

Episode Title: Andre Baros on Revolutionizing Material Selection in Sustainable Architecture| Transcript

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Speaker 1

Welcome to Green Building Matters, the original and most popular podcast focused on the green building movement. Your host is Charlie Cicchetti, one of the most credentialed experts in the green building industry and one of the few to be honored as a lead fellow. Each week, Charlie welcomes a green building professional from around the globe to share their war stories, career advice, and unique insight into how sustainability is shaping the built environment. So settle in, grab a fresh cup of coffee, and get ready to find out why. Green building. Green Building Matters.

00:34

Charlie

Hey, everybody. Welcome to the next episode of the Green Building Matters podcast. Once a week, I interview a green building professional. Somewhere in the world, you've probably been seeing a trend. Over the last 12 months of our interviews, we've been doing the podcast for, gosh, eight years now. Technology, technology, and even AI. And we're going to have that conversation today, but we're going to focus in on material. So got a special guest. I've got Andre on here today. Can't wait to unpack a little bit about what he's working on at ACE Labs. Andre, how you doing today?

01:02

Andre

Great, thank you. Nice to be on the show.

01:04

Charlie

Yeah. I met some of your colleagues and can't wait to hear your journey. And I know we'll talk about architecture and then what you're doing today.

So take us back, though. I love for my listeners just to get that kind of foundation. Where did you grow up and go to school?

01:17

Andre

Sure. So I grew up in Chicago, born and bred in the city, still identify as a Chicagoan, went to college at iit and that was a huge change because, like, growing up in the city people think of it as a giant city, but really it's a lot of little neighborhoods. So you grow up in a neighborhood and it's like a small town, and then you go to IIT and it's downtown, and you meet the whole world overnight. Right. Great city to study architecture in. Got to see a ton of great buildings, meet great people, really solid foundation. And then including a semester abroad in Italy, which was even better. Great stuff. And then my early days kind of continue from Chicago. So from IIT got lucky and someone introduced me to Harry Weiss's office. So my early days were with Harry Weiss.

02:04

Andre

He's probably best known for the Washington Metro and a lot of transit. I got to work on some transit, got to meet people who'd been working on that project for 30, 40 years straight, which was pretty exciting. And all my early projects I could walk to, which was also amazing. One of my favorite things there was. Harry had an office, had a model in the office of a tower for downtown Chicago with wind power integrated into it. And it was one of these crazy ideas that people were like, that's never going to happen. He had another one for a river walk along the Chicago river, which Carol Ross Barney just realized again 30 years later than when he drew it. But it takes time sometimes. But it's worth remembering these inspiring big ideas and carrying them through.

02:49

Charlie

Chicago's such a great city for architecture. But if you had those ties to some of those kinds of what I would call early influence mentors, just a little

ahead of its time. I'm glad that it really came to life now. I was in Chicago a few months ago and I did the architectural boat tour, and I was just in awe. Man, it was amazing. Let's build on that. Where'd you go from there?

03:12

Andre

So from Harry Weiss, I went to Wheeler Kearns. I was convinced I wanted to design homes. And while I got to design some homes, really, Wheeler Kearns was my graduate school. The level of mentorship there was out of this world. And I recently bumped into a friend who also worked there. And I was like, is my memory just, like, delusional because I was young? Were they really that great? And she's like, no, they were really that great. They still are. Everybody there is a solid mentor and just kind of an old school. Everybody does everything in the office, but not at a basic level. Like, everybody's an expert at everything. Really, really shockingly good offers. I think they're the only ones who've won two AI Chicago Firm of the Year awards. Beautiful work, beautiful people. I had a great run there for 10 years.

04:02

Andre

Got to work on a whole range of stuff. Some really experimental case study projects. Net zero, before we had a term for net zero, a lot of super insulated projects and a lot of passive ventilation and passive cooling schemes. We did a project, a home with a labyrinth for cooling underneath it, you know. Right. Like really cool stuff then. And like, one of my themes is that we didn't call it sustainability. It was just responsible architecture. Right. It was just the right way to do things. I think today they would use the term sustainability, but back then we didn't. It was just the right way to do stuff. Which is funny because then I went to Hoke, like, small office. My biggest project was 30,000 square feet. Jumped to HOK, and my first project was like 12 million square feet. Just astronomical. Jump. But I Also learned that when you change scales like that, sustainability has to go from being just how you do it to a more formal, structured narrative. Everything about a project has to become more structured at 12 million square feet. And

sustainability, just one more of those things. You have to have a whole team dedicated to it. You have to have the expertise. And that was the luxury of being in a place like hok. I mean the specialists that were on hand. I think that just sitting near me, I had two PhDs in sustainability who are a reference. Right. Great resources, worked there for a while and then followed family here to Colorado, kind of. My father in law became ill. We came out to support them and ended up in Colorado. Very different environment than Chicago.

05:44

Andre

And unfortunately, sustainability went from something I could take for granted on projects to something I really had to work for on projects. So that was another kind of shift. Even though people here are really connected to the outdoors, the investment in architecture is lower than Chicago and the specialization, sustainability and stuff is lower. It's just a lot more work at all levels to achieve really sustainable projects. Here it's been 10 years and the market's matured a lot, but it was kind of a shock that I didn't expect coming from Chicago to Colorado, but still achieving good stuff. I mean, the first project I worked on was chasing net zero for an office building, which was cool, but it was kind of like treading new ground here.

06:30

Charlie

Kind of counterintuitive, right? You might just assume if you're not from there. I'm in Atlanta and one of my business partners over the years moved to Bolton and I can see some of that. Okay, so love all of those firms you've worked at and thanks for showing us the scale there too, when you jump. Sustainability though, was it earlier in your career or did it really show up at the one firm you know, maybe. When did that first come on the scene for you?

06:56

Andre

I think sustainability as a term showed up at hok. That's where, like I said,

it was really in the structure of the firm. When you go to big projects at the jump. Before that, I'd say it was more about nature or responsibility than sustainability. My career spans a while and sustainability wasn't as much of a buzzword early on, but I became vegan 20 years ago just for the lower carbon footprint. And I exclusively biked or took public transportation for 25, 30 years because that was just the right thing to do. It wasn't necessarily sustainable, it's just the right thing to do. But like I said, when I got to hok, I realized that you have these structures in place, this tracking in place, this expertise in place to take bigger projects, more sophisticated projects, and take them up to that next level of high performance and so on.

07:54

Charlie

I keep hearing it, the right thing to do and responsibility. I love your attitude towards it. Even ahead of plaques and rating systems and all that. There's a place for it. They're tools. What about other mentors you mentioned? A few. Does anyone else kind of influence you, open the door, challenge you along the way?

08:12

Andre

Gosh it's funny, I've. I talked to a lot of young folks today who come to me looking for mentorship and often they complain about having a lack of mentors. I could go on forever about my great mentors, right? I've been super lucky from at IIT, I had people like John Kriegshauser, who taught me how to build things, and Maitan Kadella, who are phenomenal mentors. Then at Harry Weiss, Ellen Mills, who I kind of butted heads with at the beginning. And then I realized she was trying to help me out and she became a phenomenal mentor at Wheeler Kearns. Everybody there was a great mentor. But Mark Weber really jumps out. Mark had this. Mark had a background in building things. He grew up in the trades, his family was in the trades. And he had this really nonsense attitude about anything to do with architecture. He's like, just go figure it out. Do we have to build a model? Do we have to do another drawing? Do we have to go out and mock it up? Anything is solvable. And that was really important for whatever,

early part of my career. And then, sorry, jumping ahead at hok, even though there's a lot of great people, it was really Randy, my manager, leader, friend, who taught me about project management as an art rather than like a responsibility, and made it fun. Not necessarily fun, he just made it. He took the stress out of project management. Showed me good management, great mentor. I could keep going forever, but there's a few.

09:42

Charlie

Yeah, that's important. Project management, somebody will use the rest of your career. I love to give shout outs to the influencer. So thanks for giving us a sneak peek there. How about accomplishments? What's on the highlight reel? Andre, as you look back.

09:56

Andre

You know, it's funny. My kids, I have two teenagers and I have great relationships with them. Like nothing else goes well. At the end of the day sustainability and all the work I do is for the next generation. And so having good relationships with my kids is kind of a huge deal for me. I definitely have to go there in the same vein. I taught for a while, and a couple months ago, I was walking down the street and I bumped into one of my past students and he's like, hey, Andre it's great to see you. Thank you. He's like, by the way, we know that you were working more than 40 hours a week while you were teaching, and it was a real stretch for you to commit to teaching, but we appreciate it. And you made a difference. Like hearing that on the street from a past student, again, just kind of makes all the difference. So that's my proudest moments.

10:49

Charlie

Way to go. And I can tell you, being a dad, that's really cool, man. I've got three boys. They're 16, 13, and 11. Let's fast forward to the present day, but something in the middle we haven't quite talked about yet is material. So

how the heck did you choose to become this material expert? When did that happen?

11:05

Andre

It's really funny. It wasn't so much a conscious effort, but when I look back, it was always there. I started at IIT and my favorite thing was the wood shop. And I ended up fabricating furniture as a side job during school to make money building custom furniture, building models for folks and experimenting with materials. I had some disastrous experiments with trying to do metal casting for furniture parts and resin casting. And some of it worked, some of it didn't, but it was like leading into it, milling metal parts, all kinds of different woods and wood species, and then at Harry Reese, a little less directly touching materials. But I became responsible for the library there and started understanding how product reps became your expert on materials. Right.

11:57

Andre

Like, no matter what material you needed, there was an expert out there in that rep network who you could reach out to and be like, hey, teach me about fiberglass. I've never heard of it. Like, help me figure that out. And then again, Wheeler Kern is a firm all around detail and craft and sort of like a scarpa esque attention to detail. And so there the library was massive, really well organized, a lot of physical samples, hundreds of window samples and tile samples and metal samples. And this sort of attitude of like, this product comes in this format. I wonder if we can get in this format. Hey, this was invented for like, there was one project where we used panels designed for railroad car floors as wall panels because they fit what we needed better, right? From a durability and an aesthetic perspective, kind of going outside the normal range to go find stuff. At hok, I was a designer, but I was always obsessed with picking out materials. Even designing a high rise. What's the title in the lobby? I couldn't get away from it. It was just kind of a bit of this, a bit of that but this constant thread was tech and materials, connecting everything else I did along the way.

13:11

Charlie

Okay, that's how you went all in on materials. Like you said, not a conscious choice. That was happening. But you're right. When you look back on it made sense. That's fantastic. Tell us about today, a little more about ACE Labs and what's a day in the life of Andre right now.

13:26

Andre

I made the jump to ACE Lab a couple years ago. Actually started as a user, right. I love being an early adopter of tech. I was one of the first Revit users in Chicago way back in the day and stumbled into aslab and thought, wow, this is really potass. I stumbled into aslab and I was like, wow, this really has potential to be a game changer and sort of fill a gap in the industry, making materials and relationships with reps more accessible. Right. Going back to that experience of Harry Weiss, where I really loved being able to reach out to a rep to ask a question. And so now I'm at aslab and most of what I'm doing is actually on the back end designing our database.

14:08

Andre

So we started out with, I think Windows was our first category. A few Windows make it more accessible, normalize the data. Just make searching for Windows less of a comparing apples and oranges task and more about just pulling something up, comparing easy data. And then that was successful. And we grew and added doors and insulation and barriers and roofing. And you start adding more and more categories and you realize there's a lot of information an architect needs to know. There is a lot of different and really unique information. The durability on a window is completely different than durability and insulation. Right? Different criteria, different performance things. And so my job is to stay ahead of that. And figure out, okay, we're going to add more content. What do we care about? What do users care about?

14:59

Andre

What metrics, aesthetic metrics, performance metrics, sustainability metrics, matter, and how do you bring that all forward without letting people drown in data? I think for Windows alone, we have over 200 data points. We collect, or potentially collect around Windows. That's a lot. But when you go to our website, it's clear and easy and hopefully as digestible as simple data when you need it. Information. I'm just constantly in the background answering our team's questions around materials. Right. We've got a huge team of people collecting data and they have questions every day about, what is this? What does this mean? What does this term mean? Is this important? Do people care about this?

15:41

Charlie

Yeah, it's got to be. You're right. Easy to use, but a database that people trust. Is this the latest and greatest? Is it up to date? So sustainability. This is the Green Building Matters podcast. Are you putting embodied carbon data in there? Recycling? How does sustainability look?

16:00

Andre

I'm glad you asked, because sustainability kind of runs through in the veins of everybody here. That's kind of where we all started from. At the end of the day, it's something we care very deeply about, going back to that responsibility. But on the other hand, we also realize that one of the problems in the market is if you're only a sustainability tool, then you're one more thing people have to do. It's that siloing of information, that siloing of data. So we really want to say that sustainability isn't a separate bucket. It's part of the same bucket of all the decisions you make in a project. So that when you're looking for a roofing material, for example, you find the best choice for your project, and right there you can see the sustainability options, or if there is no sustainable option, you can see the data and what's out there and make a responsible choice based on what's

available. As much as possible, we want to facilitate choices, and we think architects are responsible people who like to make the right choice, but often don't have the data at their fingertips. Again, it permeates everything, but not as a separate entity, as part of the basics of what aslab is about.

17:09

Charlie

Got to break down those silos. Related is a kind of change management, let's say. So you were a user, an early user, you jumped over to work on this team. But let's say you can find one champion of some software like yours within a firm. How do you really highlight them and gamify it and make sure that there's momentum even around that singular user? I don't know any tips on kind of change management? When a customer says, oh, yeah, we.

17:35

Andre

Signed up for this, yeah one thing I think that makes a huge difference is taking work away, not adding work. Like there's always new platforms coming up and I think architects as a group have become fatigued of like another subscription and other platforms learn. And while I think that's a little bit exaggerated, the perception is out there and so it's really helpful if things like us pre-populating a lot of this data. If you think of ASLAM as a workflow tool and just a place to manage all your material, making decisions, it is that. But it's a spreadsheet that kind of populates itself because we're already building the database. So we're trying to take away one more point of friction in a day to day operation. Saying here you can just make your own spreadsheet. But if we've got the data, it'll auto populate little things like that. Or if we don't have it yet, you can reach out to us and we'll answer the question for you. It's pretty cool, the questions people send our way every day. I'm like, hey, I was searching on your platform and I noticed you don't have X yet. Can you help me find X? We do it right because we really want to just make people's lives easier, help people make good material decisions.

18:43

Charlie

Wake Glow service, they just have to be bashful to reach out. I love that. And you're right. Take away show you're not disrupting their workflow, you're really in and out of their normal workflow. Or maybe in sales, are you selling vitamins? Are you selling painkillers? Right over here, this is nice to have. And over here actually helping you with some pain that you're having. Sometimes you have to point that out. Well, that's exciting. What you and your team are building at Ace Labs, what's next with maybe not just sustainability and green buildings, but materials? I don't know. What are you reading up on? What are you excited about? What's next?

19:17

Andre

Gosh so I just finished. I love to read. Looking back, I love to read. A couple months ago I read Louis Tsumaraki Lewis' book Manual of biogenic housing design. And one of the things I loved about it is they have a chapter on wood and they're like if you know, wood is a very sustainable material if it's sourced responsibly. And so the chapter started with how to check if your wood is sourced responsibly and not if there's an easy way. Like is it FSC certified? But what if it isn't? Can you still check? And so they explained how to look at aerial photos and assess the providence of the wood. You were, you were getting cool. So that idea of thinking about the entire life cycle of the supply chain is really neat to me. I ended up following that up with reading a book on forestry and kind of deep dive of like, okay, let me understand that supply chain better. Let me understand the constraints around it, the good, the bad, the ugly, to be able to make informed choices.

20:13

Charlie

We're going to talk more about books in a minute. And while this is an audio podcast, you have a beautiful bookcase behind you there, so I can tell you're an avid reader. We have this shift towards AI as I understand and

I'm learning more about your tool. How do you think that's going to help? And do you really think that can help solve some of our sustainability problems?

20:33

Andre

I think AI is interesting. It is like any tool, it has its pros and cons and wins and losses. I think the main risk of AI is actually the power consumption and from a sustainability perspective, it's not the greenest tech. But from a day to day workflow perspective. I can't believe how much time AI saves me. Every day I'm doing quality control and millions of data points and without AI to help me write formulas for interrogating that data, I'd be stuck. Sure, I could do it myself, but why spend a whole day writing a little formula to check some data or a little script when AI can do it for me in half an hour? The time savings is huge. And just the day-to day quality of life at the end of the day, I think it's going to make our lives easier, not take jobs away. But that's just my experience of it. Right. There's a lot out there.

21:31

Charlie

I like that outlook. You're right. Big picture, we got to get more sustainable building these data centers and how they're powered, but in the workflow and kind of a greater good thing. What's more eco-friendly: recycled paper towels or Dyson Airblade hand dryer? We can have, we can have these debates. Let's get to know you a little more here. Kind of some of our rapid fire. What would you say is your specialty or gift?

21:55

Andre

Gosh I guess at the end of the day I think my optimism is. And it's probably something I picked up from our mentors along the way. But this sort of can do attitude, you can do anything if you stay at it long enough to work hard enough. Problems are solvable. It just takes effort. Like if you think about the idea of why did nobody build a slab before? Well, maybe no one was crazy enough to think you could actually build a catalog of every

architectural material. But that optimism of, sure, it may be a big problem, but a bit at a time, it's solvable. I think that's my special still, optimism.

22:28

Charlie

Can be contagious in a good way. Where there's a will, there's a way, and hey, who better to do that than us? You've put together a great team and I love it. So do you have any good habits or routines or rituals that help you stay on point?

22:41

Andre

Yeah, I think it varies seasonally. Honestly, it's spring right now, so I'm completely obsessed with my garden and planting and I'm doing a little rewilding project. I've got a lot of seed in the ground. But in general, my habits are reading. I try to read every day and read a variety of things. A little bit of literature, a lot of technical, a little bit of history and kind of balance it out. Again, I try not to silo my knowledge and so I'm reading a bit of everything, technical books, aesthetic books about architecture and so on. And then podcasts. When I'm not reading, I'm listening to podcasts.

23:18

Andre

I've actually listened to your podcast a bunch over the years and it's a great way to fill in gaps and hear other people's perspectives, which is one of the things I really love from podcasts.

23:29

Charlie

I really appreciate that. And yeah, just, you always want to realize that there's a lot more to either learn or get inspired by. You don't have to always just learn, but you can just be inspired or relatable. And that's why I do this podcast. And I've kept it up. Andre is just I think some part of your story, hopefully someone's getting excited about maybe a little relatable. Maybe they needed to hear that. That's something else you can get from the

books or the podcast. So with reading, is there a certain place you like to go read? Do you have a certain ritual around that or.

24:04

Andre

Yeah like just off camera here I've got a little reading couch. It's a little two seater love seat. And every night I sit there with a book and my dog, right. The Dog puts her head in my lap, and I've got a book there, and for half an hour or an hour, I read every night. It's like the perfect way to wind down and wrap up the day.

24:22

Charlie

That's amazing. I'm glad I asked. So as we get to know each other more. I'm a fan of the bucket list. Not everybody has a bucket list, but maybe travel, adventure, maybe write a book. I don't know. What are a couple things in your book?

24:36

Andre

It's funny you should say that, because I think my bucket list item is going back to books. I really want to write a book, but not just any book. I think it'd be fun to write a kid's book on architecture and kind of. I've done some workshops with kids on architecture, and there's. It's really fun. And I think there's an opportunity there that I'd love to take the time to get to one day.

24:57

Charlie

All right, there you go. How about travel, though? Is there a place you want to go back to or a place you'd want to get to for the first time?

25:04

Andre

Yeah, I love traveling. I'm actually heading off to France next week to shop. I'm curious. In Paris, they did a lot of restoration buildings for the

Olympics, and I'm curious to go see some of those, like, old buildings made new again. I think there's gonna be something interesting there.

25:21

Charlie

I love it. Well, the bucket list is tied to buildings, architecture, and rejuvenation. I love that, man. Okay, so books. We've been talking about it. You've recommended a few. I'll put links in our show notes, but any others that you would recommend to our listeners? And for our listeners, I can see behind them, books about Gaudi. I mean, books over here about buildings and data. It's a beautiful collection. I admire collections of anything. And I think I would call this just an amazing book collection.

25:51

Andre

It's funny. The Lewis Tuberocki Lewis book is the one I recommend the most. The other one is Four Walls and a Roof by Reiner degraaf. Sort of a memoir about being an architect that I think strikes the perfect balance of all the different things an architect has to do, from philosophy and theory to the nitty gritty of client management and detailing. It's kind of got a bit of everything in a really readable book.

26:21

Charlie

We're going to put links to that one as well. These are fantastic recommendations. So as we start to wind down just a couple more things. As you look back on your career, is there anything you wish you'd have known earlier?

26:33

Andre

Yeah it's funny, I wish I'd known earlier how varied the architecture profession is going and the whole AEC industry, I think going in, I had a very narrow understanding of what an architect was and what the possibility was. And along the years meeting landscape architects or

architects who are really specialized at hok, there was this. There's people in the hospital group with just really super detailed knowledge. And so I think, I wish I'd known earlier that you could specialize more and kind of go down these paths. I'm very happy to be a generalist, but I think that's what I wish I'd known earlier was the unique opportunities that are out there.

27:16

Charlie

A lot of wisdom was shared today. Last question as we wrap up. Let's say someone's listening to this and they're just, man, they're fired up about your story. Maybe they're getting into the material side of this movement. Any words of encouragement for someone jumping in right now?

27:32

Andre

I think one is kind of building on what I just said about knowing that there's possibilities out there. I think one of the things that I've found the happiest in people I've met is the folks who found their niche and didn't kind of care what other people say. Maybe there's a stereotype in the profession, so the glamour of being a designer, the money of being a leader or something like that. But I think finding your niche and falling in love with it, whether it's technical or design or materials or whatever, but finding the spot in the profession that you love and leading into it would be my advice for anybody young because there's so many cool, unique niches out there to sell.

28:14

Charlie

Okay, you heard it here, man. I've really enjoyed getting to know you more. I've met some of your colleagues and to our listeners now, we have interviewed just three amazing people that are just part of the team at ACE Lab. And so hopefully you can tell I'm a fan of their work. Hopefully it shows you, though, you can get together from different backgrounds. I would say that about you and the other two I've interviewed and just look at what you're building. So for those listening that you're thinking, hey, what am I going to do down the road? Or could I be a part of a company like this

in the future? Just Yeah, I mean, I think that we're proving that out here and I just love learning your background. So Andre, man, just keep up the great work.

28:48

Charlie

I look forward to connecting with you more to our listeners. Please connect on LinkedIn and let Andre know what you thought about this interview. Thanks for your time today.

28:55

Andre

Thank you so much. Great show.

Thank you for listening to this episode of the Green Building matters podcast@gbes.com Our mission is to advance the green building movement through best in class education and encouragement. Remember, you can go to gbes.com podcast for any notes and links that we mentioned in today's episode and you can actually see the other episodes that have already been recorded with our amazing guests. Please tell your friends about this podcast, tell your colleagues, and if you really enjoyed it, leave a positive review on itunes. Thank you so much and we'll see you on next week's episode.