



An Extended Guide · No. 1557

Snow, Ice, and the Winter Advantage

Why a reachable array
shines in an Ohio winter

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! Read this first — two honest truths about ground-mount solar

Two honest truths before we start, because they surprise a lot of good folks. First, a ground-mounted solar array is a professional job. It takes a licensed installer, real foundation work in your yard, building and electrical permits, and your utility's approval to connect (that approval is called interconnection). This guide is here to help you understand, plan for, and evaluate a ground mount; it is not a do-it-yourself project, and I never want you digging footings, wiring an array, or opening an electrical panel. Second, a plain grid-tied solar system — roof or ground, without a battery — shuts itself off during a power outage, even in bright sunshine. That is a required safety feature, so the system cannot put electricity onto the lines while the crews are repairing them. If keeping the lights on during an outage matters to you, you will need a battery, and we will talk about that plainly. Here in Ohio the snow comes every winter, and a ground mount quietly handles it better than a roof — because you can actually reach it, safely, from the ground.

Why winter is a ground mount's time to shine

Snow worries a lot of folks thinking about solar, and fairly so — we get real winters here. But a ground array has a genuine edge in the cold months, and once you see why, an Ohio winter looks a lot less daunting.

I'm Bill, and I run Bill's Home Tech here in Portage County, Ohio. For 30-plus years I've helped folks feel easy about the gear around their homes, in plain words and with safety first. Winter and solar get talked about as if they don't mix; the truth is much friendlier than that, especially on the ground.

The heart of it is simple: a ground array stands at a height you can reach from solid footing, so on the rare day you'd want to clear snow, you can — gently and safely. A roof array you simply leave to the sun. We'll cover when to bother, how to do it safely, and why a snowy dip is nothing to fret over.

★ Nervous about solar in the snow?

It's one of the questions I hear most, and the answer is more reassuring than folks expect. Tell me your worry and I'll walk you through it. Call or text me at (330) 200-8042.

The whole idea in under a minute

If you read nothing else, read this. Here's the winter story for a ground array, in a handful of plain points.

- ❑ A ground array is reachable, so you can clear snow safely from the ground.
- ❑ Most of the time you won't need to — smooth, tilted panels shed snow themselves.
- ❑ A steeper winter tilt sheds snow faster and catches the low winter sun.
- ❑ Pole and elevated mounts stand above the deep drifts entirely.
- ❑ A dip in production during snowy spells is normal and already expected.
- ❑ Never force frozen ice off the glass, and never climb a roof to clear snow.
- ❑ Use a soft, long-handled snow tool — never anything hard or scraping.

✓ Mostly, you just let the sun do it

The reassuring truth is that most snow clears itself once the sun hits the panels. Your job is usually just patience — and, on a ground mount, the option to help it along safely when you'd rather not wait.

The reachable-array advantage

Everything good about a ground mount in winter flows from one plain fact: you can reach it standing safely on the ground.

On a roof, snow on the panels is simply out of reach — and rightly so, because nobody should be up on an icy roof. You wait for the sun and the slope to shed it. A ground array changes that entirely. It stands at a height you can tend from solid footing, with both feet on the ground and no ladder in sight.

That means that on the odd occasion snow lingers and you'd rather not wait, you have a safe option a roof never gives you. It's the same reachability that makes a ground mount easy to clean and service the rest of the year — winter just shows it off best.

✓ Reachable means you have a choice

The point isn't that you'll be out clearing snow all winter — you won't. It's that a ground mount gives you the safe choice to help when you want to, where a roof array leaves you only to wait.

Panels often shed snow on their own

Before you picture yourself bundled up and clearing panels all season, here's the happy reality: most of the time they clear themselves.

Solar panels are smooth and set at a tilt, and their dark surface warms in the sun. So when the sun comes out after a snowfall, the snow loosens and slides right off, often in one satisfying sheet. More often than not, the array clears before you'd have gotten around to touching it.

That's why the honest advice for most snowy days is simply to wait. The sun does the work, the snow slides, and production picks back up on its own. Clearing by hand is the exception, for deep or stubborn snow you'd rather not sit through — not the rule.

✓ **Patience is usually the whole plan**

Nine times in ten, the right response to snow on your panels is to leave it be and let the sun shed it. Reserve hand-clearing for the deep, lingering snows where waiting really costs you something.

When it's worth clearing, and when it isn't

Since the panels mostly shed snow themselves, the real question is when it's actually worth the bother. Here's how I'd think about it.

If the sun's coming and the snow's light, wait — it'll clear itself before long. It's worth considering a gentle clear when a deep snow is sitting on the panels with a stretch of gray days ahead, so you'd lose a good while of production, and only if you can reach it safely from the ground.

And there's a firm line the other way: if it's iced over, if you'd have to climb or stretch or stand on anything, or if the footing's bad, don't. No amount of winter production is worth a fall or a cracked panel. When in doubt, wait for the sun — it always comes.

✓ Safe and easy, or not at all

The rule I'd give anyone: clear snow only if you can do it gently, from the ground, with a soft tool, in good footing. If any part of that isn't true, leave it to the sun and don't give it another thought.

How to clear it safely

When you do decide to clear snow, doing it gently protects both you and the glass. Here's the safe way, step by step.

Use a soft, long-handled snow tool — the kind made for cars or panels, with a foam or soft rubber blade, never a hard scraper or a shovel edge. Stand on solid, level ground and work from there; the whole point of a ground mount is that you never need to climb. Draw the snow gently down and off the low edge, letting gravity help.

Work with a light touch. The goal is to lift and slide the snow off, not to scrape the glass clean or chip at what's frozen on. Clearing the lower part is often enough — once the bottom's free, the sun warms the exposed panel and the rest tends to let go and slide on its own.

! Soft tool, solid footing, gentle hands

Only ever clear panels with a soft-bladed tool, standing firmly on the ground, using light strokes. Never a hard scraper, never a ladder, never force. If you can't do it gently and safely from your feet, wait for the sun instead.

Never climb a roof to clear snow

This one deserves its own page, because it's the most important safety point in the whole guide — and it applies to everyone.

If any of your panels are on a roof, clearing snow off them is simply not something to attempt. An icy, snow-covered roof is one of the most dangerous places a person can be, and a fall from one is life-changing. No amount of lost winter production comes anywhere close to being worth that risk. Roof panels, you wait — full stop.

This is one of the quiet arguments for a ground mount in a snowy climate: it removes the temptation entirely. You never face the choice of whether to get up on the roof, because everything you'd ever want to reach is right there at ground level. Our ground-versus-roof guide weighs this and the rest of the trade-offs.

! A roof in winter is no place for anyone

Please never climb onto a roof to clear snow off panels — not yours, not a neighbor's, not for anyone. Let it slide off on its own. If a roof array ever truly needs clearing, that's a job for professionals with proper gear, not a homeowner with a broom.

A steeper tilt sheds snow better

The angle the panels sit at makes a real difference to how snow behaves — and a ground mount lets you take advantage of that.

The steeper a panel stands, the more readily snow slides off it, and the better it catches the low winter sun that rides close to the horizon this time of year. A shallower angle holds snow longer. A ground mount can be set at a good angle for our latitude, and some can even be adjusted steeper for winter.

I won't put a number on the angle — that's for your installer to set for your site and your goals, and it depends on more than snow alone. Our seasonal-tilt guide digs into whether adjusting the angle a couple of times a year is worth the fuss. Here, just know that tilt and snow-shedding go hand in hand.

✓ Let the installer pick the angle

The right tilt balances winter snow-shedding, the low winter sun, and the rest of the year all at once. That's exactly the kind of judgment your installer makes for your specific site — no guessing at degrees needed from you.

Two kinds of homes, two sets of needs

Snow behaves a little differently on a wide-open country property than it does on a snug town lot, so the winter plan shifts to match.

If you live in town or the suburbs

In town or the suburbs, there's less room around the array, and where the snow ends up matters — both the snow you clear off the panels and any that might slide off them.

- With less room, plan where cleared or sliding snow will land — not on a path.
- Smaller arrays are quick to clear on the odd day you choose to.
- Keep a clear, safe standing spot at the low edge so you're never reaching.
- Mind walkways and the neighbor's side when snow slides off a tilted panel.

If you are out in the country on a well

Out in the country, the snow comes deeper and the wind piles it into drifts. There's room to work, but keeping a way to the array open takes a little planning.

- Deep drifts and blowing snow are the norm — an elevated or pole mount helps.
- Keep an access path to the array clear so you can reach it when you want.
- Wide-open exposure means wind can both pile snow and help scour it off.
- A snowy stretch dips production, but your yearly plan already counts on it.

★ Big drifts or a tight lot, there's a winter plan

Whether you're clearing a path through country drifts or minding where snow slides on a town lot, we can set you up to breeze through winter. Call (330) 200-8042.

Pole and elevated mounts rise above the drifts

For the snowiest, windiest spots, there's a design that sidesteps deep snow almost entirely by lifting the panels up out of its reach.

A pole mount stands the panels high on a single stout post, and even a taller-legged ground frame lifts the low edge well up. That height keeps the panels above the drifts that pile up at ground level, so snow is less likely to bank up against them in the first place — and what does land sheds off into open air below.

It's a real plus in open country where the wind heaps snow into deep drifts. Pole mounts have their own trade-offs and their own guide, so I won't go deep here — but if deep snow is a yearly fact of life for you, it's worth asking about. Our pole-mount guide lays out the full picture.

✓ Height beats drifts

If your property collects deep drifts every winter, lifting the panels up high is one of the surest ways to keep snow from banking against them. Ask your installer whether an elevated or pole mount suits your site.

A snowy dip in production is normal

Let's ease one worry right now: yes, production drops when snow covers the panels, and no, that isn't a problem with your system.

Covered panels can't catch the sun, so a snowy spell means less production until they clear — that's just physics, and it happens to every solar array everywhere it snows. It's a normal part of the year, not a sign anything's wrong.

And here's the reassuring part: this is already baked into the picture. When an installer sizes a system and talks through what it'll produce, the slower winter months are part of the whole-year math from the start. A few snowy days don't upset the plan — they're already in it.

✓ Think in years, not snowy days

Solar is a whole-year proposition. The bright, long days of summer do the heavy lifting, and the short snowy days are already accounted for. A dip in a January storm is expected, not alarming.

Snow's small silver lining

Snow isn't purely a production thief. Once the panels themselves are clear, a snowy landscape can actually give you a little something back.

Fresh snow is bright and reflective, and a blanket of it on the ground can bounce extra light up onto clear panels. It's a modest effect, not something to count on, but on a crisp, sunny day after a snowfall — with the panels shed clear and the world white around them — your array can be catching a bit of bonus light off all that brightness.

I mention it mostly to round out the picture. Winter isn't all downside for solar: cold, clear days are actually fine producing weather once the snow's off the glass. It's the covered panels that cost you, not the cold itself.

✓ Cold and clear is good weather

Don't let the season fool you — a cold, bright winter day with clear panels is perfectly good solar weather, sometimes with a little reflected help off the snow. It's only snow on the glass that slows you down.

Ice is a different animal from snow

Soft snow you can gently coax off. Ice — frozen hard to the glass — calls for a different rule entirely: leave it be.

When snow partly melts and refreezes, or an ice storm glazes everything over, you can end up with ice bonded to the panel surface. Unlike loose snow, that will not brush gently away, and trying to chip, scrape, or pry it off is a fine way to crack or scratch the glass — or to slip and hurt yourself doing it.

So with ice, the answer is patience, every time. Let the sun and the rising temperatures release it naturally, and it'll slide off when it's ready. Forcing frozen ice off panels risks real, costly damage for no good reason, since it'll clear itself soon enough anyway.

! Never force frozen ice off the glass

If ice is frozen onto the panels, leave it completely alone — no scraping, chipping, or prying. You'll crack the glass or hurt yourself long before you'll win. Wait for the sun; ice always lets go on its own.

Keeping an access path clear

If you'd like the option to reach your array in winter, a little planning keeps that option open when the snow's deep.

The reachability that makes a ground mount so handy only helps if you can actually get to it. In a deep-snow winter, that means keeping a path to the array reasonably clear — so you're not wading through drifts or losing safe footing just to take a look or clear a panel.

This matters more in the country, where drifts pile deep and the array may sit a good way from the house. Think about it when you're siting the array in the first place: a spot you can keep a path to is a spot you'll actually tend. In town, with less ground to cover, it's rarely a concern.

✓ A reachable array you can't reach isn't much help

When you plan where the array goes, picture getting to it in February. Keeping a safe, clear path to it in winter is what lets you use the ground mount's big advantage when you actually want to.

The right tools for winter

You need very little to handle snow safely, and the right couple of pieces make all the difference between easy and risky.

- A soft-bladed snow tool — foam or rubber, made for panels or car glass.
- A long handle, so you can reach the panels from solid ground without stretching.
- Warm, dry gloves and boots with good grip for safe footing on snow and ice.
- A path shovel to keep your standing spot and the way to the array clear.
- Patience — the most useful winter tool of all, since the sun does most of the work.

! The wrong tool does more harm than good

Never reach for a hard shovel, a scraper, a broom handle, or anything with an edge on your panels — they scratch and crack glass. A soft, purpose-made snow tool used gently is the only thing that should ever touch them.

What you can do, and what's a pro's job

Gentle snow-clearing from the ground is squarely a homeowner job. A few things, though, belong to a professional — and the line is clear.

Brushing loose snow off a reachable ground array with a soft tool, from solid footing, is fine for you to do. So is simply watching, waiting, and keeping a path clear. That's the ordinary winter care a ground mount asks for, and there's nothing daunting about it.

What isn't yours: climbing anything, clearing a roof array, forcing ice, or touching any part of the electrical system. And if snow ever reveals damage — a cracked panel, a bent frame, a wire pulled loose — note it and call a pro rather than handling it yourself. Our maintenance guide covers the year-round checks.

! If it isn't gentle and grounded, it's a pro's call

Soft snow, soft tool, solid ground, your two feet: yours. Ladders, roofs, ice, wiring, or any damage: a professional's. Keeping that line bright is what makes winter with solar genuinely worry-free.

Ground versus roof in the snow

The winter difference between the two mounts, laid out plainly on one page.

	Ground mount	Roof mount
Can you reach it?	Yes, from the ground	No
Clear it safely?	Soft tool, on your feet	Never climb up
Above deep drifts?	On a pole or tall frame	Up on the roof
Sheds snow itself?	Yes, tilted and smooth	Yes, tilted and smooth
If it won't clear?	Help it, or wait	Wait for the sun

Both shed most snow on their own, and for both, patience is usually the plan. The difference is the safe option: a ground mount lets you help when you want to, while a roof array leaves you only to wait.

Mind where the snow slides

One easily-overlooked winter point: when snow sheds off a tilted panel, it has to land somewhere, and it's worth a thought where.

A panel shedding a full sheet of snow can drop a surprising amount all at once, right off the low edge. You don't want that landing spot to be a walkway you use, a doorway, a spot where someone might be standing, or pressed up against the neighbor's fence. It's the same courtesy you'd give snow sliding off any sloped surface.

The good news is this is easy to plan around. When the array is sited, picture the snow sliding off the front and make sure the space below is clear ground, not a path or a gathering spot. On a tight town lot, it's worth a moment's thought; on open acreage, rarely an issue at all.

✓ Give the sliding snow a safe place to land

Think of the strip of ground just below the panels' low edge as the snow's landing zone. Keep it clear of walkways and doorways, and a shedding array is simply a satisfying sight, not a hazard.

Common slip-ups to sidestep

A few winter missteps come up again and again. Steer around these and snow becomes a non-event.

- Climbing a ladder or roof to clear panels — never worth the risk, ever.
- Reaching for a hard shovel or scraper that scratches and cracks the glass.
- Chipping at ice frozen to the panels instead of letting the sun release it.
- Fretting over a snowy-week production dip that was always expected.
- Clearing snow onto a walkway or letting it slide where people walk.

✓ When in doubt, wait for the sun

Almost every winter mistake comes from impatience — reaching too far, pushing too hard, worrying too much. The sun clears the panels reliably and for free. Letting it is nearly always the right move.

Questions worth asking up front

A few questions at planning time set you up for easy winters. Bring these to your installer.

Q: What tilt will you set, and how does it handle snow?

A good installer picks an angle that balances snow-shedding, the low winter sun, and the rest of the year for your site. They can explain the choice in plain terms — no degrees needed from you.

Q: Will I be able to reach the low edge safely to clear snow?

You want to hear that the array is sited and set so you can stand on solid ground and reach the panels with a long-handled tool — never needing to climb or stretch.

Q: Given our drifts, would an elevated or pole mount make sense here?

On a snowy, windy property, lifting the panels above the drifts can be a real advantage. A local installer who knows Ohio winters can tell you whether it fits your site.

✓ A snow-smart install is an easy winter

The winter you'll have depends a lot on choices made before the array goes in — the tilt, the height, the siting. Ask about them up front and you'll coast through the cold months.

Common Questions

The questions I hear most about snow, ice, and solar in an Ohio winter.

Q: Does solar even work in the winter?

Yes. Cold, clear days are good producing weather once the panels are clear of snow — and fresh snow on the ground can even reflect a little extra light up onto them. It's snow sitting on the glass, not the cold, that slows things down.

Q: Do I have to clear snow off my panels?

Usually not. Smooth, tilted panels shed snow on their own once the sun hits them. On a ground mount you have the option to help along a deep snow, safely from the ground — but most of the time, patience is the whole plan.

Q: Is it safe to clear snow off the panels myself?

On a ground array, yes — with a soft-bladed tool, standing on solid ground, using gentle strokes. Never with a hard scraper, never on a ladder or roof, and never forcing frozen ice. If you can't do it gently from your feet, wait for the sun.

Q: Won't a snowy month ruin my production?

No. A dip during snowy spells is normal and already figured into the whole-year picture from the start. The long, bright days do the heavy lifting; the short snowy ones are expected, not a problem.

★ Still uneasy about winter?

Snow is the worry I most enjoy putting to rest, because the real story is so much friendlier than folks fear. Call or text me at (330) 200-8042 and I'll walk you through it.

You don't have to do this alone

You just have to remember that a friendly, patient person is one call away.

I hope this guide made snow, ice, and your array through an Ohio winter feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

When you'd rather have a hand, that's exactly what I do. I come to your home, work at your pace, and never make you feel rushed or silly for asking. A first visit is a flat \$99, and for the parts that don't need me on-site I can often help right on your screen for \$49. Every visit comes with a 30-day, come-back-free guarantee. I don't sell solar and I don't do the licensed electrical work or the install itself — I help you understand it all, ask the right questions, and line up a trustworthy local solar installer, so you never feel talked into anything.

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Ground vs Roof in the Snow

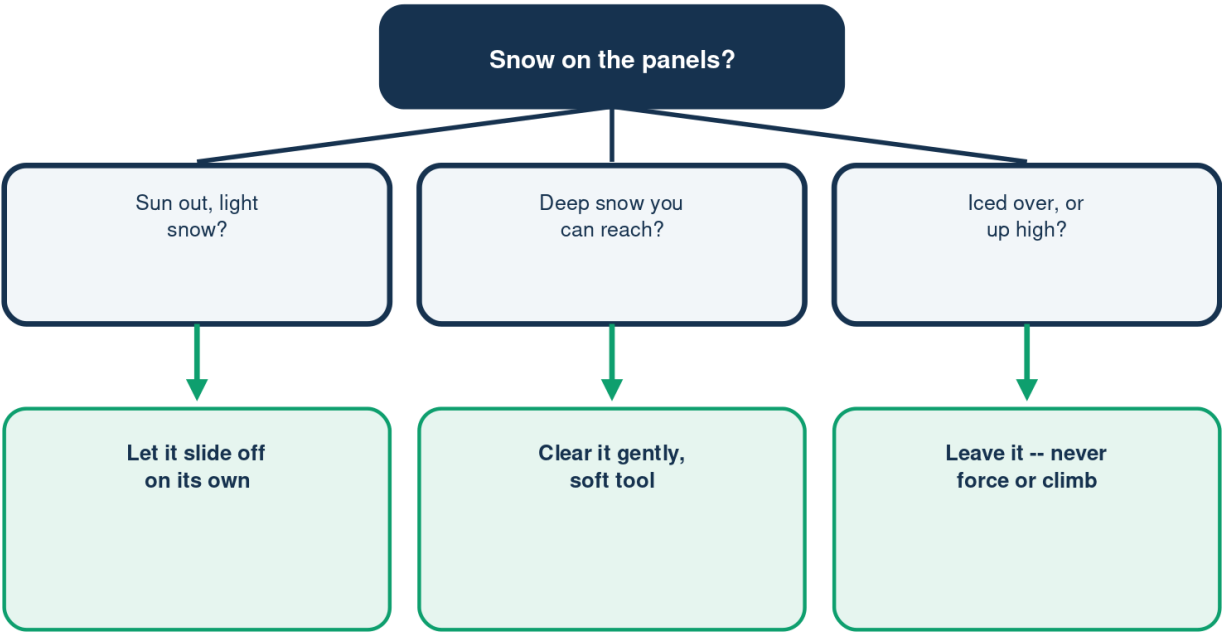
Both shed snow -- but only one you can safely reach

	Ground mount	Roof mount
Reach it?	From the ground	No
Clear it safely?	Soft tool, safe	Never climb up
Above drifts?	Pole/tall frame	Up on the roof
Sheds itself?	Yes, tilted	Yes, tilted

Most snow clears itself -- a ground mount just gives you the choice.

Should I Clear the Snow?

Usually the sun handles it -- here's when to help



Never climb a roof, and never force ice frozen onto the glass.

Illustration - a schematic, not to scale. Your setup may differ.

Steeper vs Shallower for Snow

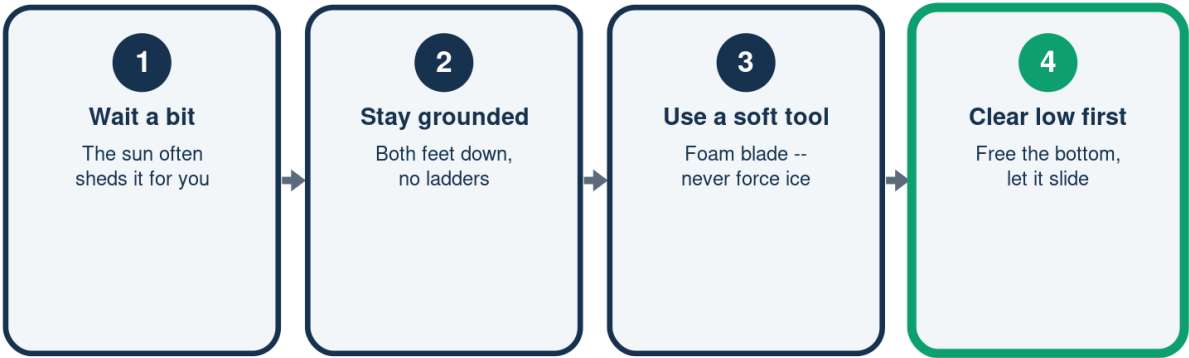
How the tilt angle affects snow -- your installer sets it

	Steeper tilt	Shallower tilt
Sheds snow	Slides off fast	Holds longer
Winter sun	Catches low sun	Aimed higher
Best for	Snowy sites	Summer peak

No degrees to guess -- the installer picks the angle for your site.

Clearing Snow Safely

Only ever gently, from the ground



If you can't do it gently and safely from your feet, just wait.



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A Note From Bill

A quick note from Bill.

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— *Bill*



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