

Factory-mounted Variable Frequency Drives

- Control fan motor speed for lower fan operating costs and quieter operation



R-410A Applied Rooftop Systems

MicroTech™ III Unit Controller

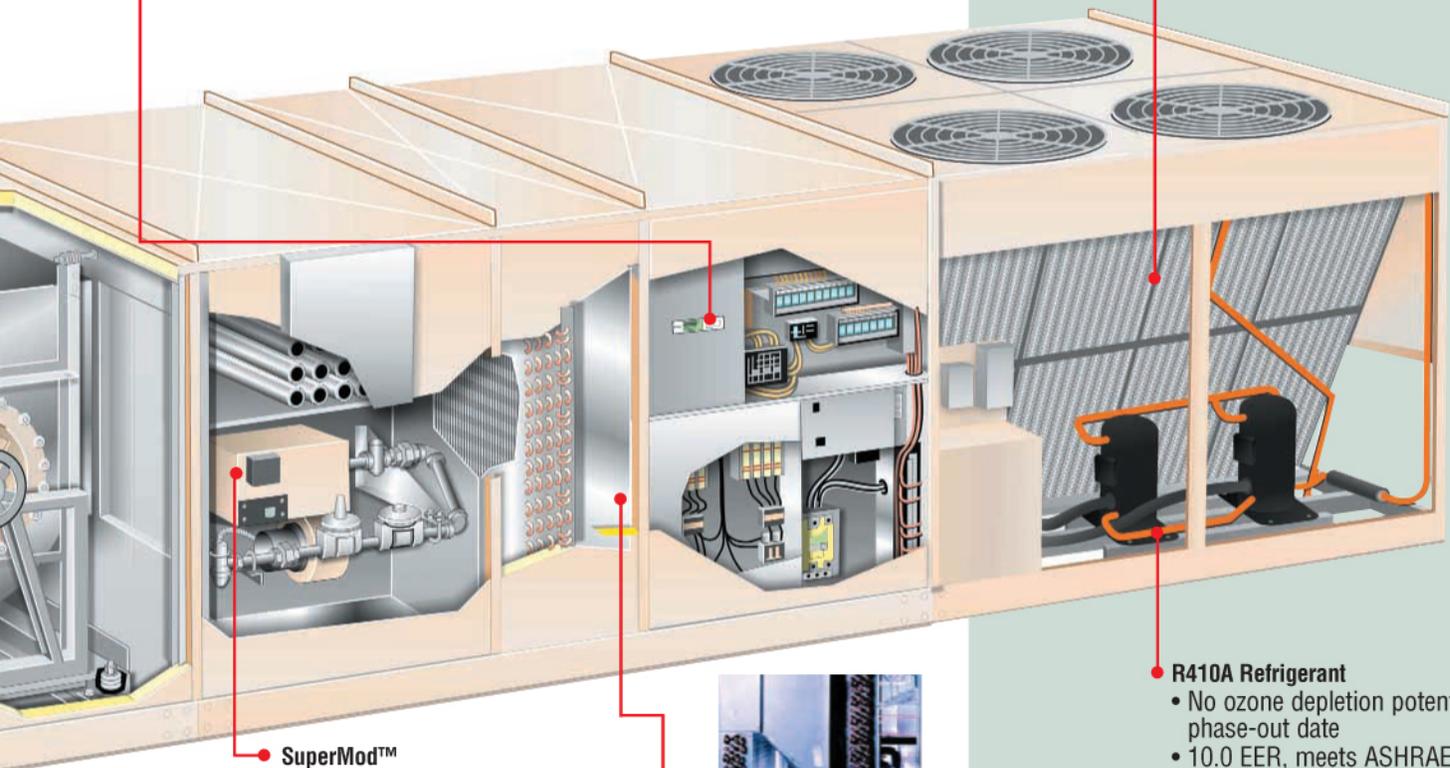
- Easily accessed for system diagnostics and adjustments via a keypad and display on unit
- Remote user interface option provides all functionality of unit-mounted interface
- Open Choices™ feature provides interoperability with BACnet or LonMark certified communications for easy integration into your building automation system of choice



- Compatible with McQuay Multiple Air Handler Controller (MAC) for coordinated operation of multiple units serving a common duct or space
- Outdoor air and humidity control logic maintains minimum fresh air intake and optimum humidity levels

Microchannel Condenser Coils

- Proven technology from the automotive industry
- Suited for R-410A
- All aluminum design
- No corrosion between fins, tubes and header



SuperMod™ High Turndown Gas Burner

- Full 20:1 turndown and multiple sizes enable precise temperature control at reduced design, installation, and life-cycle costs
- Maintain comfortable tenant environment in VAV, 100% make-up air, and dehumidification applications



UVGI Lights

- For pennies a day, UVGI can improve IAQ by destroying mold, fungi, and bacteria on coil and drain pan surfaces

R410A Refrigerant

- No ozone depletion potential or phase-out date
- 10.0 EER, meets ASHRAE 90.1-2010 energy requirements
- Dual refrigerant circuits provide redundancy for high unit reliability

Blank Sections

- Available throughout unit to factory-mount air blenders, filters, sound attenuators, humidifiers or other specialty equipment (air purification shown)
- Allow customization for maximum system performance and efficiency
- Reduce design and installation costs



To find out more about **McQuay** applied rooftop systems,
call your local **McQuay** representative at:

Metro Area: 787-961-9222

Island: 787-777-1893

Mobile (Until 9pm): 787-594-1119

*A global leader in
system solutions for
air conditioning, heating,
ventilating and refrigeration.*

