

Solar Installs Leading to ‘Screwed Up’ Roofs

Careless solar installers are damaging roofs and causing leaks — leaving roofers to clean up their mess

By [Gary Thill](#)



By all indications, it's going to be another banner year for the rooftop solar industry as installations grow and prices fall. "The solar market clearly remains on a strong upward trajectory," confirmed Abigail Ross Hopper, president and CEO of the Solar Energy Industries Association.

But behind this red-hot market lies a serious problem: Because professional roofers are not usually installing roof-mounted solar, a large percentage of those installations lead to "messed up and screwed up" roofs.

The solar industry "has adopted a number of best practices to maximize the durability of roof penetrations ..." said Barry Cinnamon, former owner of Akeena Solar, who now hosts a renewable energy podcast. "But these best practices are not always followed, resulting in roof leaks and potential hazards from loosened solar panels. If these leaks happen, it's usually a roofer who is called in to repair the damage."

Aaron Nitzkin knows about that reality all too well. "If you talk to any roofing contractor in any market where solar has any activity and say, 'Hey, what do you see out there?' they

will all tell you about the messed up and screwed up roofs they see,” said Nitzkin, CEO of Solar Roof Dynamics, which helps roofers incorporate solar into their business. “It’s much more common place than people realize.”

How common? Nitzkin said that in one rainstorm last year in California, as many as 40% of the roofs with solar installations were leaking. “When you’re growing really fast and people have minimal roofing experience, they don’t know what they’re doing,” he said. “In a drought you can get away with it, but when it starts to rain we see leaks.”

Some leaks are caused from solar installers treating the roof like a construction zone — dragging heavy panels and racks across a roof. “Dropped tools, panels getting dragged across the roof’s surface or other negligent use of the roof’s surface can lead to leaks and holes,” blogged Lennie Moreno, founder and CEO of Sofdesk, which sells web apps for solar and roofing companies. “It could take years but a careless installation of solar panels could end up resulting in huge repair bills that could have easily been avoided.”

Additionally, junk or tools that get left behind can find their way into downspouts and gutters, which can block drainage and can cause ice dams in the winter. Improperly installed systems can also cause water to dam up and even run back up the roof, Moreno said.

Nitzkin said even if roofs aren’t leaking immediately, they will eventually leak if the panels aren’t installed properly. “People underestimate the implications of going into a roof,” he said. “If you mess up the roof, you have leaks that cause mold and a lot of damage. If you don’t use the right kind of caulk or flash properly it might not leak for a few years, but I guarantee you it will leak. We see this all the time.”

But it’s not just leaks that are a problem. Some solar panels get installed on roofs that are near the end of their life, Nitzkin said. Recently, he saw a solar system that was installed on a 20-year-old roof. When that happens, homeowners can get stuck with a bill of \$3,000 to \$5,000 to have the solar removed so the roof can be replaced. “Any

kind of new industry has sketchy people trying to capitalize on it," Nitzkin said. "Homeowners can get caught and it's really unfortunate."

Even if panels get installed on a new roof and the install causes problems, many homeowners don't understand that their roof warranty has been nullified. Nitzkin said he recently saw a two-year-old roof where the warranty was voided because of a solar installation.

Although some solar companies warranty the work, there's no guarantee they'll be around when the need arises, he warned. "Most solar companies are two to three years old," he said. "Are they going to be around to honor the workmanship warranties?"

Nitzkin said all of these issues are why roofers need to start taking back the roof-mounted solar market. "A roofing contractor should fully own the roof and the integrity of the roof," he said. "Roofers can give customers confidence that they stand behind the roof."