



10 Questions to ask potential Solar Installers

1. How long have you been in business, and how much experience do you have installing PV systems similar to the one you are proposing here?

- 50 previous installations is a good *minimum* threshold. It's ok to give a new company a chance, but they should have installed *at least* 5-10 systems (unless it's your brother, and he is just starting out- 😊). It will often take 1-2 years for workmanship issues to begin to surface, so a new company can't really speak about the long-term quality of their projects.

2. Is your company NABCEP certified?

- This is a probing question on a couple levels. First, if they do not know what NABCEP is, that should be a big red flag! NABCEP is the *North American Board of Certified Energy Practitioners*. This group establishes quality standards for the installation of PV systems and is highly respected within the Solar Industry.
- Second, NABCEP does not "certify" companies, it only certifies *individuals*. So, if the person answers yes to this question, they either do not understand how NABCEP works, or they are not being honest. **The follow-up question** to a yes answer is: **Who**, at your company is NABCEP certified, and in what area are they certified? There should be at least one person (more is better) on-staff, that is certified in either *system design* or *system installation*, two of the more common certifications. NABCEP also offers a *PV sales* certification, which is good, but does not qualify the person (or the company) to do system installation.
- The list of all NABCEP "certified" practitioners can be found at www.nabcep.org, so you can easily verify the certification status of any person who the Installer says is "certified."

3. Can you provide 2 or 3 references that I could contact to get a recommendation?

- If they do provide some people that are willing to be contacted, reach out and ask them questions like, "How well did they deliver on what they promised?", or "How likely are you to recommend them to a friend?"

4. What financing models do you offer?

- This will probably come up during the sales presentation, but you should be aware of how the different models work (see below).
- **Cash purchase:** You buy the system with your own cash, or your own financing (i.e. a home equity loan). By *owning* the system you benefit from all available incentives and tax credits, and typically will see the highest return on investment (ROI).
- **Solar Lease:** Like leasing a car, the Solar Company will own the system (even if it is on your roof), and you will make a fixed lease payment to the solar company. Your electric bill will be reduced because of the solar power you harvest, so the combination of your lease payment and your reduced electric



bill will be less than your current electric bill. Total monthly savings can vary, but typical savings could be in the 10%-30% range. The big benefit of this model is that often there is **zero out of pocket costs** for you to go-solar, so this is a popular option. The drawback is that the system owner gets all the tax credits and energy credits.

- If you think you might be **moving** within the identified lease period (often 20 years), be sure to ask what happens to the array when you move. The new home buyer is not obligated to continue the lease, and the PV system owner may or may not relocate the system to your new home.

5. What equipment are you proposing?

- Be sure they specify at a minimum, what solar modules, inverters, and racking are being proposed. Knowing these products, you can do your own research to be sure they are quality products, and if there are any known issues. The **modules** and **inverters** are the heart of the system, and reputable Installers will only use high quality products. Don't try to save money by accepting low cost (low quality) equipment. In a couple years performance issues will likely arise.

6. Who do you use to perform the installation?

- Some smaller companies will get the sale, and then sub-contract the installation to another company. This is typically not ideal, but may be ok if they use quality partners for the installation. The best option is that the solar company has their own, full-time employees that install their systems.
- Sometimes an outside, licensed electrician will be brought in to make the final AC wiring connections. This is fine, and is not uncommon, as long as there is an established relationship, and history with this electrician. You want to be sure that the solar Installer will take full responsibility for any future issues, and not point fingers towards an electrician who can no longer be found.

7. What is the process for the system to be operational, and how long will it take?

- Be sure that the full process is explained to you, so your expectations are properly set. Even the best companies will need *at least* 4-6 weeks (and often more) to obtain all permits, procure the equipment, and to complete the installation. The important aspect is to be kept informed as the various stages of project development are completed. The installer should be able to explain how this communication will take place.

8. What kind of warranties and guarantees do you offer?

- **Materials:** All equipment should have a manufacturer's warranty that the Installer will support, and the Installer should provide some guidance in making a claim, if needed.
- **Workmanship:** This varies by installer, but a *minimum* should be a two-year workmanship guarantee. This will require the Installer to come out and repair any defects that surface as a result of the installer's workmanship.
- **Performance:** A performance guarantee is a commitment that the PV system will produce a certain amount of energy (within a range) each year, and if it does not, the Installer will pay for the shortfall.



Not all companies (even quality ones) offer this, but if not, you could ask for an explanation of the methodology that was used to estimate the annual production and how certain those expectations are.

9. Do you offer any maintenance services?

- While a PV system is technically “maintenance free,” it is wise to have someone take a close look at your array each year. If squirrels can access your roof, they seem to really enjoy chewing on the plastic wire insulation, and this can lead to **electrical issues**. Sometimes a wire will come loose from its clip under the array and is sitting on the shingles. This can cause **abrasion** to that wire as it gets moved by the wind.
- If the installer offers an annual inspection, that is a valuable service. If you can get up to the edge of the array yourself, you can spot these kinds of issues, however, if you see a chewed or abraded wire you should **contact your installer**. Any wires where the insulation has been removed or damaged are **dangerous shock hazards** (carrying high voltage current) and should not be touched.

10. Question to ask yourself: How much pressure do I feel?

- The better Solar Installation Companies will not be pushy. Their presentation will be clear, and straightforward, and they will answer all your questions. Solar is not right for everyone, and a good sales representative will help you determine what is best for you, without putting pressure on you.
- It is OK to tell the sales representative that you are reviewing multiple proposals (which is a good idea), and that you will need some time to consider the options.
- If you really like a certain Installer but their pricing is not the lowest, you can tell them this, and ask them if they could match a competitor’s proposal. It never hurts to ask. If they can’t match the competitor’s price, they may be able to offer some discount. Remember, they may cost more for good reasons, like offering better service, or better quality equipment.