Now is the time to schedule your HVAC maintenance!

Call us TODAY!

Call to schedule your maintenance now and your units will be ready to go for cold weather.

508-763-3738

Ask about our automatic scheduling or Maintenance Agreements and never worry about forgetting to call again! You will also receive priority scheduling for all emergency service when you sign up for auto-scheduling or Maintenance Agreements!

Karen Lamy DeSousa, Owner & President

WBE CERTIFIED

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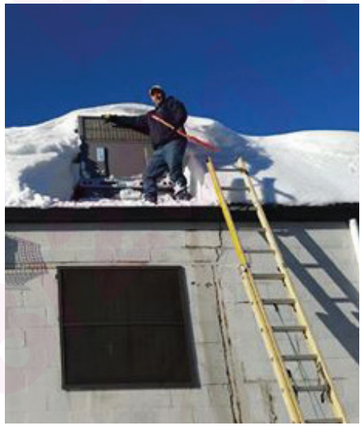
ADVANCE AIR & HEAT COMPANY INC.

Fall Newsletter

How To Protect Your HVAC Units from Snow and Ice This Winter

New Englanders can't help but cringe when we think about the brutal winters we've endured in years past. Remember 2014? That was an especially rough year for HVAC units and HVAC technicians. For our techs, winter meant shoveling their way across rooftops to dig out condensers and rooftop units that had been smothered by many feet of snow. Fortunately, all our techs stayed safe and kept all of their fingers and toes! The HVAC units were not all quite so lucky – at least one unit met its death by being impaled by a giant icicle!



With winter just around the corner, it's a good time to talk about winter weather care for your HVAC units. HVAC units are built to withstand the snow and ice, but every unit has its limits. An HVAC unit requires air flow to work properly. A unit that looks like a giant igloo encased in an ice cube will not work properly and can sustain damage if it operates in that condition. (By the way, this is true for units that are covered in leaves, shrubs and ivy too – make sure you keep the area around your units clear year-round so that they can breathe and function properly.)

Generally rooftop units do pretty well on their own. Last winter was an exception to this due to the heavy volume of the snow that built up high on rooftops, or drifted to ridiculous heights. Hopefully we will not have blizzard after blizzard, so that rooftop units can take care of themselves. However if you have heat pump units, you need to take extra care. Even a foot or two of snow can cause problems for your heat pumps.

If you're thinking to yourself, "How do I know if I have a heat pump?" don't be embarrassed, it can be really hard to tell by just looking at your unit. The heat pumps we have in our office, look just like a gas-fired furnaces with a cooling coil attached. Same basic shape, same basic size. The only difference is our units don't have a burner, so they are not furnaces. Other heat pump systems look EXACTLY like an air conditioner, but include a reversing valve to allow it to essentially operate in reverse and heat in the winter and cool in the summer. Quick rules of thumb: if your condensing unit (outdoor unit) runs when it's cold out, you probably have a heat pump. Or if you have baseboard heat, you do not have a heat pump. If you're not sure, call us at 508-763-3738 or go to our website at www.advanceair.net.

Keeping your condenser clear of snow is important. However, when shoveling out your condenser, USE CAUTION. Try not to actually touch the condenser with the shovel, or cause the snow to smoosh into the sides of the unit. You'll notice that a condenser has a series of delicate-looking fins, some protected by a metal grid, some not. These fins are how the condenser transfers heat. These fins need to be clean, clear of debris/snow/etc. and undamaged in order to work (so no smashing the coils with a shovel, OK?)
Many heat pumps use electric heating coils for backup or supplementary heat. The electric heat automatically kicks on any time the heat pump can't produce

What's Inside:

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enough heat. Because you're getting heat, you may not realize that your heat pump has actually stopped working. At least not until you get your electric bill. Ouch! After any significant snow storm, we recommend visually checking your condenser to make sure it's clear of snow and undamaged. This will help prevent sticker shock on your electric bill as well as make sure that your heat pump stays healthy through the winter.

Hopefully winter will be kind this year and your heat pumps will be happily snow-free all year. But if Mother Nature decides to blanket us in the white stuff, now you'll know what to do!

Three Things to Consider Before you Skip Heating Maintenance This Year

Recently a customer asked me, "Are PMs on my HVAC equipment really necessary?" As budgets tighten, preventative maintenance is often a go-to place to cut back. Will you die if you don't do maintenance? No, of course not. Can you get away with it? Probably. But here are three things you should consider before you skip it altogether:

1. What is your risk tolerance?

Much of the benefit of preventative maintenance is the "prevention" part – meaning if you do it, bad things won't happen. But how do you calculate the cost-benefit of something that may or may not happen? Tough call. Consequences vary wildly by customer, industry, time of year and type of problem. Will your employees get up and leave if it's hot? Will you lose thousands of dollars of product if your refrigeration goes down?

To find out your risk tolerance, ask yourself, "What's the worst case scenario?" For example, if your cooling fails during a 100-degree summer heat wave and you have critical heat-sensitive electronic equipment, you could have thousands of dollars of damage. Or if heating fails on the coldest darkest night in winter, will your pipes freeze? Obviously, no one can predict the future and tell you if/when the worst may occur. Preventative maintenance is an insurance policy to mitigate the risk. Only you can decide your risk tolerance. So, do you feel lucky?

WAIT. Before you answer that…

Keep in mind, the longer you defer, the greater the risk. The effects of deferred maintenance are cumulative. Dirt and grime builds up on your system over time creating increasingly worse operating conditions and more stress on your equipment. So, now I'm gonna lay some scary down on ya… Cooling compressor failure becomes more likely with each missed maintenance visit. Since the compressor is the heart of the cooling system, it is one of the most expensive repairs. For heating, the same type of buildup can occur with soot and scale in the furnace or boiler. This buildup can cause damage to heating system components or even worse, since heating unit operation involves combustion, carbon monoxide or other flue gases can cause dangerous conditions for occupants. So, in theory, I guess you COULD die from not doing maintenance. So, if you're not going to maintain it, at least install some good CO detectors, would ya?

2. You may not be saving money by avoiding maintenance.

Even if you are the riskiest of gamblers, your main reason for skipping out on maintenance – saving money – may not actually be reasonable. I'm sure you've heard it before: maintenance reduces your energy costs, increases operating capacity and lengthens unit lifespan. But thanks to some recent studies, we can now begin to quantify the savings. And the results may surprise you. I'm not going to go into the whole math thing here, but you can find the calculations on our website, with graphs and everything: http://www.advanceair.net/preventive-maintenance.

3. Long-term Deferred Maintenance can Shorten Unit Life-Span

A well-made HVAC unit should last between 10-20 years on average, though we service some 40-plus year old ones that are still going strong. Manufacturers calculate the average unit lifespan based on the unit running within specified temperatures and pressures, and assuming regular maintenance is being done. When maintenance is not done, the unit runs outside of acceptable temperatures and pressures which causes additional wear and tear on the unit, shortening its overall lifespan and causing premature failure of its components. There are some great studies for this too and again, let's keep the math out of the blog, eh? Check out our website: http://www.advanceair.net/preventive-maintenance.

Summary

I think the answer is pretty clear. Preventive maintenance is just smart. Whether you do it by contract, on-call, or have your own in-house staff take care of it, preventative maintenance can actually save you money. And your units, your energy bill, and your employees, tenants or tomatoes will thank you!

Heating Unit Down Again? It Could be Your Ductwork

Repeat service calls for the same issue can be incredibly frustrating, not to mention costly. Despite loads of training and experience, there are some issues that are so far behind the scenes that it takes the elimination of everything else to get to the bottom of the problem. With so many moving parts in an HVAC unit, technicians logically start by focusing on the most common components to fail and eliminating those first. It takes a smart technician quite literally thinking outside the box to find the problems that aren't in the unit itself, but in the design or sizing of the ductwork. Undersized ductwork is one of the most common issues to get overlooked, sometimes even for years! And it's an issue that can cost you big bucks in service calls and early unit failure.

Undersized ductwork can make your heating unit run extra hot, creating extra wear and tear on the heat exchanger, sensors and other parts leading to premature failure. There are temperature safeties built into heating units which will shut a unit off that is overheating, which protects your building and the unit, however, most safeties automatically reset once the unit cools down, allowing the unit to start heating again. Because the unit resets, you may not even realize that there is a problem, until it's too late. The overheating may have already caused damage to your heat exchanger. Ductwork problems can go unnoticed for YEARS, even by experienced techs. But there are a few things to look for.

- Irregular operation of the heating system. Unit turning on and/or shutting off frequently.
- Discoloration on the heat exchanger.
- Early or repeated failure of the high limit temperature sensor.

Ductwork problems can even extend beyond the life of the prematurely failed unit. Since inspecting or replacing ductwork is almost never part of a unit replacement bid, most contractors never even look. They simply assume that the ductwork was designed and sized properly, so a new unit gets attached to existing undersized ductwork and the premature failure trend continues on! Getting a quality installation to begin with, including properly designed and sized equipment and ductwork (and don't even get me started on controls) is obviously your best bet, but failing that, if you find yourself continually having issues with your HVAC system and/or you have to replace it before the typical 15-20 year lifespan has expired, be sure to ask your contractor to check the duct size, design and condition. You may find that's where your problem truly lies.

If you're having issues with your HVAC system, call Advance Air at 508-763-3738 or go online to www.advanceair.net to schedule service or for more information about keeping your HVAC system and ductwork performing in top shape!