TRANSCRIPT – Episode 50

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.

Speaker 2 00:00:19 And so we kind of came in with the, you know, the redneck, we can build this stuff knowledge...

Speaker 1 00:00:24 Right.

Speaker 2 00:00:25 But we didn't have the, uh, doctorate degree.

Speaker 1 00:00:27 Okay.

Speaker 2 00:00:27 But it worked sometimes people like that don't work well together. We were willing to try almost anything.

Speaker 1 00:00:34 Drum roll please…. We are so excited to launch our new series, Innovations. I mean, it's in our name, and we're going to explore the past, present and future of PGT Innovations. In our first episode, we brought in someone who could tell the story first hand, Rod Hershberger, our Co-Founder and Chairman of the Board, Rod Hershberger. Rod shares a few "redneck" stories of the early days of our company. Good morning, we are here on the clear impact podcast and we are kicking off a series around innovations, Dean Ruark and I had an amazing conversation last year, and it just sparked so many great ideas that we decided to put an entire series around this topic. So we are gonna be discussing the past today, and we have in studio with us Rod Hershberger. Rod is the chairman of the board and the founder of PGT Innovations. And so welcome Rod. So glad you're here.

Speaker 2 00:01:23 Hi, good morning. It's great to see you guys.

Speaker 1 00:01:25 Great to see you. Um, so this is the story, as I've heard it. In 1980, from a sketch on a napkin, you and Paul Hostetler began Vinyl Tech, and this was, and still is, a manufacturing porch closure product line, which continues today as EZ Breeze. And then seven years later, you added glass and began manufacturing windows. And then in 1992, South Florida was devastated by Hurricane Andrew. And so I'm excited to hear the first hand account of how the industry changed and how all of that led us to where we are today.

Speaker 2 00:01:59 Yeah, Andrew was a really interesting phenomena and, and a lot of people don't realize that it happened in August of '92 and Andrew's the A Storm. It was the first storm of the year. So I think what's really notable is we look at really bad hurricane years or really calm hurricane years. And, and it doesn't really matter. You can't, you can't really focus on that. It just takes one storm.

Speaker 2 00:02:21 In 1992, it was Andrew. That was that one storm. I think the most important thing before we ever did anything with codes or even looked at what was happening with window products and houses and, and people that were, houses that were destroyed, and buildings that were destroyed, is we became the red cross collection center, um, for the west coast for this area of the west coast. And we had permission to run supplies back down to homestead behind, as we said, behind the enemy lines, cuz there were certain parts there with no electric that you couldn't get to.

Speaker 2 00:02:49 So we were the relief company that was hauling truckload after truckload after truckload, and our employees were just volunteering - employees and their families - were volunteering

to go down and unload truckloads. So our presence was relatively new in South Florida, but all of a sudden, it was known by everyone cuz of all the trucks that we were sending down there. So they realized, Vinyl Tech at the time, PGT, we still had the name PGT, we had named that when we came out with our glass windows, was recognized in South Florida and sometimes you're, you're lucky and sometimes being lucky is better than being really smart.

Speaker 2 00:03:22 Um, but we had a new sales rep at the time in Miami, um, Abe Armenteros, his dad had just put in, um, quarter inch tempered glass, lived in the Kendall area, put in quarter inch tempered glass throughout his entire house. His neighbor's houses got destroyed. His house withstood it. So, we looked at that and not being brilliant structural engineers like we have on staff now, we knew that if the window was stronger, it's gonna withstand and it's gonna protect the house better.

Speaker 2 00:03:51 And there's, there's been an argument all along about which fails first or which comes first: the window gets destroyed, the roof gets blown off, or the roof starts peeling away and then it blows the windows out. I'm not gonna get involved in that conversation. My version of it is they both need to be stronger. And that's kind of how we approached that scenario after Andrew went through.

Speaker 1 00:04:09 Yeah, I remember that storm. I was in Naples, um, in 1992 and I had just moved to Florida and it was a little terrifying, but also I was young and stupid. And so we just saw it as a big hurricane party and we were very fortunate. We didn't sustain any damage and...

Speaker 2 00:04:23 You stayed, you're still there.

Speaker 1 00:04:24 We did. Yeah. But it was pretty terrifying to look at the red zone of a hurricane that was as wide as the state at that time. And it was like, oh, by the time you realize you need to leave, there's no place to go. <laugh> You can’t.

Speaker 2 00:04:36 Yeah. It was interesting. I woke up that morning and uh, turned on the radio and turned on the TV. And one of the first things I heard is the wind gauge on the national hurricane center had blown off and it's like, oh my God, like the wind gauge blew off. That's supposed to measure 200 mile an hour winds. This is really a frightening thing. And it had just sped up. It was like a huge tornado.

Speaker 1 00:04:57 Yeah.

Speaker 2 00:04:58 Um, when it came across the state.

Speaker 1 00:04:59 Yeah.

Speaker 2 00:05:00 So yeah, it changed, it changed our industry forever.

Speaker 1 00:05:02 Yeah, for sure. Um, it's one of the trivia questions that we ask in PGTI University is “When was Hurricane Andrew?”, and you know sadly, well, or maybe fortunately a lot of people who are coming in now weren't even born then.

Speaker 2 00:05:15 <laugh> I know.

Speaker 1 00:05:16 So they don't, they're like what, what? Nineties, what is that? So <laugh>

Speaker 2 00:05:19 Right, right. Yeah, pull out their phone and they can check it.

Speaker 1 00:05:22 Right.

Speaker 2 00:05:23 They can, they can look it up.

Speaker 1 00:05:23 Exactly. So, seeing the devastation on the ground, being part of the relief effort and being there and having that conversation around the tempered glass. So that led you to just explore, uh, future solutions around windows.

Speaker 2 00:05:37 You know, it was really interesting. Dade county came out and, and Dade County has always been known as having the toughest building code in the entire nation, and people would look at Dade County sometimes and just say, those guys are crazy, um, with what they're putting in code and the way you have to test product. And you know, we're just not gonna do business there. And yet Dade County came out after that storm and said "The code that we have is not strong enough. Look at all the houses, look at all the destruction," and, you know, there's the argument that, "Was it really built to code or were the inspectors lax?". But the storm was so strong and so big and so devastating that you could make that argument all day long, but it was easy to see the code just wasn't strong enough.

Speaker 2 00:06:16 So they announced they're gonna build a new code and they invited industry to be a part of it. And sometimes what you don't know is good because had we known all the nuances of going in to write a new standard or write a new code and try to get that passed, we'd have probably shook our heads and said, "No, we're not gonna do this. We're on the west coast of Florida. We serve just started recently, but we serve that community." But being involved in standard writing and code writing, particularly when you're writing a standard or code for something that's not been out there.

Speaker 2 00:06:46 It's not like you're adapting or adopting a new code that's a little bit stronger. You're writing a standard that's not been out there, you know, naive us. We put up our hands and said, "Yeah, we're industry, we wanna be involved." And so for the next two years, every other Monday, Monday was the day they worked on it.

Speaker 2 00:07:00 Every other Monday, there were two of us that drove down and we did two people on purpose cuz, over the course, we thought it would take about a year to write the standard. It took almost two. But over the course of that year, we figured, "People are gonna get sick, they're gonna take vacations, they're gonna have family things going on. And if we have at least two people attending all the meetings that they can, there's continuity."

Speaker 1 00:07:20 Right.

Speaker 2 00:07:21 And the other advantage to doing that is we had that three hour drive over and three hour drive back. And it just became like a Petri dish of ideas going out.

Speaker 1 00:07:31 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. You can also find us on Facebook and LinkedIn.

Speaker 2 00:07:50 We didn't know how to run some of the tests and we weren't members of ASTM, American Standard Testing Methods. So we were just looking at things and saying, "Okay, so now we're gonna build windows that are strong as walls. How are you gonna do that?" And we were fortunate that we were partnered with DuPont who had just come out with some new products and they stepped in and they had some product they thought might work. And then, you know, we heard about the

Australian Standard where they used sandbags or they shot 2x4's. And I think one of the advantages is we had a couple of, uh, PhD doctorates from, um, University of Missouri, and um, from Florida. And, but they had not been in the field and experienced the devastation, but they had the book knowledge. And so we kind of came in with the, you know, the redneck, we can build this stuff knowledge, but we didn't have the, uh, doctorate degree

Speaker 2 00:08:38 But it worked. Sometimes people like that don't work well together. We were willing to try almost anything. And so we came up with ideas of how to measure speed of a 2x4, what that weight should be. And we started testing in our lab without even talking to Dade County so that we could test like T1-11 siding, concrete block and figure out what we thought the speed should be of the missile, and because we needed to know that before we knew what we even needed to build a window to. You could sit there and say, "We're gonna build a window that's as strong as a wall." How strong is that wall? How do you know how strong that wall is? So we had to figure out a test method to figure out what the most common construction in Florida block siding.

Speaker 2 00:09:19 And probably the second-most common at that time was T1-11 siding, five eighth inch or three quarter inch. And we went to the three quarter inch thinking, "It needs to be stronger than what it was." And we found out that shooting 2x4 at block walls and three quarter inch T1-11 was almost the same. The strength of the siding was almost the same. Um, it would blow out the block or it would, you know, start going through. And so, once we figured out that speed, then we started working with DuPont on figuring out how to make a, a window, not only that would withstand that 2x4, but wouldn't just knock the glass out of the frame. Um, cuz you know, you get that really strong glass in a frame and there, we didn't use laminated glass at that time.

Speaker 2 00:09:57 It was a different type of glass with a, um, it was called century glass, that had laminate on one side of it. Um, and it was a little bit softer and sand in it were not good friends. Um, it scratched it really bad. But we came up with a thickness between us and DuPont that would work and withstand that 2x4, and we came up with a way to attach that to a frame. And this, I'm, I'm making it sound kind of easy, but this was over the course of probably 16 months. Maybe 18 months, with continual shots. And I'm, I'm sure if no one's told you about some of the first 2x4 shots that we had, someone can, but they were pretty scary, and pretty funny now when you look back like, you know, we had a barrel behind it and we had boards behind it and went through the boards, went through the barrel, went through the wall of the building.

Speaker 1 00:10:42 Oh no <laugh>

Speaker 2 00:10:43 Fortunately nobody was in, in the way cuz it would've just wiped somebody out.

Speaker 1 00:10:47 Oh gosh.

Speaker 2 00:10:48 You know, then we had to learn how to control the speed because you were using an air gun and of course we're building it out of a tool and die shop, so we had critical tolerances. Well in the real world, people didn't have those tolerances.

Speaker 1 00:10:58 Right.

Speaker 2 00:10:59 So when they talked about how much air pressure you needed, we were getting speeds that were double what they were advertising. And then, um, they came up with the standard.

We didn't think it was right. We brought everybody to our lab - and this was probably a year in - and we actually had a way to measure the speed that was really accurate. And we actually use this little triangular thing you use when you're a bunch of us like to hunt. And so when you're shooting your gun and you're doing your own loads, you shoot through this little triangular thing and it tells you how fast the bullet's going. So you could measure different weights of bullets and different grains of, of, um, gun powder. And you could tell how fast it was going with that. I wonder if we can dummy that down enough that we can actually measure the speed of a 2x4 going through it, like you would measure the speed of a bullet. It wasn't deadly accurate, but it was pretty close. And so that's how we came up with our first speed of the 2x4. Well then as we got more sophisticated, you realize you can measure off the 2x4 and you can put, you know, marks at like every inch or every six inches and use a, a really well controlled, expensive high speed camera and measure the black marks on the inches as they went by, and you could get the exact speed of a 2x4. So that's how we kind of got into the 2x4 speed. Okay. And we showed that to Dade County and they initially started out with 80 ft/sec, which would blow through block walls, blow through siding. We couldn't make a window that would withstand it. That's how we come up with the, now, 50 ft/sec.

Speaker 1 00:12:19 Missile level D.

Speaker 2 00:12:20 Missile level D, 9 lbs. 2x4. So it took years. And, and I know the industry looked at us and we get calls. You know, we, our names started getting out there. We weren't well known at that time, but our name started getting out there because we were working with Dade County and we were getting calls from other engineers in the country. It was good conversations, but it was funny conversations. It's like, “What are you guys doing? Like, you know, nobody in the world's gonna use that standard except Dade County. Like you're writing something for one county.” And it's like, yeah, but it's a good county and it's a good code, and we trust it. And we had kind of walked into this whole thing, thinking “Dade County is a little bit overkill, and what they require, we're not really sure that we agree with everything they require.”

Speaker 2 00:13:00 And as we went through this writing process and not had the, the education and the background, like some of the people did that had written code before, we realized these guys were really sincere about putting a code in place, developing a standard that would truly protect their clients and the people that lived in their county. So it wasn't long after Dade County finished the code and said, “This is really a good code.” And they put it out there, you know, cause people have to review it and it's gotta go through the consensus process that Broward County stepped up and then West Palm Beach stepped up and then, you know, sooner or later the entire state of Florida started looking at it and saying, “Well, you know, every place in Florida that has a, a high wind speed or as at risk of having a hurricane really should think about this standard and whether the standard should be in place.”

Speaker 2 00:13:45 And then that grew to the three different codes that were out there for the US became unified and it got adopted. And this is over the course of, you know, 10 years, 12 years. Where the entire code got adopted for impact code. So yeah, we're, we're um, kind of proud that we were involved in that, we can't brag about it because we were so unsophisticated and it was trial and error, but it was trial and error that we had, we had agreed, “we're just not gonna give up.” This is good for the industry. And I think that set little bit of a standard for what PGT has always been is, we will always advocate for codes that are stronger if it protects the consumer. You know, we're not gonna fight it if it protects the consumer and makes it safer for them, we'll find a way to adapt. And that's a little different,

I think, than a lot of, of window companies. It's not fun to change your entire manufacturing process because a code changed and it's difficult, it's expensive, and sometimes it's not almost not worth it. And we've always kind of taken a little bit different approach to it.

Speaker 1 00:14:43 Right? Well, the heart behind it is to provide quality and to protect people. And you went in, and you were part of the relief effort, so you saw the devastation and what that is like to be without electricity to be without a home. Like that's just foundational for survival, and when people's safety and security is jeopardized like that, like that's a big deal. That's, that's hard to watch and not be part of a solution, so it's exciting to know that we're part of a company that that's the foundation.

Speaker 2 00:15:13 Yeah. And I think, um, there there's all these side stories, but you've seen so many other storms and you see the floods in Oklahoma and, and you know, storms that hit the panhandle or storms that hit other areas of the country. PGTs almost always been in that relief effort. You know, we've, we've taken truckloads of supplies and dropped them off. And, and our, our customers know it, our employees know it. And it's really kind of funny because when Charlie was coming, one of our drivers, in like the middle of the night almost, called one of our customers up in Tennessee or Kentucky and said, “Hey, there's a storm gonna hit Florida. It's probably gonna be there like three or four days after I get back, I need to take a truckload of plywood back. I, I, I think our people are gonna need it.” Didn't call anybody here. Couldn't get ahold of anyone to get permission. He just did it

Speaker 1 00:15:56 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.