

AERO® Air-Handling Units

Selection Guide

Single Wall or Double Wall										
Model 39L	03	06	08	10	12	15	18	21	25	
Nominal Airflow (cfm)	1,500	3,000	4,000	5,000	6,000	7,500	9,000	10,500	12,500	
Height (in.)	24	28	32	32	32	40	44	44	52	
Width (in.)	38	46	50	58	65	65	65	77	77	
Double Wall										
Model 39M	03	06	08	10	12	14	17	21	25	
Nominal Airflow (cfm)	1,500	3,000	4,000	5,000	6,000	7,000	8,500	10,500	12,500	
Height (in.)*	35	35	38	38	45	45	48	58	58	
Width (in.)*	33	46	54	67	67	72	79	79	86	
Double Wall (cont.)										
Model 39M	30	36	40	50	61	72	85	96	110	
Nominal Airflow (cfm)	15,000	18,000	20,000	25,000	30,500	36,000	42,500	47,500	55,000	
Height (in.)**	60	71	77	87	102	113	113	126	126	
Width (in.)**	104	109	109	117	117	120	139	139	157	
Single Wall or Double Wall										
Model 39S	00	01	02	03	04	05	07	09	13 17	
Nominal Airflow (cfm)	400	600	800	1,200	1,600	2,000	3,000	4,000	6,000 8,000	
Height (in.)***	15	15	19	19	23	23	34	43	43 48	
Width (in.)***	28	28	36	36	45	45	57	67	67 72	

*indoor unit with four inch base rail ** indoor unit with six inch base rail ***SH model unit

A Legacy of Training



Willis H. Carrier began training members of the heating, ventilation, air conditioning and refrigeration industry in 1905. Carrier continues to promote technical expertise in the industry with the expansion of its sustainable solutions curriculum and has recently been named a U.S. Green Building Council Education Provider (USGBC EP).

To earn this status, Carrier's course materials were reviewed by a panel of USGBC peers and deemed to provide the high level of quality required for training Leadership in Energy and Environmental Design (LEED®) professionals. The courses and workshops supporting LEED-Accredited Professional and Green Associates credential maintenance are administered through Carrier University.

Benefits at a Glance

For Building Owners and Managers

- Easy to maintain
- Reliable performance
- Outstanding life cycle cost
- Advanced IAQ solutions

For Consulting Engineers

- ARI certified
- ASHRAE 62 compliant
- Simple to specify
- Agion antimicrobial coating
- System-integrated controls

For Contractors

- Easy to break down
- Reduced installation time
- Easy to service
- Ideal for replacement

The Future of the World Depends on Our Ability... to Sustain it.

As the world's leader in high technology heating, air-conditioning and refrigeration solutions, we believe that market leadership requires environmental leadership. Carrier sets industry standards for environmentally sound business practices and a commitment to sustainability across its products, services and operations. We demonstrate this commitment by creating environmentally responsible solutions that consume less energy and incorporate innovations that improve the world – indoors and out.





AERO® Air-Handling Units

Outstanding Life Cycle Performance



With Aero® air-handling units, Carrier takes an entirely new approach when it comes to air handling. Our Aero units provide advanced technology and custom features in a streamlined package. The Aero 39M Series revolutionary casing delivers indoor air quality (IAQ) benefits while remaining easy to install. And that's just the beginning. Aero air-handling units are well-suited for a long list of applications, from commercial to industrial to institutional facilities, with the same quality features and construction for both indoor and outdoor units. The proven ease of assembly and disassembly makes the 39M ideal for retrofit situations. Aero units will perform in the most demanding precision environments, including clean rooms and high-tech processing areas. With Aero air-handling units, Carrier delivers excellent performance and reliability, combined with an unprecedented flexibility of features, so you can create precisely what you need in an air handler.



39S 400 to 8,500 cfm



39L 1,800 to 15,000 cfm



39M Aero™ (Outdoor) 1,500 to 60,500 cfm

Indoor Air Quality

Aero air-handling units (AHUs) offer highly efficient filtration options, including HEPA filters, available on the Aero 39M series. These units also have cleanable panels that can be easily wiped or washed down, as well as fully drainable sloped drain pans. For added cleanliness, the inner-panel liners of the Aero 39M units are available with Agion® antimicrobial-coated steel. This technology uses the controlled release of silver ions to provide continuous suppression of microbial growth on the interior surface of the AHU. The Aero 39M panels rest against ultratight seals and Carrier's patented "no through-metal thermal break" feature means no metal-to-metal conduction path, which reduces the likelihood of condensate forming on the outside of the unit.

Leak Tight Construction

What better way to save energy than to keep conditioned air inside the unit where it belongs? The Aero 39M casing has a proven one percent at 8 in. wg. leak rate which is backed up by random end of line testing. The structural frame and panel design is the reason for this low leak rate. It is also the same reason why it achieves a deflection ratio of less than 1:200 at +/- 8 in. wg. over the length of the unit.

Quiet Operation

The Aero 39M unit's patented-sealed double-wall insulation system not only provides superior thermal performance, it yields the added benefit of outstanding acoustics. For sound-sensitive applications, plenum fans are available. Aero AHU's extra-quiet operation can enhance the comfort of your building's occupants and the overall quality of their indoor environment.

Flexible Features

Aero AHUs offer fan options for virtually any air-handling requirement. We help configure your choice for the pressures and efficiencies that will yield the best performance for your particular application. Carrier's AHU Builder software can plot a variable air volume (VAV) system curve based on the minimum airflow and static pressure set point. Fan types include forward curve, airfoil and plenum fans, for quiet operation and installation flexibility. Most fan types are available in multiple-wheel sizes.

Reliability

The Aero 39M AHU's construction system combines complex technology with clean, elegant design. A unique structural frame carries the units' weight, enabling easy and safe removal of panels for servicing. The laminated steel-panel construction handles high-pressure applications easily, while delivering superb deflection performance. Optional prepainted, both inside and out, galvanized panels are available to protect the unit and prevent the formation of unsightly "white rust."

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BACnet is a registered trademark of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Aero® 39M Indoor Air Handler



Thermal Double Pane Viewports
R-13 Casing Insulation

Agion Antimicrobial Interior Coating

Rigid Structural Frame and Panel Casing Construction

Thermal Break Design

Exterior Appliance Quality Finish

The Right Level of Control

Factory-installed controls are available as an option on all Aero 39M air-handling units. There are many available options, from factory-mounted sensors and actuators to the most flexible system on the market today — the i-Vu UC Open XP controller by Carrier. The i-Vu Open control system combines state-of-the-art Carrier equipment, plug-and-play controllers, and the powerful, web-based i-Vu user interface to form a cohesive, intuitive, and fully-integrated native BACnet® building automation system.

The UC Open XP controller and expansion module provides auxiliary building control to interface with air handlers, chiller plants, hot water systems, lighting, and other HVAC equipment. The UC Open XP's factory-engineered control programs provide simple building integration for commercial applications with 48 I/O point capability.

Field time is also reduced by pre-wired quick connects that allow for easy assembly and disassembly of air handlers with controls.

For all your comfort needs, Carrier has the right level of control.