

WHISPERQUIET®

RECIRCULATING AIR HANDLERS

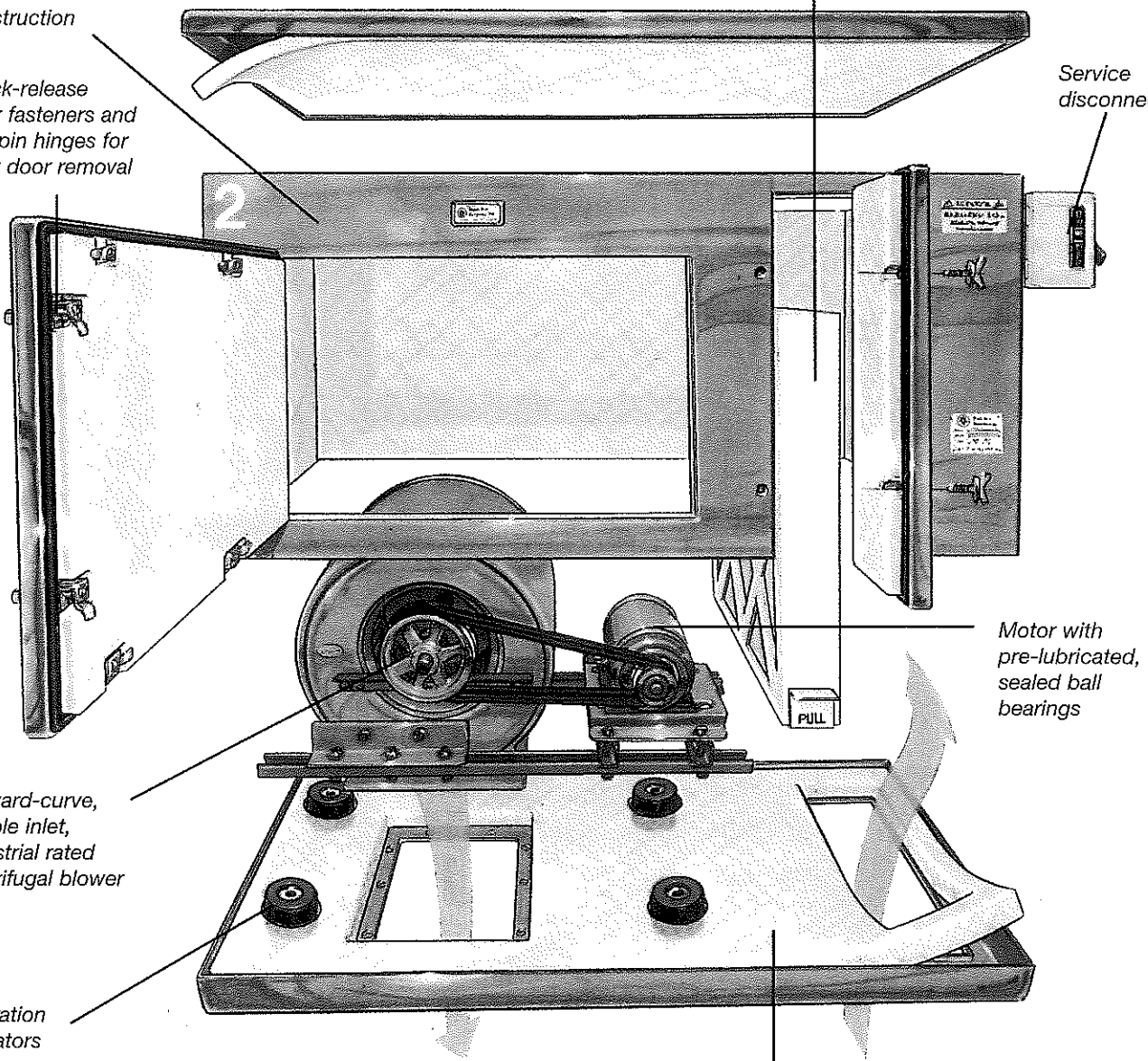
For Cleanroom environments and other demanding applications

Cabinets are one-piece welded modular construction

Quick-release door fasteners and slip-pin hinges for easy door removal

Easy side access to prefilters

Service disconnect



Forward-curve, double inlet, industrial rated centrifugal blower

Motor with pre-lubricated, sealed ball bearings

Vibration isolators

Cleanroom compatible, sealed insulation



CLEAN AIR TECHNOLOGY, INC.

WHISPERQUIET® RECIRCULATING AIR HANDLERS

Designed and manufactured for quiet operation and durable, efficient performance in cleanroom environments and other demanding applications.

The WhisperQuiet® line of recirculating Air Handler equipment is specifically designed and manufactured for HVAC applications that require quiet operation and durable, efficient performance.

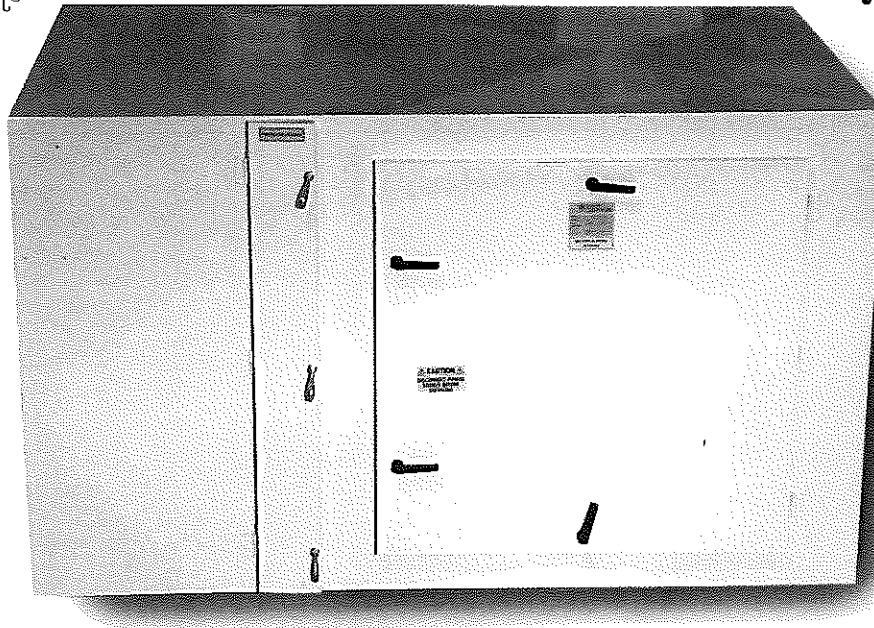
Each unit incorporates heavy-duty components, to provide dependable, continuous operation with minimum noise levels and maintenance. Models are available with a variety of options to meet specific application requirements. Each model offers product features that deliver significant benefits to end-users.

Designed for quiet operation

The WhisperQuiet® Recirculating Air Handler is designed for applications demanding continuous, proven reliability.

Each unit includes several design and construction features to assure that operation is at the lowest possible noise levels:

- One-piece, welded construction eliminates loose seams that can develop vibrations and accompanying noise.



- Insulated access doors are gasketed and air tight.
- Blower shaft bearings are heavy duty, industrial ball-bearing style with grease ports.
- All motors are double-shielded, pre-lubricated and rated EPACT compliant.
- Vibration isolators are matched to specific weight requirements for each assembly. Vibration isolators are located within a sub frame between the blower and bottom of cabinet. The complete assembly is fully isolated.
- Additional vibration reduction is provided by the use of flexible air-duct connections between the blower discharge outlet and the supply air inlet duct.

- Foil faced insulation is secured in place using welded stud pins. All edges are sealed with foil tape wrap.

- Insulated double wall construction optional.

Designed for durable, high-efficiency operation

High-volume air movement places significant demands on air handlers.

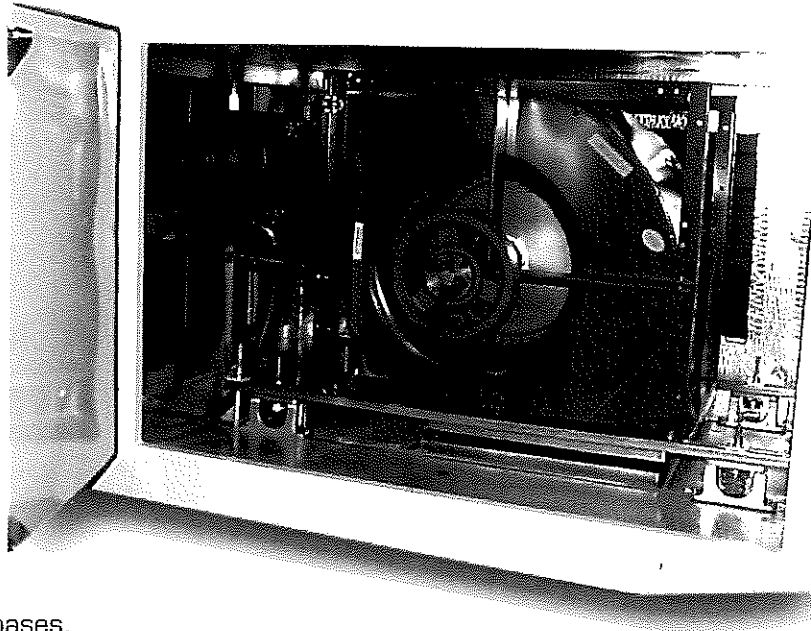
Continuous operation can stress and wear moving parts and reduce operational life. WhisperQuiet® recirculating air handlers are designed to meet the difficult demands of high-volume air movement with superior efficiency and extended operating life.

- Blower and RPM ratios are calculated for each unit to determine the most efficient air volume to horsepower rating.
- Cabinets are constructed from 18 gauge aluminized steel then primed finished and painted. Cabinets for exterior placement are constructed with 18 gauge aluminized steel, primed and finished painted for outdoor environments.

- All standard modules feature forward-curve, double inlet, industrial-rated class 1 centrifugal blowers, with adjustable sheaves, belt drive, high-efficiency motors, built-in prefilter section and vibration isolators.

- Units 5 hp and larger use double or multiple groove style sheaves. B-Drive belts are used for greater grip and torque. All double or multiple drive belts are matched belt sets.

- Standard motors are 3-phase, open, drip proof, mounted on adjustable motor bases.



These options include:

- Exterior grease port's
- Air volume capacities, from 1,600 CFM to 25,400 CFM
- Vision window

- Cooling with either chilled water or DX cooling coils.
- Heat/reheating with hot water, steam or electric heating coils.
- Manually-adjusted face and bypass air balance dampers.

- Backward inclined blowers.
- Spark-free aluminum blower wheels and housings.

Motor and starter options

- Manual starter, magnetic starter, or combination fused magnetic motor starter with service disconnect.
- Variable frequency drive (VFD)
- Service factors to 1.25.

Designed for easy inspection and maintenance

Standard WhisperQuiet® recirculating air handlers are designed to minimize the time and effort required for inspection and maintenance procedures.

- All access doors utilize quick-release fasteners and slip-pin hinges for easy door removal.
- Access doors are designed so that complete blower/motor assembly can pass through the door opening, if necessary.
- Prefilter access doors are located on the same side as the motor drive access door on standard units.

Options to meet your specific application

WhisperQuiet® recirculating air handlers are available with a variety of options that allow the units to be delivered and installed for your specific application.

- Variety of mounting configurations, including suspended, deck mounted or roof top.

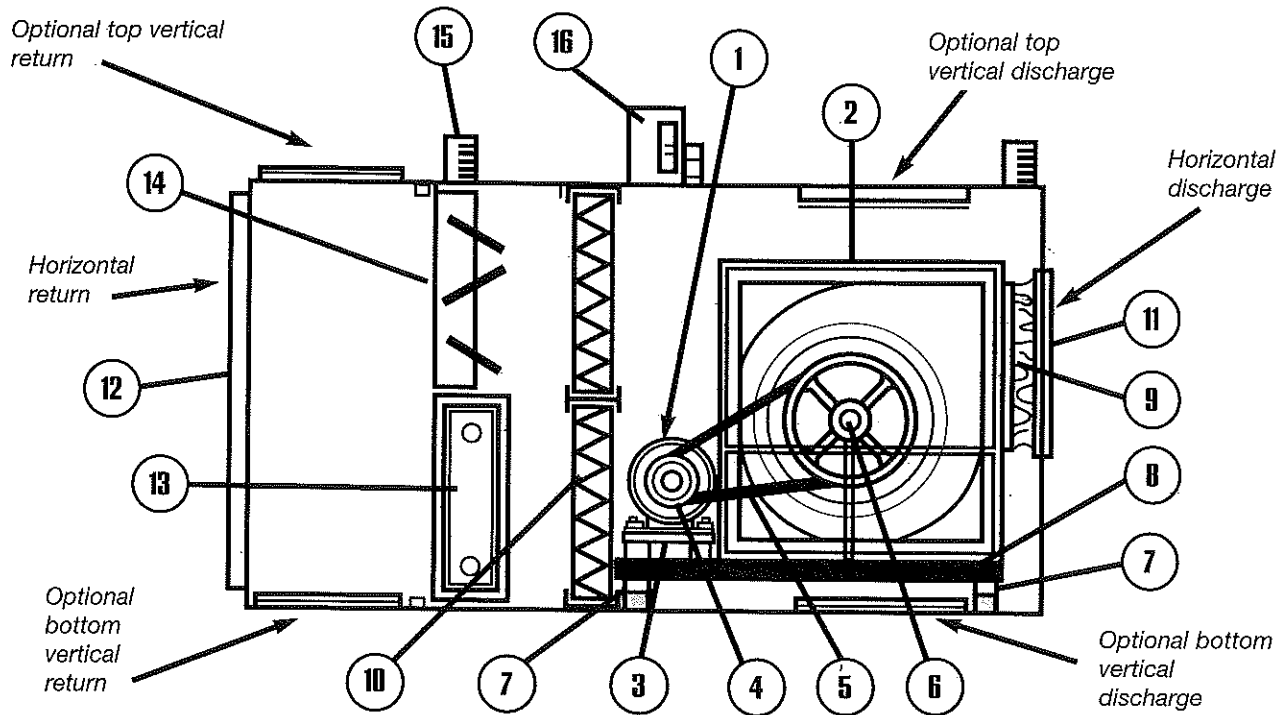
- Totally enclosed, fan-cooled (TEFC), totally enclosed, non-ventilated (TENV), or explosion-proof motors.
- Voltages, 208-220-240V., 1-phase and 3-phase; 440-480V. 3-phase; and special foreign voltages.
- Externally mounted motors, drives and belts with guards.

Model number designations for WhisperQuiet® Recirculating Air Handlers

Model No.	CFM Range*	HP
RAH 16-28	1,600-2,800	1
RAH 28-42	2,800-4,200	2
RAH 42-56	4,200-5,600	2
RAH 56-70	5,600-7,000	3
RAH 70-84	7,000-8,400	5
RAH 84-98	8,400-9,800	5
RAH 98-112	9,800-11,200	7.5
RAH 112-145	11,200-14,500	10
RAH 145-169	14,500-16,900	15
RAH 169-213	16,900-21,300	20
RAH 213-254	21,300-25,400	25

* Please specify static pressure required

Standard and Optional Components for WhisperQuiet® Recirculating Air Handlers



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|---------------------------|--|
| ① Motor | ⑨ Flexible airduct connection |
| ② Blower | ⑩ Prefilter, 4" pleated or hi-effic. options |
| ③ Adjustable motor base | ⑪ Discharge (air outlet) 3 options |
| ④ Adjustable drive sheave | ⑫ Return (air inlet) 3 options |
| ⑤ Drive belt | ⑬ Cooling and/or heating coil option |
| ⑥ Fixed driven sheave | ⑭ Adjustable damper option |
| ⑦ Vibration isolators | ⑮ Spring isolator hanger option |
| ⑧ Channel rails | ⑯ Fused service disconnect option |

For more information

For more information on WhisperQuiet® recirculating air handlers, contact our offices by telephone at **734/459-6320**, or fax at **734/459-9437**, or send your specifications or design requirements to our engineering staff for evaluation and quoting at:

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CLEAN AIR TECHNOLOGY, INC.

Decades of Experience Building America's Cleanrooms