



# AirStream™ Fan Coils



VERSATILITY AND CONTROL FOR TODAY'S MULTI-OCCUPANT BUILDINGS

# AirStream™ Fan Coils – More Choice, More Control, More Comfort

Multi-occupant structures come in all shapes and sizes. But while hotels, hospitals, schools and apartment buildings are all very different, they all have the same need – to provide comfortable environments for the people inside.

How do you create such an environment, and at the same time, minimize your investment, energy use and operating costs? By making AirStream™ 42 Series fan coils part of your heating and cooling system.

## Always a Perfect Fit

When it comes to product range, no other selection of fan coils is more complete than Carrier's AirStream line. With everything from belt-drive units to ducted and unique stackable configurations – all in multiple models and capacities – AirStream offers you unparalleled flexibility.

That means you can choose the fan coil that's the best fit for your space and your system. And with our latest configuration software, your Carrier representative can specify the exact unit for your application quickly and easily. You receive a clear, comprehensive description of the units ordered, along with performance data, options, specifications and detail drawings.

More important, our software ensures that the AirStream units you receive are a perfect fit, eliminating the need for expensive field modifications and the delays that go with them.

AirStream units themselves are designed for fast installation, with factory-installed, low-voltage controls that simplify onsite wiring, and pre-piped, pre-wired motorized valve packages. Pop-top valve actuators simply snap on and off should the valve package require servicing.

## Control Operating Efficiency and Comfort

Team your AirStream fan coil with Carrier's communicating Zone Controller or non-communicating Debonair™ thermostats, and you gain powerful control over efficiency and comfort.

These low-voltage digital controls open up a world of options that allow you to adjust fan coil operation based on occupancy and actual cooling or heating requirements – and decrease energy usage and operating costs in the process.

Both also utilize SmartFan™ to control AirStream's three-speed fan. The controls automatically match fan speed to actual

## AirStream 42 Series Fan Coils

### 42C Horizontal Units 200 to 1200 cfm



Designed to meet the varied requirements of concealed or exposed applications, these units offer tremendous flexibility. Five different models include furred-in ceiling configurations and under-ceiling cabinet mounts.

- Perfect for hotels, apartments, schools and offices
- Fast, low-cost installation
- Low silhouette minimizes space requirements, adds versatility
- No expensive ductwork needed

### 42V Vertical Units 200 to 1200 cfm



All six models feature a slim profile that's ideal for concealed or exposed applications in hospitals, schools, apartments, offices and hotels.

- Furred-in under-window units and cabinet models offer front or top discharge
- "Lowboy" under-window models save space
- Slope-top model prevents items from being placed on top
- Out-of-the-way, furred-in wall mount
- Tamperproof locks

cooling or heating requirements, adjusting the fan to run at the lowest setting capable of maintaining the room setpoint.

Not only does SmartFan optimize efficiency, it optimizes occupant comfort by regulating temperatures more effectively, reducing fan noise and improving dehumidification. SmartFan is available on all AirStream direct-drive fan coils, including horizontal, vertical, stack and ducted units.

## Debonair – High Performance, Low Cost

Debonair non-communicating thermostats provide efficiency and simplicity across the AirStream product lineup. Yet they're surprisingly affordable, making them a powerful, economical alternative to networked controls.

In addition to your choice of non-programmable and 7-day programmable versions, Debonair thermostats come with a long list of standard features:

- Large, easy-to-read ThermoGlow® back-lit liquid crystal display
- Single or dual setpoints
- Fahrenheit or Celsius display



- Configurable system selection, to work with virtually any application
- NeverLost™ memory that stores setpoints and schedules indefinitely, without battery backup
- Tamper-proof ExactFit® locking cover

And because heating or cooling an empty space wastes money, Debonair thermostats offer a Smarttemp option. Where you're not able to predict room occupancy – in a hotel, for example – Smarttemp gives you unoccupied setback control capabilities without expensive motion sensors.

During the day, an internal time clock reduces energy use by putting the space in unoccupied mode. When a guest enters the room, a simple push of a button initiates the occupied mode for comfort control. For those applications with predictable occupancy periods, such as schools, the 7-day programmable Debonair thermostat allows up to four time and temperature settings for each 24-hour period.

Other Debonair options include wireless thermostats that go anywhere without the need for wires or holes in the walls, as well as remote sensors and light-activated sensors that change the system to pre-set non-occupancy levels when lights are turned off for the day.

### 42S Stack Units 300 to 1200 cfm



Use these stackable units in a vertical column rising from floor to floor, for extraordinary system design and installation flexibility in hotels and other multi-story buildings. Models include furred-in stack, exposed stack, and a back-to-back, furred-in model that serves two rooms.

- Reduce installed costs by 10% to 20% compared to other systems
- Require only one field power connection and a simple riser connection
- On furred-in models, only supply-air grille, return-air access panel and room thermostat are visible

### 42D Ducted Units 600 to 2000 cfm



Available in horizontal or vertical configurations, 42D fan coils are designed for ducted, high-static applications – ideal for multiroom cooling and heating in hotels, apartments and offices.

- Furred-in-ceiling, under-ceiling or closet mounting
- Simple, low-cost installation
- Quiet, efficient operation and dependable performance

## Maximize Savings with the Zone Controller

AirStream fan coils reach their full money-saving potential and versatility when they operate as part of a CCN – Carrier Comfort Network.

CCN is a fully integrated, intelligent control system that reduces costs by identifying and meeting each zone's temperature, humidity and ventilation requirements. At its heart is Carrier's Fan Coil Zone Controller, a precise, powerful interface that controls and synchronizes the operation of the fan coil in each zone.

The communicating Zone Controller allows occupancy schedules, heating and cooling setpoints and holiday schedules to be easily programmed to increase efficiency and reduce energy costs. It also saves energy by cycling the fan on and off as needed when the space is empty, operating the fan continuously only during occupied periods.

Adding to the value of the Zone Controller are many standard features, including:

- The ability to operate the system based on local or global occupancy schedules or remote time clock input status
- Diagnostic test capability



- Changeover via surface-mounted sensor or global forcible signal
- Smart Start warm-up or cool-down to achieve setpoint by the scheduled occupancy time
- Alarm status for dirty filters, condensate overflow and space temperature deviations

When teamed with optional humidity sensors, the Fan Coil Zone Controller gives you the ability to maintain space temperature and maximum humidity level. It can also be used with optional CO<sub>2</sub> or condensate overflow sensors, and can be combined with Carrier Linkage thermostats to operate up to eight separate fan coils in a single zone.

## Greater Comfort for Everyone

With so many control options, including SmartFan's three-speed fan control, AirStream fan coils provide building occupants with the ultimate in quiet and comfort. But there's another kind of comfort that comes with AirStream – the peace of mind that system designers, contractors and building owners enjoy knowing that they've chosen well-designed, well-built Carrier equipment.

To learn more about AirStream fan coils, call your local Carrier office today, or visit us on the Web at [www.carrier.com](http://www.carrier.com).

## 42BH System Units 800 to 4000 cfm



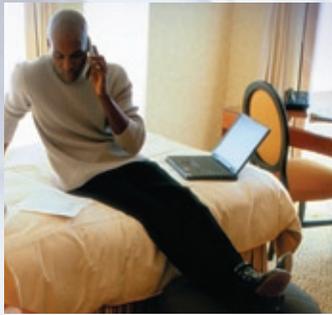
The 42BH fan coil combines comfortable, year-round air conditioning with economical central-station operation.

- Wide choice of options ensures the right unit for the job
- Motors from 1/4 to 3 hp to best fit load requirements and lower operating costs
- Factory-balanced fans lessen vibration, reduce noise
- Full-coverage, stainless steel condensate pan reduces maintenance costs

# AIRSTREAM™

# There's an AirStream™ Fan Coil for Every Application

With AirStream, Carrier offers the greatest selection of configurations, models and sizes. Whenever your project calls for fan coils, you're sure to find the perfect solution.



**Hotels**



**Health Care Facilities**



**Schools**

## Benefits at a Glance

### FOR SYSTEM DESIGNERS

- Wide selection of units, models and capacities to fit all your fan coil applications
- Powerful selection and specification software tools in the hands of experienced Carrier representatives provide system design assistance
- Option of communicating or non-communicating controls delivers even greater flexibility
- Carrier's complete product offering allows single-source system design
- UL-certified and ARI-approved equipment meets applicable standards

### FOR BUILDING OWNERS AND MANAGERS

- Affordable fan coils and controls lower system cost
- Control options and SmartFan™ deliver greater occupant comfort and productivity
- Fast, easy installation reduces labor costs and delays
- Efficiency and control capabilities save energy and operating expense
- Carrier extended warranty options provide continuous coverage

### FOR CONTRACTORS

- Breadth of line and flexibility minimize need for field modifications
- Experienced Carrier representatives with specification software ensure accurate configuration
- Simple installation saves time, increases profitability
- Factory-installed options reduce labor, boost productivity
- Reliable performance reduces potential for callbacks
- Easy maintenance shortens downtime



# AirStream™ 42 Series Fan Coils

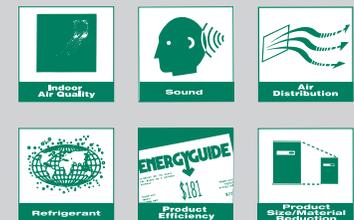


*As the world leader in heating, ventilation and air conditioning, Carrier is committed to continually improving the quality of comfort we provide to our customers. But our level of responsibility extends well beyond...*

*Carrier Corporation has identified six specific areas which directly impact how we, as a world manufacturer, balance our customers' needs for comfort with the environment's needs for responsible consumption.*

*These symbols graphically represent our six areas of concentration and will serve as visual reminders of the importance of managing our finite resources.*

*Each one of us at Carrier Corporation believes that, for generations to come, success will not only be measured by the quality of our products and systems, but also by how we have improved the quality of life.*



Manufacturer reserves the right to discontinue, or change at any time, specifications for designs without notice or without incurring obligations.  
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## 42C Horizontal Units

<p><b>42CA</b> Furred-in ceiling model with low silhouette</p> 	<p><b>42CE</b> Furred-in ceiling model with factory-installed plenum</p> 	<p><b>42CG</b> Under-ceiling-mount cabinet model with stamped return-air grille</p> 	<p><b>42CK</b> Cabinet model with telescoping flip-down panel</p> 	<p><b>42CF</b> High-static, furred-in model</p> 
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## 42V Vertical Units

<p><b>42VA</b> Furred-in model for under-window applications, top or front discharge</p> 	<p><b>42VB</b> Cabinet model with top or front discharge</p> 	<p><b>42VF</b> Cabinet model with slant top and top or front discharge</p> 	<p><b>42VC</b> Furred-in lowboy model for concealed, under-window applications</p> 	<p><b>42VE</b> Cabinet lowboy model with stamped discharge grille</p> 
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## 42S Stack Units

<p><b>42VG</b> Furred-in wall model</p> 	<p><b>42SG</b> Furred-in stack for concealed applications</p> 	<p><b>42SG</b> Furred-in stack, master and slave units</p> 	<p><b>42SH</b> Exposed stack for use where concealed installations are impractical</p> 	<p><b>42SJ</b> Back-to-back, furred-in stack units</p> 
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## 42D Ducted Units

<p><b>42DA</b> Furred-in ceiling model for ceiling or over-closet installation</p> 	<p><b>42DC</b> Furred-in ceiling model with factory-installed plenum</p> 	<p><b>42DD</b> Vertical model with galvanized casing, commonly for closet installation</p> 	<p><b>42DE</b> Ceiling model with galvanized casing</p> 	<p><b>42DF</b> Exposed-ceiling cabinet model</p> 
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## 42BH Belt-Drive Units

<p><b>42BH</b> With electric heat</p> 	<p><b>42BH</b> Without electric heat</p> 
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### AirStream 42 Series Fan Coil Applications

#### 2-Pipe

- Chilled water flow, cooling only
- Hot water flow, heating only
- Seasonal changeover from chilled to hot water
- Total electric heat (chilled water cooling, electric coil heating)

- Seasonal changeover of chilled/hot water, plus auxiliary electric heating for mid-season control

#### 4-Pipe

- Both chilled and hot water 4-pipe applications