

Absolute Advantage Heating, Cooling and Indoor Air Quality **Home Comfort Guide.** 





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#### **Our Mission**

Our mission to work together with you and your family to design equipment solutions and provide you options for a safe and efficient heating and cooling system that will keep your family safe, healthy and more comfortable year-round while meeting your current financial needs and future plans.

#### **Our Commitment To You**

Our highly trained team of system design pros and our experienced installation team members will diligently work with you to help design, select and install the best comfort system available to take care of all of your home comfort needs for many years to come.





# When purchasing a new home comfort system, there are **4 parts to the equation**.

Most home owners will only experience the need to replace a home comfort system once in their life time. The process can become stressful, confusing, frustrating and very time consuming. Our team has the ability to make your decision much more comfortable and less time consuming.

Learning about a new heating and cooling system involves much more than just collecting prices.

#### #1 The company you choose:

- Must earn your trust and take care of your home like it was their own.
- Must take the time to educate you on all of your options.
- Must take the time to explain all of the newest equipment features and benefits and how they will effect your home.
- Must take the time to clearly answer all of your questions and concerns.
- Must earn your business and investment dollars.

#### #2 The guarantees made by the company you choose:

- Are you confident they will follow through on their promises.
- Are you confident they will honor their warranties.

#### **#3** The quality installation practices of that company:

- Must take the time to design and install the optimal system for your home.
- Must have experienced installation techs who are capable of installing, setting up and fine tuning all of the technology in your new system.

#### **#4 The equipment brand:**

- There are numerous brands available today and some are better than others.
- All of the effort put into system design, sizing and your investment dollars can end up being a failure if substandard equipment is used.
- The opposite is also true, great equipment will never live up to its full potential if the design and installation processes are short changed.
- We can seamlessly combine the design, installation processes and brand to ensure you receive the value you deserve.



#### **According to industry surveys**

**61%** say they have rooms that are too hot or too cold





**48%** adjust their thermostat daily





**38%** admit to family disagreements about temperature



25% say the air in their home causes their allergies to act up



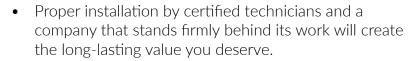
18% say their family battles are comfort vs. energy costs



**24%** notice musty foul odors at home

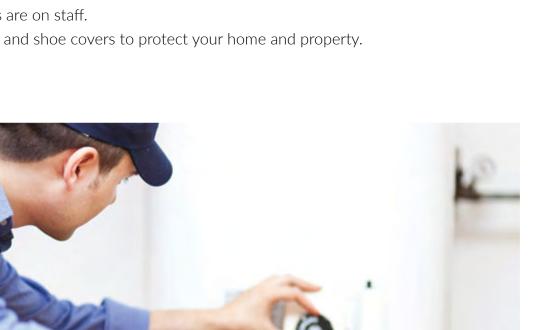


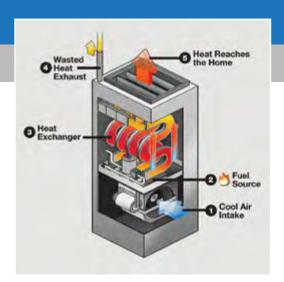
#### Home comfort problems are not solved by equipment alone.





- All of our technicians have been thoroughly background checked and drug tested.
- We are a NATE certified company.
- We are an EPA certified company.
- We are qualified to offer Xcel Energy rebates on furnace and air conditioning systems.
- We are licensed and insured.
- All of our electricians are on staff.
- We use drop clothes and shoe covers to protect your home and property.







# Granite counter tops, shiny new appliances and hardwood floors **look great.**

Over the years you will make many investments in your home. Most of which you can touch or see every day so that investment is very tangible and yes, looks great.

- Granite counter tops
- Hardwood floors
- New appliances
- Major and minor remodels and more







A new comfort system, if designed correctly, should become invisible. An investment in something you can't reach out and touch every day may seem a little unsettling until you consider everything it offers.

- Quiet
- Consistent temperatures
- No breakdowns
- Invisible except for annual maintenance and filter changes
- The value is in not knowing its there and the piece of mind of knowing if there is ever an issue, **Absolute Electrical**, **Heating and Air** will be there to take care of it.





#### Return on your investment!

#### Accurate equipment sizing is paramount and takes out the guess work.

- Furnaces and air conditioning systems come in many sizes for a reason.
- Different cars need specific engines just like your home needs accurately sized equipment.

#### We don't go by your current equipment size or configuration.

• We find that most existing equipment is oversized.

Over sized as well as under sized equipment will cause many issues including loss of efficiency, uncomfortable temperatures and early equipment failure.

Sizing by use of the Manual-J which is the industry standard for heating and cooling load calculations.

• This ensures your new equipment is appropriately sized for the requirements of your home.

Accurate sizing guarantees peak performance and efficiency.

Accurate sizing ensures the longest life span for your new equipment.

There is no "Cookie Cutter" or "Rule of Thumb" solution for heating and cooling your home.

Bigger is never better!









#### **Equipment Warranties**

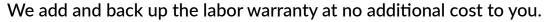


We will register your new equipment with the manufacturer to commence your warranty.

We will provide you with the warranty certificate from the manufacturer.

• Our warranties are transferable if you sell your home.

We are available nights and weekends if there is ever an emergency.



• You can relax if there is ever an issue. You're covered!



• Not unlike the warranty on a new car.

Annual servicing ensures your new equipment will continue to operate at its optimal level.

- Annual servicing allows us the opportunity to spot a potential problem before it becomes an issue.
- We recommend the Absolute Advantage Membership for your annual servicing.





Emergency Service



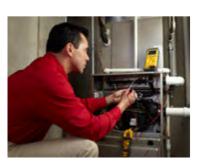
### What you will receive today is a *no surprise quote*, not an estimate.

 This makes your decision to move forward with Absolute Electrical, Heating and Air, a snap.

#### There are no hidden fees or charges.

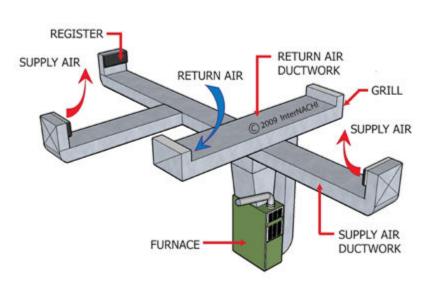
#### All of our quotes include:

- Removal and recycling of all of your old equipment
- Furnishing and installation of the new equipment you selected as well as a new digital programable thermostat.
- All of the ductwork modifications necessary for air flow efficiency
- All of the labor involved in your project
- Building permit
- All required taxes





### AIR DISTRIBUTION SYSTEM







#### Designing your **New System.**

The first step is finding out what your comfort needs and concerns are.

By asking a series of questions designed to identify areas needing to be addressed, we will be better suited to design the optimum system for your home.

- How long do you plan to live in your home?
- Do you have any plans for additions or remodeling?
- What is the age of your current equipment?
- How many repairs have been required in the last 5 years?
- How much have you spent on those repairs?
- How often do you have routine maintenance performed?
- Do you currently use a programmable thermostat?
- Do you currently have a humidifier?
- What is your current air filtration system?
- Do you have areas in your home that are too hot in the summer or too cold in the winter?
- Do you have a preferred temperature setting?
- Does any member of your family have allergies or asthma?
- Does any member of your family have any pet allergies?
- Is dry skin or sinuses a concern during the winter?
- Does your home have a lot of static electricity in the winter?
- Are there any noise issues concerning your current system?











#### The second step is identifying your priorities.

Would you rate the following as very important, somewhat important or not important?

#### 1. Energy efficiency of your new system

- Furnace
- Air conditioning system

#### 2. Controlling the overall comfort level of your home

- Temperature swings
- Possible family disagreements concerning the temperature setting

#### 3. The ability to control the temperature when you are away at work or on vacation

• Thermostat internet connectivity capability

#### 4. Indoor air quality options

- Air filtration
- Humidity control

#### 5. Warranty options

#### 6. Competitive financing options

- No interest plans
- Low interest plans

#### 7. Project time lines

- Installation dates
- Length of the project





#### Select your **Options**

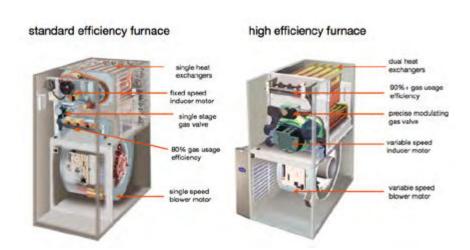


**The third step** is discovering what features and technology are available on todays home comfort systems and how they can make your home more comfortable and energy efficient.

#### What are your furnace options?:

There are two families of furnaces. 80% efficient and 95% efficient and above known as high efficiency.

- This is also referred to as its AFUE. Annual Fuel Utilization Efficiency.
- Think of this as the fuel efficiency of your family car.
- Over the years of operation and service from your new furnace this can have an impact on your energy bills.
- The higher efficiency furnace is a slightly bigger investment on the front side but can pay for itself over time.



Within both families there are a variety of options to choose from that effect comfort and temperature control.

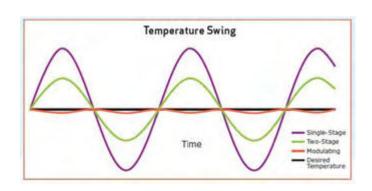
Single stage heat: When this furnace comes on it heats at full power until your thermostat reaches its set point.

- Its either on or off
- This is like pulling away from a stop light at full throttle just to stop at the next light.
- Not a very comfortable ride and in most instances, this will cause your heat to surpass the desired set point.
- This causes short run times and ultimately temperature swings above and below your desired setting.
- Short run time will cause hot and cold zones throughout your home.





# Let's get more **comfortable** and **stop** the **temperature swings** and **cold spots**.





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Two stage heat: This is like having two furnaces. One small (first stage) and one large (second stage)

First stage: This is the small furnace and will run at 60% of your furnace's capability.

- This will allow for a longer run time at a slightly cooler temperature heating more of the air in your home each cycle.
- This longer run time helps alleviate cold rooms or areas of your home and temperature swings.
- This furnace may run more often or longer than what you're currently used to.

Second stage: This is the large furnace and will run at 100% of your furnace's capability.

• Second stage will engage automatically on those cold winter mornings to raise the temperature from your over night set point.

• Once your desired set point is reached the next time your furnace comes on it will use first stage once again.

 In the end, a two-stage furnace means a more comfortable home and less time spent in front of the thermostat raising or lowering the temperature because someone is too hot or too cold.

The idea is, set it and forget it.



# Ultimate **comfort** with **modulating heat**.



**Modulating heat:** A fully modulating gas valve operates between 40% and 100%, like a light bulb with a dimmer switch.

- Designed to come as close as possible to flatlining the temperatures in your home.
- Continuous small doses of heat for consistent heat and whole home comfort.
- Outstanding for heating the outlying areas of your home that are hardest to reach.

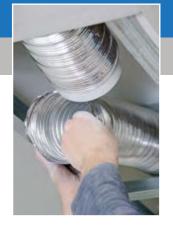
#### **Maximum efficiency and controlled comfort**

• You might forget you even have a thermostat.





# Proper air flow and delivery are **critical**.



Older furnaces are only capable of delivering a limited amount of air through your existing ductwork which can hinder the performance of even the best air conditioning system especially in multi-level homes.

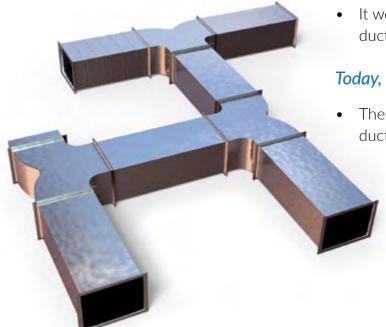
- Cold air-conditioned air is denser and heavier than warm air and is therefore harder to push to all areas of your home.
- Forget about getting that cold air to the top floor where you really need it.
- This is compounded by our high altitude.
- Colorado has very thin air which is even harder to get moving.

Many, if not most, homes have *inadequate* ductwork to support air conditioning at our altitude.

• It would not be cost effective to try to replace your ductwork especially two stories up.

Today, there are solutions...

 The correct equipment and, in most cases, non-invasive ductwork modifications.







## Controlling your comfort with **airflow**.



Older furnaces provided air movement but little was done to address air flow and how it can affect comfort.



- Currently, those old-style blower motors are being phased out of production.
- The latest generation blower motors meet the new federal guide lines and are designed for performance.

# These blower motors are referred to as either ECM constant torque or ECM variable speed constant velocity. *ECM: Electronically Commutated Motor.*

- ECM is the technology of the very high efficiency motors. There are 2 types used in HVAC, the constant torque, which has preset "speeds" that vary as the duct conditions vary, and variable speed where you tell the motor the speed you want and it varies its torque to give you close to the airflow you've asked for, even as duct conditions change, like a filter plugging up or vents being shut.
- These are the blower motors designed to overcome restrictive ductwork issues, drive an existing air conditioning system better and make todays higher efficiency air conditioning systems operate at their peak efficiency.
- Either blower motor will increase the overall air flow throughout your home and help to overcome under sized ductwork.
- Both are designed for continuous fan operation which is necessary for balancing temperatures and continuous filtration.





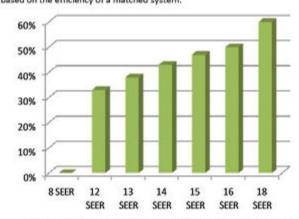
#### Air Conditioning System Options



#### Air conditioning system efficiencies

• SEER (Seasonal Energy Efficiency ratio) is a measure of efficiency for air conditioners. Like gas mileage ratings, SEER is a rating of how many BTU's of cooling the unit can produce for the electricity it uses. The higher the SEER, the more efficient the unit is.

#### Annual savings for cooling your home based on the efficiency of a matched system.



Like miles per gallon in a car, the higher the system SEER rating, the more comfort you will get from each energy dollar.

#### **Product line up**

- Platinum Series 20 SEER Variable Speed Compressor
- Platinum Series 18 SEER Variable Speed Compressor
- Gold Series 17 SEER Two Stage Compressor
- Silver Series 16 SEER Single Stage Compressor
- Silver Series 14 SEER Single Stage Compressor
- Silver Series 13 SEER Single Stage Compressor





#### Air Conditioning System **Staging**

## Air conditioning system staging is just like furnace staging.

- Longer run times at lower power
- More consistent temperatures for a more comfortable home
- More energy efficient



#### **Staging options:**

Single stage: on or off like a single stage furnace. Runs at 100% capacity any time its on.

**Two stage:** like having two air conditioning systems in one package. One small system (first stage) and a large system (second stage).

*First stage*: runs at only 70% of its capacity for a longer run time cooling more of the air in your home each cycle.

- This longer run time helps alleviate hot rooms or areas of your home and temperature swings.
- First stage may run longer than what you're currently used to.
- A lot of the energy used is to start your compressor. That longer run time lessens the impact on your energy bills.

**Second stage:** runs at 100% of its capacity on those hot summer days to keep up with the demand.

• Once your desired set point is reached the next time your system comes on it will use first stage once again.





# Ultimate Comfort with Variable Speed Cooling.

### Variable speed air conditioning systems

- Variable speed compressors deliver the longest run times.
- Depending on the cooling needs this system will run between 30% and 100% of its capacity.
- Designed to come as close as possible to flatlining the temperatures in your home during the summer.

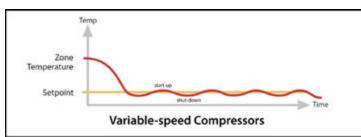


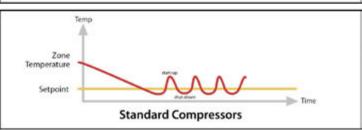




• Must be combined with a communicating furnace and American Standard thermostat









#### Non-invasive duct modifications.

We can't change the ductwork throughout your home but we can make a number of modifications at the time your new equipment is installed to increase your air flow and comfort.



- There are two distinct and important ail flow components of your system:
  - 1. Return air: this is the air pulled from your home to be heated or cooled
  - 2. Supply air: this is the air delivered that has been heated or cooled
- Blower motors are designed to push the air so its necessary to make it easier to draw in the air your system requires.

### There are three modifications that can be made that will help overcome inadequate ductwork in your home:

- Return air filter box: this is placed under your new equipment
- Return air duct/drop beside your new equipment
- Turning vanes placed in the ductwork above your new equipment

These non-invasive modifications will allow your new system to breathe.





#### Winter humidity solutions.



Colorado has a very dry climate during the winter. This can cause a number of health issues such as dry skin, allergies and even a bloody nose. The dry air can also cause issues with antiques and hardwood floors.

- Adding humidity can help alleviate these symptoms and protect your investments in furniture and beautiful floors.
- Adding humidity can also make you feel warmer and more comfortable at home without raising the temperature.
- There are three humidifier styles to choose from:
  - 1. Aprilaire 800 steam humidifier with automatic digital control and outdoor temperature sensor
  - 2. Aprilaire 700 powered humidifier with automatic digital control and outdoor temperature sensor
  - 3. Aprilaire 600 bypass humidifier with automatic digital control and outdoor temperature sensor
- Depending on which model you select, they are capable of delivering from 17 to 34 gallons per day.



Depending on the size of your home and your humidity needs, one of these models will add the humidity you need.





# Indoor air quality, filtration and purification.



## Cleaner, healthier air is within reach with the products we offer.

- A whole-home air filter removes particulates and irritants including:
   Mold spores, pet dander, dust mites, pollen and even viruses
   By removing these harmful contaminants, you'll reduce the risk of asthma attacks and allergic reactions
- Control dust and odors
   You'll notice less buildup, making your home look and feel cleaner, while protecting your furniture and electronics. Some products will remove odors as well.
- Protect your heating and cooling equipment investment

  With a high-efficiency filtration system, you'll keep your air conditioner's coil clean and your furnace working efficiently; saving energy, minimizing repair costs and extending the life of your equipment.

  Standard filters are less effective and need to be replaced more often.







#### Thermostats and Comfort Control.



#### The following statement is very close to being 100% true.

- There are literally hundreds of thermostats on the market today and picking one can be more complicated then selecting a furnace or air conditioner.
  - 1. Smart thermostats
  - 2. Digital thermostats
  - 3. Programmable thermostats
  - 4. Non-programmable thermostats
  - 5. Specialty thermostats
- In the end your thermostat needs to be able to accurately control your heating and cooling and be matched to work with your new system. After that the smart technology needs to be addressed to meet your requirements. *We can do that!*









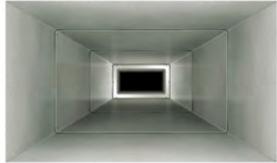


## If your furnace and air conditioner are the heart of your system, your duct work are the lungs.

- We are always amazed at what we find in the ductwork.
  - Hot wheels, left over M&M's, tennis balls, stuffed animals, construction debris from the time the home was built and entire dust bunny farms.
  - All of these things can lead to quite a few issues, the worst of which are health issues like allergies and asthma.
    - Lack of air flow causing temperature issues
    - Very dirty equipment that can cause premature failure
    - Continuously clogged filters
    - Very dusty home
    - Missing hot wheels
- We rely on and recommend Ductworks because they represent the same quality of work that we do.
  - Getting your ducts clean will go along way toward protecting your investment in a new heating and cooling system.
  - From time to time we offer specials on duct cleaning.









## Our work starts when you select a date.

### Once you select an installation date our team focuses on the planning and logistics for your specific project.

- You will receive an email confirming the date and time your project it scheduled to begin.
- Your technician will meet with the operations manager to completely cover your project.
  - Verifying heating and cooling load calculations
  - Verifying all required equipment and material required for your project
  - Verifying any special logistics requirements or needs
- After everything is verified all of your equipment and material will be ordered by the warehouse manager and delivered to our office prior to your project date





# **Installation Day.** Putting all the pieces together.

The morning of your project your installation team will meet with the operations manager to receive a full briefing on your specific installation.



- Your installation team is provided with a completed installation package:
  - Invoice, warranty certificates and any other required paperwork
- All of the equipment and materials are verified by your installation team and loaded on the truck.

When your installation team is ready you will receive either a text message or a phone call from our customer service representative to let you know we are on our way.





#### When your project is **complete**.

### Your installation team will do a complete walk through of your project.

#### You will receive a full briefing on:

- Your new furnace and its operation
- Your new air conditioning system and its operation
- Your new thermostat
  - Programming and operation
  - Continuous fan operation. HIGHLY RECOMMENDED!
- Your new duct modifications and air flow enhancements
- The operation and maintenance of any new indoor air quality products
  - Humidifier, filtration and air purifiers
- Filter sizes, location and replacement schedule
- Final 5 star clean up
  - We're not done until you say we're done!
- That's when we will collect the final payment.

