

20 QUESTIONS

Are you prepared for ice dams this season?



Are you prepared?

Ice Dam Quiz Questions (with Answers!)

1. Why are ice dams called ice dams?

- a) They cover up your gutters, preventing rain from flowing through the gutters
- b) The ice forms a barrier that keeps water (from melting snow) trapped on your roof**
- c) The ice forms a barrier that makes it harder for you to rake the snow off your roof

Answer to question #1:

b) Ice dams cause the water to *dam up* on your roof. The ice forms a “wall” along the edges of your roof, preventing water (from melting snow) from flowing down and off of your roof. Ice dams can also form around skylights, vents, and anywhere two inclined sides of the roof meet (i.e., valleys).

2. Where on your roof are ice dams LEAST likely to form?

- a) Overhangs
- b) Valleys
- c) Peak (ridge)**

Answer to question #2:

c) Ice dams normally can't form on the peak of a roof. There's nowhere for water to pool and subsequently freeze. Any snow that melts flows *down* the roof, and may form ice dams along the way (typically along the overhangs and in the valleys).

3. Which of the following statements is FALSE?

- a) **Gutters can cause ice dams**
- b) Poor attic insulation can aid in the development of ice dams
- c) Any amount of snowfall can aid in the development of ice dams

Answer to question #3:

a) [Gutters do not cause ice dams](#) or even contribute to their formation. Ice dams tend to envelop the gutters, but that's simply because gutters are part of the overhangs, which ice dams tend to form on with or without gutters. The overhangs are cold and allow runoff from higher-up on the roof to freeze. Having gutters extends the overhangs of your roof by several inches, which can lead to *additional* ice buildup on the gutters—but the gutters themselves do not *cause* the formation of ice dams. Because of this, houses without gutters can get ice dams as easily as houses that have gutters.

4. What kind of snow causes ice dams?

- a) Heavy, wet snow
- b) Light, crunchy snow
- c) **Any kind of snow**

Answer to question #4:

c) The type of snow doesn't matter. What causes ice dams to form is a roof that melts some of the snow, which then refreezes. It's true that heavy, wet snow is closer to melting upon impact on your roof, which means it could possibly be a bit more likely to melt and cause ice dams. But any type of snow can cause ice dams.

5. Which of the following most accurately describes how ice dams typically form?

- a) Snow falls, then it rains, and the snow-rain mixture refreezes into ice
- b) **Snow falls, the hot roof causes some snow to melt into water, and water rolls down to the cold parts the of roof and freezes into ice**
- c) Heavy snow falls, and because it's so heavy it simply gets packed into ice over time

Answer to question #5:

b) Ice dams typically form because a hot roof (hot because of poor attic insulation and/or inadequate ventilation) causes some of the snow to melt into water, which runs down the slope of the roof and refreezes into ice once it reaches the colder parts of your roof (typically the overhangs).

6. Which of the following is LEAST effective at preventing ice dams?

- a) Keeping plenty of salt on your roof**
- b) Making sure your attic is well-insulated
- c) Keeping the snow off your roof (like by means of roof-raking)

Answer to question #6:

a) If your roof doesn't melt the snow, the snow remains snow and doesn't become ice—meaning that if your attic is well-insulated (and well-ventilated) it's very unlikely that ice dams will form. Or, if there's no snow, then there's nothing to melt into water and refreeze into ice—meaning that ice dams can't form on a roof that's been completely cleared of snow. However, salt isn't effective, because it's nearly impossible to get enough of it on your roof to prevent or melt ice dams. More importantly, salt can damage your gutters, shingles, and siding (among other things)—not to mention the devastating effects it can have on your landscaping and/or foliage.

7. What part of your roof is MOST important to rake, in order to prevent ice dams?

- a) Overhangs**
- b) Valleys
- c) Around the chimney

Answer to question #7:

a) The biggest and most common types of ice dams tend to form on the overhangs, and overhangs always take up more surface area on roofs than valleys do. Clearing the overhangs eliminates the *most* ice-dam-forming potential.

8. What's the main problem with "salt pucks"?

- a) They don't melt enough ice to reduce the size of ice dams significantly or prevent further damming
- b) They can discolor shingles and discolor or kill plants and/or grass
- c) Both of the above**

Answer to question #8:

c) Salt pucks tend to melt little round holes in the ice, and have no effect on the remainder of the ice surrounding it. Also, the salt puck can damage your shingles for as long as it's in contact with the surface of your roof. In the spring, the salt-and-snow mixture will melt and run off into your garden or lawn, harming or killing your grass and/or plants.

9. What's the most effective roof-raking technique?

- a) Rake as much snow off the center of the roof as possible; that's the area that receives the most heat from the attic
- b) Start raking the overhangs and edges of the roof first, then work your way towards the peak of the roof; that makes it easiest to pull all the snow off**
- c) Both of the above; these techniques are equally effective

Answer to question #9:

b) The idea is to rake as much snow off the roof as you possibly can. If you start from the center, you're just piling and packing snow onto the overhangs, which makes it harder to clear the overhangs and other areas of the roof. But if you get the overhangs and edges *first*, it's much easier to reach the rest of the roof.

10. How do you know when you've successfully prevented ice dams?

- a) You don't see any icicles
- b) Your roof isn't leaking
- c) You don't see any ice dams, even after you've removed the snow from your roof**

Answer to question #10:

c) You can have nasty ice dams but not have any icicles. And you can have huge ice dams but no leaky roof (yet). But if you remove the snow from your roof and can't see any ice dams underneath...then that means there aren't any ice dams!

11. What might happen if you try to knock or rip icicles off your roof?

- a) You could rip off pieces of your shingles
- b) You could get injured
- c) Both of the above**

Answer to question #11:

c) The bases of icicles are usually attached to your shingles, or very near to your shingles. If you try to rip the icicles off, there's a good chance some of your shingle granules or entire pieces of your shingles will come off with the icicles. If you're on a ladder and try to remove icicles, you run the risk of falling off the ladder. Or if you aren't on a ladder and are taking a Fred Flintstone approach to removing the icicles, there's a good chance the icicles or larger chunks of ice will fall right on top of you. The bottom line is: don't try to remove the icicles from your roof, no matter how tempting it might be.

12. Accurate "free estimates" are extremely difficult or impossible for ice dam removal services to provide over the phone or in-person. Why?

- a) A blanket of snow usually covers most of the ice dams, so the snow must be removed before the technician can even see how large or extensive the ice dams are**
- b) By law they aren't allowed to provide free estimates over the phone
- c) They would need to know the exact dimensions and pitch of your roof in order to gauge the severity of your ice-dam problem

Answer to question #12:

a) Ice dams are usually covered by snow. Any honest ice dam removal technician needs to be able to see how many ice dams there are and how big they are before even having a clue on how long it might take to remove them. Even with that information it would be nearly impossible to give an *accurate*

estimate without at least steaming some of the ice to help get a sense of how soft or hard the ice is and how strongly it's adhered to surface of your roof. There are simply too many variables in ice dam removal to give an accurate assessment of how long it will take to remove the ice dams.

13. Which of the following ice dam removal techniques is LEAST likely to damage your roof?

- a) Using blunt instruments (chisels, ice-picks, hammers) or torches
- b) Melting the ice dams with hot water
- c) Melting the ice dams with steam**

Answer to question #13:

c) Primitive instruments and fire can damage your shingles and cause you to need part or all of your roof replaced. The trouble with hot water—typically used by amateur or inexperienced ice dam removers—is that it takes much longer to remove the ice dams, and that the excessive amounts of water can easily leak through your shingles and into your home or business, making your problems much worse. *Steam* is the safest and most effective method to remove ice dams.

14. If you hire a steam-only ice dam removal service, which of the following ice dam removal techniques is most effective at preventing ice dams from recurring?

- a) Removing all the ice and snow from your roof**
- b) Removing only the ice dams from your roof, and not bothering to remove the snow
- c) Cutting strategically-placed channels into the ice dams, allowing the dammed-up water to flow off your roof (and saving time “on the clock” that you’d otherwise have to pay for)

Answer to question #14:

a) Without *any* snow or ice on your roof, ice dams can't recur unless you allow *additional* snow to pile up atop your roof. By contrast, even if all the ice dams are removed, as long as there's snow on your roof, there's the possibility that the snow will continue to melt, forming new ice dams. The problem with

simply cutting channels into the ice is that as soon as any amount of snow melts atop your roof, that water from the melting snow runs through the channels and can easily (and very quickly) refreeze. These channels will no longer be channels, and you'll be back to Square One: a leaky roof you need fixed and ice dams you need removed. Companies that use this channel-cutting technique claim that they'll save you money by not needing to remove the *entire* ice dam. But this is just a quick-fix...minus the "fix" part: your ice dams just keep coming back until you pay to have the *entire* ice dam and *all* of the snow removed from your roof.

15. What if your ice dam removal technician steps in snow on your roof and leaves behind hard-packed snow footprints?

- a) The snow footprints can damage your shingles if left on your roof for an extended period of time
- b) The footprints can refreeze into ice and create additional ice dams**
- c) The footprints usually remain on your roof well into May—long after the rest of the snow on your roof has melted

Answer to question #15:

b) Lazy or inexperienced ice dam removers often traverse your roof on a path that they create by walking through the snow. This allows them good footing while removing ice dams, but if they don't remove the path they created by walking across your roof, it will almost certainly turn to ice and you'll have to pay to get yet another ice dam removed.

And because this ice dam is almost certainly higher up the slope of your roof than the ice & water shield under your shingles, it may very well cause *far more* leaking than the original ice dam you had removed.

This is a *very common* mistake made by newbies in the ice dam removal business. Considering about 4 out of 5 ice dam removal companies are newbies to this trade, it's crucial that you keep your eyes peeled for this type of act.

16. Why should you make sure that your ice dam removal technician knows where your gas meter is located outside?

- a) Because it's required by state law
- b) Because your technician will need to be able to climate-control your home or business so that the attic, roof, and snow & ice remain at a steady temperature
- c) Because you don't want snow to be dumped onto the gas meter, which may obstruct the "breather" holes and cause your gas (and heat) to shut off, requiring you to pay someone to dig your gas meter out from under the snow**

Answer to question #16:

c) Relatively few people know that your gas meter actually has a little "breather" hole that needs to be exposed to air in order for your gas to run. If the ice dam removal technicians don't know where the gas meter is and accidentally dump shovelfuls of snow onto it or get water on it, the breather hole will get covered up, and your gas will shut off. Just make sure anyone who goes onto your roof knows where the gas meter is.

17. How much obligation is your insurance company under to provide ice dam removal for you?

- a) Your insurance will probably cover most or all of it
- b) It depends, but the chances are about 50/50 that your insurance company will pay for a portion of it**
- c) Your insurance will not cover ice dam removal

Answer to question #17:

b) Your insurance company rarely is under any *obligation* to cover ice dam removal, but may often cover a portion of it on a "good will" basis.

18. If your ceiling is visibly soggy—as though water has leaked through your roof—or if you actually see water dripping from your ceiling, what is the best, least-risky way to manage the leaking?

- a) By going up into your attic and trying to remove the water with buckets and by mopping it up—and getting the ice dams removed ASAP
- b) By setting up as many fans as you can in the room where the leaking is, and by poking one or more small holes in the soggiest part of the sheetrock with an awl or long nail, so as to allow the water to drain into buckets and not pool up above the ceiling—and then getting the ice dams removed ASAP**
- c) By setting out as many buckets and rags as you possibly can in order to catch the water—and then getting the ice dams removed ASAP

Answer to question #18:

b) Going up into your attic could be dangerous or extremely difficult. Simply setting out buckets and rags hoping that your ceiling doesn't disintegrate is risky. You need a way to drain off some of the water.

Boring a large hole in your ceiling could damage its integrity even further, and the water that pours out might be hard to contain. Poking a smaller hole—like with an awl or nail—allows the water to drain, and allows you to contain it easily with a bucket placed below the hole.

But be careful: *only poke a hole where water is already dripping or where water clearly is pooling above your ceiling.* It's also a good idea to put fans in the room where the leaking occurred, because the air circulation can help the wet areas dry more quickly. For more on how to deal with leaks, see my blog post titled "[5 Ways to Deal with Water Leaks Caused by Ice Dams.](#)"

19. How does the depth of your roof overhangs (AKA eaves) affect the development of ice dams?

- a) Overhangs are usually deep because they have gutters, and gutters cause ice dams
- b) If your overhangs are deep, it's harder to rake the parts of your roof above the overhangs
- c) The deeper overhangs hold more potential for big ice dams**

Answer to question #19:

c) Deep overhangs often result in big, thick ice dams. The reason water freezes when it flows over your overhangs is because this is the only place on your house that is cooled by cold outside air from both the top and the bottom. For this reason ice dams are extremely likely to form on the overhangs. The deeper the overhangs, the greater the surface area is that is being cooled from both the top and bottom - thus increasing your chances the melting snow from above will freeze as it flows past the extra cooled surface of your overhangs. Deeper overhangs can simply hold more ice than shallower overhangs can.

20. Approximately how much does one cubic foot of ice weigh (that is, an ice block that measures 1 foot x 1 foot x 1 foot)?

- a) 17 lbs.—not very heavy, but adds up when your roof is covered in ice
- b) 37 lbs.—fairly heavy, and equivalent to about 4 gallons of water when it melts
- c) 57 lbs.—very heavy, and can add up to several tons of stress and (eventually) water on your roof**

Answer to question #20:

c) A cubic foot of ice weighs approximately 57 pounds (just shy of water, which weighs approximately 62.5 lbs). A typical ice dam is at least dozens of cubic feet in size. That's a lot of stress on your roof, and a lot of potential for leaking (or, worse yet, a cave-in).

(End of Quiz)



All Done!

How'd you do? If you got more than about half the answers right, you're far more well-prepared than most people (and, unfortunately, most ice dam removal "professionals").

Heck, even just thinking about the questions and reading the answers has made you better-prepared to prevent and deal with ice and snow-related challenges.

If you liked the quiz, there's more where it came from: because you're on my private email list, I'll email you occasionally with more suggestions for how to protect your property from ice dams this winter. In the meantime, you can also find more helpful info on my [Ice Dam Blog](#).

Of course, we're happy to provide steam-only [ice dam removal](#) and [roof snow removal](#), if and when you need it. We offer same-day and next-day service, and we're one quick phone call away at **(651) 964-8557**.

To a safe, ice-dam-free roof!

Joe Palumbo, President