FlashReport™ Test Results

Conducted by:
Ocean State Air Solutions Inc.
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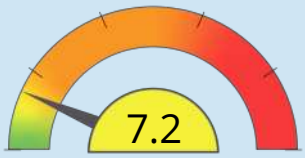
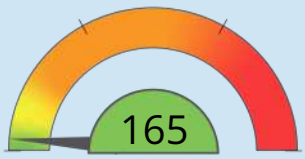
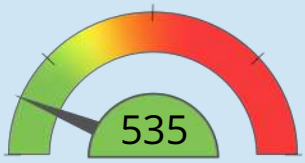
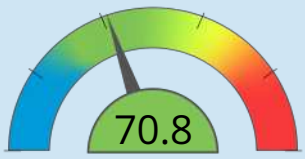
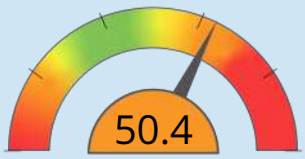
401-293-0422

Monitor ID: 35809
Report ID: 819554
Test Period: 05/05/25
09:06 AM

Outdoor Environment
62.6°F
88% RH
GOOD

This report identifies air pollutants commonly found in homes and offers recommendations so you can make informed decisions about health, comfort, and safety indicators in your home.

HEALTH	Particulate Matter *(µg/m³)*		Action Recommended for Sensitive Individuals
	Chemicals *(µg/m³)*		No Action Necessary
	Carbon Dioxide *(ppm)*		No Action Necessary
COMFORT	Temperature *(°Fahrenheit)*		No Action Necessary
	Relative Humidity *(RH%)*		Action Recommended
SAFETY	Carbon Monoxide *(ppm)*		No Action Necessary

No Action Necessary:	Within acceptable levels for most people.
Action Recommended for Sensitive Individuals:	Pollutant levels may affect some individuals like children, elderly, people with health conditions.
Action Recommended:	Pollutant levels above health guidelines for the general public.
Action Required:	Pollutants at levels deemed unhealthy by authorities; steps should be taken urgently.

If you are interested in a more in-depth analysis, ask your contractor about a multi-day test.

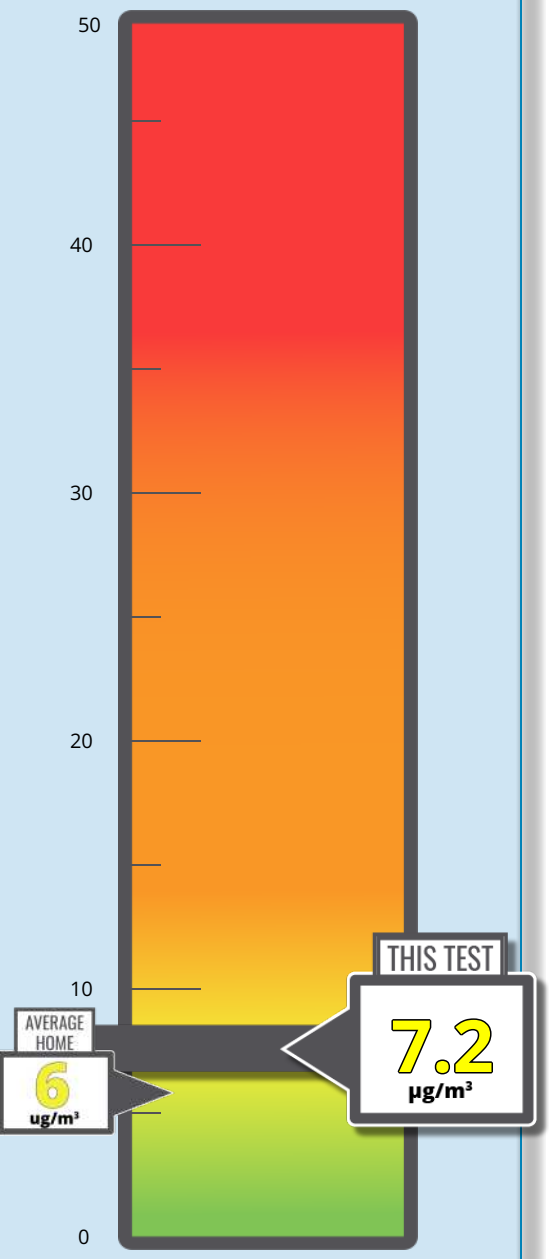
WHAT WE FOUND IN YOUR HOME:

Particle levels were between

5-10 µg/m^3

Action Recommended
for Sensitive Individuals

PM 2.5: **7.2 µg/m^3**



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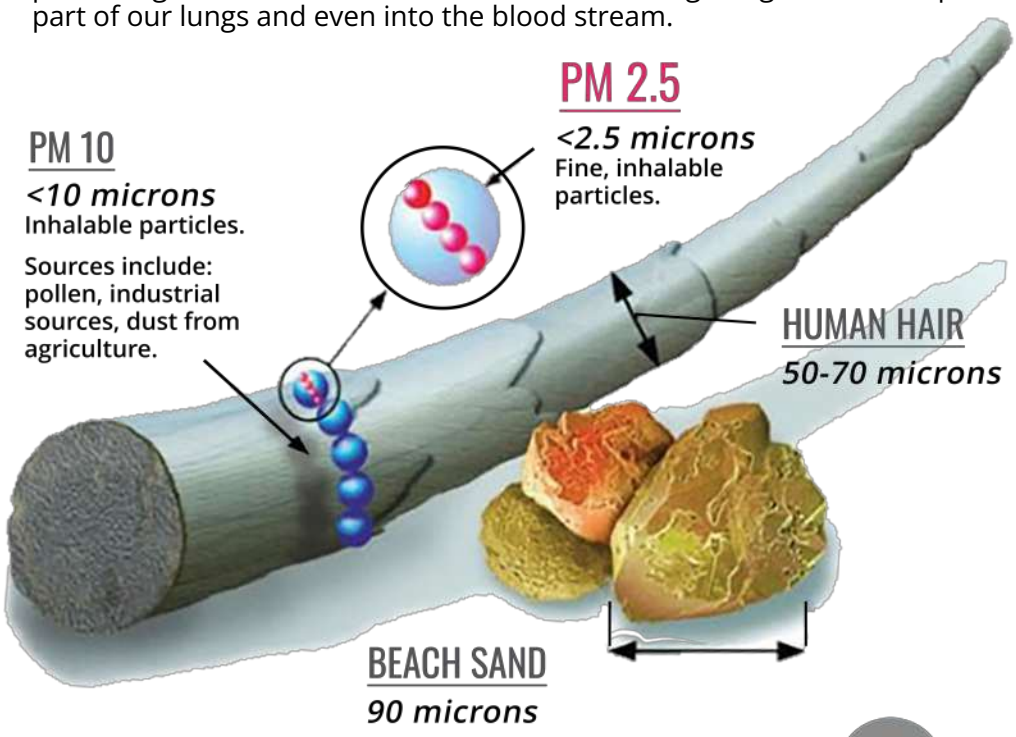
HEALTH: PARTICLES (PM 2.5)

WHAT ARE PARTICLES?

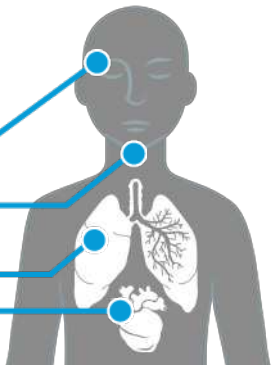
Particulate matter (PM) is a microscopic mixture of solid dust particles and liquid droplets found in the air, invisible to the eye. The smallest particles pose the greatest health risk. PM 2.5 is small enough to get in the deepest part of our lungs and even into the blood stream.



HEALTH CONCERNS

Exposure to PM 2.5 is associated with:

- Eye irritation
- Asthma attacks
- Lung and throat irritation
- Trouble breathing
- Lung cancer
- Increased hospitalizations for heart and lung disease



POTENTIAL CAUSES

- Combustion: cooking, candles, improperly vented combustion appliances
- Activities in the home such as cleaning and housework
- Heating and cooling system issues
- Pollution that originates from outside sources (pollen, wildfire smoke)

RECOMMENDED ACTIONS

- Use range exhaust fan when cooking
- Inspect ductwork; seal and clean as necessary
- Replace filters or upgrade filtration to highest MERV-rated filter possible
- Upgrade thermostat to operate HVAC system fan on a schedule
- Consider portable HEPA filtration in frequently occupied zones

SCAN THE QR CODE FOR MORE INFORMATION:

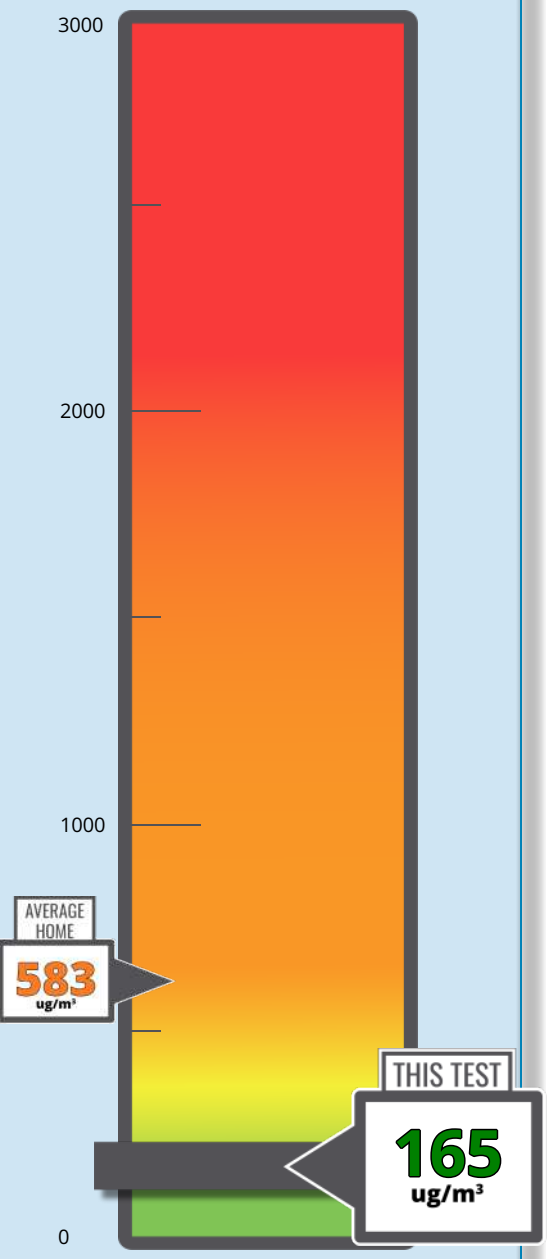
Sources: Environmental Protection Agency (EPA), California Air Resources Board (CARB), International WELL Building Institute

WHAT WE FOUND IN YOUR HOME:

VOC levels were below
300 µg/m³

No Action Necessary

VOC: **165 µg/m³**



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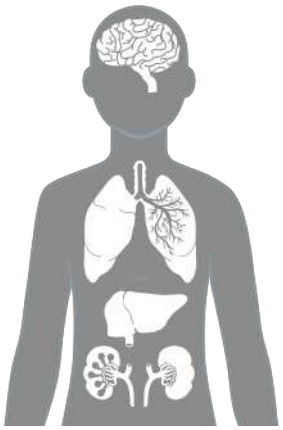
HEALTH: CHEMICALS (VOCs)

WHAT ARE VOCs?

Volatile Organic Compounds (VOCs) represent a broad category of chemicals that are present in numerous products we use to build and maintain our homes. Once these chemicals are in our homes, they are discharged or "off-gas" into the indoor air we breathe. They may or may not emit odors, so smelling is not a good indicator of health risk[1,3].

HEALTH CONCERNS



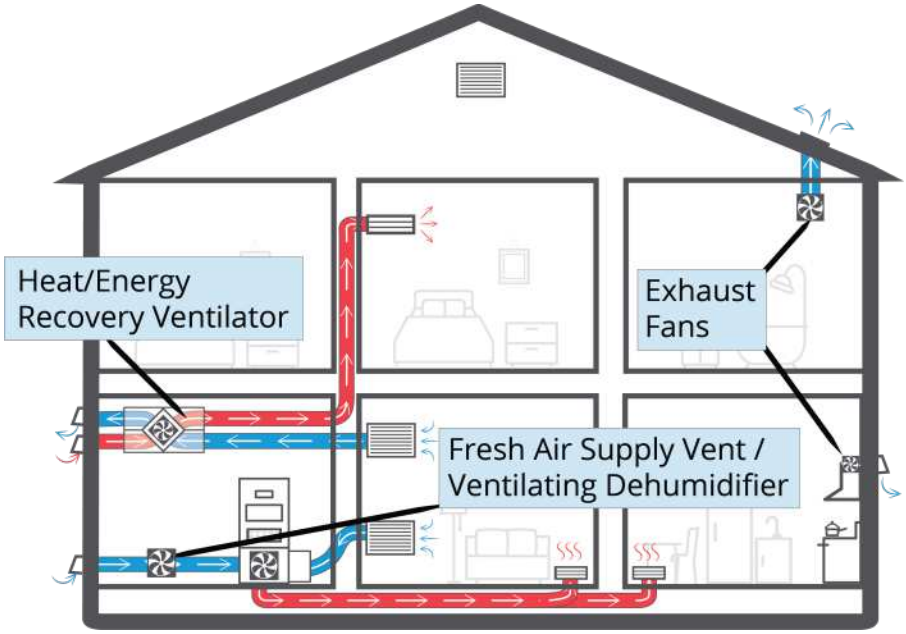
- Eye, nose, and throat irritation, difficulty breathing, asthma[1,2,5]
- Central nervous system damage, headaches, and dizziness[1,2,5]
- Skin problems[1,2]
- Damage to the liver and/or kidneys[1,2]
- Linked to fertility issues, cancers, neurological and learning disabilities[4,5]

POTENTIAL CAUSES

- **Building materials and furnishings:** furniture, flooring, wood products, rugs, carpets, paints, sealants, glues, adhesives and insulation[1,2,5]
- **Household Products:** cleaning supplies, cosmetics, scented products, air fresheners, and toys[1,2,4,5]. Stored fuels in attached garages[2].

RECOMMENDED ACTIONS

- Reduce VOC sources: scented products, cleaning fluids, candles[5]
- Heat or energy recovery ventilator (HRV/ERV)
- Fresh air supply vent or ventilating dehumidifier
- Exhaust-only ventilation
- Install carbon filtration to capture VOCs



SCAN THE QR CODE FOR MORE INFORMATION:

Sources: (1) Environmental Protection Agency (EPA), (2) HealthLinkBC, (3) Minnesota Department of Health, (4) Endocrine.org, (5) American Lung Association

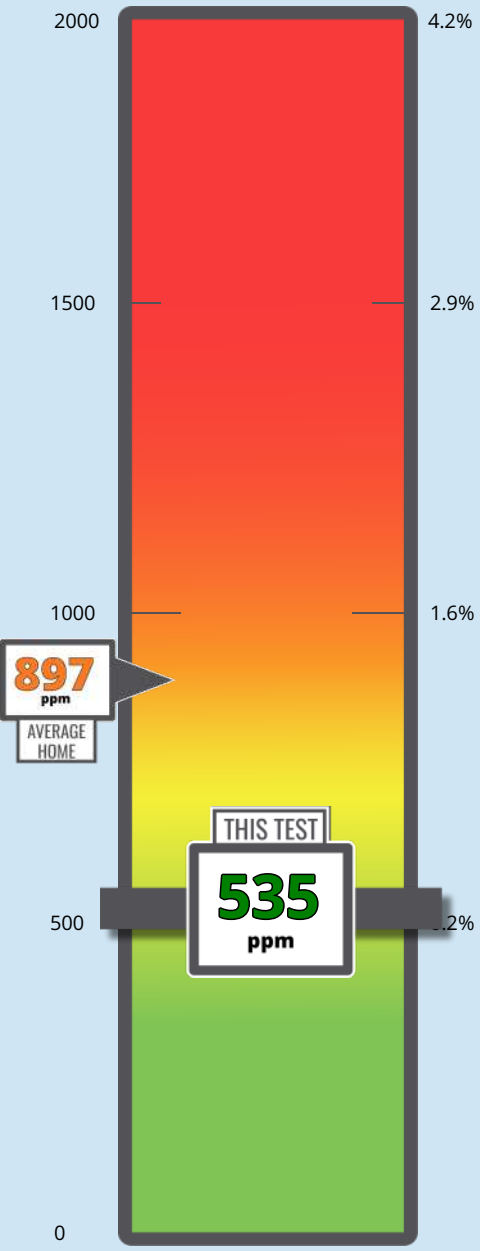
WHAT WE FOUND IN YOUR HOME:

CO_2 levels were below **750 ppm**

No Action Necessary

CO_2: **535 ppm**

Rebreathed fraction: **0.50%**



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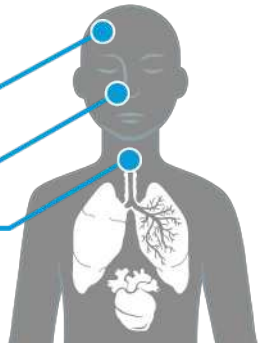
HEALTH: CARBON DIOXIDE (CO_2)

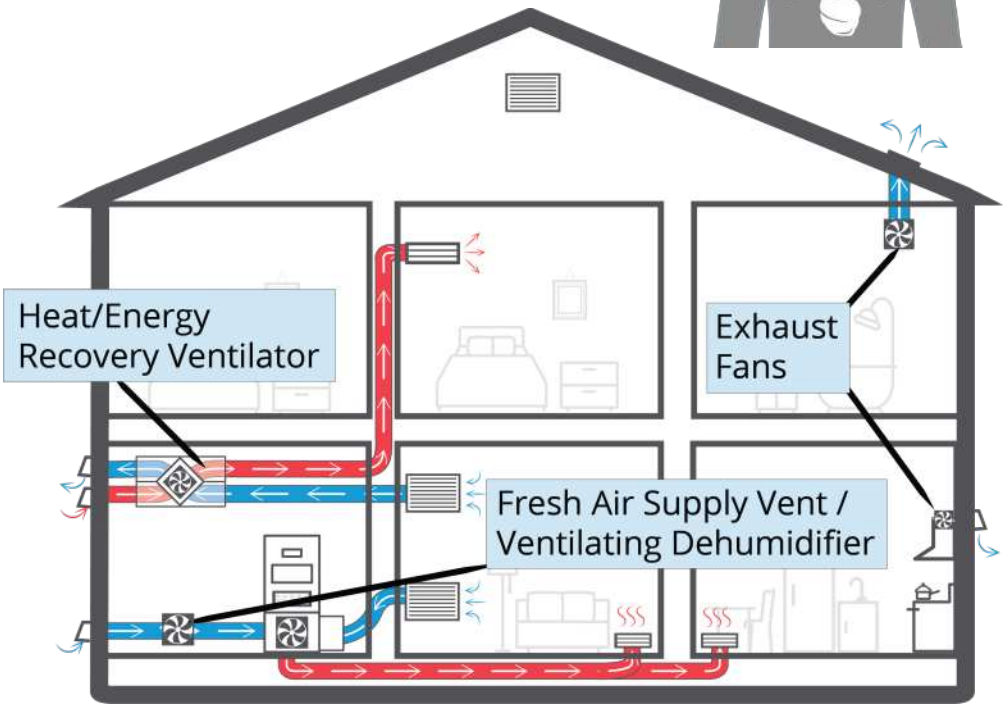
WHAT IS CARBON DIOXIDE?

Carbon dioxide (CO_2) is a gas we exhale. It builds up in the home when there is no mechanical ventilation for fresh outdoor air. Ventilation has a great impact on health, comfort, and performance. Well ventilated homes with adequate air exchange should have CO2 levels of 600-1,000 ppm, with an average of 800 ppm or less[1]. The rebreathed fraction is the percent of the indoor air that has been previously exhaled[2].

HEALTH CONCERNS

- Lower cognitive function[2]
- CO_2 levels over 1,000 ppm - Higher risk of rhinitis (sneezing or a runny/blocked nose)[3]
- Eye irritation, sore/dry throat, coughing, sneezing, and stuffy, congested or runny nose
- Increased risk of airborne disease[4]





POTENTIAL CAUSES

Source causes:
'Tight' or energy-efficient home construction without adequate ventilation, breathing, combustion activities

Heating & cooling issues:
Lack of supplied fresh air/ventilation, malfunctioning or shut-off ventilation, HVAC equipment needs repair

RECOMMENDED ACTIONS

- Heat or energy recovery ventilator (HRV/ERV)
- Fresh air supply vent or ventilating dehumidifier
- Exhaust-only ventilation
- Inspect ventilation system to ensure performance and adjust as needed

SCAN THE QR CODE FOR MORE INFORMATION:

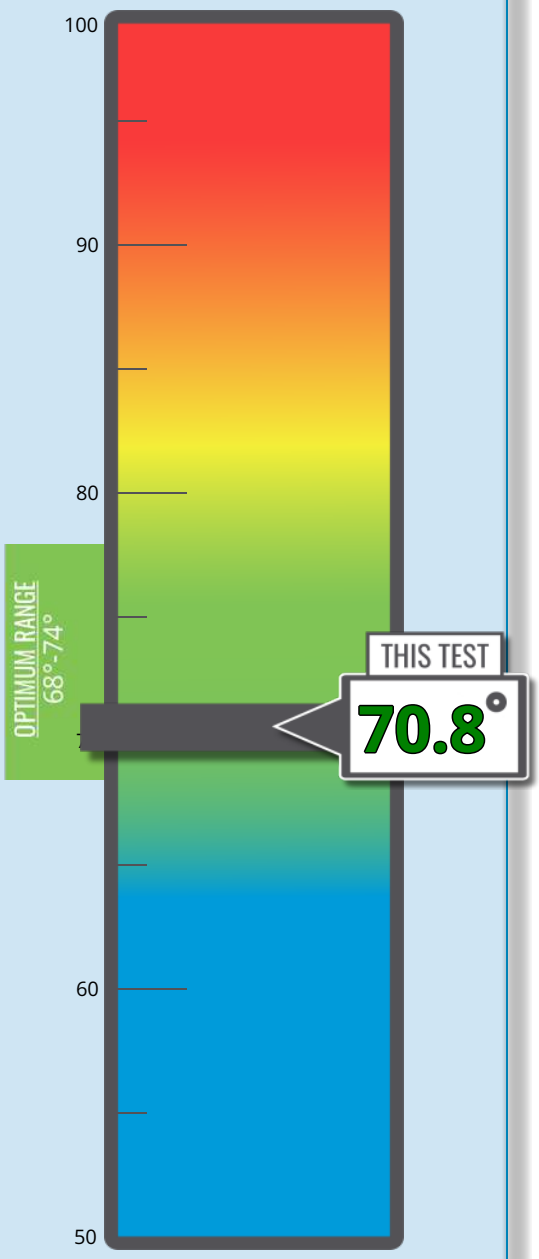
Sources: Environmental Protection Agency (EPA), California Air Resources Board (CARB), International WELL Building Institute

WHAT WE FOUND IN YOUR HOME:

Temperature levels were within the optimum range

No Action Necessary

Temperature: **70.8°**



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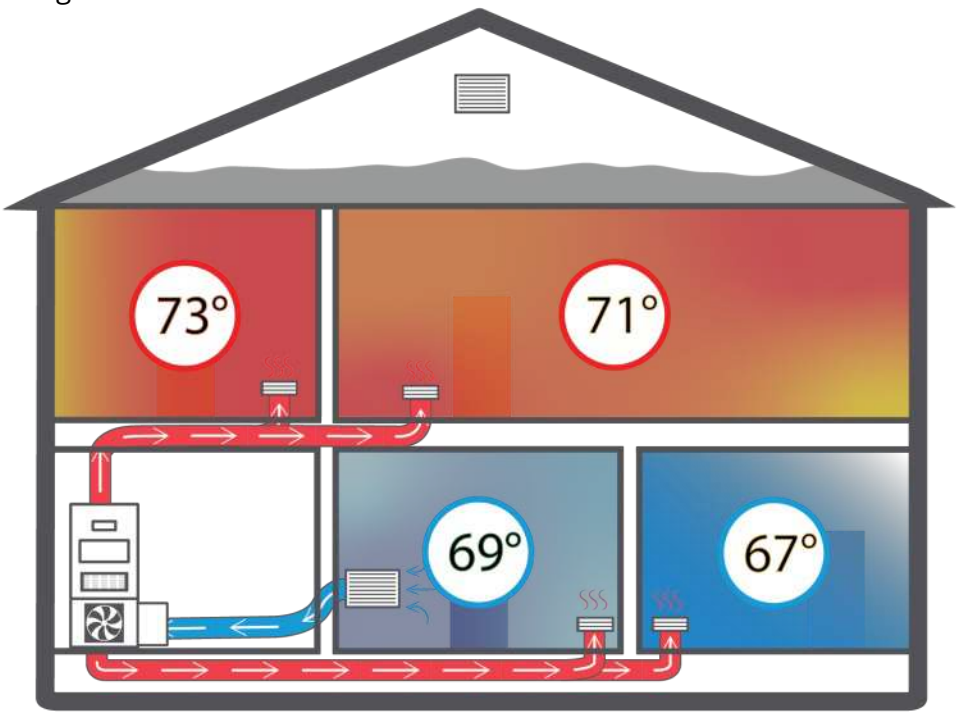
COMFORT: TEMPERATURE (F°)

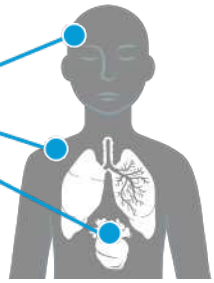
WHAT IS THERMAL COMFORT?

The National Institutes of Health (NIH) states thermal comfort (temperature) is linked to our health, well-being, and productivity. The thermal environment is one of the main factors that influence thermal comfort and, consequently, the productivity of occupants inside buildings.

The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standard 55-2010, *Thermal Environmental Conditions for Human Occupancy* states that indoor temperatures in the winter should range from 68-74°F and 73-79° F in the summer.



COMFORT & HEALTH CONCERNS



- Decreased productivity
- Discomfort
- Thermal stress (excessive heat)

POTENTIAL CAUSES

- Inadequately sized ductwork, heat or AC equipment
- Leaky and/or imbalanced ductwork
- Poor thermostat location
- Inadequate/poor insulation
- Building air leakage (drafty house) from doors, windows, walls, etc.

RECOMMENDED ACTIONS

- Verify heat, AC and ductwork are correctly sized for the home
- Seal leaky ductwork located outside of the conditioned area
- Upgrade thermostat for improved accuracy and energy savings
- Install zoning
- Seal building air leakage and add insulation

SCAN THE QR CODE FOR MORE INFORMATION:

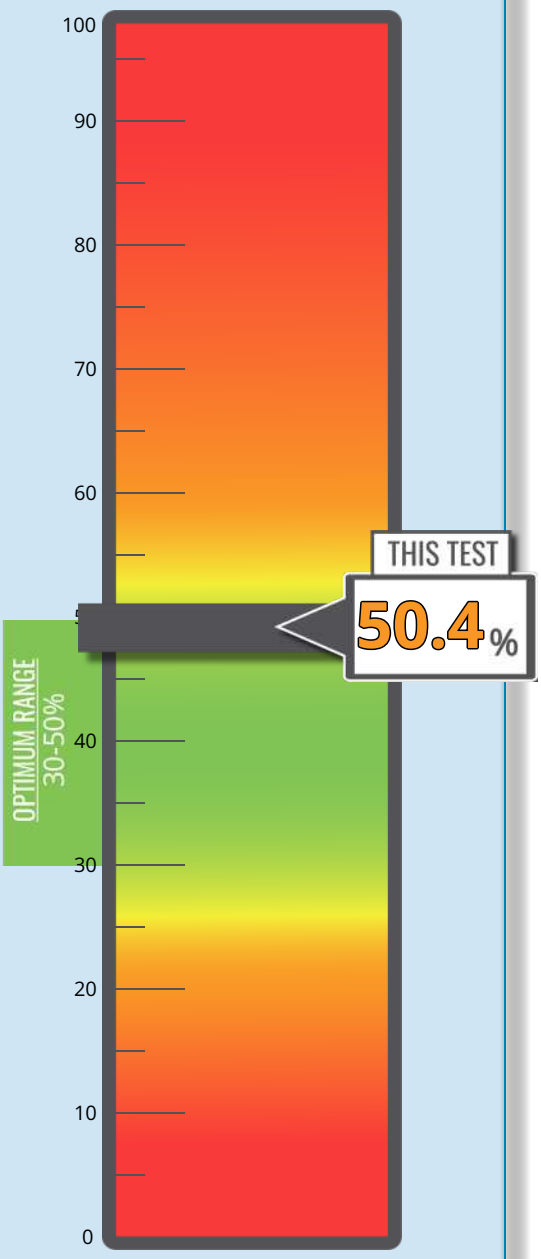
Sources: Sources: ASHRAE Standard 55-2010, National Institutes of Health (NIH), National Academies Press, Energystar.gov, International WELL Building Standard Institute (IWBI)

WHAT WE FOUND IN YOUR HOME:

Humidity levels were above **50%**

Action Recommended

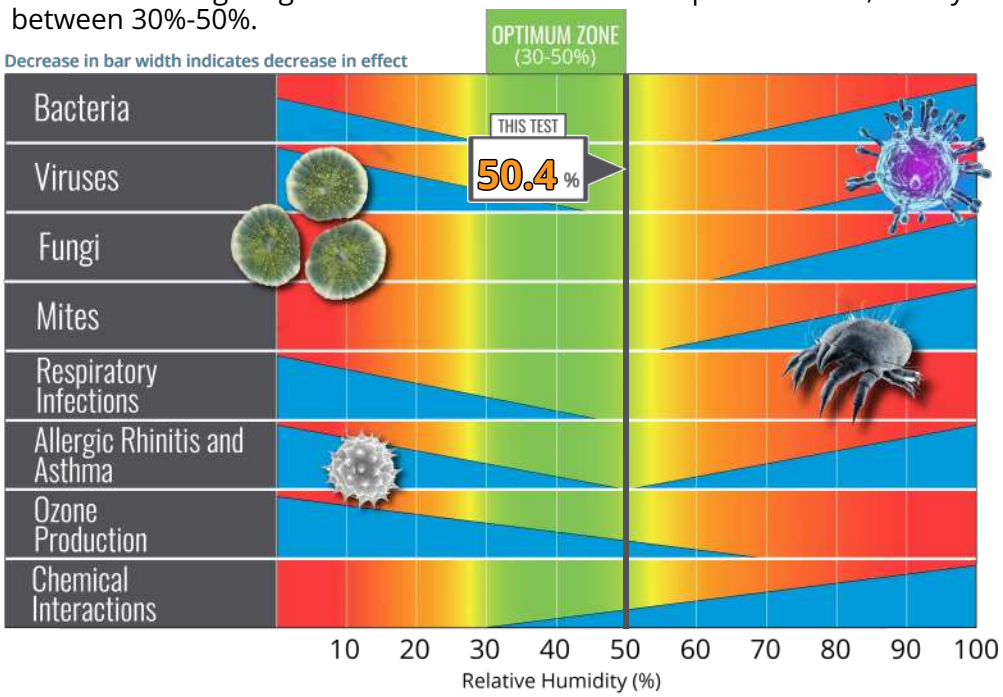
Humidity: **50.4%**
Dew Point: **51.5°**



COMFORT: RELATIVE HUMIDITY (RH%)

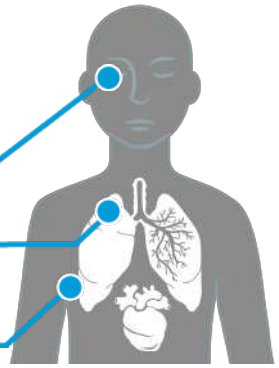
WHAT IS RELATIVE HUMIDITY?

Relative humidity (RH) is a measure of how much water vapor is in the air. It can affect the incidence of respiratory infections and allergies, and contribute to comfort issues. According to the CDC, high moisture (>60%) can foster biological growth. Indoor RH should be kept below 60%, ideally between 30%-50%.



COMFORT & HEALTH CONCERNS

- Ignoring RH aids in the spread of viruses and bacteria, and can adversely affect the eyes, skin, and respiratory tract
- **Low RH**: feeling too cold, irritated respiratory passages, and being prone to infection
- **High RH**: increased allergen loads (pollen, mites, and mold), and ineffective perspiration, the body's natural cooling mechanism



POTENTIAL CAUSES

Structural issues:
Exterior grading and rainwater management/standing water, leaky building envelope, plumbing leaks

Heating & cooling system issues:
Poor humidification or ventilation, improperly sized cooling system, HVAC equipment needs repair

RECOMMENDED ACTIONS

- Install humidifier or dehumidifier
- Inspect ductwork; seal and clean as necessary
- Operate exhaust fans during cooking and bathing
- Install UVC lamp (non-ozone) over the AC coil to prevent biological growth

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SCAN THE QR CODE FOR MORE INFORMATION:

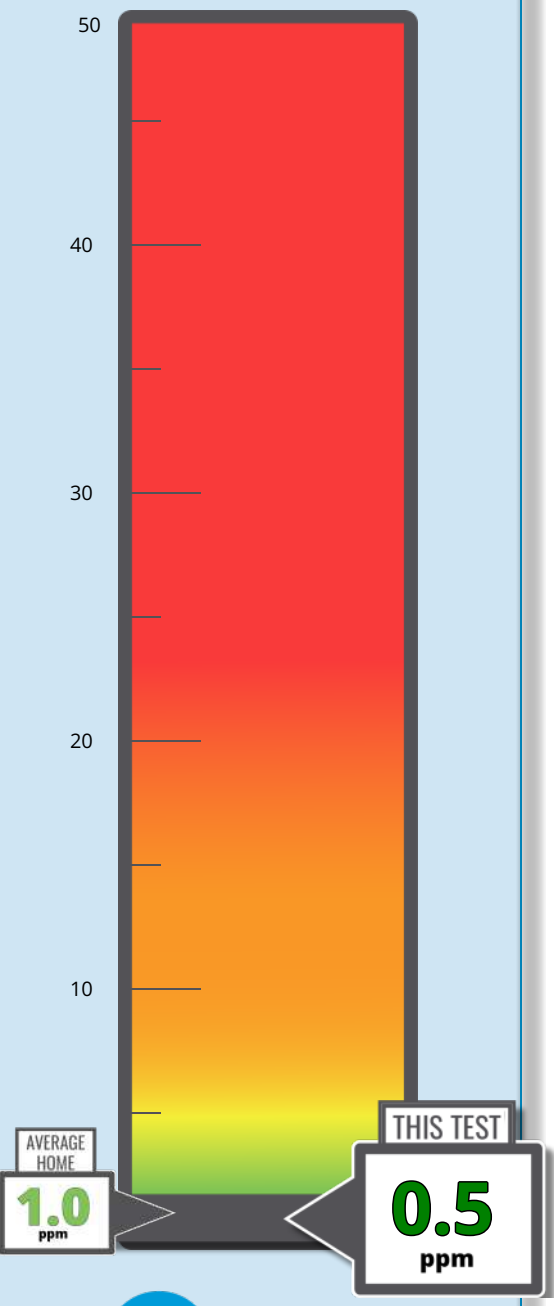
Sources: Environmental Protection Agency (EPA) & U.S. Center for Disease Control and Prevention (CDC), Indirect Health Effects of Relative Humidity in Indoor Environments, Environmental Health Perspectives, Health Canada

WHAT WE FOUND IN YOUR HOME:

CO levels were below
6 ppm

No Action Necessary

CO: **0.5 ppm**



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SAFETY: CARBON MONOXIDE (CO)

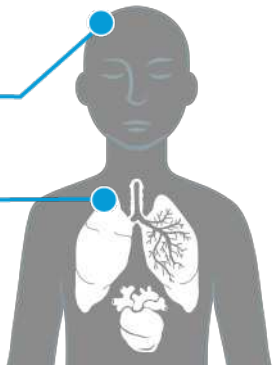
WHAT IS CARBON MONOXIDE?

Carbon monoxide is gas that has no odor, taste or color. Burning fuels, including gas, wood, propane or charcoal, make carbon monoxide. Appliances and engines that aren't well vented can cause the gas to build up to dangerous levels. A tightly enclosed space makes the buildup worse.
—Mayo Clinic

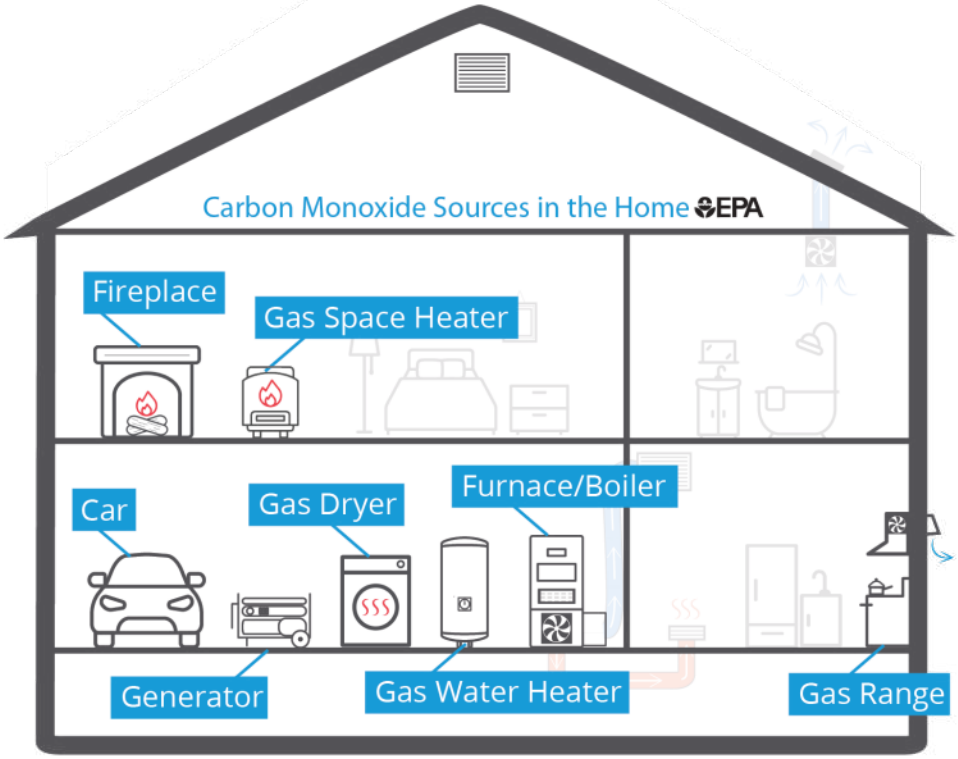
SAFTEY & HEALTH CONCERNS

Low level exposure:
- Headaches, nausea
- Flu symptoms, fatigue, drowsiness

High level exposure (CO poisoning):
- Confusion, chest tightness
- Loss of consciousness
- Suffocation



POTENTIAL CAUSES



RECOMMENDED ACTIONS

- Investigate to identify source when CO level is over 6 ppm
- Install or check CO alarm(s) per local building code
- Have your heating system, water heater, and any other gas, oil, or coal burning appliances serviced by a qualified technician every year. *—CDC*

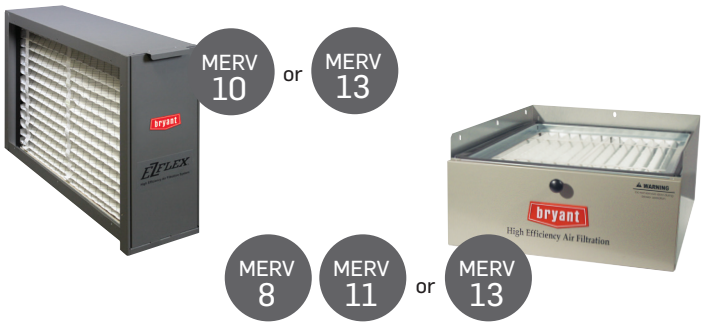
SCAN THE QR CODE FOR MORE INFORMATION:

Sources: Mayo Clinic, Environmental Protection Agency (EPA), World Health Organization (WHO), Centers for Disease Control and prevention (CDC), Health Canada

Heating & Cooling Systems®

Evolution™ Air Purifier

- Whole home air purifier and filter
- Features patented Captures and Kills™ technology
- Captures on average 95% of particles ranging from 1.0 to 3.0 microns in size*
- Offers 99% germicidal effectiveness within 24 hours against selected viruses, bacteria and fungi
- Provides greater installation flexibility with narrow cabinet design
- Requires virtually no cleaning – simply change purifier cartridge periodically
- Enhances HVAC equipment operation
- 10-year parts limited warranty‡



EZ Flex or Fan Coil Cabinet Filter

- Whole home air filter
- MERV 10 captures on average 80% of particles from 3 to 10 microns in size, MERV 11 captures on average 85% of particles from 3 to 10 microns in size
- MERV 13 captures on average 90% of particles from 3 to 10 microns in size**
- Offers high dust-holding capacity with deep-pleated filters extending the time between filter changes
- Features easy filter replacement
- Enhances HVAC equipment operation
- 10-year parts limited warranty‡

ABOUT PARTICLE ALLERGENS

What are they?

Dust, pet dander, pollen, smoke, bacteria, viruses, mold spores, and other particle allergens too small to see.

Why should I be concerned?

Particle allergens are known to trigger and worsen asthma and allergy symptoms. Children, pregnant women, the elderly and people with chronic respiratory issues can be especially susceptible.

These allergens also collect in your heating and cooling system, reducing airflow and adding stress – a common cause of efficiency loss and premature failure.

Where do they come from?

Pets, plants, smoke, dirt on shoes, and many common household activities, including cooking and cleaning.

How do I control them?

We recommend continuously running the fan on your heating and cooling equipment. To avoid increasing indoor humidity, we recommend Bryant systems including the Perfect Humidity System® and SmartEvap™ technology.

* The Evolution air purifier has demonstrated effectiveness against the murine coronavirus, based on third-party testing (2020) showing a >99% inactivation, which is a virus similar to the human novel coronavirus (SARS-CoV-2) that causes COVID-19. Therefore, the Infinity air purifier can be expected to be effective against SARS-CoV-2 when used in accordance with its directions for use. Third-party testing (2012, 2007) also shows ≥99% inactivation for the type of virus that causes common colds, Streptococcus pyogenes and human influenza. Airborne particles must flow through your HVAC system and be trapped by the MERV 15 Evolution filter to be inactivated at 99%.

** MERV is a filter efficiency standard ranging from 1 to 16 (higher MERV = higher efficiency). The Evolution air purifier achieves a MERV 15 rating based on third-party testing (2012) showing 95% of particles size 1.0 to 3.0 microns captured and 85% of particles size 0.3 to 1.0 microns captured.

‡ Limited warranty period is 10 years upon timely registration. If not registered within 90 days of installation, the warranty period is five years, except in jurisdictions where warranty benefits cannot be conditioned on registration. See warranty certificate for complete terms, details and restrictions.

bryant®
Heating & Cooling Systems

Whole-Home Dehumidifier

- Easy, versatile control provides a user-friendly interface for setting desired dehumidification levels
- Configurations available for the optimum combination of unobtrusive design and convenience
- Customizable sizes available in 80 or 100 pints
- Built-in “clean filter” reminder feature
- Capable of dehumidifying two areas (ie: HVAC system and basement)
- Five-year parts limited warranty

Dehumidification Technology Offered by Bryant

Bryant Perfect Humidity System® technology gives you enhanced control over humidity levels for greater comfort when you select compatible equipment.

Perfect Humidity System technology continually monitors indoor humidity and indoor temperature and has the ability to turn on your comfort system for dehumidification purposes only during the cooling season.

Perfect Humidity™

SmartEvap™ Technology

SmartEvap technology is a moisture-control function, which can lower the humidity level in the home paired with a compatible thermostat. By turning off the blower motor for a predetermined amount of time immediately following a dehumidification cycle, SmartEvap technology prevents condensate remaining on the indoor coil from re-humidifying the home.

About Relative Humidity

According to ASHRAE*, humidity ranges from 30 to 60% is best for human occupancy.** When temperatures and humidity rise during the summer months, most homes run their cooling systems at cooler temperatures to stay comfortable. Pulling moisture from the air can help you feel more comfortable without dialing down the thermostat.

When relative humidity is too high it can create an ideal environment for mold, dust mites, and contaminants to grow in the home. Dehumidifying helps control mold and mildew.

Air that is too humid reduces your body’s natural ability to cool itself, so you feel warmer. People respond by turning down the thermostat, which then results in a cold, clammy feeling. When humidity is properly maintained, you can feel more comfortable at a higher temperature, which can help save you money on your air conditioning bills.

Select a properly sized cooling system with Bryant Perfect Humidity System technology. Cooling equipment with multiple stages will further enhance your system’s dehumidification capability. Consider installing a separate dehumidification system. Modern dehumidifiers attached to your home comfort system can extract healthy, comfortable levels of moisture throughout the whole home.

* American Society of Heating, Refrigeration and Air-Conditioning Engineers ASHRAE is a registered trademark of American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc.

** 2020 ASHRAE Handbook - HVAC Systems and Equipment, Chapter 22

05/2024

Heating & Cooling Systems®

Ultraviolet Lights and Carbon Air Purifer with UV

Mold and bacteria can grow on the surface 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.

Conventional methods for cleaning your indoor cooling coil involve chemical or steam cleaning methods that can be costly and time consuming. The Preferred™ UV Light delivers the benefit of a cleaner, more energy-efficient comfort system and years of lasting reliability with an excellent 10-year limited product warranty.*

- UV lights keeps evaporator coil clean of growing mold and bacteria
- A build-up of contaminants on the indoor portion of your cooling system just 0.002” thick can reduce air flow by 9%
- Single- and double-lamp models are available
- Low maintenance and no cleaning required, just replace the lamp bulbs once a year
- Carbon air purifier with UV can help address the reduction of common, unwanted, and potentially harmful household gases and odors including ozone

Buildup of mold and mildew on your indoor cooling coil can impact performance, making your HVAC system less efficient because it has to work harder to keep you cool.

Carbon Monoxide (CO) Saftey Guideline

According to ASHRAE, the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, “a carbon monoxide alarm shall be installed in each dwelling unit in accordance with [National Fire Protection Association] 720, Standard Installation of Carbon Monoxide (CO) Detection and Warning Equipment, and shall be consistent with requirements of applicable laws, codes, and standards (ASHRAE 62.2-2013, section 9.9).”

CO Alarm

- Uses highly sensitive, CO-specific electrochemical sensor
- Easy-to-read, continuous digital display shows CO level with updated information every 15 seconds
- Features loud, 85-decibel pulsing alarm
- The rechargeable lithium ion battery helps the carbon monoxide alarm provide uninterrupted protection, even during a power outage (No need to replace batteries once a year)
- Displays the highest CO level recorded – via peak-level button – since the alarm was last reset or unplugged
- Seven-year parts limited warranty

Annual Equipment Servicing Recommendation

Keep your home comfort system running at peak performance by putting an annual maintenance agreement in place. You wouldn’t drive a car all year long without seeing to basic upkeep. Well, the same goes for heating and cooling equipment. By ensuring that all moving parts are checked and cleaned and refrigerant is adjusted to the proper levels, you can enhance your home comfort system’s efficiency and lifespan. Done annually, certain routine steps can ensure you’ll get the most out of your system for years to come.

* To the original owner, the Bryant ultraviolet lamp base is covered by a 10-year parts limited warranty upon timely registration. The limited warranty period is five years if not registered within 90 days of installation except in jurisdictions where warranty benefits cannot be conditioned upon registration. The Bryant ultraviolet lamp bulbs are covered by a 90-day parts limited warranty. See warranty certificate for complete details and restrictions.