

The 411 on Refrigerant

Every air conditioner out there uses refrigerant as a cooling means. Air conditioners do not actually remove heat, they just move it—from where it isn't wanted to somewhere else. Similarly, refrigerators, freezers, and anything else that needs to get rid of unwanted heat use a refrigerant cycle and refrigerant to do this.

There are over 100 different chemicals used as refrigerants, mostly depending upon the type of equipment that's using it. You may have heard the trade name Freon—that's a specific refrigerant produced by Chemours, formerly DuPont. Every refrigerant has an R- number, so we can tell them apart, and there are different groups of refrigerants depending upon their makeup.

If your home's central air is more than 10 years old, it likely has R-22 in it. This refrigerant was used for about 50 years, but because it contains chlorine—which contributes to the damage of the ozone layer—installation of R-22 in new units was banned in 2010. Over the last 10 years, its production has been slowly phased out, and now producing and importing R-22 is banned.

These days, it's not uncommon for some contractors and "sales techs" to tell homeowners that the use of R-22 is banned, or that if their air conditioner is low on refrigerant, it cannot be refilled and must be replaced. Both of these tactics to get you to replace your unit are totally wrong.

There is a stockpile of R-22 in the industry, and contractors turn in the used R-22 that we take out when we replace equipment or remove it from a unit to work on it. This R-22 is then purified to AHRI standards and can be resold. This supply will last a number of years. There are also well over a dozen alternative refrigerants that work like R-22 that can also be used. One popular gas was invented by an Indianapolis company who recently sold to Chemours. So if you are leery of what you are being told, call us—we'll always give you the truth!

Current central air conditioners use R-410a, which is a good gas. It does, however, have a high GWP (global warming potential), so sometime in the future, it will be phased out of use as well. It hasn't been decided exactly when, and the equipment manufacturers haven't agreed on what will replace it, so the situation could get interesting. At Appel, we always stay up-to-date and informed on the latest industry news and regulations, so you can trust us to steer you the right way.

COVID-19 Notice

Your health and safety are our top priority!

We understand that you may be hesitant to have an Appel technician in your home while COVID-19 is still a threat. For better or worse, however, your HVAC system continues to run and need care while the rest of the world grinds to a halt. In fact, with so much more of your time spent at home, it's even more important to keep an eye on things and make sure everything is running smoothly.

As an essential service provider, Appel continues to service our customer's needs while doing everything in our power to protect everyone's health and safety. We continue to monitor all COVID-19 information and updates provided by the CDC (Center for Disease Control) and WHO (World Health Organization) to ensure we follow the latest guidelines to the letter. In addition, all our technicians wear masks, gloves, and shoe booties while working at your home.

As always, we encourage you to reach out to us with your questions and concerns. By working together, we'll get through this.



Appel's Ode to Spring

Hello, all you spring enthusiasts! We see you out there working on your flower beds, waking up happily to the sound of birds chirping, and switching over (maybe a few weeks early) to sandals. You're in good company—spring is our favorite time of year as well.

We can't help but embrace the warmer weather after a long Indiana winter—especially after having been cooped up for the last several weeks. These milder days have us taking long walks, grilling in the backyard, and opening up a few windows to welcome fresh air.

We also love to see the beauty of the neighborhoods that we drive into everyday explode into color with blooming flower beds and budding trees around every corner. It brightens our day to walk up to your front door for your HVAC system's routine maintenance call amongst nature's lovely backdrop. What a beautiful part of the country to call home!

And, of course, we'd be remiss if we didn't mention the switch to summer food. You know how we love our recipes! With the various farmers markets opening up, fresh produce and goods make our taste buds sing. We even get an early start on the craving for a few ears of My Dad's Sweet Corn, although we do have to wait another month or two. Until then we'll enjoy a strawberry rhubarb pie and a few salads made with fresh lettuce.

And don't forget the spring cleaning! We know...this may not be quite as pleasurable as the rest of spring's bounty, your house and your health will thank you. While you're at it, add "have HVAC system serviced" to your spring cleaning list. Appel's trusty technicians will ensure your units are just as clean and sparkling as the rest of your home!

Patio Party Prep

Getting your outdoor spaces ready for summer entertaining is as easy as 1-2-3-4! Pick a day or a weekend (be sure to check the weather forecast), and follow these simple steps:

1. Give your grass and shrubs a quick trim.

It's always nicer to spend time out in the yard when the grass is freshly cut, plus it makes it easier to catch a few fireflies when the sun goes down.

2. Sweep away the cobwebs.

Take all the items off your patio or deck and give the surface a thorough cleaning. You can do this with a push broom and soapy water, or simply give it a good sweeping, depending on how dirty it is.

3. Add some atmosphere.

A new pot of hanging flowers and citronella candles are always welcome additions to the summer scene. If you like to cook, adding a few herbs near the lounging areas lends a pleasant scent to hot summer nights.

4. Scrub that grill.

It's harder to do when the steaks are waiting, so take the time now to give it a really good cleaning. Soaking your grates in a 5 gallon bucket with dishwashing detergent will cut the grease for a fresh new cooking surface. A wipe down of vinegar on stainless surfaces will bring back the luster.

Well done! Time for a little rest and relaxation with family and friends.
You've earned it!





The Evolution of the Trusty Thermostat

In the good old days with gas, oil, and electric furnaces, your control was a mercury bulb thermostat. Everyone is familiar with the famous Honeywell "round" thermostat, but there were rectangular stats as well. These thermostats worked well enough, but weren't always the most accurate. And they relied on you to adjust the temperature manually if you were going to be gone or wanted it cooler to sleep.

In the 1970s, as a result of the energy crisis, clocks were added to these mechanical stats to automatically change temps at times you wanted it cooler or warmer. By the 1980s, programmable thermostats using solid state electronics came out, making them much easier to program and better able to hold a nice, even temperature. Over the years, these thermostats were perfected and features were added until, by the mid 2010s, the industry looked to the internet to bring home comfort into the technological age.

Now there are dozens of WiFi thermostats out there to choose from. With even the most basic, you can control your home's temperature from an app on your phone or computer. You'll get a message if the house gets warmer or cooler than the temp you have set. In the next tier up are models that work with systems

like Alexa, where you literally don't have to lift a finger to adjust the temperature.

There are systems that work with an alarm or your doorbell or your lights. Some controls give you loads of runtime data so you can see how much your unit ran each day and what the temp was at a given time. That's for the tech geeks out there—it's amazing what the WiFi stats today can tell you. But practically, most homeowners just want their stats to adjust the temp while away or to get warnings if the heat or the cooling goes out while they're gone. Perfect for snowbirds.

If you're interested in replacing your thermostat and thinking of switching to WiFi, talk to us. We offer a special price if we install a new thermostat while at your home performing equipment maintenance. We can help you choose the perfect control and will send it with the technician when he comes. We can also install one you've purchased through an outside vendor, though in many cases, you'll get a better warranty on the same thermostat if it comes from a contractor and not the internet or a home store. And on top of all that, you can get a nice rebate from Duke or Vectren for upgrading...it's a win-win!

It Pays to Be Efficient!

We can hear dads across the state saying the same thing: "You think money grows on trees?" Maybe not, but we have rounded up a nice list of energy rebates, and all they require is for you to reach out and pick them. Being proactive in your energy efficiency is good for the environment and your monthly bill. So take a few minutes to check out the list below or go to your energy company's website for easy access to all the latest energy rebates and credits available.

2020 FEDERAL TAX CREDITS Furnaces

95% efficient, Energy Star certified (See Energy Star for more details): \$150

Blower

Must use no more than 2% of the furnace's total energy: \$50

Heat Pump

Energy Star certified 8.5 HSPF/12.5 EER/15.00 SEER: \$300

Air Conditioner

Energy Star certified 13.00 EER/16.00 SEER: **\$300**

2020 VECTREN REBATES Thermostats

"Smart" thermostat: \$75 Wi-Fi enabled thermostat: \$50

Gas Furnaces 95-96.99% AFUE: **\$250**

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Gas Boilers

90% AFUE or higher: **\$300**

Visit Vectren.com/ SaveEnergy for a complete listing and more details on eligibility.

2020 DUKE REBATES Central Air Conditioning or Heat Pump

15 and 16 SEER with ECM: \$300 (+\$125 with Smart Thermostat)

17 SEER or higher with ECM: \$400 (+\$125 with Smart Thermostat)

Geothermal Heat Pump

19 EER or higher with ECM: **\$400** (+**\$125** with Smart Thermostat)

Visit Duke-Energy.com for more information.

Allergies & Indoor Air Quality

What's in a breath of fresh air? Quite a lot it seems—just ask any allergy sufferer. As the earth bursts forth with plants, flowers, and green grass, it comes with an uptick in new scents, pollen, mold, and more. What's worse is all those bits join in with man made pollutants such as emissions and chemicals to stealthily invade your home, mixing with the dander, mold spores, dust mites, and all the rest.

What is a living, breathing person to do? There are numerous ways to mitigate indoor air quality in your home to meet your needs and comfort level.

Media Air Cleaners

Whole house air quality can be improved tremendously with a media air cleaner. Integrated with your existing HVAC system, this device will pre-filter your air, diffuse it, and toss those unwanted particles into a highly effective media filter where they will be trapped for good. The benefits are twofold. First, it will take up to 99% of the particles out of the air, vastly improving the quality. Second, filtering out the air prior to it entering your system will ensure your unit has less work to do.

UV Lights

We know a lot about UV rays as they apply to being out in the sun, but what role do they play in indoor air quality? UV-C rays that are the most dangerous to cells (and typically blocked by the earth's atmosphere) can be artificially generated to clean air. In a UV purification system the air passes through a filter and then enters a chamber where it is blasted with UV rays. This exposure kills all the living organisms, such as mold and mildew. Rather than just a trap, it is an active way to eliminate and dissipate. The air then goes through another filter chamber before being released back into your home.

Routine Maintenance

The easy answer to getting a jump on the air quality in your home comes down to scheduled maintenance. Having your unit inspected and cleaned regularly and changing those filters keeps your system working efficiently, and with your system humming along nicely, the air you are cycling through your home will be cleaner.

In the end, the decision to go the extra mile with an add-on system such as media cleaners or UV lights is up to your budget, environmental, and comfort needs. Many individuals are content to allow their existing system to do its job while others may need to invest more into the quality of their air to help with allergies or asthma, or just to get rid of excess pet dander floating around in the home.

If you would like more information about making your home's air quality a priority, give us a call today.

Now Hiring Installers!

Do you dream of a job where you actually look forward to going to work every day? If so, consider making the switch to Appel! Working for a strong company with years of experience and a loyal following will change the way you look at your job. We value our employees and customers, and it shows in ways big and small.

If you're a highly motivated, quality-conscious HVAC Installer, we want to hear from you. We're proud to offer above-average wages, as well as excellent perks and benefits:

- 401K Retirement Program with Company Matching
- Pension Plan
- Vacation Pay
- Holiday Pay
- Take-Home Vehicle
- · Company-Supplied Uniforms
- On-The-Job Training

Interested? E-mail your resume to hvac1945@gmail.com or give us a call at 317-846-0434 for more information.



Your Daily Energy Savings Checklist



There are a myriad of ways and reasons to cut energy use in your home. Many of these come in the form of an investment, ie: you spend money to save money down the road. Some of these include adding an attic vent, replacing your AC unit, replacing windows, and upgrading appliances to more energy efficient models.

There is also a long list of inexpensive and easy ways you can make a dent in your energy use and costs day to day.

• Pay attention to your thermostat.

Keeping you cool and comfortable is the goal during the hot summer months, but where exactly is that sweet spot? Play around with adding a degree or two to see if your body adjusts to the subtle change. You might find the change is worth it on your bill.

Use your smart thermostat wisely.

A smart thermostat is only as smart as the one programming it. Do a little research into how to make it work the best for you. Be sure to take advantage of the options for when you are out of the house for an extended amount of time, overnight, or for a longer vacation.

Change your filters.

It's the chorus of every energy savings song, whether it be sung in winter or summer. A fresh filter allows your system to work at peak efficiency and is critical to air quality as well.

• Turn on your bathroom fan after showering.

Getting that heat up and out of the house quickly will be beneficial to your bill and will help prevent any sneaky mold growth. Be sure to turn it off when the heat dissipates, or install a timer.

Turn off your ceiling fans when you are not in the room.

That breeze will cool you down while you're near it, but it doesn't do much good when no one is around to feel it.

Assess your light bulbs.

Compact Fluorescents have come a long way and use a quarter of the energy that incandescent bulbs use. They also last about 10 times longer. Check out the selection at your local hardware store, and experiment with the options.

• Turn off the lights.

Working on the habit of turning off the light every time you leave a room will pay some dividends in the long run. Encouraging your spouse and kids to do the same will help, too. Consider adding motion detector lights in areas of the home where you typically leave a light on 24/7, such as hallways or entries.

These little changes will add up over the course of the summer months and are easy additions to your daily life. If you have questions about how you can save even more money with your heating and cooling system itself, call us today for a consultation!

A Case for Change(ing your filters)

Filters play the starring role in your home's HVAC system when it comes to keeping you warm or cool. Ensuring they are fresh and clean enough to do their job is one of the easiest ways to keep your home comfortable (for less \$\$) during any time of year. Changing your standard filter every three months is a good routine for an Indiana winter. Switching that up to monthly during the summer months is also important. Here's why:

Your System is Working Harder

During the winter your system kicks on and off several times a day to keep you toasty warm. In the heat of summer your air conditioner does double and even triple duty cycles, longer and more often to achieve your comfort nirvana. This results in more air being pushed through those trusty filters each and every day, which can clog all those little fibers up in a hurry. Something as simple as a plugged filter can shut down your entire system.

Humidity is Not a Filter's Friend

Your hairstyle isn't the only thing that suffers during a humid Indiana summer. That excess moisture trapped in the air can become trapped in your filters as well. With that moisture comes mold and mildew and all sorts of undesirable muck that can clog the air passages and prevent your filter from working efficiently. Moist filters will not trap and cleanse as desired.

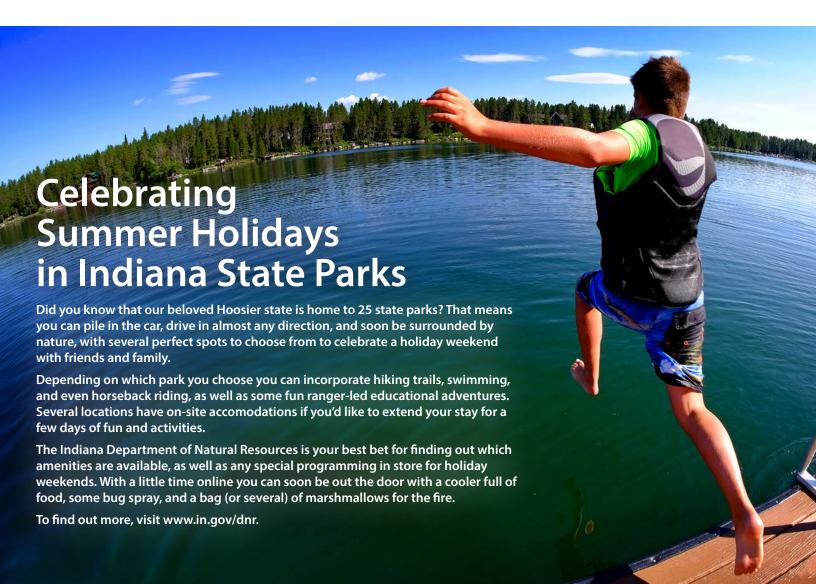
Summer Air is Full of...

Allergens, dust, grit, mold spores, pet dander, pollen...the list goes on and on and on. Every time you open your doors or windows you let in more of the big beautiful microscopic world and send it to through your trusty filter. A good filter does its job in trapping those undesirable little bits, but it can reach capacity quickly.

How can you tell when a filter should be changed?

It depends on all of the factors above, but a monthly visual check should get you on the right path towards best efficiency and air quality for your home. Take the filter out and look for telltale signs that it has done its job and is ready to be retired. Dust on the surface, a fuzzy appearance, dampness, or mold growth are all indications that it is time for a replacement.

Keeping your filters fresh will keep your HVAC unit humming along nicely and allow your home's air quality to remain high.



Recipe: Asparagus and Mozzarella Stuffed Chicken Breast

(View original recipe at allrecipes.com.)

With more time at home these last few weeks, have you turned into an amateur chef? That's okay, we haven't either.... But when you get sick of canned soup and dish after dish of Tuna Helper, give this recipe a try! It's ridiculously easy, ridiculously tasty, and comes out looking like a gourmet meal. Why not light a couple candles, pop open that special bottle of wine you've been saving for a special occasion, and turn it into a stay-at-home date night?

- 2 large skinless, boneless chicken breast halves
- salt and black pepper to taste
- 8 asparagus spears, trimmed, divided
- ½ cup shredded mozzarella cheese, divided
- ¼ cup Italian seasoned bread crumbs

Preheat your oven to 375 degrees. Grease an 8x8-inch baking dish.

Place each chicken breast between two sheets of heavy plastic (resealable freezer bags work well) on a solid, level surface. Firmly pound the chicken with the smooth side of a meat mallet to an even thickness of about ¼ inch. Sprinkle each side with salt and pepper.

Place 4 spears of asparagus down the center of a chicken breast, and spread about ¼ cup of mozzarella cheese over the asparagus. Repeat with the other chicken breast, and roll the chicken around the asparagus and cheese to make a tidy, compact roll. Place the rolls seam sides down in the prepared baking dish, and sprinkle each with about 2 tablespoons of bread crumbs.

Bake in the preheated oven until the juices run clear when pricked with a fork, about 25 minutes. An instant-read thermometer inserted into the center should read at least 165 degrees F (74 degrees C).





Angie loves us, and our customers do too! We are so pleased and proud to have earned the Angie's List Super Service Award for 21 years in a row. For those who are not familiar, this is the highest honor Angie's List gives out and is only awarded to businesses who go above and beyond to satisfy their customers. Throughout the coldest nights and the hottest days—and everything in between—our staff and technicians are there for you. Many thanks to YOU for valuing our service and expertise so highly. We couldn't have made it here without you!

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