



HVAC Zoning 101

As you move about your home, do you experience hot and cold spots? Is the upstairs always much warmer than the downstairs? Do the big, beautiful windows in your living room make it difficult to maintain a steady, comfortable temperature? Would you like for your home office to be a different temp than your kitchen or bedroom? Zoning could be the answer!

What is Zoning?

A zoning system (also known as zoned HVAC) uses dampers in your ductwork to manage airflow and direct heated or cooled air to specific areas of your home, each of which has its own thermostat. For example, if your husband prefers his mancave to be a chilly 68° but you prefer to read your book in a balmy 75° den, zoning allows you to do this. It simply turns the A/C on, opens the dampers in the mancave and shuts them in the den, keeping things nice and comfy for both of you.

Is Zoning Right For Your Home?

Zoning can be a great option for just about any home. But if any of the following conditions apply to you, zoning could make a significant difference to your comfort:

- · You experience uneven temperatures throughout your
- You have a multi-level home or a large floor plan with multiple wings.
- · You have high ceilings.
- · You have lots of large windows, such as picture or bay windows or glass doors.
- You have atypical spaces, such as a finished basement or attic room, a sunroom, or a room over your garage.
- · You have rooms that are rarely used.
- · You have family members that constantly fight over the temperature in the house.

A newer home that has been built to accommodate a zoned HVAC system will certainly be easier (and cheaper) to zone. But even if you have an older home, don't let that deter you—the ductwork in most homes can be retrofitted for zoning.

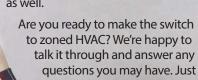
How Many Zones Does Your Home Need?

Speaking with an HVAC expert is the first step to figuring out how many zones would be appropriate for your needs. If you find the temperatures in your home are significantly different upstairs

compared to downstairs, they may suggest one zone per floor. Or you may find you'd like each room to have its own zone. The sky's the limit! (Though keep in mind, the more zones you have, the more expensive the system will be to install.)

What Are the Advantages of Zoning?

You mean, aside from a more comfortable home? Zoning helps your HVAC system run more efficiently, which can also save you money on your monthly bills—up to 30%, according to the US Department of Energy. This is because those dampers divert air away from areas that don't need it, so the system doesn't have to work as hard to cool or heat the areas where you want it most. Zoning is much more efficient than simply closing off the



air vents in each room—and less



DIY CORNER: Easy Household Maintenance You Can Do Yourself

In this day and age of high-tech everything, maintaining all the moving parts and pieces of your home can seem fairly overwhelming. But there are several easy, routine things you can do without calling in the HVAC pros—and knowing how to do them can help keep your family comfortable throughout the winter without spending an arm and a leg!

Change Your Filters

- Furnace Filters These should be checked monthly and swapped out every 30-60 days. Most systems make it easy to find and remove the filter, but if you have issues, a quick Google search on your unit's make and model will give you specific instructions. Turn off your unit, and pull out the filter. Look for dust on the surface, a fuzzy appearance, dampness, or mold. If you see any of these conditions, it's time for a change!
- Whole-house Humidifier Filter These should be changed at least once a year, and maybe more often if you have hard water or we've had a particularly harsh winter. Check your owner's manual, but most units follow these fairly simple steps: turn off the system, remove the cover, and disconnect the water tube. Remove the filter (sometimes called an evaporator pad)—if it looks to be in good condition, just give it a good cleaning with water and vinegar to remove any calcification. If a replacement is needed, slide the new filter into the tracks (there should be markings to indicate which end goes where), taking care not to jam it in (this is an indication it's not going in properly). Replace the cover, and turn your unit back on. In addition to changing or cleaning your filters, the whole unit should be cleaned annually.

Clean Off Your Outdoor A/C Unit

If you keep on top of it, this is really a minor chore. Any time you're outside doing yard work, cooking on the grill, or playing with the kids, take a few minutes to check out your A/C unit. Remove any loose debris, like tree branches and leaves. Suck up any dirt on the fins using the soft-brush attachment on your vacuum cleaner. Hose off any lingering muck. These simple tasks will help keep your unit running cleaner, longer, and more efficiently—and will help make sure it starts up without any issues come summertime.

Re-seal Your Windows

It's no good heating and cooling your house when all the air is escaping out of cracks around your windows. A couple times a year, be sure to inspect all the seals on the outside of your doors and windows. Remove any cracked, dry, or damaged caulk, clean the area, and replace with new. Put painter's tape down first to keep things nice and neat, and smooth the caulk with a lint-free cloth after you've piped it in.

Change the Direction of Your Ceiling Fans

Most people don't realize you can change the direction your ceiling fan rotates, much less why you'd ever want to do such a thing. But this simple task can end up saving you up to 10% on your heating and cooling bills! In the summer, you want your fan rotating counterclockwise, to force air downwards, creating that lovely, cooling breeze. In the winter, having your fan rotating clockwise will create an updraft that helps circulate warm air throughout the room. To change directions, turn your fan off, find a sturdy ladder, and take a look at the base of the fan. Find the switch, and slide it to the opposite direction. (It's really that easy.)

PREVENTIVE MAINTENANCE MATTERS!

Maintenance, maintenance, maintenance! It's our mantra, and for good reason. Preventive maintenance truly is one of the most important things you can do to keep your HVAC system healthy and happy—thereby keeping you and your family healthy and happy. Here's why:

- COMFORT: Preventive maintenance helps keep you comfortable all year 'round. If your system goes too long without a little attention, various issues can pop up that prevent your home from being heated or cooled evenly. You may also end up with irritating noises or smells that keep you from enjoying the comfort of your home to the fullest.
- MONEY: "A stitch in time...." When you regularly have an HVAC technician check on things, they're more likely to notice small problems before they become big problems. Even something as simple as a small leak or a dirty filter (change your filters!) can lead to a complete shutdown if left alone for too long. That small maintenance fee will be well worth it to avoid having to pay to replace the entire system.
- MORE MONEY: Without proper maintenance, you could end up spending more on your utility bills. Your HVAC units can

develop blockages and leaks that significantly impact your system's energy efficiency. When your system has to work harder to get air around those blockages, it means more money out of your pocket.

- INDOOR AIR QUALITY: Regular maintenance of your HVAC system helps your indoor air quality and the overall cleanliness of your home. Over time, mold, dirt, and dust builds up inside the equipment and can end up escaping into your living areas. Not only does this mean having to clean your home more often, it can also lead to allergies and serious respiratory issues.
- SAFETY: Neglected heat pumps and heating units can lead to mechanical and electrical problems which, in turn, can result in a fire. If you have a gas furnace, your technician will also test your gas burners to make sure gas is not leaking into your home and raising carbon monoxide levels.

Has it been awhile since your HVAC system got some TLC? Appel has several maintenance plan options to suit your home and budget. Call us today!

HVAC Equipment Price Increases

Like many other consumer goods in this country, heating and cooling equipment continues to get more expensive, seemingly by the day. Our industry has experienced price increases ranging from 20-30% in the last 18 months alone. Increased prices of raw materials such as steel, copper, and even wood, continue to affect manufacturing costs and the end cost to the consumer. Higher labor production and delivery costs further compound the problem.

New Efficiency Requirements Will Drive Prices Even Higher.

2022 is the last year for the current efficiency ratings for air conditioners and heat pumps in the state of Indiana. Beginning January 1, 2023, the new efficiency minimum for air conditioners will move from 13 to 14 SEER. SEER (Seasonal Energy Efficiency Ratio) is the cooling efficiency rating for air conditioners and heat pumps. The higher the SEER rating, the less electricity a unit uses to produce an equal amount of cooling. Retail prices for 14 SEER air conditioners are \$400-\$700 higher than our current 13 SEER models.

HVAC Rebates and Tax Credits

Did you know that if you're needing to replace or update your HVAC equipment, the government will actually pay you to choose certain options? Tax credits from the federal government, as well as rebates from energy companies like CenterPoint and Duke, make switching to energy-efficient HVAC equipment that much more affordable.

2022 DUKE REBATES

Central Air Conditioning

- 15 and 16 SEER with ECM: \$200
- ≥17 SEER with ECM: \$300

Air Source Heat Pump

- 15 and 16 SEER with ECM and Min. 8.2 HSPF: \$300
- ≥17 SEER with ECM and Min. 8.2 HSPF: \$400

Geothermal Heat Pump

• ≥19 EER with ECM: \$400

Smart Thermostat: +\$65 when purchased along with HVAC equipment listed above

Visit <u>duke-energy.com</u> for a complete listing and more details on eligibility.

2022 CENTERPOINT ENERGY REBATES

Gas Furnaces

• 95-96.99% AFUE: \$225

Gas Boilers

• 90% AFUE or higher: \$300

Visit <u>midwest.centerpointenergy.com</u> for a complete listing and more details on eligibility.

Similarly, heat pump minimum cooling efficiency will move from 14 SEER to 15 SEER. The heating efficiency, HSPF (Heating Seasonal Performance Factor), will also move from the current minimum efficiency of 8.2 HSPF to the new minimum of 8.8 HSPF. Retail prices for 15 SEER heat pumps are \$1,400-\$2,000 higher than our current 14 SEER models.

Annual electricity savings to the consumer for the increase of one SEER point ranges from \$12-\$30, depending upon the capacity of the unit. As an example: If you pay \$700 more for a 14 SEER air conditioner in 2023 at the return of \$30/year in electrical savings, it will take 23 years to recoup your additional expenditure versus the purchase price of the 13 SEER unit in 2022. This certainly does not seem like a good return on investment.

NOW is the Time to Replace HVAC Equipment!

Air conditioners and heat pumps are going to continue to get more expensive. Price will be impacted by higher production costs and by new minimum efficiency changes. Most air conditioners have a life expectancy of 15-20 years, and most heat pumps have a life expectancy of 12-15 years. If your equipment is aging, or if you know your system has a refrigerant leak, now is most likely the best time to consider equipment replacement.

Take Advantage of Rebates & Other Incentives.

Duke and AES (formerly IPL) do have rebates available on qualifying cooling equipment purchases (see the list to the left).

Get Ready for Flammable Refrigerants.

Another compelling reason to consider replacing your older model air conditioner or heat pump is that the EPA will be forcing the HVAC industry to switch to new, flammable refrigerants, no later than January 1, 2025. The last time the industry was forced to switch refrigerants back in 2010, from Freon (R-22) to Puron (R-410A), equipment pricing and equipment problems escalated.

We, as an industry, have less experience with these new refrigerants. Manufacturers have to overcome the challenges of engineering equipment and parts to withstand higher pressures and to operate with the different chemical compositions found in the new refrigerants. Installation and service technicians must be trained to work with the new refrigerants, equipment, and parts. There is always a learning

curve when an industry makes a significant change such as this. We will continue to post more information about the new refrigerants and how this will impact your life and your wallet.







Ductwork Doesn't Last Forever Signs It May Be Time to Replace

When it comes to ductwork, we're willing to bet it's "out of sight, out of mind" for most homeowners. But this could end up costing you lots of money. According to Energy Star, "about 20 to 30 percent of the air that moves through the duct system is lost due to leaks, holes, and poorly connected ducts." This means a considerable loss of comfort...and much higher utility bills.

Is it time to replace your ductwork? Here are a few things to look out for:

AGE

Unlike fine wines and cheeses, your ductwork will NOT get better with age. The older it gets, the more susceptible it is to wear and tear in the seals, seams, and joints. This deterioration can lead to leaks and other problems for your HVAC system. Even if everything seems to be working fine now, old ductwork is likely to spring a costly surprise on you at some point down the road. Better to keep on top of things and be able to plan for the inevitable repairs or replacement.

HIGH UTILITY BILLS

As we mentioned above, leaky and poorly fitted ducts can lead to a huge loss in energy efficiency—your HVAC system has to work much harder to heat and cool your home, because a good chunk of the air it has already heated or cooled is escaping. Which, of course, leads to a higher dollar amount on your monthly bills.

UNEVEN AIRFLOW/TEMPERATURE

When you move from room to room, does the temperature seem about the same? Or is it much stuffier or colder in a couple rooms? An easy way to test this out is to take readings with an indoor thermometer in different parts of your house. If the temps are all over the place, it could be due to faulty ductwork that isn't able to move the air around your home evenly.

POOR INDOOR AIR QUALITY

When your ductwork is full of leaks and holes, it's not just your temperature-related comfort that suffers. Those gaps also let in all sorts of dust, mold, moisture, and allergens as well. And then your HVAC system proceeds to blow them all throughout your home. So if you're feeling sneezier than usual, having respiratory problems, or are noticing unsavory odors...it may be time to inspect those ducts.

VISIBLE DAMAGE

One of the best ways to tell if there are issues with your ducts is to take an old-fashioned look. Do you see dents and holes? Are there kinks, tangles, or twists? If something heavy falls or knocks into your ductwork, it can cause damage that could potentially restrict airflow or spring a leak.

NOISES

A little bit of noise is common in an HVAC system. But if you're hearing lots of rattling, whistling, or vibrating noises, it may be time to take a look at the ducts. In order to wind its way through the rooms of your home, your ductwork is held together with a series of fiberglass or plastic joints. If these get damaged, or if your ducts have holes in them, your system will start to get obnoxiously loud.

If you're experiencing any of these issues with your ductwork, it's time to call in the pros. An experienced HVAC contractor like Appel can take a look and see if you can get away with some repairs or if a replacement is needed.

'Tis the Season to Make a Difference

Have you been wanting to make a difference in the community? A good way to choose a volunteer opportunity (and to ensure you stick with it) is to find something that aligns with your interests. Are you the consummate host or hostess? Look into serving at a soup kitchen or nursing home. Do you love animals? Shelters could always use a helping hand. Are you a retired teacher? There are lots of kids out there who need mentors.

There are several volunteer opportunities in the Carmel and Indy areas. Here are a few of our favorites to get you started:

- <u>Brighton Hospice</u> Brighton Hospice provides care to patients who are at the end of their lives. They train volunteers to provide assistance, comfort, and compassion when it's needed most.
- City of Carmel Help out at one of our fair city's many monthly and seasonal events, or find year-round volunteer opportunities for organizations like the ALS Association of Indiana, the Carmel Clay Public Library, or Meals on Wheels.
- <u>Indy Film Fest</u> Are you a film buff? Help support the arts in Indiana by becoming a screener, a ticket-taker, an event planner, and more!
- <u>SCORE</u> Do you have a mind for business? Interest in using your talents and experience to support local entrepreneurs? SCORE may just be the place for you!
- Alzheimer's Association There are many ways to become involved in this organization—from advocacy to data entry to clinical trials. Help achieve their vision of a world without Alzheimer's and dementia!





Bring the Heat! October 1, 2022

During the frigid, Indiana winters, a properly functioning furnace can save lives. Which is why Appel proudly participates in Bring the Heat Indianapolis each year, a program that provides free furnace services to elderly, disabled, and low-income homeowners in the Indianapolis area, ensuring they have safe, efficient heating to get them through the season.

It's estimated that there are thousands of people in Marion County who do not have a safe source of heat for their homes. Since the Bring the Heat program relies solely on the support of volunteers, Appel and other companies and individuals donate funds, labor, equipment, parts, and time to help as many homeowners-in-need as we can.

We're proud to use our skills and resources to make a difference in our community!

There's Nothing Better Than FREE

With the costs of just about everything skyrocketing these days, there's no sweeter word to our ears than "free." And because we know HVAC purchases can be fairly significant, we want to help lessen the burden by offering **18-months FREE financing for all qualifying purchases.** No strings, no hassle. Just a bit of a boost when you need it most.

Give us a call for more details and to see if your equipment purchase qualifies for this special deal!

5 Common Boiler Problems

You've heard of Murphy's Law—the adage that anything that can go wrong will go wrong. Particularly if it's a frigid Indiana night and you're counting on your boiler to keep you nice and toasty. All of a sudden, you hear some suspicious noises, and the air inside your home starts to cool noticeably. Sigh. Time to see what's up.

There are several things that could be keeping your boiler from operating at peak performance. Here are a few of the most common:

1. Leaking

Old parts, a worn out seal, a pressure valve set too high, a system overload, pipe corrosion...these can all contribute to leaks or drips in your boiler. If you notice this issue, it's best to get in touch with an experienced HVAC contractor to find out the cause. They'll have the know-how to diagnose and fix the problem without causing any further damage.

2. Kettling (and Other Strange Noises)

Does your boiler sound like it's about to brew you a nice, steaming cup of tea? That's not a good sound. The purpose of boilers is to heat water, which then gets spread throughout your home as steam, warming the air as it goes. Kettling and rumbling noises can be brought on by a number of things, but hard water is typically to blame—minerals in the water, such as calcium and magnesium, build up on the boiler's interior and can clog the flow of water in the heat exchanger. This leads to intense heating which causes those noises...and potentially larger issues, as well.

3. Frozen Condensate Pipe

We see this issue a lot in the colder months. Your condensate pipe is responsible for moving waste gas, in the form of a liquid, from your boiler to the outside drain. But what do liquids do in cold temperatures? They freeze. Especially if your condensate pipe is fitted outside your home or in an unheated space, like your garage. The frozen condensate can cause a blockage or even make its way back into the boiler and cause a full system breakdown. Not fun. This is a fairly easy fix, though, and one you can do yourself—just apply hot (not boiling) water or a warm cloth on the pipe. Be sure to wear gloves, though, to protect your skin from the extreme cold of the pipe.

4. Pilot Light is Out

Fixing this problem could be as simple as reigniting the flame (after following the instructions in your boiler's manual to make sure you do so safely, of course). But before you do,

you'll want to check on a few things: First, make sure your boiler is receiving gas—if not, you may need to check that the stopcock isn't on or that the gas in your house isn't turned off. As simple as it sounds, you may also want to check that there isn't a draft somewhere that keeps blowing out the flame. If none of these are at fault, the problem could be a faulty thermocouple or a deposit build-up.

5. Thermostat is Wrong or Not Working

We hate to be Captain Obvious here, but is the thermostat turned on? Is it set to the correct temperature? Do the batteries need to be replaced? Have you reset the clock after a time change? You may roll your eyes, but sometimes the simplest thing is the solution! If you've checked all these factors and your thermostat still isn't doing its job, it could be old or broken, or some wires could have come loose. Time to call the pros.





Borrow, Don't Buy

Support Your Local Library!

"Google can bring you back 100,000 answers. A librarian can bring you back the right one."

—Neil Gaiman

In the internet age, you may be tempted to think libraries are a dying institution. Not so, and nor should they be. Libraries offer a safe place for the community to gather with free access to information and technology, knowledge and imagination. Libraries are a place for everyone.

And while some of our tax dollars go to support basic expenses and upkeep, to have a library system that is truly worthwhile, they need a little extra help. Here are a few ways you can give back to your local library:

- **DONATE MONEY** Instead of buying the latest bestseller, consider donating that amount and checking it out from the library, instead.
- **DONATE MATERIALS** Do you have a stack of books by your bed that's just gathering dust? Give them to the library! You may also want to contact your local branch to see if they need any other supplies. Many libraries offer all sorts of events and workshops, and donations of games, art supplies, and the like may also be welcome.
- DONATE TIME Volunteering to help with events or everyday administrative activities can be a rewarding way to give back to the community and help keep the library running smoothly.

For more information...visit your local library! (Click here to find your branch in the Indiana State Public Library Directory.)

Be a Tourist in Your Own City Hidden Gems in the Indy Area

There are several go-to Indy attractions you might visit when you have out-of-town guests. The Children's Museum, Monument Circle, the Speedway.... But there are a few local points of interest that even lifelong Indy-area residents might not know about. Grab the family some weekend and check out one of these hidden gems!

- <u>Museum of Miniature Houses</u> What is it about tiny things that so captures our imaginations? Located right here in downtown Carmel, this is one of just a few museums dedicated to miniatures in the whole country.
- <u>Flower Alley</u> Head a bit further south to Broad Ripple, and take a wander down this residential alley, where homeowners have painted beautiful, colorful flower murals on their garage doors.
- John Dillinger's Grave On a nice day, Crown Hill is an excellent place for a peaceful stroll—especially if you're a history buff. The cemetery is the final resting place of notables such as President Benjamin Harrison, James Whitcomb Riley... and of course, the infamous gangster John Dillinger.
- <u>City Market Catacombs</u> Did you know there are miles of interconnected tunnels hidden under City Market in downtown Indy? Dating back to well over 100 years ago, a tour of the so-called Catacombs is for fans of history and spookiness, alike.

\$150 Off

any **Aprilaire** whole-house humidifier

Valid Oct 26 - Nov 30, 2022 Cannot be combined with any other coupon, Platinum Plan discount, or special offer. Please present coupon at time of service.

Appel Heating & Air Conditioning www.appelheat.com

\$500 Off

any new high-efficiency gas furnace

Valid Oct 26 - Nov 30, 2022 Cannot be combined with any other coupon, Platinum Plan discount, or special offer. Please present coupon at time of service.

Appel Heating & Air Conditioning www.appelheat.com

\$1000 Off

any new high-efficiency system (A/C and furnace)

Valid Oct 26 - Nov 30, 2022 Cannot be combined with any other coupon, Platinum Plan discount, or special offer. Please present coupon at time of service.

Appel Heating & Air Conditioning www.appelheat.com