GUIDE YOU NEED TO KNOW ABOUT HOME VENTILATION

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Abstract

Many of us sighed a breath of relief as we turned the page from 2022 to 2023. In the meantime, we must stay vigilant and take the necessary precautions to stay safe and healthy. For many homeowners in Sunshine Coast, this might mean prioritizing air quality because air quality can affect the transmission of airborne pathogens.

People in Sunshine Coast are now having conversations surrounding air quality and how they might be able to improve it. What can be done to improve the air quality inside the home of all sizes and types, especially those in the public sector? In this case, proper home ventilation becomes essential for everyone in Sunshine Coast to stay healthy.

1. Introduction

If you want to know more about home ventilation in Sunshine Coast, then you have come to the right place. We are here with this new and the latest PDF that may be very helpful and informative for you. It deals with a guide that you need to know about home ventilation in Sunshine Coast.

2. Why You Should Take Home Ventilation Seriously

A newly built home in Sunshine Coast, Residence 950, takes indoor air quality very seriously. Built in 2018 by Troon Pacific, the 9,500-square foot home on Russian Hill has hospital grade air filtration via a Zehnder whole-house ventilation system, which changes all the air in the home every two hours; a central whole-house vacuum system that keeps all areas allergen and dust-free and a below-grade air barrier to keep out all allergens and mitigate dust.

Ventilation, it seems, “is the new frontier for making houses healthy,” says Carl Seville, whose Atlanta-based SK Collaborative does green building consulting and certification. The EPA cites indoor air quality (IAQ) as one of the top five environmental risks to public health. And, a recent study shows that people spend 90% of their time indoors – whether in houses, offices, schools, cars. And, recent Berkeley Labs IAQ findings on ventilation suggest that when lots of people gather together in a small space, the CO2 they expel into the air can impact their health and cognitive performance. (So, you might not be able to blame the beer for your actions when you and your friends are packed into your kitchen.) Along with CO2, according to the National Environmental Education Foundation, indoor air is polluted with lead, dust mites, mold, radon, pests, carbon monoxide, pet dander, mold, and second hand smoke. Throw in some humidity and you encourage mold to grow.

Think about that as you take your next breath of indoor air and know that before the day is over you will breathe approximately 2,500 gallons of the stuff. It’s all enough to make you gasp – for fresh air.

While the top-of-the-line Zehnder products can be upwards of $10,000, we mere mortals, or at least those of us who don’t have $45 million for a luxury mansion, can still get fresh air into our homes. As Seville points out though, it’s not just about bringing in outdoor air but bringing in air from the right places. You don’t want to pull in air from your garage, for example.

What most older houses have now for ventilation are bathroom fans and kitchen range hoods to remove the bad air. Older homes may be leaky, so while you are getting some fresh air, you have no control over where it's coming from. On top of that, your HVAC system won't work efficiently. Newer homes are more tightly built. So, yes, they're more efficient from an energy standpoint, but you may not be getting the fresh air you need.

Enter the HRV and ERV. Although they've been around a while, many people don't know about them. But you should get to know them because you're going to be hearing about them a lot in the next few years as more people focus on IAQ. Basically, these devices pull out the bad air and replace it with good air. (If you have an older home, the first thing you'd need to do is tighten it up for either of these to do their best work.)

An HRV, Heat Recovery Ventilation system, uses the heat from the stale indoor air that's being exhausted to warm up the incoming fresh air; the two air streams merely pass by each other in the HRV's core so they never mix. Overall, you are using less energy to bring the outside air to room temp.

The ERV, Energy Recovery Ventilation system, does things a little differently. It captures both heat and moisture, your indoor humidity. In winter, the system transfers the humidity from the indoor air being extracted to the incoming fresh (and dry) air. In summer, it pulls the humidity out of the outside air before it gets inside. You save energy by reducing the load on your air conditioning system and/or dehumidifier.

Talk with an HVAC professional to determine which system will work best in your house, in your climate and for your lifestyle. HRV costs, not including installation, run anywhere from $600 to $1,100 for a mid-size system (this assumes you already have ducts and a central HVAC system.) Similar-sized ERVs may cost $150 to $200 more.

Of course, if you do have a bigger budget for air scrubbing, you can invest in some of these other things that Troon included at Residence 950:

Vents that look like a covered wall outlet and are flush with the wall, leading to a central location with a HEPA filter (air purifier) to ensure air is as clean as possible

Various extensions/tools for the whole-house vacuum system located throughout the home, including a dust pan attachment in the kitchen so crumbs can be swept up and sent directly to the central location

A sub-slab air and water barrier, which helps mitigate the risk of harmful gases such as radon and moisture from entering the home from below grade and influencing air quality.

Active ventilation from a below-ground air barrier with a fan system releases harmful air outside of the home.

A mud room with lockers and a built-in ventilated bench and shoe storage – to keep from tracking in allergens and pollutants. Closets and trash areas are also ventilated.

Hard surface floors only – wood, stone – which are easier to clean than carpet and don't collect dust or allergens.

3. Selecting a Kitchen Ventilation System or Hood

What you need to know about purchasing a ventilation system for your kitchen in Sunshine Coast.

Delicious aromas may be an enticing part of good cooking, but moisture, grease, odors, and heat from stovetop food preparation will damage the surrounding areas.

Steam from cooking condenses on windows and walls, and carbon monoxide from gas-range combustion can build up.

Mechanical ventilation from a range hood or vent—which removes stale, odorous steamy air through ducts—eliminates or lessens these problems.

Choose from basic ductless wall-mount units or more-versatile systems with multiple lights, timers, and easy-clean surfaces.

Some slim hood designs hide under over-stove cabinets, then slide out for use; others serve as shelves for microwaves with venting fans beneath. Elaborate vent systems integrate a wall-mount microwave conveniently set over the range.

Because a vent functions by capturing air and steam, its hood or canopy should be as wide as the range top. Decorative hoods or canopies are used to dress up a range or cooktop hood in stainless steel, tile, or paneling that matches the cabinetry. Hoods can be semi-custom or custom.

Range Hood Fans with Ductwork

A hollow sump area under the hood holds stale air until a fan moves it outdoors through ducts; the deeper the sump, the more it holds.

The fan plays a crucial role; a powerful unit keeps the air fresher. Axial fans have blades similar to ordinary fans. Centrifugal fans resemble a wheel and move more air for longer ducts.

Filters trap grease and particles, preventing entry into the ductwork and potential clogs that can be a fire hazard. Filters should fit snugly yet remove easily for cleaning or replacement.

Do your homework. Browse websites and magazines that compare current models and features. Consumer Reports is an excellent source for unbiased information and recommendations.

What does cfm mean and why is it important? Room and stove size determine the required rate of air removed, which is measured in cubic feet per minute (cfm).

According to the Home Ventilating Institute in Sunshine Coast, the general recommendation is a minimum of 40 cfm for every linear foot of a range. Usually, an average size range requires air removal at 120 cfm when using an overhead range vent hood.

Recirculating range hoods: This is the most basic but least efficient system. These hoods attach to the wall above the cooktop and pull air through a filter, recirculating it back into the room, often including odors or gases. Filters do absorb grease and require frequent cleaning or replacement. These hoods are easy to install because they don't require ductwork.

Downdraft systems: Such systems are typically part of the range, often on the stovetop near the burners. Some stove designs can be retrofitted for venting from underneath. "Hidden" styles remain flush with the cooking surface until necessary. Then, with the push of a button, they rise 8 to 10 inches

above the cooking surface. These are best for island or peninsula cooktops where hood installation may be awkward or impossible.

Downdraft units use one or more fans, pulling air through a filter into ductwork (usually beneath the floor or above cabinets, and sometimes out the wall). They need a minimum of 150 cfm. Stove placement is also a factor; wall units need up to 400 cfm; an island cooktop needs up to 600 cfm.

Cleaning and Maintenance Tips

Because their purpose includes removing grease and moisture from cooking, these systems quickly collect dirt and require regular cleaning. Always check the manufacturer's specific cleaning instructions if available.

The usual routine includes washing external surfaces often (even daily) with a solution of warm water, detergent, and ammonia. Rinse well with clear water. Don't use abrasive or scouring pads because they scratch surfaces.

Sponge cooled light bulbs with the solution, rinse, and thoroughly dry.

If the blades are accessible, wipe frequently with the washing solution. If they are inaccessible, schedule annual professional maintenance.

Remove metal mesh filters; soak in solution for a few minutes. Sponge off dirt as necessary, rinse, and air dry before replacing in the hood.

Charcoal filters are not cleanable; replace them once a year.

4. Why You Need a Bathroom Vent Fan

A bathroom vent fan is a mechanical ventilation device that exhausts indoor air to the outdoors via a flexible tube or metal duct. A vent fan will draw out moisture and odors from the bathroom, improving air quality. Not only is it a good idea to install one, but many building codes also now require it for new construction or when major bathroom remodeling is underway. Where a vent fan is required, the building code may have specific recommendations for matching the size of the fan—as measured by CFM (cubic feet of air per minute)—to the square footage of the room. Not all communities have this building code requirement, so check with your area. For example, in some communities, bathrooms that have operating windows may not be required to have vent fans. Even when not required, though, a vent fan is a good addition to any bathroom.

The Purpose

Many people in Sunshine Coast imagine that a bathroom vent fan serves the primary function of removing odors from a bathroom, but the more important function is actually to exhaust warm, moist air, such as that created from the use of a bathtub or shower. Warm, moist air not only encourages mold growth but also can cause damage to the fixtures and surfaces in a bathroom.1 If your bathroom doesn't have a fan and it smells musty, you would be well advised to install one—and to check to make sure that serious mold growth hasn't already begun.

Without a bathroom vent fan, bathrooms are susceptible to excessive moisture buildup that increases the chances of damaging bathroom walls, floors, and ceilings, as well as bathroom fixture.1 Warm, humid air, caused by running hot water for baths and showers, is a perfect environment for mold, mildew, and microorganism growth. High moisture in rooms can also break down interior room

materials such as wallboard, wall paint, and trim, not to mention the entry door. For a safe, healthy bathroom, provide ventilation.

How Vent Fans Operate

A vent fan is wired to standard 120-volt household electrical current, in much the same way as ceiling light fixtures are wired. The vent fan may be wired to the same electrical circuit that powers a light fixture. A wall switch operates the vent fan, and it may also have a timer that will allow the fan to continue running for a prescribed amount of time. When the fan is turned on, the air is drawn out of the bathroom through the fan enclosure and into a plastic hose or metal duct leading to a vent opening on the roof or sidewall of the home. A louvered cover plate protects the exit point of the vent, which keeps the duct closed when not in use. This vent cover is cut into the wall or roof and attaches to the outside with four screws and some silicone caulk or is covered by a flashed roof cap.

Options

Bathroom vent fans vary in size, styles, and colors, and they may be standalone models that feature only the ventilating fan or combination units that include the fan as well as a light fixture or heat lamp. Now, there are even sophisticated models that incorporate Bluetooth capability and a speaker, allowing you to stream music wirelessly from a smartphone, tablet, or home media system.

Pay attention to the sound ratings when shopping for vent fans. Although it might seem like a minor point, a loud fan can be quite distracting when you are trying to relax by soaking in the bathtub. Sound ratings of 1.0 or less are the best choice—the lower the sound rating, the quieter the fan.

One of the most important choices is to make sure the fan operates at a capacity sufficient for the size of the room. Vent fan capacity is measured by CFM (cubic feet per minute), the volume of air moved by the unit. Generally speaking, the greater the capacity the better, but it is possible for a vent fan unit to be too powerful for the space, which can create a negative pressure situation in the bathroom.

This has the potential for interfering with the operation of furnace ducts or sucking cold air in through windows, so it is important to choose a vent fan unit sized appropriately for the square footage of your bathroom.

Less than 50 square feet: 50 CFM

More than 50 square feet: 1 CFM per square foot

HVI Certification

Fans certified by the HVI (Home Ventilation Institute) have been independently tested and certified to meet specific industry standards. When chosen according to proper size recommendations and installed correctly, HVI certified fans are guaranteed to perform as promised.

Installation Tips

It is best to install the vent fan near the area where there is most moisture, such as over the sink or near the shower. In an open bathroom, you can position the vent fan midway between the shower/tub and toilet area. In a very small bathroom, centering the fan in the room is fine. Where the toilet is located in a secondary enclosure with a door, you may want to consider a second vent fan for this area.

Make sure that the exterior vent louver operates correctly so that it closes fully when the fan is not in use. This will keep cold air from seeping back into the house when the vent fan is not running.

Insulate around the flexible hose or metal duct that leads from the fan housing to the outdoor louvered cap. This will help reduce the loss of indoor heat to the outdoors.

Do not tightly seal the gap beneath the bathroom door. Allow a 3/4-inch gap so that the air exhausted by the fan can be replaced.

If the bathroom has extra-high ceilings (9 feet or higher), you may need a vent fan with extra capacity.

5. How Often Should Air Ducts Be Cleaned?

The air ducts play a crucial role in circulating the cool and warm air inside the house. Over time, these ducts accumulate tiny particles, including pet dander, dust, pollen, etc. Dirty air ducts not only lead to poor air circulation but also negatively impact the efficiency of the appliances and worsen the indoor air quality.

That is why you must clean the dust thoroughly. Now the question is, how often should you clean the ducts? It depends on various factors like how often you clean your home, the size of the property and various other things.

However, it is important to know the correct time to get the job done. If you want to clean the air ducts perfectly and easily, contact professionals who offer the best bond cleaning Sunshine Coast.

People generally hire them at the end of the lease period, but you can contact them whenever you want to deep clean your entire house or even a small section. If you want to ducts, you must have the right knowledge.

Read on to know more about how often air ducts should be cleaned.

Why You Need To Clean The Air Ducts

When it comes to the dusting of the house, one of the most overlooked areas is the air ducts. This is due to the fact that dust, pet dander, dirt, and fungus remain hidden within the ducts. You must remove them from the ducts from time to time. Clean ducts will have the following benefits.

Improve Indoor Air Quality

The air that circulates through the ducts is what your family inhales on a daily basis. As a result, if the ducts are not cleaned, allergens like pollen and pet dander can accumulate and enter your living space.

These particles can irritate people who have allergies, asthma, or other respiratory diseases. When you clean the ducts, the air quality improves, keeping your family healthy.

Improve Efficiency of HVAC system

The presence of dust and dirt in the ducts reduces the competence of the HVAC system. When the ducts become clogged, the appliance must absorb more energy in order to function properly. As a result, the bill of electricity consumption will rise. By keeping the ducts spick and span, you allow the units to run as efficiently as possible. Before you hire professionals to get the job done, know how to find the best house cleaning service.

Protect your Cooling & Heating Equipment

Clogged coils in blower wheels, air conditioners and other issues caused by a dirty ventilation system can lead to costly repairs. Removing dust and dirt from the ducts will keep the equipment running smoothly and help it last longer.

The Right Time To Clean Air Ducts

Many prefer to clean the ducts once a month, while others believe that you can take a lot of time to clean them. However, the frequency is determined by how quickly it becomes dirty. When you encounter the following situation, you must clean your ducts.

Excess Dust

The most important reason to clean air ducts is the dust, dead skin cells, pet dander, and harmful allergens that remain inside the ductwork. Excess material is present in the form of dust poofs that come out of the air vents. Your home appears dirty because of the build-up, and you experience health issues.

Visible Mould and Weird Smell

Mould thrives in moist, humid, and difficult-to-reach areas such as air ducts. If you see mould outside the ducts, smell something strange, or have symptoms like coughing, eye irritation, etc., clean your ducts. To get high-quality cleaning, contact trained end of lease cleaners in Sunshine Coast. They will clean and disinfect the area.

Infestation of Pest

Pests can make a home in your ducts, polluting the air, which circulates throughout the house with an unpleasant odour. If you find bugs around your air ducts or notice that your system isn't working properly, a thorough cleaning of the ducts is required to eliminate the pests.

Moving Into a New Home

When moving into a new home, you should clean the ducts, especially when you don't know if the former owner had modified their home or had pets in that house. You can contact professional cleaners who can clean the ducts along with the entire house. They use modern tools to complete the task perfectly and improve the hygiene of the house.

Allergy-like Symptoms

Studies show that people who have clean ducts have better overall health. When contaminated air circulates throughout the house, people experience allergy and cold-like symptoms. Dust mites can live in air ducts and trigger allergic and asthmatic reactions. The ducts are one of the places you forget to clean and dust in your home, so make sure you clean it thoroughly.

Why You Need Professionals

Many people attempt to clean their own air ducts, but it is important to understand that this is not a do-it-yourself project. It necessitates advanced tools such as a high-powered vacuum and a rotary brush, which you are unlikely to have in your garage.

Furthermore, improper cleaning can cause duct damage and lead to costly repairs. Hire professionals if you want remove dust from the air ducts safely and perfectly.

Removing the dust particles from the air ducts can be an exhausting and stressful task. You need powerful vacuum cleaners and the knowledge of the correct technique to get the job done. If you want to reduce your stress and get the best result, contact professionals that offer thorough end of lease cleaning in Sunshine Coast.

6. How to Clean Air Vents In Your House

One of the best ways to ensure that the air in your home is clean is to clean your air vents in Sunshine Coast. The air ducts in your house contain millions of particles of dust, hair, dirt, pollen, spider webs and other allergens. Cleaning your air vents will also save you money on heating and air conditioning.

So read the tips listed below and learn about how you can clean the air vents in your house in Sunshine Coast.

Here's What You Need

Heavy duty vacuum

Screwdriver

Broom

Cleaning Brush

Here's What To Do

Turn off the power connected to the heating and air conditioning system.

Unscrew the air duct covers or grilles from the walls. Use your brush to clean the grates thoroughly. If they're very dusty and grimy, you may want to use soap and water to make them gleam.

Vacuum the ducts as much as possible. Consider renting a heavy duty vacuum for this purpose. The standard household vacuum isn't powerful enough to clean deep into the crevices of the ducts. Make sure that the vacuum you rent has a long hose to reach deep into the ducts. This is important, as there may be mold and mildew growing inside the air ducts. If you want the ducts to be cleaned more thoroughly, consider hiring a professional to do the job.

Clean the grilles in your ceiling. If you can't reach them with the vacuum or screwdriver, use a broom to attack the dust. Remember that if you haven't cleaned them for a long time, you will want to protect yourself from all the dust and debris that will fall down by wearing a dust mask.

7. How to Improve Air Quality in Your Home to Help You Breathe Better

Better air quality comes down to filtering the air, introducing fresh air, and managing humidity.

You may not think much about the air quality inside your home in Sunshine Coast if you are primarily asymptomatic. But the truth is air quality can have a much more significant impact on your health than you realize. Some symptoms of unhealthy indoor air quality include headaches, irritation of your ears, nose, and throat, and dizziness, among others—but more severe effects can include cancer and respiratory diseases.

A quality air purifier is one way to improve air quality in your home. However, you should keep a three-pronged approach in mind: Filter the air, introduce fresh air, and manage humidity, experts say. Here are 12 ideas for improving indoor air quality, whether you or someone in your home has allergies or environmental conditions outdoors are causing poor air quality inside.

Remove obvious air pollutants.

In general, people spend about 90 percent of their time indoors, according to data from the Environmental Protection Agency. And the quality of the air we breathe that 90 percent of the time (or more) is crucial to our overall well-being, says Steven Haywood, MD, a former respiratory therapist turned board-certified emergency medicine physician with Summa Health in Akron, Ohio.

The first step to better air quality is to remove anything from your home that is causing your indoor air quality to degrade, says Peter Mann, founder and CEO of Oransi, a North Carolina–based air purification company. This may or may not be easy. For example, if you have cleaning supplies, paint, or other chemicals in the house, simply move them to the garage and out of your main living area.

Bring in fresh air.

It's challenging to completely remove sources of air pollution when the source is your pet, for example. A family member who’s ill can be another source of air pollution that’s difficult to remove, Mann adds.

However, Mann says that improving the air quality in your home can be as simple and quick as opening ventilation windows. Sometimes, that's not always practical, depending on the weather, humidity, pollution, pollen levels, and other local factors outside.

Update your thermostat.

A thermostat that can push air around your home when you're not using the heat or AC is ideal. Look for one with a circulating mode, says HVAC professional Joseph Wood, founder of Boston Standard, a heating, air conditioning, and plumbing company.

Some circulating thermostats will run your indoor fan for 20 minutes every hour, while others may allow the fan to run continuously at a reduced speed for constant airflow. If you have a smart thermostat, you may also be able to turn on the fan manually from your phone when you need some extra circulation.

Run bathroom or kitchen exhaust fans.

Running a bathroom or kitchen exhaust fan may sound extreme (and maybe a little annoying, as the sound can be grating), but this step can help improve indoor air quality by removing stale, humid air from the home.

"This feature will constantly draw air out of the home, thereby drawing fresh air in to replace it," Wood says. If you don't want to run the exhaust fan constantly, focus on running it for an extra 20 minutes after a shower or when your home is in need of a refresh.

Maintain your dehumidifier.

Moist air can be great for indoor air quality, but too much of a good thing can have the opposite effect. Ideally, you want to maintain an indoor relative humidity between 30 and 50 percent.

Take care of your dehumidifier, and keep it clean and running throughout the humid season in your area, Wood says. For example, in the Northeast, April through October would make sense; it would be sensible for people in Sunshine Coast to run dehumidifiers all year long to remove sticky air.

Add humidity in winter.

Keeping your home at an ideal humidity level will help you maintain a healthy air environment. In the summer, you will likely need a dehumidifier to help. However, a humidifier is beneficial during winter when the air is typically dry. So whether moist air is delivered via a portable or professionally installed system, humidifiers are recommended to help improve overall air quality, Wood says.

Buy a quality air filter.

It makes sense that higher-quality air filters will capture more particles. However, the catch is that smaller particles will cause the filter to clog faster, requiring more frequent replacement, Wood says.

He recommends changing your air filter every 30 days or so (or if you have a larger capacity filter, every six months). Keep replacement filters on hand so you have them when you need them.

Limit scented items.

We hate to break it to you, but Mann says that those scented candles, air fresheners, diffusers, etc., that you love can contribute to the poor air quality inside your home. Some scented products contain harmful volatile organic compounds (VOCs)—such as formaldehyde, benzene, and toluene—that can be hazardous to your health.

Excess exposure to harmful VOCs can cause headaches and irritation to your eyes, nose, and throat. Many cleaning, disinfecting, cosmetic, degreasing, and hobby products contain VOCs, too. Avoid these products whenever possible, and when you can't, ensure you thoroughly ventilate your home.

Get houseplants.

Air-filtering indoor plants aren’t only a great way to add life and visual interest to any space—they may also help to increase oxygen inside your home and purify the air. They do this by helping to filter the pollutants that originate from inside your home.

Some plants are able to filter out harmful chemicals and VOCs from wood, cleaning products, furniture, trash, carpets, natural gas, and more, says Dakota Hendrickson, co-founder of Filti, a filtration technology company based in Kansas City, Mo.

Examine your air ducts.

Keeping air ducts clean is important for air quality inside your home. Some common signs that your air ducts need cleaning include visible dust build-up on the ducts or furniture, as well as an increase in allergy flare-ups, Hendrickson says.

Because this job requires some complex cleaning equipment, it's best to leave this job to a professional. In the meantime, be sure to clean and dust all your registers and grilles.

Check cooking vents.

Whether you have a hood or a microwave with a carbon filter above your range in the kitchen, ensure the vents are working and that you clean them (and the filters) regularly, Hendrickson says. This is especially important if you have a gas range, as carbon monoxide can be emitted into the air when burners are on.

Clean your floor coverings.

Carpet and rugs add coziness to a home, but they’re also a top source for collecting pet dander, dirt, pollen, and more—particles that can be kicked up with every step. Make sure you clean them regularly

to help minimize build-up, Hendrickson says. You may also want to consider implementing a no-shoes household to further prevent build-up.

8. Conclusion

Home ventilation is vital for every owner; that helps to improve indoor air quality inside a home. You must follow this guide that will help you to learn some valuable information about home ventilation in Sunshine Coast.

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