

Episode 37: Photovoltaic Solutions

**Daniel Robbins:** Here we are again for another episode of Above It All, a podcast dedicated to the roofing industry by Johns Manville. I am here today with special guest, Rob Hughes, and he's going to talk to us about photovoltaic and what it means for your roofing system. Rob, how are you, sir?

Rob Hughes: I'm great, Daniel. How are you doing this afternoon?

**Daniel Robbins**: I'm doing fabulous. It is a fine Wednesday afternoon. And I just wanted to touch base with you because I know you've been really working on a lot of these projects related to photovoltaic, but before we get into that, I wanna get your back story, what brought you here to JM, 'cause I know you've been here for some time, what's your story? How did you get into the roofing industry, and then finally here?

**Rob Hughes:** Well, that's a great question, Daniel. I've been at JM about four years, and I actually came here to work on the guarantee extension program, and got moved into Owner Services when the group was formed about three years ago, and I ended up being a technical support for the rest of the team. As time has gone on and photovoltaics have ramped up, I've taken on more of that responsibility, screening and looking through all the materials that come to us from a variety of different sources, builders, owners, and particularly PV vendors that are putting PV systems on buildings. I started out in the industry, my entire adult life has been in the construction industry. I was a general contractor, and I went into working for a building envelope contractor around about 2010 and kinda cut my teeth, doing a number of different roles, project management, estimating, operations, came up here to Denver, to kinda chase my children and where they were living and ended up at JM.

Daniel Robbins: So you were doing full building envelope when you say that, that's the full project.

Rob Hughes: So that's...

**Daniel Robbins:** The project management essentially, like a head contractor, and then you would plug in the guys who do the roof, the guys that do the sheet metal and...

**Rob Hughes:** As a builder, when I was a builder, absolutely. When I went to work for this building envelope contractor, which is a fancy way of saying roofer who does other things, and in this case, it's kind of wall panel systems, ACM panel systems, and a whole variety of that kind of work. Yes, we managed all of that kind of work for general contractors. So the scope involved essentially what we referred to as Division 7, which is kind of how you wrap that building and how you keep the water out.

**Daniel Robbins:** A watertight building, building envelope. But it's not just the exterior too on building envelope, it goes all the way through the entire structure, right?

**Rob Hughes:** Right. Well, Division 7 certainly incorporates other components, insulation, etcetera, and so those are all part of that program and... So yeah, I got to do a lot of interesting things, but I think my background as a general contractor kind of uniquely prepared me for being able to look at what a broad scope Division 7 picks up.

**Daniel Robbins:** Very cool. So fast forward, you're here at JM, you're in the Owner Services program and you're working on our photovoltaic offering or kind of campaigning with our customers or building owners.

**Rob Hughes:** So there's a big push nationwide, and I think it's really worldwide to go ahead and better utilize alternative energy sources. So a combination of factors are bringing this to the forefront, and I would say that as much as there are incentives like recently passed legislation to kind of incentivize bringing the production of PV systems back to the United States.

**Daniel Robbins:** Tax incentives?

**Rob Hughes:** Tax incentives, exactly. For manufacturing, etcetera. There's also incentives that come from... On a regional basis, you're looking at utilities providing incentives by way of what they'll pay for energy entering into their systems. So you're seeing a lot of activity for PV in the Mid-Atlantic, Virginia, Maryland, all the way up to New Jersey. A little bit up in Massachusetts, in the Northeast. There's quite a bit of activity in Minnesota and Illinois, and then of course, California is the big one in the whole nation for solar, and Colorado is getting a fair amount of activity as well. It's not evenly distributed throughout the United States, and I think what's really kind of dictating it is, A, where are the buildings, B, where are the incentives, whether they be financial incentives for what they're getting paid per kilowatt, or there is some sort of tax incentive from the government bureaucracy.



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Daniel Robbins: Side conversation, is there a nice return? Do you know if there is from solar?

**Rob Hughes**: I think that, from JM's perspective, we're not as well tuned to that as say the building owners, like a company like Prologis, let's say, for instance. And I know that they have an initiative to go net zero by 2040, so they're looking at having all of their buildings have no carbon contribution by 2040, it's quite a lofty goal, right?

Daniel Robbins: It's lofty, yeah.

**Rob Hughes:** And so the incentive for them is that their customers pay less for their energy, and they're going ahead and kind of fulfilling what the objectives of their company are in the long term.

**Daniel Robbins:** So, really it just is a thing of the future, in it's optimization?

**Rob Hughes:** It's here now. It's not in the future.

**Daniel Robbins**: I mean like, for a while, there was discussion because materials were just too expensive to put something together efficiently, but now it's like codes, tax breaks, the materials potentially have gotten cheaper, the ways of manufacturing. And so here we are now, and it's actually a deal.

**Rob Hughes:** Well, you're correct about that. Certainly fewer obstacles and more different types of systems and materials available. I think it's really neat that we're getting incentives for people to produce here in the United States, part of the issue, and why things slowed down for a little bit was getting stuff from overseas and the tariffs that were involved, there were certain things that were restricting the market a little bit, and to go ahead and have those barriers removed is really gonna ramp things up moving forward.

**Daniel Robbins:** That's very cool. So talk to me more about your role, what are you doing with customers?

**Rob Hughes:** So here at JM, what Owner Services does is we manage the guarantee for the customer after it's been issued, right? So we have a whole front-end team, sales and materials, puts the guarantee in place in conjunction with our contractors, and Owner Services is positioned to support the building owner for any kind of thing that comes up over the lifetime of that guarantee, right? Guarantees are anything up to 30 years, pretty much most typically 20-year guarantee, it's a long-term commitment from JM. And so we're here to go ahead and support that. On the PV end what the expectation is is that we wanna make sure that anything that's going on top of the roof doesn't jeopardize that guarantee.

**Rob Hughes:** So we're looking out for the building owner's interests, and we're looking out for the interest of the guarantee, those things go hand-in hand. And so what we do is, we typically work with a third party, the PV vendor, the folks putting that on the roof on behalf of the owner to make sure that they kind of, how shall we say, check the boxes, right? We wanna make sure that we have a system that's compatible with our roof, that doesn't damage our roof, and that the owner realizes that the owner has certain responsibilities in this relationship, right? JM doesn't take responsibility for the PV system, the owner needs to go ahead and acknowledge that they have responsibility for it.

**Rob Hughes:** So we request an Overburden Waiver signed by them saying exactly that, right? If there's a problem with the roof, the building owner is responsible for moving the PV system, so that we can investigate, repair, take care of that roof. The other part of it is we wanna know what's going on that roof. How does it interact with our roof system, and are there any adverse impacts? So I review all that information as it comes in, I advise the owner if there are things that might wanna be modified or things they might wanna dial in that are gonna work better for them, and then I basically facilitate that moving forward because the process involves going ahead and making sure that that guarantee is intact at the end, that's really important to our building owners. Certain building owners require us to generate a letter at the end of the process that says, "Look, they fulfilled JM's requirements, they're all clear, the roof guarantee is in good shape".

**Daniel Robbins:** So long-term, keeping that roof system intact, warranty-wise, is that a continuing relationship you gotta have with the contractor that installed the solar system, or is it like... The reason you're there is so this project can get worked out and once it's done, everybody's got the right paperwork to close the deal?



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**Rob Hughes:** Well, the paperwork is part of it, contractor is certainly an important part of it, right? When a PV system goes on a roof, there's gonna be work that involves the roofer. Frequently there are attachments that go ahead and penetrate or attach to the roof that need to be sealed, all that work needs to be done by a JM-approved contractor on a JM-approved roof, and this isn't any different with any other manufacturer, they have the same types of requirements. So we want it... That's one of the boxes that has to get checked. Are you working with a JM-approved contractor, is it somebody we're comfortable with? Okay, you're good to go. And it's a source of work, a valid source of work for our contractors.

**Daniel Robbins**: And I love that, and so really, that warranty stays intact because of what you're doing, people get the life out of the roof system they want and they can switch it over, they can switch over to photovoltaic any time and you can oversee that process and make it sweet from our perspective?

**Rob Hughes:** You bring up an interesting point, right? So we were talking about the life span of a guarantee being 20 years, and it's interesting because I will sometimes have customers, and we deal with everything from large commercial customers to just regular collection of people who own several buildings in one city, to school systems, municipalities, etcetera. All are going ahead and putting PV systems on. But sometimes they'll put a system in front of me and that system is already 10 years old. And so one of my... Part of my job is to tell them, "Hey, let's have a look at the roof and let us make some suggestions to bring that roof to a point where you can feel comfortable having a PV system that's gonna last 20 or 30 years on a roof that really only has a 10-year guarantee left."

**Rob Hughes:** In a perfect world, we'd be looking at having that coincide, right? So that PV system goes on when the guarantee goes into force, so you have almost equal time frame for the guarantee lifespan and the lifespan of the PV system.

**Daniel Robbins:** Fascinating, so we really do on our roofing... And that's one thing I could understand more about. We really want our roofing systems to go past the guarantee, they're well-endowed to do so, but the guarantee is strong and we have certain protocols in place.

Rob Hughes: Right, well, for quality.

Daniel Robbins: That's really what it is. It's all about quality.

**Rob Hughes:** It is about quality, of the quality product and a quality installation, you should generally anticipate that a roof system properly maintained is gonna outlive the guarantee, that's pretty typical. But once again, back to that 20-year scenario on the 20-year guarantee, the PV system could last up to 30 years, we have customers that are asking that question, What can we do? Can we get into a situation where we're specifying roofs that are more of the 30-year variety, so we have an absolute correspondence between guarantee and PV lifecycle age, right? So it's pretty neat the way the market's moving and the way people are getting more tuned to that kind of making sure that they have that alignment.

**Daniel Robbins:** Yes. So in the same vein of Owner Services, is there some common questions that you get about roof care that you, if anyone is listening who is a building owner, that you would want them to know? Also, yes, of course, come get in touch with your Owner Service team, but what are some key things that you're hearing that, of course, you can provide a solution for?

**Rob Hughes:** So I would think one of the number one things would be buildings change over time, whether they change in terms of use or they change in terms of the look, somebody might wanna modify how that building looks on the outside of it, or they simply need to maintain that roof system. So over time, these kind of changes, it's important that the manufacturer, whether it be JM or any other roofing manufacturer is kept engaged in the process. For instance, somebody comes in and occupies a seven-year-old building and decides to upgrade the HVAC systems because they're putting a different usage underneath it, it's no longer a warehouse, they've converted half the building to an office.

**Rob Hughes:** Well, that's typically gonna entail changes, things added to the roof, perhaps insulation added to the roof. So how do we as a manufacturer capture that information and make sure that we protect the integrity of the guarantee? So my recommendation to the owner is use the manufacturer as a resource, use JM as a resource, use me as a resource to go ahead and ask those questions, what do we do, how do we keep this intact? The last thing that you really want is you make those changes, three months later, you get a big leak and we send somebody out there to look at it and we go, "Hey, there's a whole bunch of stuff on this roof that wasn't on this roof before. Well, stop, pause, we gotta pick up the pieces and figure out where we're at." I'd rather be proactive about that. That's what we're here for.



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Daniel Robbins: I love that. Well, Rob, we are out of time. Thank you so much for being on the podcast. It was a pleasure.

Rob Hughes: Thank you, Daniel.

Daniel Robbins: Until next time, we'll catch y'all later. Be safe out there.