# Healthy Home Solutions from Carrier





Carrier Clears the Air for Enhanced Comfort

# Things to Consider Before You Buy

### You Can Enjoy a Cleaner, Fresher Indoor Environment

Carrier specializes in creating a customized home comfort system tailored to your needs with our broad selection of residential heating and cooling products. To take your indoor comfort to an entirely new level, Carrier<sup>®</sup> Healthy Home Solutions offers a comprehensive family of products designed to clean and refresh the air inside your home. These products include:

• Air purifiers and cleaners

Fresh air ventilators

• UV germicidal lamps

Humidifiers

- The Infinity<sup>®</sup> System
- Carbon monoxide alarm

If you could examine the air inside your home, you might be surprised to find contaminants such as viruses, bacteria, mold spores, pollen and animal dander. In fact, indoor air can be up to five times more polluted than outdoor air. Carrier Healthy Home Solutions offers a variety of air purification and filtration products that fine tune your indoor environment by removing these pollutants from the air you breathe.

The Infinity<sup>®</sup> air purifier offers extremely high air filtration efficiency and patented germicidal technology so effective it even captures and kills airborne pathogens such as bacteria, viruses and mold spores. And, the Infinity air purifier is as convenient as it is powerful because no cleaning is required. Just periodically replace a removable cartridge.

Regular filter changes are important. Carrier high-efficiency filters feature a design that allows for easy removal and even easier replacement.

- Dirty filters restrict airflow through your heating and air conditioning system, causing the system to work harder and be less efficient in maintaining your indoor temperature settings.
- Clean filters help your system operate at its peak performance and efficiency levels, helping you keep your utility costs down.

It is recommended that your Carrier high-efficiency filter be changed at least:

- Once a year for standard fan operation
- Twice a year for continuous fan operation

## **Air Filtration Products**

When your heating and air conditioning system is equipped with a Carrier® high-efficiency air filter, your indoor air is cleaned as it passes through the pleated media filter. The clean air is then circulated throughout your home.

Filtration Efficiency for Particle Sizes     MERV 15     MERV 13 (opt.)     MERV 10     MERV 11     MERV 8       3.0 - 10.0 microns 1.0 - 3.0 microns 0.30 - 10.0 microns     > 90% > 90% 0.30 - 10.0 microns     > 85% 0.30 - 10.0 microns     > 90% 0.30 - 10.0 microns     > 90% 0.30 - 10.0 microns     > 90% 0.30 - 10.0 microns     > 85% 0.30 - 10.0 microns     > 90% 0.30 - 10.0 microns     > 85% 0.30 - 10.0 microns     > 10.0 microns     > 10.0 microns     > 10.0 microns     n/a     n/a       Extensive Capability     Extensive (see next page)     None     None     None     None       Filter     Disposable No cleaning required     No gear     10-year     10-year       Warranty     10-year     10-year     10-year     10-year       Vair purifier     EX Flax     EX Flax     Filter cabinet     Filter cabinet       (a) arrange     EX Flax     EX Flax     EX Flax     Filter cabinet	Filtration Efficiency for Particle Sizes         MERV 15         MERV 13 (opt.)         MERV 10         MERV 11         MERV 8           3.0 - 10.0 microns 10 - 3.0 microns 0.30 - 1.0 microns         > 90% > 90% 0.30 - 1.0 microns         > 90% 0.30 - 1.0 microns 0.0 - 1.0 microns         > 90% 0.30 - 1.0 microns 0.0 - 1.0 microns         > 85% 0.0 - 10 microns 0.0 - 1.0 microns         > 75% 0.0 - 10 microns 0.0 - 10 microns         > 00% 0.30 - 1.0 microns 0.0 - 10 microns         > 00% 0.30 - 1.0 microns 0.0 - 10 microns         > 00% 0.0 - 10 microns 0.0 - 10 microns         > 00% 0.0 - 10 microns 0.0 - 10 microns         > 00% 0.0 - 10 microns 0.0 - 10 microns         None         None           Filter         Disposable No cleaning required         None         None         None         None           Warranty         10-year         10-year         10-year         10-year         10-year           Warranty         10-year         10-year         0.0 microns         Filter cabinet         Filter cabinet           Warranty         EZ Fiex         EZ Fiex filter         EZ Fiex filter         Filter cabinet         Filter cabinet		Best	Bet		Go	
Filtration Efficiency for Particle Sizes         MERV 15         MERV 13 (opt.)         MERV 10         MERV 11         MERV 8           3.0 - 10.0 microns 0.30 - 1.0 microns         > 90%         > 90%         > 85%         > 70%         n/a           Germicidal Capability         Extensive (see next page)         None         None         None           Filter         Disposable No cleaning required No cleaning required         No cleaning required No cleaning required         No cleaning required           Warranty         10-year         10-year         10-year         10-year	Filterion Efficiency for Particle Sizes     MERV 15     MERV 13 (opt.)     MERV 10     MERV 11     MERV 8       3.0 - 10.0 microns 0.30 - 10.0		Infinity <sup>®</sup> Air Purifier	EZ Flex™ Filter and Cabinet		Cartridge Filters and Cabinet	
3.0 - 10.0 microns       > 90%       > 90%       > 85%       > 70%         1.0 - 3.0 microns       > 90%       > 75%       up to 65%       n/a       n/a         Germicidal Capability       Extensive (see next page)       None       None       None         Filter       Disposable No cleaning required       No cleaning required       No cleaning required         Warranty       10-year       10-year       10-year	3.0 - 10.0 microns       > 90%       > 90%       > 85%       y to 65%       y at 060%       y to 65%       y at 060%       y to 65%       y at 060%       y at 00%       y at 00% <t< th=""><th>Filtration Efficiency for Particle Sizes</th><th>MERV 15</th><th></th><th></th><th>T T</th><th></th></t<>	Filtration Efficiency for Particle Sizes	MERV 15			T T	
0.30 - 1.0 microns       up to 95%       > 75%       n/a       n/a       n/a       n/a         Germicidal Capability       Extensive (see next page)       None       None       None         Filter       Disposable No cleaning required       Disposable No cleaning required       Disposable No cleaning required       Disposable No cleaning required         Warranty       10-year       10-year       10-year       10-year         Value       EZ Flex cabinet       EZ Flex cabinet       Filter cabinet for furnaces       Filter cabinet for furnaces         Filter cabinet       EZ Flex filter       Filter cabinet       Filter cabinet       Filter cabinet	0.0 - 1.0 microns     up to 95%     > 75%     n/a     n/a     n/a       Germicidal Capability     Extensive (see next page)     None     None     None       Filter     Disposable No cleaning required     No cleaning required     No cleaning required       Warranty     10-year     10-year     10-year	3.0 - 10.0 microns					
Capability     (see next page)     None       Filter     Disposable No cleaning required     Disposable No cleaning required     Disposable No cleaning required       Warranty     10-year     10-year     10-year	Capability     (see next page)     None       Filter     Disposable No cleaning required     No cleaning required     No cleaning required       Warranty     10-year     10-year     10-year						
Filter     Disposable No cleaning required     Disposable No cleaning required       Warranty     10-year     10-year	Filter     Disposable No cleaning required     Disposable No cleaning required       Warranty     10-year     10-year         Image: State of the		Extensive (see next page)	Nor	ie	No	ne
Warranty     10-year     10-year       Image: Warranty     Image: Warranty     Image: Warranty     Image: Warranty       Image: Warranty     Image: Warranty     Image: Warranty     Image: Warranty	Warranty     10-year     10-year       Image: State of the state	Filter	Disposable No cleaning required	Dispos No cleaning	able g required	Dispo No cleanin	sable g required
varie purifier cabinet	vair purifier braces br	Warranty		10-у	ear		
	Infinity air purifier for fan coils MERV 10 & 13	ty air purifier rnaces			for f	urnaces	Carrier Filter cabin

#### Infinity<sup>®</sup> Air Purifier

The Infinity<sup>®</sup> air purifier offers extremely high air filtration efficiency and patented germicidal technology so effective it even captures and kills airborne pathogens such as bacteria, viruses and mold spores. And, the Infinity air purifier is as convenient as it is powerful because no cleaning is required.

As Carrier's premium air filtration solution, the Infinity air purifier is the industry's best air purifier, offering an amazing ability to capture airborne particles as small as .01 microns. This product easily outperforms popular portable air cleaners as well as typical whole-home electronic air cleaners. And, it's simple and convenient to use because it eliminates the need for monthly filter cleaning – just replace the removable media 1-2 times per year.



Carrier's Infinity Air Purifier is 200 times more effective than standard portable ionic air treatment.

Carrier

0

#### **Germicidal Capability**

Patented, award-winning technology kills airborne bacteria, viruses and molds.

Physio	logy	Organism	Kill Rate*
	Spore Forming	Bacillus subtilis (Anthrax surrogate)	97% <sup>7</sup>
	Gram	Mycobacterium Parafortuitum (Tuberculosis surrogate)	99.9% <sup>7</sup>
Bacteria	Positive	Staphlococcus aureaus	97.5% <sup>4</sup> 100% <sup>5</sup>
Gram Negative		Serratia marcescens	96.6% <sup>1</sup> 100% <sup>4</sup>
		Pseudomonas aeruginosa	99.9% <sup>7</sup>
	3 V	Morbillivirus (Measles)	99.9% <sup>1</sup>
	1.5	Vaccinia (Smallpox surrogate)	99.9% <sup>6</sup>
Virus		Coronavirus (SARS)	99.9% <sup>2</sup>
		Influenza Wild Type A	99% <sup>1</sup>
		Human Influenza	99% <sup>2</sup>
		Avian Influenza	99.9% <sup>3</sup>
		Encephalomyocarditis picomaviridae (Human cold virus surrogate)	99.99% <sup>4</sup>
Fung	i	Aspergillus versicolor	99% <sup>7</sup>

\* Kill rate claim is percentage of pathogens captured on the media that were killed or inactivated after continuous exposure to an energized system for the stated time period.

<sup>1</sup> After one hour exposure <sup>2</sup> After two hour exposure

<sup>5</sup> After 12 hour exposure
<sup>6</sup> After 18 hour exposure
<sup>7</sup> After 24 hour exposure

<sup>3</sup> After five hour exposure<sup>7</sup> After<sup>4</sup> After six hour exposure

### **Fresh Air Ventilators**

Newer, more tightly constructed homes are designed to conserve energy. At the same time, they can trap airborne particles, gases, unpleasant odors, and moisture allowing them to re-circulate throughout your home.

Carrier<sup>®</sup> fresh air ventilators work behind the scenes to remove these pollutants and refresh your indoor environment while saving energy. It's kind of like opening all the windows without letting heated or cooled air escape.



The Fresh Air Vent provides an alternative, economical solution to bring fresh air into your home. Although it doesn't have the heat exchange capabilities of an ERV or HRV, fresh air is introduced in a controlled way.

HRV or ERV?

- If you live in a colder climate with a longer heating season such as Canada or the northern United States, the HRV will provide the most comfort and efficiency.
- In the midwest and southern states, where humidity removal is needed for the incoming air, an ERV provides year-round efficiency.

### Ultraviolet Germicidal Lamps (UV Lights)

Mold spores, bacteria and fungi can invade the dark, damp surfaces of your cooling coil. Left unchecked, buildup of these contaminants can reduce system efficiency and release potentially harmful pollutants such as mold spores and unpleasant odors into the air you breathe.

As part of Carrier Healthy Home Solutions, the germicidal UV lamp bathes the cooling coil with intense UV-C light, helping to sterilize its surfaces while maximizing system efficiency and protecting the air you breathe.

- UV lights are mounted inside your system, near the indoor cooling coil, where fungus and microbes may grow and pollutants can collect.
- No cleaning is required. Simply replace the lamps once a year and you can continue to enjoy cleaner, healthier air and enhanced system efficiency.
- UV lights are designed to work in newer systems and can work in your current system as well. With a 10-year limited warranty, better air quality means reassurance like never before. The lamps are covered with a 90-day limited warranty.

### **Humidifiers**

Overly dry air can cause itchy, cracked skin, dry nasal passages, annoying static shocks, and cracked woodwork. Adding a Carrier<sup>®</sup> humidifier can help alleviate these conditions.

In addition, more airborne moisture means less opportunity for dust and other irritants to circulate in the air that you breathe.

Carrier humidifiers can even help you save money on your energy bills since humidified air actually feels warmer than dry air - so your control can be set to a lower temperature.



Fan Powered **Humidifier** 



**Bypass** Humidifier

#### Durability and warranty

- Durable casing a Carrier industry first - our humidifier casing is designed to resist UV light damage, corrosion or accidental impacts for long-lasting functionality.
- Carrier humidifiers include a 10-year limited warranty. See your Carrier dealer for more information.
- Water saving bypass model is 100% efficient in water usage.



## The Infinity<sup>®</sup> System

Carrier's patented Infinity System gives you ultimate control over temperature, humidity and airflow providing you the best in comfort and indoor air quality.

- The Infinity System delivers enhanced air cleaning capabilities with a nearly continuous flow of air through your system's filters. And, with our economical, multi-speed continuous fan, you can experience even greater air cleaning.
- True Sense™ dirty filter detection lets this system tell you exactly when your filters need to be cleaned or replaced. This feature greatly increases the likelihood that you will maintain optimum air cleaning performance.
- With Carrier's unique Ideal Humidity System® technology function, the Infinity System puts you in control of your humidity like never before, squeezing extra moisture out of the air during the cooling season and giving you control of your humidifier from one convenient location during heating.



Carrier's patented Infinity<sup>®</sup> Control is the key to an Infinity System with unprecedented utility and ease of use.



### **Carbon Monoxide Alarm**

Carrier<sup>®</sup> carbon monoxide alarms use sophisticated electronics and unmatched sensor technology to detect and record the levels of carbon monoxide (CO) circulating in your indoor air. You can monitor the current CO level in your home on a large, easy-to-read digital display. When dangerous levels of CO are present, a loud, audible alarm alerts you and your family, automatically.

- Carbon monoxide is a colorless, odorless gas produced by incomplete combustion of fuels such as natural and LP gas, kerosene, coal, wood and charcoal. Any fuel burning device, including appliances, automobiles, and fireplaces can produce CO.
- Exposure to CO can cause fatigue, chest pains, impaired vision and coordination, headaches, dizziness, confusion, nausea, and can even be fatal.
- Every year, there are more than 2,000 fatalities in the United States from CO produced by improperly installed or maintained fuel-burning appliances.

Carbon Monoxide ALARM

Carrie

- Carrier recommends placing a carbon monoxide alarm on each level of the house and in every bedroom.
- The carbon monoxide alarm's peak level memory allows health care professionals to quickly assess the level of exposure in the event of an alarm.
- A rechargeable lithium ion battery ensures continued detection and warning even during a power outage.
- For peace of mind, you can check to see if your CO alarm is functioning properly with the simple push of a button.



CO in the Air ppm = parts per million Approximate Inhalation Time and Toxic Symptoms Developed
50 ppm The maximum allowable concentration for continuous exposure for healthy adults in any 8-hour period, according to OSHA**
200 ppm Slight headache, fatigue, dizziness, nausea after 2-3 hours
400 ppm Frontal headaches within 1-2 hours, life threatening after 3 hours
800 ppm Dizziness, nausea and convulsions within 45 minutes. Unconciousness within 2 hours. Fatal within 2-3 hours
1,600 ppm Headache, dizziness and nausea within 20 minutes. Fatal within 1 hour
3,200 ppm Headache, dizziness and nausea within 5-10 minutes. Fatal within 25-30 minutes
6,400 ppm Headache, dizziness and nausea within 1-2 minutes. Fatal within 10-15 minutes
12,800 ppm , Fatal within 1-3 minutes
0 3000 6000 9000 12000 15000
<b>Carrier CO Alarm Response Times</b> ** Occupational Safety and Health Administration This CO alarm meets response time requirements as follows: At 70 ppm, unit must alarm within 60-240 min. At 150 ppm, unit must alarm within 10-50 min. At 400 ppm, unit must alarm within 4-15 min.



#### **Turn to the Experts**

Willis Carrier invented air conditioning in 1902. Over 100 years later, we're proud to say Carrier<sup>®</sup> systems are trusted in more homes than any other brand.

Carrier continues to be on the forefront of innovative engineering and unsurpassed standards of excellence. So when choosing a home comfort system, you'll want to turn to the experts. Your Carrier dealer will evaluate your home, such as window placement and size, ductwork, other structural specifics and lifestyle to provide a customized indoor comfort plan designed specifically for you. And when you have an expert helping you make an educated decision, you're going to feel more comfortable.



www.carrier.com

#### 1-800-CARRIER

01-IAQ-040-25

A member of the United Technologies Corporation family. Stock Symbol UTX.

© Carrier Corporation 2010

notice or without incurring obligations.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without

comfort

This Box is to be used as a knock-out for a non-varnished area on a full-spread, full-bleed varnish plate.