

Speaker 1 00:00:05 Welcome to the Clear Impact Podcast brought to you by PGTI University. Thanks for joining us today. My name is Sherri Connor, and I am your host.

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Speaker 3 00:00:23 And that was on the requirements document.

Speaker 2 00:00:25 So that was the first one to Rod. He got everybody together and we celebrated it, cuz as a company, it was honestly the first time that we have received an award for a design effort that we did.

Speaker 1 00:00:34 Ah, the good ol' days. It's always fun to recount stories of how products got their start. Today's episode in our Innovation Series brings in Mike Nau, our Lead Design Engineer, and Kenny Vander Bent, our Senior Manager of Product Design. These two have worked together for 20 years! Today we learn about the history and success of WinGuard Aluminum.

Speaker 1 00:00:53 Welcome to the clear impact podcast, and we are continuing in a series around innovations and we are exploring the past present and future of PGT innovations and sitting with us today, we have Kenny Vander Bent and Mike Nau, and I'll let you guys introduce yourselves and give us like your name, your title, and maybe how long you've been here.

Speaker 3 00:01:14 Okay. I guess I'll get started. My name is Mike Nau. I've been with - actually it'll be in another month - I'll be here 20 years. So worked for a lot of different companies though, prior to that, a lot of two year and four years stints. So, uh, starting in California window companies, window companies in Tennessee, in Mississippi and then on into Florida, but I was born and raised in New Jersey, so, I had a little experience with those windows as well. <laugh>

Speaker 1 00:01:40 So you've got a good background. And what is your title? What do you do here?

Speaker 3 00:01:43 So I'm a Lead Design Engineer and uh, basically that's what I've been doing for the entire time I've been here. So, working with the products, uh, mostly doors, doors have always been, I don't know, for some reason I would start talking and all of a sudden I'd get shoved in the door corner. Doors were my specialty. And I like that, don't get me wrong. It was always, always enjoyable.

Speaker 1 00:02:02 Nice. And Kenny?

Speaker 2 00:02:04 Yeah. Kenny Vander Bent. I actually started the same day or week as you did.

Speaker 3 00:02:08 Yeah, it was a couple, just a couple weeks except that year-

Speaker 2 00:02:10 20 years ago. So I've been here two decades as well.

Speaker 3 00:02:14 You went on your honeymoon. That was the only difference.

Speaker 2 00:02:16 Yeah. Thanks. Thanks for remembering.

Speaker 3 00:02:17 <laugh>

Speaker 2 00:02:18 It started one day and literally took three weeks off to get married. So I got married and got this job the same week in my life. So yeah, it's been great. Um, my current title is a Senior Manager of New Product Design. I can't believe it's been 20 years that Mike and I started

together, but I've only been doing it half as long as he did. My job before this was college, and before that was fast food. So I think my background is: college, chicken, and windows and doors. So I've been doing windows and doors pretty much all my, my career.

Speaker 3 00:02:49 Great combination though.

Speaker 2 00:02:51 Yeah, seems like it.

Speaker 1 00:02:52 <laugh> Yeah, you can't go wrong with chicken. Awesome. We are gonna be talking about WinGuard Aluminum, which is one of our steady-state tried and true products that we manufacture and sell to our dealers and they have an amazing reputation in South Florida, and so how did you and your teams develop WinGuard Aluminum?

Speaker 3 00:03:12 I would say, uh, prior to WinGuard Aluminum, we developed some really, really high end door system. And uh, I'm gonna start out with the door, cuz WinGuard Aluminum means a lot of things. It means windows. It means doors. So I'll just start out with door.

Speaker 1 00:03:23 Can you stay in your door corner?

Speaker 3 00:03:25 Yeah, I'll stay in my door corner. There was a whole series of, of requests. You know, they wanted flexibility. There was, you know, all of the requirements, criteria and things like that, that people were asking for. We were just coming out of the, the downturn. And so there was a lot of retrofit and so people were asking for it. They said, "We need to squeeze that frame down. We need to get that frame to a size that we can use. And we need to have flexibility in the field. We want to be able to reverse panels. We wanted to be able to do a lot of different things with the, uh, with the product," which was cool because later on after we, they introduced the product, the marketing department came up with a Swiss army knife to describe the product cuz the whole, the whole mantra was flexibility that it was, you could reverse things, change things in the field just anyway. It was a very successful product, very well received in, in the field right in the beginning.

Speaker 2 00:04:12 Uh, just gonna add to it. I think when we started that too, you and I were in the field, we were getting a ton of feedback on what was the issues with sliding glass doors. By time you get on a job and a sliding glass door has been ordered incorrectly, it's a big deal to send that whole sliding glass door back to PGT. Reverse the interlocks, do a lot of rework to it. So that was the number one thing that we sat down when we said, "There has to be a way that we can make this easier." And if there's a way for them to order the panel incorrectly, but still fix it in the field, we would save the dealer and we'd save PGT a lot of work, and that's kind of the focus of that whole design was to figure out a way to relieve that issue from the customer. And I think that was one of the surprising things we, we heard 'em say that they didn't give us a solution. They said, "This is just a big problem." And I think through the design-

Speaker 3 00:05:00 Oh definitely.

Speaker 2 00:05:01 And that was one of the compelling reasons after launch that I think was so well received because when it got to the field, some of 'em would literally call back and we'd have to train them and said, "No, you're good. Here's how you'd take that interlock off. And here's how you can make that panel become the panel that you thought you ordered." And it just alleviated a, a ton of work.

Speaker 3 00:05:17 Just to back up just a little bit, a point that I wanted to make was that early on, when you were designing, we were designing products, you were kind of like in a vacuum, just working on a product on your own and nobody else around you was, like, really involved. And so, this particular product, this particular patio door stemmed out of a meeting where an executive was across the room and said, "You're gonna make me a door like this," you know? And so we started working on it. You could work in a vacuum, which was nice, cuz you could work under the radar and kind of developed a design sort of conceptual and, and get some good, good drawings and ideas together. But in the end, this was the first one where we teamed up and Kenny was brought together. He was over in architectural, uh, running the architectural engineering and uh, they teamed up Kenny with me and we kind of fine lined it, did exactly what he just spoke of. So, that's what brought us to that point. We wouldn't have- probably wouldn't have gotten there if it hadn't have been for us joining together and starting to throw things back and forth. That's uh, the beginning of the evolving of a team effort, which was really good.

Speaker 1 00:06:17 Well, you get a lot of synergy that way.

Speaker 3 00:06:19 Oh definitely.

Speaker 1 00:06:19 And then you get the momentum going and all of the wheels and all of the gears start clicking and aligning and it's magic when it happens like that. So, the process and the timeline, like approximately what was that like?

Speaker 3 00:06:32 Well, um, the under the radar part was probably about a year beforehand. Okay. And then it became a real thing and I think we were probably in it about six to eight months, maybe. Yeah. Six, eight months developing.

Speaker 2 00:06:43 Yeah. And PGT was relatively young in the project management side of the business. Prior to that, and you can correct me, Rod and the design engineers would run a design project by themselves. So they would lead the whole project from an engineering standpoint, and I think this is one of the first transitions where we, we made the whole project, a larger team effort. So we had an executive, Mick Ferrucci, who took on this first project and he had never done project management before. So, it was kind of a unique experience for us as design engineers because we never had a vice president sitting in every project meeting that we had. So, we would pitch the design to this whole team and to Mick who had no idea what a window and door was. But at the end of every meeting, he was asking everybody, are they on track and how can we make this better? And how can we make this process faster? So, I think that attention from upper management to the detail and to always pushing the project forward, kept everybody on task. And I think it allowed us to be very efficient with our time all the way through IT and launch initiatives.

Speaker 3 00:07:44 And it provided us the support that we need. I mean, obviously when you're working on your own somewhere, you're not, you're not necessarily, you don't feel like there's a front man. Somebody talking for you. This time, we had an executive who was leading the entire charts. That was really good.

Speaker 1 00:07:58 And it probably helped him too, to be in on the meetings because then he had a greater understanding of what was actually involved, and not throwing out unrealistic timeframes.

Speaker 3 00:08:08 Yeah.

Speaker 1 00:08:08 Nice.

Speaker 3 00:08:09 Yeah, so I said to eight months, but there's a window of time where you're, you're kind of completed with submitting all, you've done all your, all your testing, you've submitted everything. And then there's kind of a lull where we're waiting for Miami-Dade to produce all of their documentation, and that's the time when you can really get the meat of the implementation done. You start doing bill of materials, you're doing fabrication drawings, you're doing all the things that are necessary to get the tooling going and all that, cuz it's a fairly large window. You know, Miami-Dade typically was in a, in a six month range. So...

Speaker 2 00:08:39 So it's a 12 to 18 month, beginning-to-end process typically.

Speaker 3 00:08:43 At least that. Yeah.

Speaker 1 00:08:45 When did this come out? When did WinGuard Aluminum launch?

Speaker 4 00:08:49 Be sure to tune in for upcoming episodes to help you understand the fenestration industry, what you need to know when buying windows and doors and other related topics, you can find out more about us at [pgtiuniversity.com](http://pgtiuniversity.com). You can also find us on Facebook and LinkedIn.

Speaker 3 00:09:08 2010, probably around April. Yeah, 2010.

Speaker 1 00:09:12 So 12 years ago or so.

Speaker 3 00:09:14 Yeah. Doesn't seem like that.

Speaker 1 00:09:17 <laugh> I know, time is elusive, right? Yeah. All right, um, what was the most surprising thing during the process? Or was there anything surprising?

Speaker 3 00:09:25 If I would reflect back on the prior products, I would say that, uh, it was very well received. It was, it was really orchestrated well on the line, the line was set up well, people were ready to go and we were able to get some volume product out. And the, uh, dealers really liked, I think we hit the mark and that was, it was a good, it feels good. So, I don't know about amazing or surprising, but...

Speaker 2 00:09:45 I was surprised because I've been part of launches prior to that, and I've been part of launches after that one. And typically, as a design engineer, you sit there, you launch it and then you don't take vacation. You literally wait for the calls to come in. Well and you wait for the executives to come knocking on your door and the customers either figure out something that you forgot about, or they don't like the change and they, they'll call Rod, they'll call anybody. That's probably the first project where we didn't get negative feedback instantly. Hey, we didn't even get any three weeks later. We just kind of went on to the next project because we're all sitting there waiting for something to happen, and I think the customers were giving positive feedback, which is surprising to me. <laugh> The design engineer team doesn't always get positive feedback, just cause are so buried inside of the factory. So, I was actually surprised at how well received it was, which I think goes to the communication on the front end, as well as talking to our customers and then launching with exactly what we had said we wanted to do. So that was a surprise to me. The other one was, that was our first Crystal Achievement Award. Um, as a company...

Speaker 3 00:10:47 And that was on the requirements document.

Speaker 2 00:10:49 So that was the first one to Rod. He got everybody together and we celebrated it cuz as a company, it was honestly the first time that we have received an award for a design effort that we did.

Speaker 3 00:10:58 Yeah, I forgot about that.

Speaker 2 00:11:00 So that was our first one.

Speaker 3 00:11:01 And it was interesting because they, they put the Crystal Achievement Award on the, on the product requirements document. You can't put that on the requirements document, that you're supposed to win an award with it.

Speaker 2 00:11:10 It was a goal.

Speaker 3 00:11:11 Oh that's like, when you make a movie, you say, well you're gonna win an Emmy. Otherwise you lost <laugh>.

Speaker 1 00:11:15 <laugh> so it was subliminal. Yeah. Or prophetic.

Speaker 3 00:11:18 But somehow it happened.

Speaker 1 00:11:20 Well congratulations. Good job.

Speaker 2 00:11:22 It was a big deal back then.

Speaker 1 00:11:23 And so we're gonna roll into another product.

Speaker 3 00:11:27 We can go right into the window from there.

Speaker 1 00:11:29 Yeah. Tell us about the window.

Speaker 3 00:11:30 Because the window was probably a little more recent. The WinGuard window, we did the single hung and the roller and the picture window. Kenny was overseeing us during that time. So we were, again, even more team-oriented. We had several people working. I was working closely with the manufacturing engineer in the same office, so that any move I made, he had to know about because they were really emphasizing automated equipment, trying to, uh, balance the man hours with the arduous task. These products are heavy, and so trying to supplement that with handling equipment and things like that, I think it worked really well. One of the problem areas is obviously getting everything coordinated perfect, where glass meets the product and the product is ready for the glass. And so one of the things in the past is the, uh, typical WinGuard product had a different glass size on the top as it was at the bottom.

Speaker 3 00:12:17 So if only with the bottom one size came, you'd have a window sash sitting there or you'd have a window frame sitting there. Well, in this case, both sizes were the same, so you could always complete an order, and then just go ahead and wait for the glass to come for those next units. As long as you could combine, you know, as long as the glass was the same, obviously. Upper and lower glass was the same. And that really made it streamlined for the glass plant. They were always making the same thing for one size, top and bottom. So you could always complete an order. The idea was to keep clear of clutter, what we call boneyard. And I think everybody in the business knows what that is. So...

Speaker 2 00:12:51 I think this one is important to point out. Like, every project design has a different customer. So I think on the 770 sliding glass door, the customer was our dealer base, wanting a need and us to fill it. And I think when we switched over to the WinGuard Aluminum window system, our customer was manufacturing in the glass plant. And I think that changes the requirements, so our design team took that on...

Speaker 3 00:13:15 That's good.

Speaker 2 00:13:16 And they basically said, "Here's the process that we want to do. We want it to be one man hour per unit. We want the glass to come in here. We want the window frame to come in this way and sash." And it's the first one that I remember where the process drove us to design the window that would meet that process, because at that time and we still are it, the capacity was a major issue and getting resources was a, a really big issue. So the window design married a, a manufacturing process, which led to success of that line.

Speaker 1 00:13:45 Mm, that makes sense.

Speaker 3 00:13:45 So it is, yeah, it was definitely a different approach. Like I said, I was in a room with a manufacturing engineer and couldn't do anything unless he knew about it, because he's picking out equipment and designating things and trying to keep the ball rolling.

Speaker 1 00:13:58 Well, we're all more successful when we can be efficient. So that just makes sense way to go guys.

Speaker 1 00:14:03 Tune in next week to hear the second half of our conversation. PGTI University is the Customer Education Team for an entire family of brands. We began with the original EZBreeze porch enclosure line, then became PGT, America's leading brand of impact resistant windows and doors. We then added CGI, CGIC, WinDoor, Western Windows, New South Windows, Eco Windows and Doors, and our latest acquisition, Anlin Windows and Doors. We create products built to withstand major storms, keeping people safe, secure and prepared. Our exceptional brands give you the protection you need without compromising design or functionality. PGTI University is here to educate YOU, our listener, so that you can be more informed about window and door products.