The Do It Yourself HVAC Evaluation Guide

Thank you for downloading the *Do It Yourself HVAC Evaluation Guide* from Appleby Systems!

We've put this guide together to help homeowners like you conduct an audit of your current HVAC system so you can see if there's any need for repairs or figure out if you can cut costs on heating and cooling. It'll also help you understand whether or not you want to call a professional for further assistance, because even the most determined DIY'er needs help from time to time.

About Appleby Systems

Appleby Systems has provided homeowners in the Burlington and Oakville area with everything needed to enhance the comfort and ambience of their homes for over 45 years. We offer full services for HVAC, furnaces and fireplaces, and are available 24/7 for emergency calls, bringing prompt, professional help to quickly and efficiently restore comfort to our clients' living spaces.

How can we help you conduct an evaluation of your HVAC system and what are the benefits of doing an evaluation yourself?

What is an HVAC Evaluation?

People outside the Great White North may think of Canada as a constantly frozen ice sheet, but us Canucks know that's only a half-truth – especially in southern Ontario. Winter may be fierce, but summers can be equally brutal, and we spend almost as much money and energy trying to cool ourselves down when the height of hot weather hits. The bottom line: living here year-round requires working with both sides of the coin, and that's why it's important to evaluate your heating and cooling systems and preemptively take care of any issues that arise.

Let's start with a basic definition. HVAC stands for Heating, Ventilation & Air Conditioning, and covers all of the different ways in which you control the climate of your home. An HVAC evaluation allows you to see if there are any potential issues with the system, which you can choose to fix on your own or with the help of a professional, depending on the severity of the problem (and how daring you feel as a DIY homeowner).

An HVAC evaluation can also help you see any areas in which you can cut costs on your heating and cooling system, which is always a plus.

Let's get started!

Part 1: Checking for Air Leakage

The first step in an HVAC evaluation is usually to check for any air leakage in your home.

How the Pros Do It

When a professional contractor comes to your home to check your HVAC system, they'll use a tool called a blower door test. This tool consists of a variable speed fan – along with any additional necessary diagnostic instruments used to measure air leakage – mounted in an exterior door opening, and checks for two important issues: whether or not there's air getting into the house from the outside and, if so, where it is; or, conversely, whether or not your house is too tightly sealed.

This process depressurizes the house and allows homeowners to see exactly where any air leaks or bypasses are coming from.

Pretty nifty – but you probably don't own one of these tools. Luckily, there's a simple step-by-step method of doing this for your home that doesn't require one.

How You Can Do It

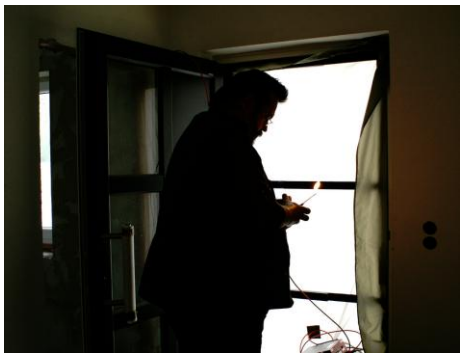
While the procedure for analyzing your own heating and cooling system is a little less convenient when it's done on your own and without a tool like a blower door test, it's not complicated and shouldn't be too difficult for homeowners who have dabbled in other aspects of DIY repair in the past. Done correctly, it should allow you to replicate the way a blower door test works well enough to understand if there are any issues with your HVAC system and where they are.

Step One

The first thing you'll want to do is grab a pencil and a piece of paper, then sketch out a drawing of your home. You don't need to be a professional artist to do this – just a basic floor plan of your house should do.

Step Two

Seal the place up: close any windows and doors. Do a double check to ensure sliding doors are latched.



Step Three

Shut off all gas-based appliances.

Step Four

Turn on all exhaust fans in the bathroom and kitchen.

Step Five

Get a candle or a stick of incense and walk through the house. Using your floor plan, mark any areas where the flame or smoke wavers, as this is an indication of areas where there's air movement.

Step Six

Once you've gone through the house and marked all areas of air movement on your floor plan, you'll want to go back and investigate each one. You can use caulk or a similar process to plug these areas up.

That's it! It may be a little less convenient than using a blower door test, but it should tell you where air leeching is eating into your energy bills.

Part Two: Checking the Insulation

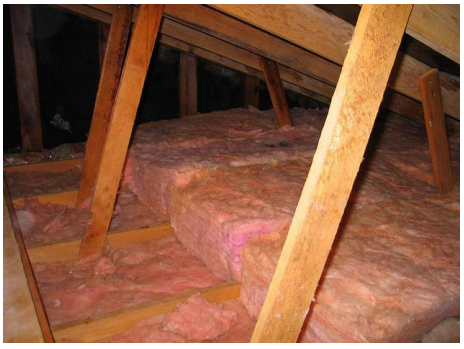
Another major aspect professional contractors look for when they conduct an HVAC evaluation of your home is the insulation levels in the attic. Luckily, and unlike checking for air leakage, this doesn't require any special tools to take care of, making it even easier for you to do it yourself.

How You Can Do It

Essentially, all you need to do is carefully check your attic and see if there are any areas that require more insulation. You'll want to be thorough about this, because you don't want to have to keep going back to see if you missed any spots the first time over, so take a good look and make sure you've covered every angle. Regardless of the specific type of insulation, there should at least 12 inches in any attic – and more is always good. It's not unreasonable to lay 20 inches or more in our finicky climate. And since attic insulation is one of the most cost effective ways to reduce your energy bills, you won't regret using too much.

If you aren't sure whether or not you need more insulation, you can grab a sample of it or take some photos and head over to our storefront on Speers Road in Oakville, where you can ask a staff member for their opinion. They can tell you if you need more, and can also assist you with issues such as how much to take home.

The good news is that if you're able to conduct this part of an HVAC audit on your own, you can probably take the next step on your own as well, as installation of both batt and blown-in insulation is a pretty easy process. Once it's done, it'll help you save money on energy by reducing heat gain from your attic, so this is worth attempting if you want to cut down on costs.



Part Three: Checking Your HVAC Equipment

The third and final aspect of an HVAC evaluation is checking your air conditioner and making sure it's clean. Like step two, this doesn't require any professional tools so you can do it quickly on your own.

How You Can Do It

All you need to do here is check the filter on your air conditioner to see if it's dirty. If it is, you'll want to clean or change it because that dirt can slow down airflow, which can lead to parts failure and higher energy costs, one of the main things you're trying to avoid with this evaluation. Take the time to check and clean or change your filter and you'll thank yourself in the long run.

After the Evaluation: What's Next?

Once your HVAC evaluation is finished, you'll be able to tell which areas of your home could use improvement to help you save on monthly bills. At this point, you've got two options: fix it up yourself or call in a professional.

Calling a Professional

If you find the results of your evaluation require work that you can't do on your own, whether it's because you aren't sure how, don't want to risk messing anything up or don't have the proper tools, you can call the professionals at Appleby Systems to take a closer look and offer some extra help. By investing a small amount with our professionals today you're working towards more savings in the long run, and problems with an HVAC system shouldn't go ignored.

Conclusion and Contact Information

So that's it! That's all there really is to a DIY HVAC evaluation – a relatively simple, three-step process that can be done by any homeowner who's had the smallest bit of experience tackling home renovation projects in the past.

We hope you found this guide useful, and welcome you to contact us with any questions about an HVAC evaluation. Please feel free to get in touch with us, and if there's anything more we can do to help with your home heating and cooling system, let us know!

Appleby Systems

http://www.applebysystems.ca

1-877-498-1716

2086 Speers Road

Oakville, ON L6L 2X8