



An Extended Guide · No. 1535

Permits, Inspections, and Interconnection

The approvals behind
a safe rooftop install

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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. The permits, inspections, and utility sign-off behind a rooftop system are there to protect you — and skipping any of them is not a shortcut worth taking.

The paperwork that keeps a rooftop system honest

Permits and inspections are not exciting. But they are exactly what stands between 'someone put panels on my roof' and 'a safe, code-checked system I can trust.'

I'm Bill, and I run Bill's Home Tech here in Portage County, Ohio. When families ask me about solar, the paperwork side — permits, inspections, and the utility's final okay — often gets the least attention, even though it protects them the most.

None of this is complicated once you see the shape of it: a couple of permits, an inspection or two, and then permission from your utility to actually turn the system on. Your licensed, insured installer usually handles the filing, but it is still your project.

This guide walks through what that paperwork trail normally looks like, who is involved, and why skipping any part of it is a genuine red flag rather than a shortcut worth taking.

★ You do not need to become a permitting expert

You just need to know it is happening and ask to see it. That is a very reasonable thing to ask of any installer — and I am glad to help you make sense of what you see. (330) 200-8042.

The whole guide, on one page

If you remember only these things, you will understand the paperwork trail better than most people who already have solar.

- ❑ Rooftop solar normally needs a building permit and an electrical permit, and sometimes a structural review.
- ❑ After permits, the work gets inspected — an independent check that it was done to code.
- ❑ The last step is interconnection: an agreement with your utility, followed by permission to operate the system.
- ❑ Some neighborhoods add an HOA approval step on top of the official permits.
- ❑ Your installer usually files the paperwork, but it is your project — ask to see the permits and every sign-off.
- ❑ An installer who wants to skip permits is showing you a red flag, not saving you time.

✓ Ask to see it, not just hear about it

'Can I get copies of the permits and inspection sign-offs for my records?' is a completely normal, reasonable request.

Why 'permitted' is a feature, not a hassle

It is easy to think of permits as red tape. For rooftop solar, they are closer to a safety net.

A permit means an independent office — not the installer, not you — reviews the plan and later checks the finished work against the code. For a project that involves roof penetrations, structural load, and live electrical wiring, that independent check is genuinely valuable.

Think of it less as paperwork for its own sake and more as a second set of trained eyes confirming the work on your home was done the way it is supposed to be.

✓ It protects you, not just the installer

A passed inspection is evidence, in your own file, that the work met code — useful for insurance, and useful if you ever sell the home.

The building permit, for the mounting and structure

The first permit usually covers the physical side: how the racking attaches and whether the roof can carry it.

A building permit is generally where the mounting plan and, where relevant, the structural question get reviewed. It is the paperwork trail for the part of the project that touches your roof's actual structure.

Your local building department — sometimes called the AHJ, short for 'authority having jurisdiction' — is who reviews and issues this permit, and who later sends someone to inspect the finished mounting.

✓ AHJ is just a formal name for your local office

You will hear installers use this term. It simply means whichever city, township, or county office has authority over building permits where you live.

The electrical permit, for the wiring

A second permit typically covers the wiring — from the panels down to your home's electrical system.

Rooftop solar wiring has to meet the National Electrical Code, generally referred to as the NEC, which among other things requires a safety feature called rapid shutdown — a way to quickly de-energize the wiring on the roof so firefighters and electricians can work safely.

The electrical permit and its inspection are how you know that requirement, and the rest of the electrical work, were actually met — not just promised.

! Live wiring is exactly why this permit matters

Rooftop solar wiring is energized whenever it is daylight, even in an outage. The electrical permit and inspection are your assurance that it was wired and protected correctly. Never inspect or touch it yourself.

When a structural review gets added

Some projects need one more step before the mounting permit is approved: a closer, documented look at the roof's structure.

If there is a real question about whether your roof's rafters or trusses can carry the added weight, the building department may call for a structural review or an engineer's letter as part of the permit process. This is more common on older roofs, unusual framing, or outbuildings like barns and pole buildings.

It is not a sign anything is wrong — it is the system working the way it should, confirming a real question before construction rather than after.

✓ Our structural-load guide covers this fully

If you want to understand what goes into that structural question, our guide on whether your roof can carry solar goes into it in depth.

Getting comfortable with one piece of jargon: AHJ

You will likely hear your installer mention 'the AHJ.' It is simpler than it sounds.

AHJ stands for authority having jurisdiction — essentially, whichever local building department has the final say over permits and inspections where you live. It might be a city office, a township, or a county department, depending on your address.

You do not need to know which office it is by name. You just need to know that it exists, that it is independent of your installer, and that its approval is the thing you are ultimately waiting on.

✓ A fair question for your installer

'Who is the AHJ for my address, and have you worked with them before?' A locally experienced installer should answer this easily.

The typical path, step by step

Every project is a little different, but most rooftop solar permitting follows a similar shape.

Step	What happens
Permits filed	Building and electrical permits submitted
Structural review	Added if the roof's structure is in question
Installation	Racking, panels, and wiring go in
Inspection	Building department checks the finished work
Interconnection	Utility agreement, then permission to operate

✓ **Your installer usually drives this**

You should not have to file anything yourself — but you should be able to ask where your project stands at any point. Our guide on coordinating your roofer, installer, and electrician covers who typically manages each step.

Inspections: the independent check

After the work is done, someone who was not part of doing it comes to look at it.

An inspector from the building department reviews the finished mounting and wiring against the approved permit and the applicable code. This might mean one visit or more than one, depending on your project and your local process.

This is the moment where any shortcuts taken during installation — corners cut on flashing, wiring done incorrectly — have a real chance of being caught before they become your problem down the road.

! A failed inspection is not a disaster

It simply means something needs correcting before final approval. What should concern you far more is a project with no inspection scheduled at all.

Two kinds of homes, two sets of needs

The permit trail follows the same basic shape everywhere, but a few details shift depending on where you live.

If you live in town or the suburbs

In town and the suburbs, your building department has likely handled plenty of solar permits already, and an HOA may add its own layer on top.

- A city or township building department with solar experience often means a smoother, more predictable process.
- An HOA, if you have one, may require its own approval before visible roof work begins — separate from the official permits.
- Utility interconnection is usually straightforward with a nearby service point and an experienced local installer.
- Neighbors who have already gone through solar permitting locally can be a useful, informal source of what to expect.

If you are out in the country on a well

Out in the country, the process still applies — but a county office and multiple structures can add a few extra threads to follow.

- Your county building department may handle applications a little differently than a city office — worth a direct call to ask what they need.
- A barn or outbuilding roof still needs its own permit if solar is going there, even though it feels less official than the house.
- Longer utility service runs on rural properties can add time to the interconnection step — worth asking your installer about early.
- A well-pump property has real reason to want interconnection handled correctly and promptly, since power reliability matters more when water depends on it.

★ Not sure what your township or county requires?

That is a very common starting question, and one I am glad to help you track down. Call (330) 200-8042.

HOA approval, when one is in the picture

Some neighborhoods add one more layer on top of the official permits: approval from a homeowners' association.

An HOA is not a government office and does not replace the building permit or inspection process — but if your community has one, it may still require its own sign-off on where panels go or how they look before work begins.

This is worth checking early, since it runs on its own timeline separate from the building department, and can affect your overall schedule if it is skipped or left until late.

✓ Check your HOA documents or ask directly

A quick question to your HOA board or property management company early in the process is far easier than a dispute after panels are already up.

Interconnection: bringing the utility into the loop

A rooftop solar system does not just plug into the grid quietly — your utility has its own approval step.

Interconnection is the formal agreement between you (or your installer, on your behalf) and your electric utility, covering how your system connects to and interacts with the grid. It is a separate process from the building department's permits and inspections.

Your installer typically handles the interconnection paperwork as part of the overall project, but it is worth knowing it exists as its own distinct step, with its own timeline.

✓ It runs alongside, not instead of, inspection

Interconnection and your local building inspection are two different approvals from two different organizations. Both matter, and both should happen.

Permission to operate: the finish line

There is one more milestone after installation and inspection, and it is worth knowing its name.

Permission to operate, sometimes shortened to PTO, is your utility's final green light to actually run your system and send power to the grid if your system is set up to do that. It typically comes after interconnection paperwork is approved and any required inspections are complete.

★ Ask your installer when to expect it

Timelines vary by utility and by project, so ask your installer for a realistic estimate rather than assuming it happens the moment panels are installed.

Handled for you does not mean invisible to you

Your installer filing the paperwork is a convenience, not a reason to stop paying attention.

A licensed, insured installer typically handles permits, inspection scheduling, and interconnection paperwork as a normal part of their service. That is genuinely helpful — this is not homework you need to do yourself.

But 'handled for you' should not mean 'hidden from you.' It is entirely fair to ask for updates as your project moves through each step, and to ask for copies of the permits and sign-offs once they exist.

★ Ask for copies as you go

You do not have to wait until the end. Asking your installer to forward each permit or sign-off as it comes in keeps you informed and keeps good records.

Why 'we can skip the permit' should worry you

Occasionally, an installer offers to skip permits to save time or money. Please hear this clearly: that is not a bargain.

- Unpermitted roof and electrical work can complicate or even void an insurance claim later, since the work was never verified.
- It can create real problems when you go to sell your home, since unpermitted work often has to be disclosed and may need to be corrected.
- It removes the one independent check that the mounting and wiring were actually done to code.
- It suggests the installer may be cutting other corners too, not just this one.

! Treat it as a hard stop

If anyone offers to install solar without pulling permits, walk away. This is one of the clearest red flags in the entire process.

What to actually ask to see

A short, specific list makes this easy to act on.

- ☐ Copies of the building permit and the electrical permit, once filed.
- ☐ The inspection sign-off, once the work has passed.
- ☐ The interconnection agreement with your utility.
- ☐ Written confirmation of permission to operate, once granted.
- ☐ An HOA approval letter, if your community requires one.

✓ Ask early, not just at the end

You can ask to see the permit applications before work even starts. You do not have to wait until everything is finished to start paying attention.

A word for buying or selling a home with solar

Permits matter well beyond the day the system goes in — they can matter years later, at closing.

If you are selling a home with rooftop solar, missing permits or inspection sign-offs can slow down or complicate the sale, since buyers and their lenders often want to see that the work was done to code. The same is true in reverse if you are buying a home with existing solar.

Keeping the permit and inspection paperwork with your other home records is a small habit now that can save real trouble at a future closing table.

✓ **Keep it with your home's other paperwork**

Permits and sign-offs belong in the same drawer as your roof warranty and other home records — not just in your installer's files.

Questions worth asking about the paperwork

These questions help you understand how a given installer handles this whole process.

Q: Who is the AHJ for my project, and have you worked with them before?

A locally experienced installer should answer this comfortably and specifically.

Q: Will you send me copies of the permits and sign-offs as you get them?

A confident 'yes, of course' is what you are hoping to hear.

Q: Does my project need a structural review, and who arranges it?

The answer should be specific to your roof, not a generic yes or no.

Q: What is a realistic timeline for interconnection and permission to operate?

Expect a range based on their recent experience with your utility, not a guaranteed date.

★ Bring me your proposal

If a written proposal is vague about any of this, I am glad to help you read between the lines before you sign — our guide on choosing a roof-mount solar installer covers more of what to vet. (330) 200-8042.

Keep your own copies, always

Whatever your installer keeps on file, keep your own set too.

- A folder, physical or digital, just for this project's paperwork.
- Permit numbers and the office that issued them, in case you need to reference them later.
- Dated copies of each inspection sign-off, not just a verbal 'it passed.'
- The interconnection agreement and the permission-to-operate confirmation, once granted.

✓ Future you will be grateful

Whether it is an insurance question, a home sale, or just curiosity years from now, having your own copies saves you from having to track anyone down.

Common Questions

The permitting questions I hear most often from families, answered plainly.

Q: Do I have to pull the permits myself?

No, your installer normally handles this as part of the job — but it is fair to ask to see what they filed.

Q: How long does the whole permit-to-operation process take?

It varies by project and by your local building department and utility, so ask your installer for a realistic estimate for your area.

Q: What happens if the inspector finds a problem?

The installer corrects it and the work is reinspected. This is the process working as intended, not a failure.

Q: Can I turn my system on before permission to operate is granted?

That decision involves your utility's rules and your installer's guidance — ask your installer directly rather than assuming.

Q: Is an HOA approval the same as a building permit?

No — they are separate. An HOA may add its own requirement on top of, not instead of, the official permits and inspections.

★ Still have a question I did not cover?

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

Bringing it all together

Permits, inspections, and interconnection are not obstacles between you and solar power — they are what make the system trustworthy.

A building permit, an electrical permit, sometimes a structural review, an inspection or two, and finally your utility's interconnection and permission to operate — that is the whole path, in order. Your installer drives it, but it is still your project to watch.

Ask to see it. Keep your own copies. And treat any offer to skip it as the red flag it is. That is really the whole guide.

★ Want a second opinion on a proposal?

If you want help understanding where a project stands in this process, or what a proposal promises about it, call or text me at (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 understanding the permits, inspections, and interconnection behind a solar install 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.

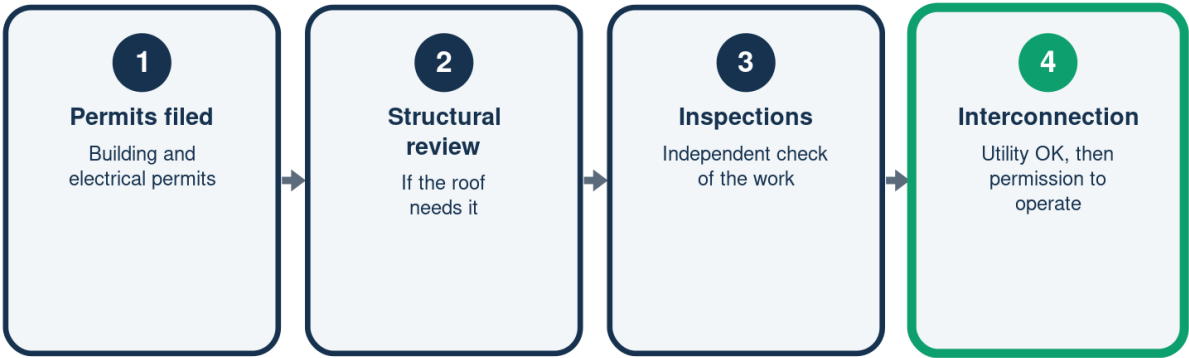
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The Typical Permit Path

From filed paperwork to utility sign-off



Your installer usually files this -- but it stays your project to track.

Two Permits, Two Jobs

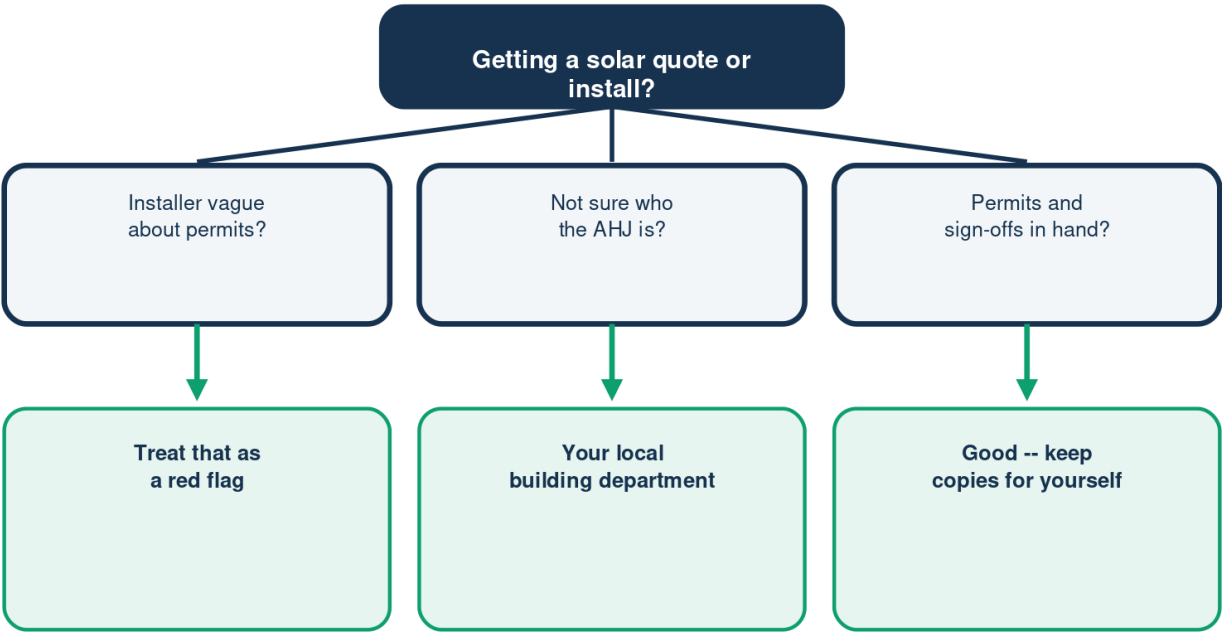
What each one actually covers

What it covers	
Building permit	Mounting and roof structure
Electrical permit	Wiring and safety equipment
Structural review	Whether the roof can carry it

Not every project needs all three -- your building department decides.

Is the Paperwork in Order?

A quick check before or during a solar project



Ask to see the permit and every sign-off -- it is your project.

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

Before vs. After the Utility Signs Off

Two very different moments in the timeline

What's true	
Installed, not yet approved	Not yet in service
Permission to operate granted	Utility has approved full use

Interconnection is the utility's own sign-off, separate from inspection.



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A Note From Bill

A quick note from Bill.

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— *Bill*



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