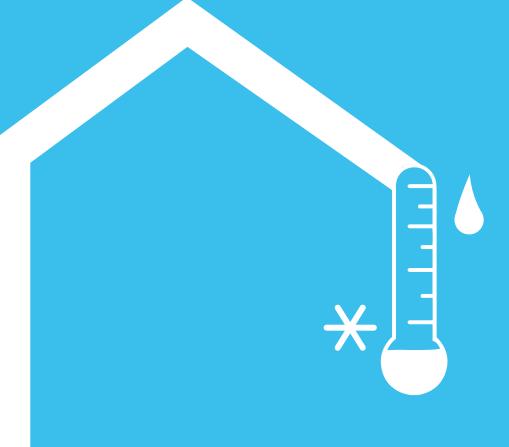


The ULTIMATE Homeowner's Guide to Ice & Snow Removal





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Introduction

While you can have some enjoyable moments indoors amidst a flurry of snowflakes brooding outside, after awhile, it can feel like the storm is holding you prisoner in your own home. The stairs are slippery, the walkway is covered in ice, and don't even think about trying to drive with the frosted-over streets stretched out before you.

So should you just camp out at home until the snow melts, or is there another solution? Good news homeowners – here's a complete guide to keeping your home free and safe from snow so you can get out and about when you need to confront Mother Nature. Let's show her who's boss!



Light Snow



Residential snow removal is easy enough to deal with when the snowfall is light, and it's even easier when you are prepared in advance. Here are a few ways that you can combat light flurries or the initial stages of a snowstorm.

Be Prepared



PAY ATTENTION TO THE FORECAST

If you've heard the forecast and are the type who likes to plan ahead, you can actually spread out anti-icers, chemicals that will prevent the snow and water from sticking to the ground. Many homeowners use anti-icers, heated floor mats, or salts to prevent the problem of snow and ice buildup altogether. MyRadar and Weather Underground are two reputable and easy-to-use weather apps that track severe weather conditions.



GIVE YOURSELF TIME TO DE-ICE

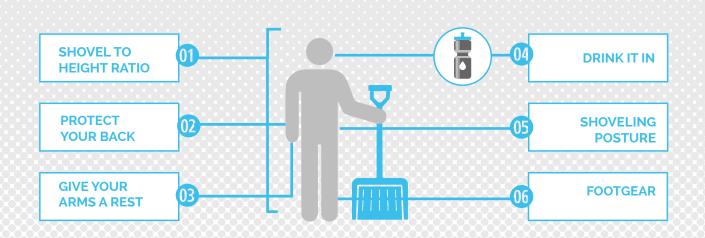
Wake up a solid 20 minutes earlier than usual so you have enough time to safely remove snow from your walkways, steps, and car (also take a minute or two to give those tired muscles a good stretch -- this'll minimize those annoying cramps and charley horses!).



DRESS APPROPRIATELY

It's cold out there, so you know you need to dress warmly, but you'll also need to be able to move, so that 6-inch puffy coat may not be the best option for snow-removal day. Instead, wear multiple thin layers to make movement easier and more comfortable, and make sure you're not wearing any loose clothing or strands (scarf tassels, drawstrings) that could get caught while you're shoveling.





Safe Shoveling

Play it safe with these tips:

(01) SHOVEL TO HEIGHT RATIO

Choose the best snow shovel for your size. A smaller person won't want the extra weight of a bulky shovel or blade. On the other hand, if you can handle it, a larger shovel head will allow you to carry more snow and get the job done faster. There are even ergonomically-designed shovels to help save your back and your energy.

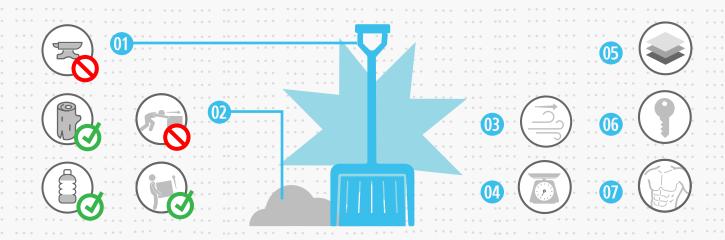
(02) PROTECT YOUR BACK

As with any task requiring physical exertion, remember to bend with your knees and lift up with your legs so you don't strain your back.

- GIVE YOUR ARMS A REST
 Switch up shoveling between your left and right arms. This will prevent muscle fatigue (not to mention boredom).
- ORINK IT IN

 Keep hydrated with warm beverages (nothing alcoholic), and take breaks periodically. Even if you have to come late, your boss would rather you arrive late than not at all because you got dehydrated (yes, even in this weather) or wore yourself out shoveling!
- Don't toss snow over your shoulder or to the side. Instead, turn your body and feet in the direction you want to remove the snow to and throw it straight. This will prevent any sprains or strains on your muscles.
- WEAR PROPER FOOTGEAR
 All the shoveling techniques in the world won't do you a bit of good if you're flat on your back on the icy ground. All it takes is one false step in the wrong shoes, and you're down. It's so important to wear quality slip-resistant shoes that provide plenty of traction while working in slippery conditions. You can find loads of different brands that will provide different benefits like thermal protection (Baffin Arctic), waterproofing (L.L. Bean), and traction attachments (Yaktrax). Get the gear that has the best combination of features for your environment to make working in the ice and snow safer and more comfortable all around.





Efficient Shoveling

Get the job done faster by following these secrets of the trade:

- USE WOOD OR PLASTIC SHOVEL HANDLES

 Metal shovel handles get cold fast. Wood or plastic are easier to handle.
- **DON'T LIFT, PUSH**This will preserve your back and get the job done faster.
- Or you'll wind up with a face full of snow.
- We already mentioned using a shovel that fits your frame, but the general rule is not to use anything heavier than 3.5-4 lbs. (give or take). Using a shovel any heavier just contributes to loss of efficiency.
- **DON'T TACKLE THE ENTIRE MOUNTAIN AT ONCE**Scoop up a few inches at a time. Once you've cleared that layer, move on to the next.
- SHOVEL A PATH TO YOUR CAR FIRST
 This way you can turn on the car and have it start thawing out while you clear away the rest of the area.
 DO NOT do this if your car is parked in the garage, only the driveway. Never have a car running in a closed garage because this could cause carbon monoxide poisoning, a real and lethal threat.
- **FOCUS ON THE GREAT WORKOUT**Shoveling snow can be a great workout for your abs!



Medium – Heavy Snow



Now let's move on to tackling the snowstorm. Obviously this is going to be more challenging than a light flurry, but it's nothing you can't handle. Homeowners need to weigh the cost of snow removal against the time, energy, and health factors that are involved with doing this tremendous job on their own. In some situations, the snowfall will be so immense that removing snow from your concrete driveway, stairs, or pathways without assistance won't even be an option. When faced with extreme conditions, follow the smart snow removal suggestions below, and let someone else do your dirty work.

Once Again, Be Prepared



GET THE RIGHT MATERIALS

Make sure you have plenty of salt, sand, or kitty litter to sprinkle onto the slippery surfaces.



DEVISE A PLAN B

Have batteries, flashlights, and some form of entertainment (remember books?) in case this storm ends up keeping you indoors for awhile.



FUEL UP

Also have enough water and essential food items to make it through (and to reward yourself for all that shoveling!).



Shoveling Safety

Seniors, Be Even More Prepared

The winter is hard on everyone, but it is particularly grueling for the elderly. That's why it's important for senior citizens to take extra precaution as the months grow colder.



SKID-PROOF SHOES

Never leave the house without skidproof soles, even just to check the mail or let the dog in. For those with canes or walking sticks, make sure the tip has grip tips.



VEHICLE CHECK

If you drive, make sure your car is serviced before the winter so no problems arise during the storm. Ensure the oil, battery, tires, wipers, and heat are all in working order.



CLEAR WALKWAYS

Don't go outside until the roads and sidewalks have been cleared. You don't need to be fighting the elements.



VITAMIN D

Eat more vitamin D-rich foods since you won't be getting as much from the sun. Milk, seafood, and healthy grains all contain this important vitamin. Also eat plenty of warm foods like tea, soup, and broth to keep you warm and nourished.



LEAVE SHOES AT ENTRYWAY

Take shoes off immediately upon entering your home to avoid letting dampness seep into your feet and causing slippery puddles to form inside the house.



BATTERY CHECK

Ensure carbon monoxide detectors, radios, cell phones, and other necessary devices are in working order, and powered up.



LAYER UP

Dress in more layers than usual (extra socks, thermals, etc.), and use a scarf to cover the mouth and protect your lungs.



BACKUP

Medical devices, breathing devices, or any other immediate life-sustaining vehicles should be supported by an automatic generator backup.









Know Your De-Icers

There are many options for homeowners who wish to de-ice their driveways, and each has its benefit and drawbacks. Chemicals such as calcium chloride or magnesium chloride are generally the most commonly used de-icers because they get the job done quickly and with little effort.

Knowing which materials are good for melting ice and which aren't is important if you want to maintain your safety and driveway quality. For example, salts, which consist of sodium chloride, are excellent for melting snow on certain surfaces (like gravel). However, this same substance will do a lot of damage to your concrete driveway.

On cement driveways, it's better to use calcium chloride because this will not deteriorate your driveway at the dramatic rate the the rock salt will. Abrasive materials such as cat litter or sand can be used to prevent slipping without the negative side effects but they will not actually melt the snow or ice once it has formed.

To get ahead of the game completely, anti-icing agents can be used prior to the snowfall. These substances will not allow the ice or snow to bond to the pavement, so you will be able to remove it easily.



Smart Snow Removal

If the snow has gotten more than you can handle on your own, it's time to look into some more professional options. There are some inexpensive services and tools that can make for fast and efficient snow removal for your driveway and stairs, so take a look.



HIRE A YOUNGSTER

If there are teenagers in your area who have the energy for it, do yourself a favor and hire it out. With the right motivation (read: \$\$), these kids will remove snow from a cement driveway in no time! Pro tip: Get the contact info for a few neighborhood kids BEFORE winter starts, so when the flurries begin, you already know who to turn to. And keep in mind that these kids typically reply to SMS quicker than phone calls, so if it's urgent, text them.



USE A SNOW BLOWER

There are different types of snow blowers that will accommodate various types of settings and circumstances. If you have one and are willing to brave the cold, then this could be a good option for you. Most people find show blowers are more efficient and less back-breaking than shoveling. On the other hand, they're certainly not cheap, they require gasoline (ideally fresh gas that's less than 30 days old), and are large so require ample storage space, making this not the most practical method of snow removal for most people.



USE A SNOW BLOWING SERVICE

There's no heavy-duty machinery here to maintain, so these services won't be too tough on your budget. When there's too much snow for a simple shoveling job, but not too much that you need to hire a plow, snow blowing is a great option.



HIRE A SNOW PLOWING SERVICE

This is a good option if you don't have or don't want to deal with the headache, damage, and issues that come along with attaching a snow plow to your own truck. Services will charge you a nominal fee (\$40-\$75 or so), and you can usually work out a neighborhood discount if you get some neighbors together.



USE HEATED FLOOR MATS TO GET THE JOB DONE FASTER

If you want to avoid buildup altogether, then laying down heated floor mats outside is the way to go. These mats rest on your walkways and stairs and effectively melt the snow as it falls so no ice or pile-ups form.





Keeping your staircases, walkways, and driveway clear are all important for your general safety once you've stepped outside. But another danger that could pose an even greater problem exists right above your head. Checking the roof's structural safety is so important during the winter, and it's something every homeowner needs to be aware of. Here are some risk factors that can affect your roof's stability and what you can do to keep your nome and family safe.



WIND DAMAGE

With strong winds blowing outside, there is a good possibility that some shingles, flashings, and other roofing components are going to come off. Prevent this problem by either investing in better quality parts from the start or having a contractor come in and fix/reinforce your roof before the winter begins. Also, make sure there are no branches hanging over the roof during the winter, as these can cause tremendous damage during a storm.



HAIL DAMAGE

Watching a hail storm from the safety of your living room can be exciting, but if you've ever been caught outside when the hail is coming down, you know how powerful those little pellets of ice can be. With such intense force, the frosty substance can do some serious damage to your home, denting metal parts such as your vents, roofing, flashings, and ridge caps.

Unfortunately, there isn't much in the way of prevention when it comes to hail damage. The only thing you can do is invest in good quality roofing materials and check for any issues once the winter has passed. This will at least prevent residual damage from causing bigger problems later on.



SNOW, ICE & WATER DAMAGE

Snow is one of the most nefarious players in the roof demolition crew throughout the winter months. Since most homeowners are so focused on getting out the door, the snow on the roof usually gets ignored (besides, just the thought of climbing up there to remove it is enough to deter most people from even trying). Snow can accumulate up to several feet before you even realize what's going on. As the snow piles up, the structural integrity of your roof becomes compromised, increasing the risk of it caving in.

Additionally, heat from your home or the atmosphere can melt the snow on your roof. When the temperature drops, that melting snow will freeze and form ice dams. Ice dams form at the edge of your roof (often clinging to or obstructing the gutters) and block water flow. Snow and ice melt but with the path is blocked water ends up gathering beneath the shingles and often seeps into your home.



Roof Warning Signs

Warning signs of a compromised roof include cracks above the windows or door frames, a bowed ceiling, or creaking noises coming from above. To prevent this from happening, follow these smart snow removal tips.



UNDERSTAND THE DIFFERENCE BETWEEN HEAVY AND LIGHT SNOW

Different types of snow weigh in differently. Fluffy snow, for example, could weigh as little as .26 lbs per cubic foot. Wet or icy snow, on the other hand, can weigh as much as 1.66 lbs per cubic foot. So how do you know how much pressure is being put on your roof?



GO OUTSIDE – TEST THE SNOW.

If it's heavy and wet, this is an indication that your roof could be carrying a heavy load too, and snow removal should be done sooner rather than later.



PREDICT WHEN YOUR SNOW MAY MELT

Temperature is another factor to consider before getting up on a ladder. If the forecast is showing warmer weather following the storm, then chances are that the snow will melt fast and you won't have to worry about snow removal at all. If it's being forecast that there's more snow to come within a week or week and a half, you should take care of the snow before it gets too heavy for the roof to support.



Roof Snow Removal Techniques

Once you've determined that removing the snow from your roof is necessary, you need to know what you're doing to get the job done as quickly and as safely as possible.

Note: We do not recommend that you remove snow from your roof on your own. It is a dangerous job, and it's really best left to the professionals. If you choose to attempt this feat, proceed with caution by following these tips.

- Remove snow from the roof six inches at a time, starting from the uppermost six-inch layer, and then making your way down through the heap.
- Roof raking is a common option for snow removal, and it's something homeowners can do more frequently to prevent major buildups from happening. This option is a good choice for singlestory homes or the overhangs of multi-floor homes (your rake will not be able to reach the entire roof on multi-level homes). Raking is also not great at getting rid of really heavy, tough, or wet snow.
- Buy a roof rake with rollers on the bottom so the rake claws don't scratch your roof. Also get one with a slight curve on the handle. This will make the entire job easier, smoother, and more efficient. If the model you are looking at comes with an extension pole, buy it! This will give you even more leverage, reaching farther and higher.
- Shoveling is a better option if you have a lot of roof to cover, or if the snow is really heavy or wet, or if it has hardened to the roof.
- Use a plastic shovel or rake because it will minimize any damage to your roofing materials.
- Shoveling your roof too often can cause a lot of damage to your shingles. The protective coating erodes each time you shovel, and if it's done too frequently, you'll be left with no protection when the summer comes around. A few times a year is just fine.

- Never place a ladder on a slippery surface. First use a heated floor mat, salt, or sand to ensure that the ground is completely slip-proof before setting up your ladder.
- Use caution whenever you are working on the roof.
- If the temperature begins to warm up, get off the roof immediately. As the snow and ice melt, the roof will become extremely slippery, and it is dangerous for you to be up that high while this is happening.
- If you can access the roof from inside, it could be easier to accomplish the task this way. Just be careful with whatever tool you are using (shovel, rake, etc.) so you don't scratch or damage the roofing materials.
- Use a calcium chloride-based solution to melt ice dams, as opposed to a sodium chloride solution, which is more likely to ruin your roof.
- The heated snow mats that we mentioned earlier are also an excellent solution that can prevent snow buildup on your roof, alleviating the need for precarious ladder and roof balancing altogether!
- De-icing cables are an efficient way to prevent ice dams from forming altogether. The cables ensure that dams don't build up by directing the water off of the roof and out of the gutters safely and strategically. De-icing cables can help reduce or eliminate snow and ice buildup on roofs, gutters, and downspouts. You can find cables for \$30 and upwards that will quickly get the job done.



Homeowner Tips & Tricks for Winter Weather

- igvee Use rubbing alcohol (or any other clear alcohol) on your windows to de-ice and keep fog from forming
- Use regular table salt on your frosted windshield as a quick fix
- Cover your car or steps with a tarp the night before a light snowfall. In the morning, you'll just have to slide the tarp off the area for instant snow removal.
- Be a good Samaritan. If you live next to an elderly person or someone who is disabled, use your neighborly good spirit and shovel their walkway as well.
- ✓ When shoveling or raking your roof, watch out for power lines! Also steer clear of the gas meter when dumping the snow.
- Clear space around the fire hydrant while shoveling. While this is technically not your responsibility, it could benefit you immensely if an emergency came up.

Being an Empowered Snow Removalist

You now know how to clear snow off a concrete surface, de-ice your driveway, and remove snow from your roof. Now you can sit back and relax with the confidence that you have the most up-to-date information on snow removal out there, and if a snowstorm should strike tomorrow, you'll be prepared.

