



An Extended Guide · No. 1519

Solar on Asphalt Shingle Roofs

Mounting on the most
common roof, done right

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! Read this first — this is professional, on-the-roof work

Putting solar on a roof is expert, permitted work — not a weekend project. It means drilling into your roof and sealing every hole against water for decades, or setting heavy ballast your roof has to carry, all while working at a height where a fall can be deadly and around wiring that is live whenever the sun is up. This guide is here to help you understand and judge that work — so you can hire the right people and ask good questions — not to walk you up a ladder to do it yourself. For any roof-mounted system, use a licensed, insured, properly credentialed solar installer, make sure the required permit and inspection actually happen, and protect your roof's warranty before the first hole is drilled. And please don't climb up to inspect or adjust anything yourself — the roof is their job, not yours. Most homes in Ohio wear this exact roof, so this guide is likely the one that matches your own house.

Solar on the roof you probably have

Asphalt shingle is the most common roof in America — and probably the one over your own head. Here's how solar mounts to it, and what changes the job.

I'm Bill, and I help folks across Portage County make sense of home projects like this one before the quotes start arriving. Of every roof type in this set of guides, shingle is the one installers see most often, which makes it the most standardized case — but 'standard' still deserves an honest explanation.

We'll cover how the mount actually fastens in, why the flashing at each attachment matters so much, and how your shingles' own age and condition change the timing. None of it requires you to climb anything or become an expert.

★ The most common project I see

If your house has asphalt shingles, you're in good company — most homes do. Call or text me at (330) 200-8042 anytime you want to talk through yours.

The whole guide, on one page

If you only read one page, read this one — the short, honest version of solar on shingle.

- ❑ Asphalt shingle is the most common roof type, and the most standardized case for a solar mount.
- ❑ Attachments fasten into the rafters underneath, and each one is sealed with flashing tucked under the up-slope shingles.
- ❑ Shingle condition matters — older, more brittle shingles are easier to damage during a careful install.
- ❑ Cold weather makes shingles more brittle, which is one reason installers watch the calendar.
- ❑ If your shingles are aging, re-roofing first is often the smarter order of operations.
- ❑ This is licensed, permitted, professional work — never a DIY project.

✓ Read it in any order

Skip to the part you're wondering about — the wear signs, the warranty, or the questions to ask. You won't miss anything you need.

Why shingle is the default case

When people picture a roof, they usually picture this one — and installers mount on it more than any other type.

Asphalt shingle covers more homes than any other roof type, which means installers have done this particular job more than any other. That experience shows up as a well-understood, predictable process, with well-established flashing techniques behind it.

That doesn't mean it's simple or something to attempt yourself — it still means drilling into a roof at height and sealing every hole for decades. It just means it's the case your installer has likely handled many times before.

That experience also tends to show in the little things: how a crew handles an odd roof angle, a second roof plane, or a tricky valley. It's not that shingle roofs are all the same — it's that installers have seen more variations of them than any other type.

✓ Have a different roof?

Metal, tile, and flat roofs each mount their own way and get their own guide in this set — start with the one that matches your actual roof.

How the attachments fasten in

Underneath your shingles is the same wooden structure that holds up the rest of your roof — and that's what the mount actually grabs onto.

On a shingle roof, roof attachments are lagged into the rafters — the sturdy wooden beams beneath the surface — rather than just the shingles themselves. Finding those beams and fastening into them cleanly is part of the installer's skill.

Missing the structure, or splitting a rafter while fastening in, is exactly the kind of mistake a trained, experienced crew knows how to avoid. It's one more reason this is a job for professionals, not a homeowner with a drill.

✓ A fair question to ask

'How do you confirm you've hit the rafter at every attachment?' A good installer will have a clear, confident answer.

Flashing tucked under the shingles

This is the single most important detail on a shingle roof mount — worth its own careful explanation.

At each attachment, a proper installer tucks a piece of flashing under the up-slope shingles — the ones higher on the roof — so that rain always sheds over the hole rather than running into it. It's the same idea used to weatherproof a chimney or a vent pipe.

Sealant alone, without flashing, is a weaker approach — it can look fine on install day and still fail years later. A small leak at one of these points can take a long time to show up as a stain or soft spot.

! This is where corner-cutting hurts most

The flashing at each attachment is exactly the place you don't want an installer rushing to win a lower bid. Our flashing guide goes deeper on what good flashing looks like.

Shingle age and condition

A solar mount is meant to last for decades — so it makes the most sense on a roof with plenty of life left in it.

Shingles age differently depending on sun exposure, weather, and simple time. An honest look at their condition — not just their age on paper — tells you and your installer whether now is the right moment.

This isn't something to eyeball from the driveway. A roofer can give you a genuine read on your shingles' condition, which is worth doing before you get too far into the solar side of things.

- A visual check of the shingles themselves, not just their paperwork age.
- A look in the attic, if it's accessible, for stains or soft spots.
- Any past repair history you're able to share with them.

★ We cover timing in its own guide

Exactly when it makes sense to re-roof before going solar gets its own guide — this page is just the honest heads-up that age and condition matter.

Cold weather and brittle shingles

Ohio winters are part of this conversation too — shingles behave differently depending on the weather on install day.

Asphalt shingles get more brittle in cold weather, which means they can crack or break more easily under a crew's weight or tools. An experienced installer plans around this — choosing how and when they work, and how they move across the roof.

This is one more example of why the work is genuinely skilled — it's not just about drilling holes, it's about respecting the material you're working on so the rest of the roof stays sound.

✓ A fair question to ask

'How does the season affect how you work on a shingle roof?' A seasoned crew will have a thoughtful answer, not a shrug.

Why re-roofing first can make sense

If your shingles are aging, the order you do things in can save you real trouble later.

Installing solar on a roof that's near the end of its life often means paying, later, to have the panels removed and reinstalled so the roof can be redone underneath them — an avoidable extra step.

Re-roofing first, then mounting solar on a fresh roof, means your shingles and your solar system can age together, and nobody has to unbolt anything ahead of schedule.

★ An easy question to ask your roofer

'How much life is left in this roof?' is worth asking before you get serious about solar. Our roof-age guide walks through this decision in full.

What makes shingle roofs straightforward

There's a reason this is often the easiest conversation to have with an installer, once the roof itself is sound.

- **Wide experience.** Most installers and crews have mounted on shingle many times over.
- **Well-established flashing methods.** The tuck-under-shingle approach is a known, proven technique.
- **Predictable layout.** Rafters run in a regular pattern that crews are used to working with.
- **Broad compatibility.** Most racking systems are designed with shingle roofs as a primary case.
- **Easier troubleshooting later.** If something ever needs a look, a well-understood roof type is simpler to explain and diagnose.

✓ Straightforward, not casual

'Standardized' describes the method, not the effort. It's still permitted, professional, on-the-roof work every time.

Two kinds of homes, two sets of needs

Asphalt shingle shows up almost everywhere — but which roof on the property wears it looks a little different in town versus out in the country.

If you live in town or the suburbs

In town and the suburbs, the house roof is almost always asphalt shingle, which makes it the roof this guide was written for.

- Most in-town and suburban houses are shingle, so this is the most common project in this whole set of guides.
- A single, well-understood roof type keeps the mounting conversation simple.
- Age and condition are still worth an honest look before you commit, even on a roof that looks fine.
- An HOA, if you have one, may still have a say in appearance — worth checking early.

If you are out in the country on a well

Out in the country, the house is usually shingle too — it's the barns and outbuildings that are typically something else entirely.

- Rural houses are commonly shingle, just like in-town homes — this guide applies to the house roof either way.
- Barns, pole buildings, and shops are usually metal, which mounts differently — see our metal-roof guide.
- If you're weighing the house against a barn roof, our guide on barns and outbuildings covers that side of the decision.
- A well-water household still benefits from thinking through both roofs before choosing where panels go.

★ Not sure if your roof counts as 'shingle'?

Send me a photo or describe it to me and we'll figure it out together — no charge for that conversation. Call (330) 200-8042.

What a shingle roof install actually involves

In broad strokes, here's the shape of the work — so you know what to expect without needing to supervise it.

None of these steps happen in isolation. A good crew coordinates them so the roof is never left more open, or more exposed to weather, than it has to be at any point along the way.

- **Planning the layout.** The crew maps out where panels and attachments will go, working around your roof's features.
- **Locating the rafters.** Each attachment point is placed over solid structure, not guessed at.
- **Sealing each attachment.** Flashing goes in at every point before the next shingle course goes back down.
- **Adding rails and clamps.** The panels' support system goes on top, followed by the panels themselves.
- **Running and protecting the wiring.** Cabling is routed neatly and safely down to your home's electrical equipment.

✓ You don't need to watch every step

You're welcome to ask questions, but there's no need to supervise from a ladder. A reputable installer will happily walk you through what happened, afterward, from the ground.

Working around your roof's features

Few roofs are one big, empty rectangle — valleys, vents, and chimneys all shape where panels can go.

A good layout works around roof valleys, vents, chimneys, and skylights, rather than through them, while still keeping every attachment over solid structure. That balancing act is part of what you're paying a skilled crew for.

How much usable space you actually have, once these features and required code pathways are accounted for, is worth understanding before you picture a full roof of panels. Our guide on whether your roof is a good candidate walks through that in more depth.

✓ Ask to see the plan

A good installer can show you a layout drawing before work starts — a helpful way to see how your roof's features were handled.

Signs of quality work, from the ground

You'll never inspect a shingle mount up close yourself — and shouldn't — but there are honest signs of care you can notice from below.

- **Tidy, even rows.** Straight, evenly spaced panels suggest a carefully planned layout.
- **No disturbed shingles nearby.** Shingles around the array should look untouched, not cracked or displaced.
- **Neat wiring.** Conduit run in clean lines, not draped or left loose.
- **A clean site afterward.** No stray fasteners in the yard, no obvious debris left behind.

✓ Tidy is a good sign, paperwork is proof

A tidy job from the ground is encouraging, but passed inspections and a written workmanship warranty are what actually back it up.

Why this stays a professional job

Shingle may be the most familiar roof, but familiar doesn't mean safe to attempt yourself.

Working at height, on a surface that can be slick or brittle depending on the weather, while locating hidden structure and sealing every hole for the long haul, is genuinely dangerous, skilled work. It takes training, fall protection, and experience most homeowners simply don't have.

! Please leave the roof to the professionals

Falls from roofs cause serious, life-changing injuries every year, and a poorly sealed hole can cause damage that takes years to show up. This guide is here so you can understand and evaluate the work — never to walk you up a ladder to do it yourself.

Watching for wear before you commit

You can notice some honest signs of shingle wear from the ground, even before a roofer's proper inspection.

- Curling or lifting at the edges of shingles.
- Bald-looking patches where granules have worn away.
- Cracked, torn, or missing shingles in any area.
- Visible patch repairs, especially several of them.
- Moss or heavy staining across large sections of the roof.

★ Notice something? Ask before you sign anything

Any of these is a fair reason to get a roofer's honest opinion before you commit to a solar quote. I'm glad to help you think through what you're seeing — (330) 200-8042.

Permits and inspections, for a shingle roof

A shingle roof mount goes through the same permitted process as any other roof-mounted solar system — and that's a good thing.

Expect a building permit for the structure and an electrical permit for the wiring, followed by one or more inspections. Your installer typically handles the paperwork, but it's your project, so it's fair to ask to see it.

There's nothing unusual about a shingle roof that changes this — the same permits and the same independent inspection apply, regardless of roof type.

- A building permit covering the structural mounting work.
- An electrical permit covering the wiring changes.
- One or more inspections before the system is approved to operate.

! No permit is a red flag

An installer offering to skip permits 'to save time' is telling you something important about how they operate. Our permits guide covers what to expect.

Protecting your shingle roof's warranty

Putting anything through your shingles can affect their warranty — worth sorting out before the first hole is drilled.

Your roof likely carries a material manufacturer's warranty, and possibly a roofer's workmanship warranty as well. How the solar attachments are installed, and by whom, can affect either one.

Installers recognized or certified by your shingle manufacturer, or simple coordination with your original roofer, helps keep that protection intact. Get the answer in writing before work begins.

- How long the solar installer's own workmanship warranty runs.
- Whether they're recognized or certified by your shingle manufacturer.
- Who to call first if a leak or issue ever shows up.

★ Ask before, not after

Getting the warranty question answered up front is exactly the kind of homework I help families do. Our roof-warranty guide digs in further. (330) 200-8042.

Coordinating your roofer and installer

A shingle roof mount usually involves two different professionals — and getting them talking to each other pays off.

Your solar installer handles the mounting; your roofer knows your shingles and their warranty terms best. A little coordination between the two, before work starts, heads off a lot of after-the-fact confusion.

- **Your solar installer** plans the mount, sets the attachments, and runs the wiring.
- **Your roofer** knows your shingles, your warranty terms, and whether the roof itself is ready.
- **Your electrician**, often part of the installer's team, handles the connection to your home's power.

✓ You don't have to manage this alone

Our guide on coordinating your roofer, installer, and electrician walks through who does what, and in what order.

Questions worth asking your installer

A short list to bring to a shingle-roof solar conversation.

Q: How will you confirm each attachment hits a rafter?

You want a confident, specific answer about how they locate structure — not a guess.

Q: How will you waterproof each attachment point?

Listen for proper flashing tucked under the up-slope shingles, not sealant used on its own.

Q: What's your honest read on my shingles' condition?

A trustworthy installer or roofer will tell you plainly if re-roofing first makes more sense.

Q: Will you coordinate with my roofer on the warranty?

You want to hear a clear yes, and ideally a plan for getting it in writing.

Q: What happens if a leak ever shows up after the install?

You want to hear that their workmanship warranty covers it, and that they'll be the first call, in writing.

★ Bring the answers to me

If anything you hear leaves you unsure, that's a good reason to call. I'll help you make sense of it, honestly. (330) 200-8042.

Common Questions

The questions about shingle roof mounting I hear most often, answered plainly.

Q: Is asphalt shingle a good roof for solar?

Generally, yes — it's the most common and most standardized case installers see, especially when the roof itself is in good condition.

Q: Will the installer have to replace any shingles?

Sometimes a shingle here or there is disturbed and replaced near an attachment point; a careful crew keeps this to a minimum and matches what's there.

Q: Can solar go on an older shingle roof?

It depends on the shingles' actual condition, not just their age. A roofer's honest look, not a guess, is the right way to decide.

Q: Does the racking look different on shingle versus metal?

The idea is similar, but the attachment method differs — metal often uses seam clamps instead of penetrations. Our metal-roof guide covers that case.

Q: What if I need a new roof a few years after going solar?

The panels come off and go back on — planned work your installer coordinates with your roofer. It's a good reason to weigh your roof's age up front.

★ Still have a question I didn't cover?

Call or text me at (330) 200-8042 and ask — there's no such thing as a silly question about your own home.

Bringing it all together

Asphalt shingle is the roof installers know best — but 'well-understood' still means professional, permitted, on-the-roof work.

Attachments fasten into your rafters, flashing seals each one under the shingles above it, and your shingles' own age, condition, and even the season all shape how the job goes. None of it changes the bottom line: hire licensed, insured people, get the permit and inspection, and protect your roof's warranty.

If your shingles are getting old, handling that first usually saves you trouble later. If they're sound, you're looking at the most standardized, well-understood mounting job in this whole series.

★ Let's talk through your roof

Whether you're just curious or ready for quotes, I'm glad to be your patient, plain-spoken second opinion — no sales pressure, ever. Call or text (330) 200-8042.

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 solar on your asphalt shingle roof 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.

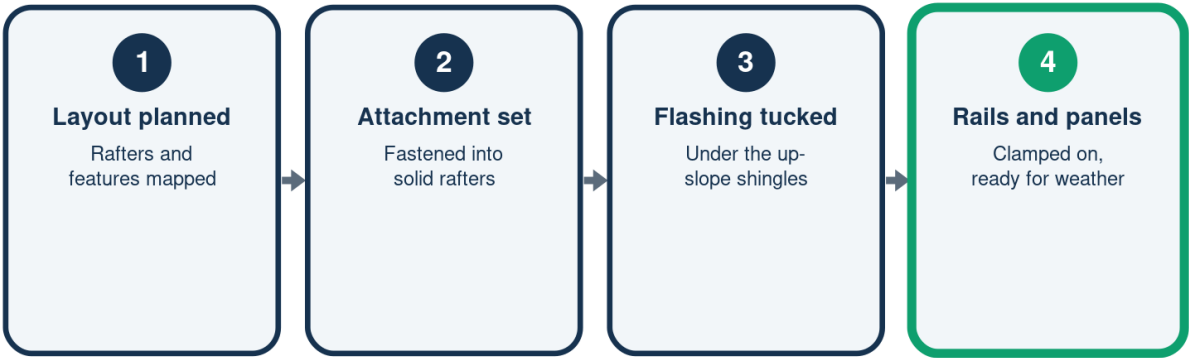
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From Shingle to Secure Mount

How a shingle roof mount comes together, in order



Every step happens at height -- professional, permitted work start to finish.

Newer vs. Aging Shingle Roofs

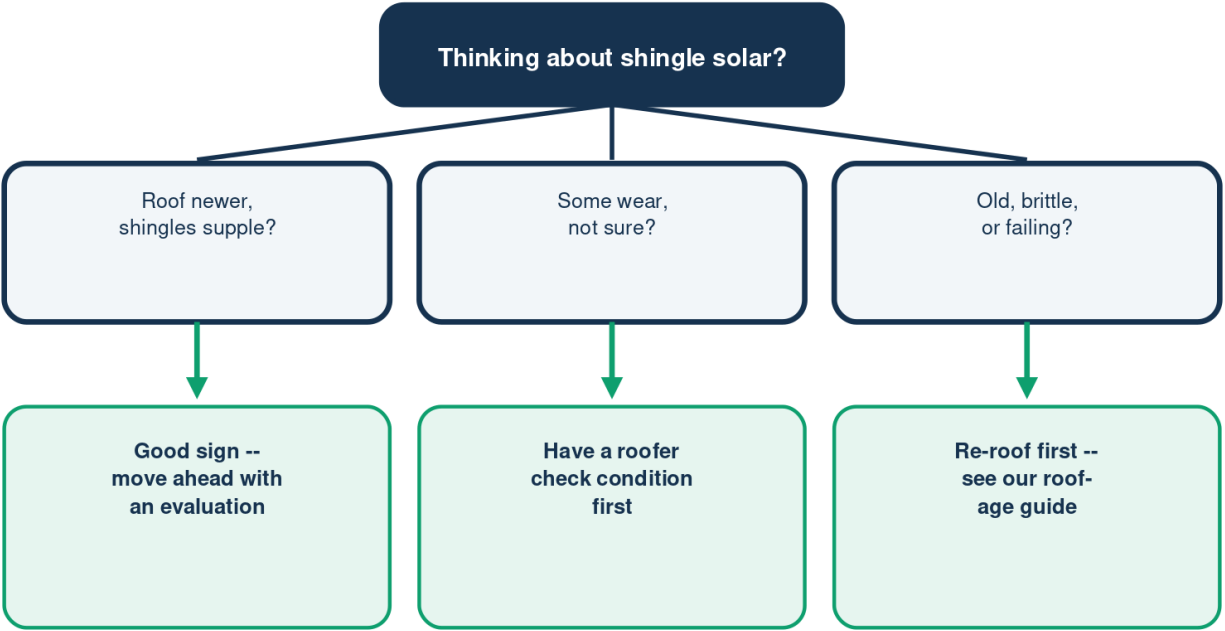
Condition changes the plan more than age alone

	Newer roof	Aging roof
Flexibility	More pliable	More brittle
Best plan	Mount now	Re-roof first
Care needed	Standard care	Extra caution

Your roofer can give you an honest read on which category you're in.

Is Your Shingle Roof Ready to Mount

Three honest starting points before you get quotes



A roofer's honest look beats guessing from the ground, every time.

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

What a Quality Shingle Mount Gets Right

The details that separate a good job from a risky one

Why it matters	
Flashing depth	Tucked in, not caulked
Attachment point	Into solid rafters
Timing	Matched to condition

These are exactly the details worth asking an installer about directly.



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A Note From Bill

A quick note from Bill.

I write these guides to make home tech a little less frustrating, and I do my best to keep every step accurate and up to date. Still, every home, device, and setup is a bit different, so I can't promise a guide will match yours exactly or fix your particular problem. These guides are for general information only — they're not professional, legal, or financial advice, and they don't replace your device's own manual or the manufacturer's instructions. Please go slow, use your own good judgment, and use everything here at your own risk. If a step involves electrical wiring, a gas appliance, a water heater, plumbing, or climbing a ladder — or if anything just doesn't feel safe — please stop and call a licensed professional (or give me a call at 330-200-8042). Bill's Home Tech and Bill Davis can't be responsible for any damage, data loss, or injury that comes from using these guides. Thanks for reading, and stay safe out there.

— *Bill*



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