Dimensions of Access Design Transcript

00;00;00;00 - 00;00;28;04
Karen Brown
On today's podcast, I'm joined by our frequent guest, Ron Wickman, an architect specializing in accessible design. Also joining us is doctor Mark Iantkow, a Canadian with an inherited eye condition who has been legally blind since the age of ten. Mark is an advocate and trailblazer in equity centered housing, universal design and adult education. With over four decades of experience, Mark has shaped policies, led groundbreaking research, and empowered marginalized communities.

00;00;28;06 - 00;00;47;24
Karen Brown
From his tenure with Parks Canada to his leadership in disability advocacy and post-secondary education. His work continues to drive meaningful, cutting edge change. Welcome, Mark and Ron. It's so great to have you with us again. As always, Ron and Mark, such a pleasure to have you here.

00;00;47;26 - 00;00;49;17
Dr. Mark Iantkow
Thank you. Pleased to be here.

00;00;49;19 - 00;01;09;06
Karen Brown
Terrific. Let's start with a little bit of information, for our listeners and viewers so that they have some context about your world, a bit about how you gather information and how you deal with the world.

00;01;09;08 - 00;01;36;00
Dr. Mark Iantkow
You know, I've grown up with this visual disability, so I've kind of evolved in terms of how I access and utilize my built environments. When I, when I'm navigating myself through a built environment and often seeing myself going over to the local mall, it's not as if I'm accessing a, well, what's what's the lighting like? What is what are the audio audible cues that I'm dealing with?

00;01;36;01 - 00;02;03;12
Dr. Mark Iantkow
What? What are even my olfactory senses picking up and how close to the fower shop? Am I close to the coffee emporium? What about feeling the light through the through the, through the skylight in the mall, etc.? All of that coalesces in a really meaningful way for me, and it's almost subliminal. Subliminal. Excuse me. A lot of people with disabilities often don't know.

00;02;03;12 - 00;02;34;06
Dr. Mark Iantkow
How do we explain how we utilize and how we function within our built environments? So when a designer is is thinking of constructing for universal design in quotations, it's important to understand how we as people with disabilities, and of course, I come from the visual disability perspective, how we as people with disabilities that might include physical disabilities as well actually function, and how we also subliminally access our built environments.

00;02;34;08 - 00;02;36;10
Dr. Mark Iantkow
I hope that helps a little bit.

00;02;36;12 - 00;02;43;27
Karen Brown
It does. And now, is it, fair for our viewers to understand that you are completely blind?

00;02;44;00 - 00;03;07;25
Dr. Mark Iantkow
Yes. All I can see now at this stage of life is some kind of light perception, that's all. And even at that, it has to be a really bright day. Years ago, when I was younger, I could actually read, I could write, I could, you know, perceive the visual world, whereas now, it's you might as well say I'm totally blind.

00;03;07;27 - 00;03;20;05
Dr. Mark Iantkow

Interesting transition over the course of my lifetime, I've seen both sides of the world. And I think that's important when it comes to understanding design and the access design continuum.

00;03;20;07 - 00;03;47;19
Karen Brown
Right now, most people who have gone to school for architecture or design of some sort will be aware of, the principles of universal design and the inclusive design paradigm. So I want to just very quickly make note of those things so that people understand what informed your work in the in the early days, where you bounce off, if you will.

00;03;47;19 - 00;04;13;12
Karen Brown
Okay. So the principles of universal design are equitable use flexibility in use, simple and intuitive, perceptible information, tolerance for error, low physical effort and size and space for approach and use. So those were design developed by Ron Mace their academic in nature. Am I correct in saying that they're academic? Yeah.

00;04;13;17 - 00;04;15;15
Dr. Mark Iantkow
No indeed. Your sorry. Yes.

00;04;15;21 - 00;04;47;08
Karen Brown
Right. The inclusive design paradigm has five principles. Inclusive design places people at the heart of the design process. Inclusive design acknowledges diversity and difference. Inclusive design offers choice where a single design solution cannot accommodate all users. Inclusive design provides for flexibility in use, and inclusive design provides buildings and environments that are convenient and enjoyable to use for everyone.

00;04;47;10 - 00;05;03;20
Karen Brown
So building on that, you developed something called the Dimensions of Access Design. Can you tell us a little bit about

what led you to that development, and sort of the Coles notes of how you developed them?

00;05;03;22 - 00;05;34;25
Dr. Mark Iantkow
Indeed, if I go back far enough, I was involved in a project with the Canadian National Institute for the Blind. This goes back to the late 1980s, and we had some funding to to advise on access to transportation terminals throughout the country. So that was kind of our springboard into explaining how people with visual disabilities, would embrace the concept of environmental design for our own population sector.

00;05;34;27 - 00;06;11;20
Dr. Mark Iantkow
And at that time, I came up with five, I call them elements, for wayfinding, elements of wayfinding for people with disabilities, how to navigate and find your way through a structure, through (garbled). And those those elements at that time were color, contrast, lighting or the way an environment is illuminated. Auditory cueing included, including which of course, would deal with acoustics, tactile information such as the tapping of a white cane and ergonomics and ergonomics was used in the broadest sense.

00;06;11;20 - 00;06;41;18
Dr. Mark Iantkow
You know how, how to how one could map and the logical layout of a structure. So I thought to myself, well, that's wonderful, but that was a, you know, you can use those elements. At that time, I thought they were elements for designing an environment generally not only for wayfinding, but for how to utilize a built environment for a person with at that time, a visual disability.

00;06;41;20 - 00;07;07;16
Dr. Mark Iantkow
And then I thought, well, that's wonderful. That might cover the the elements which evolved into dimensions. Dimensions are a little bit different. Dimensions influence one another. They, there's a fluidity between dimensions. They are dynamic. There is an

organic relationship, if you like, between dimensions where the elements are separate. I keep saying we are not Lego sets.

00;07;07;16 - 00;07;33;16
Dr. Mark Iantkow
We people are not, and do not function like like a Lego set. We are organic beings and we use built environment in an organic way. But I also thought, well, that's wonderful for people with visual disabilities and perhaps people who have cognitive issues as well might you utilize those, those elements and now dimensions of access design. But what about people with physical disabilities?

00;07;33;18 - 00;08;03;18
Dr. Mark Iantkow
So I came up with seven what are now termed as dimensions for people with physical disabilities that are quite different. An architect cannot generalize from from if they have a concept as to how to design for a person with a visual disability, or even people who might be hard of hearing or deaf or deaf blind, that doesn't necessarily mean they know the intricacies of a person utilizing a wheelchair, for example, and vice versa.

00;08;03;21 - 00;08;31;02
Dr. Mark Iantkow
So I thought, we have to go beyond those principles of universal design. Or perhaps look at how we can get to the ultimate, of those principles of universal design through the how of designing with a dimensionally oriented concept in mind. Sorry, that's the Cole's notes version is the how, I guess.

00;08;31;04 - 00;08;59;03
Karen Brown
That's okay. I want to kind of underscore what you said with a couple of things that you wrote, which for me really brought the points home. You wrote the principles of universal design describe the what while dimensions of access design answer the how? Yes. And then you also said just because a designer can design for physical disabilities doesn't mean they can design for sensory disabilities.

00;08;59;10 - 00;09;16;04
Karen Brown
I think that's a really important statement where people will take on a project and they will be single minded about one or the other, but the need is is much more universal than that now. And Ron, perhaps you can jump in on this as an architect.

00;09;17;24 - 00;09;45;21
Ron Wickman
Yeah. And I'm actually going to just go back to your comment, Karen, about students of architecture being exposed to, the concepts of universal design, inclusive design. And no we're, we're, we're not we're not exposed to that stuff unless we, we, discover it for ourselves. So it's not it's not brought to us.

00;09;45;21 - 00;10;08;10
Ron Wickman
It's it's something that we can we might do our own research on because we're we have a particular interest in that. And, you know, I would I would have been a student that fell into that category. The, the principles of universal design that just had just been been started in 1986. So, I that's when I was going to architecture school.

00;10;08;10 - 00;10;39;09
Ron Wickman
Right? That's when I had started. So I really didn't learn about the principles until later. Later on when I was out in the workforce. But just thinking about what Mark was saying to I, what I really appreciate is that there for an architect, I think there's this abstract idea of universal design and inclusive design, these big, lofty statements that we that guide us in our thinking, hopefully.

00;10;39;11 - 00;11;01;10
Ron Wickman
And then on the other side is the, are the codes and standards, the building codes, and they're very prescriptive, generally speaking, so they tell us what to do. Like if you're blind, there's a good chance you'll bump your head on something that's low, low

hanging. So let's make sure that, nothing hangs lower than a certain dimension.

00;11;01;12 - 00;11;29;14
Ron Wickman
Well, what if you're really tall or or of a different size? That's just a dimension that we've come up with that generally would fit most people, but not everybody. And, you know, really thinking this through for myself and after so many years of doing it, I really I really work in, that middle world between the high, lofty academic ideals and the more prescriptive code requirements.

00;11;29;14 - 00;11;49;03
Ron Wickman
So I challenge both sides. And then I go to people like Mark and others, and I go, what do you think of this? This is what I'm designing. This is what I'm doing. How do I really make this work? Let me spend time with you and experience space with you, and maybe I can learn something. And of course I do.

00;11;49;05 - 00;12;19;02
Ron Wickman
And often I find out that the code doesn't really, doesn't really do a good job in, in meeting the needs of so many people. And for me, that's that's what I do. That's what what I find very satisfying as a designer and an architect. And I think for a lot of, other architects and designers, that may be a world that, is just difficult to work in because of, time constraints, other, other issues and so on.

00;12;19;02 - 00;12;35;22
Ron Wickman
So, so it's very important what Mark's saying, and trying to find that that sweet spot where we can, we can work in design to really, really make it right for as many people as possible.

00;12;35;24 - 00;12;36;08
Karen Brown
Right.

00;12;36;14 - 00;12;39;19

Dr. Mark Iantkow
And just I could build on your. Just go ahead. Go ahead.

00;12;39;21 - 00;12;56;04
Karen Brown
Well, just before we get too far from codes, as I have said many times on this program, and I will continue to say code is the very least you have to do to avoid getting sued. So we can do so much better. Mark, I'll I'll throw it back to you.

00;12;56;07 - 00;13;18;16
Dr. Mark Iantkow
I was going to add again, since we're into a bit of a dialog adding to to Ron's comments. Yes, the codes are very prescriptive, but if we go back to the barrier free design paradigm and that's what was that was what was prominent in the 1980s before Ron Mace came up with this concept of universal design. I could see where everyone's mind was going.

00;13;18;19 - 00;13;56;28
Dr. Mark Iantkow
Ron Mace's mind was going because to be so prescriptive, it doesn't always work. And this is where accessibility and functionality might be a little bit different. Yes, it could be barrier free design accessible, but doesn't necessarily mean it's functional. So I can read what Ron Mace was thinking about. We have to be much broader with and much more lofty if that's the right word, with the actual principles as to what we're trying to achieve, equitable use, you know, simple intuitive use, perceptual information, which perceptual information for me is really broad.

00;13;56;28 - 00;14;33;03
Dr. Mark Iantkow
And a lot of time designers don't understand what perceptual information might mean. So what am I getting at. The barrier free design paradigm was extremely prescriptive, which would fit perfectly into building codes. But the universal design principles to try to attain them, that was that was a quantum leap from the barrier free design paradigm and the code into, you know, how do we how do we now achieve these very broad principles.

00;14;33;06 - 00;14;35;09
Dr. Mark Iantkow
So I hope some of that made sense.

00;14;35;11 - 00;15;05;10
Karen Brown
It it does. I was very struck in your video by your discussion of obstructions so there are a lot of them, but there were some in particular that particularly resonated with me. If I can sort of call them out to you one at a time, there are just 4 or 5 of them. Could you give us a sentence or two on how they are obstructions and how they how that obstruction would impact people?

00;15;05;12 - 00;15;12;10
Karen Brown
Is that fair? Okay. Wayfinding.

00;15;12;13 - 00;15;42;12
Dr. Mark Iantkow
Yes. We finding for people with visual disability can indeed be an obstruction. And Ron, you might give me feedback about this. A lot of designers design a building without even wayfinding in in thought. That's kind of an afterthought. You know, some designers like to design this magnificent looking edifice. You know, esthetics are very important functionality to some extent, and human centered design to some extent, too.

00;15;42;15 - 00;16;12;11
Dr. Mark Iantkow
But wayfinding is often an afterthought. Oh, well, we'll get an ergonomics expert or signage expert to know. So, you know, insert the signs afterwards. Well, really we should think of the wayfinding elements again, principles, now dimensions of design, before the conceptual plans are even put into place. That wayfinding should be integrated initially right up to the final construction.

00;16;12;13 - 00;16;38;16
Dr. Mark Iantkow

So so that's just an example of wayfinding I think. Well, I want to add, you know, designers might understand the ideal though. Principles to to attain, to try to attain. But it's important that they also understand what constitute obstructions for for people with cross disability. It's not only me as a person with a visual disability, but for a person utilizing a wheelchair.

00;16;38;19 - 00;16;46;07
Dr. Mark Iantkow
Just because you understand what the ideal principles might be doesn't necessarily mean you don't understand what might be the obstructions.

00;16;46;09 - 00;17;14;14
Karen Brown
Right? I used to live in a development that had horrific and still does horrific wayfinding, problems. There was an elevator from the shopping area to the residential area, but you had to know where it was before you knew where it was. There was there was a universally designed washroom, but again, you had to know where it was before you knew that it was even there.

00;17;14;16 - 00;17;23;26
Karen Brown
And you're absolutely right. They, they it's an afterthought. Ron, did you want to weigh in on that? Because I know Mark calls on you.

00;17;23;28 - 00;18;02;04
Ron Wickman
Yeah, I was just I was thinking about that, and I one of one of my, you know, sort of, I'd say my top five lessons I learned, in school, came, this one came from, Brian MacKay-Lyons, who's, very well known Canadian architect, working out of Nova Scotia. But he would always say, you know, if you if you could look at a floor plan for 10 seconds and then you know, the floor plan would be removed from you, could you, could you sketch that floor plan, like, was it, was it a simple design in the sense of like, would you know how to design the layout of it?

00;18;02;07 - 00;18;24;13
Ron Wickman
And, it resonated with me because when I design, and I didn't really understand this, you know, my first year of architecture school, I always designed from a wayfinding point of view. I always thought about whatever the building type I was designing. I always thought, how would my dad move through this building and how would I make,

00;18;24;13 - 00;18;44;00
Ron Wickman
because I had the experiences that Mark just talked about and that you mentioned, Karen, about the washrooms and the elevator. I mean, usually when I went to a shopping mall, there was no elevator. There was a freight elevator, so we would have to find a security person. And, you know, we'd use the elevator that they move furniture up and down in.

00;18;44;02 - 00;19;06;13
Ron Wickman
There were no washrooms that were accessible, so we just couldn't stay that long in a mall. But, you know, these sorts of experiences really, really hit me hard. And so when I'm in school and I'm designing a community hall building or something right away, I'm thinking, my dad needs to make a beeline from the entrance to the washroom, you know, or something like that, right?

00;19;06;13 - 00;19;40;21
Ron Wickman
I just like it's got to be easy for him to understand me because it's very, very important, right? And so not just making the bathroom accessible, but, but locating the bathroom in a way that makes sense. And then when you think about it, who doesn't like that? Like you don't have to be blind or in a wheelchair or have a mobility issue or anything to like the idea that you can go walk into a building and instinctively know where everything is, and especially if you can go back to that building a second time and you don't, it's like a no brainer.

00;19;40;21 - 00;19;48;15

Ron Wickman
Like you remember that building so well because it was just so easy to navigate. And that's what, to me, true wayfinding is all about.

00;19;48;18 - 00;20;10;12
Karen Brown
Right, and as we've discussed it a few times, I think we've hit on it in this podcast, Ron, that whenever you make something inclusive and accessible, it benefits absolutely everyone. Correct? Absolutely everyone. Mark, if you could comment on the next obstruction which is communication.

00;20;10;14 - 00;20;35;10
Dr. Mark Iantkow
Yeah. A simple example of an obstruction was communication. And it not only relates to to to my, my, my, disability population, but a person who is hard of hearing, for example, or a deaf and relies on its ASL interpretation, lighting is is vital for both of us. The way an environment is illuminated is vital for an ASL

00;20;35;12 - 00;21;13;04
Dr. Mark Iantkow
or person interpreting ASL if if that ASL interpreter is backlit, if they're standing in front of a window, a lot of people don't know this, but a deaf person has to see facial expressions along with the with the, you know, the hand gestures in terms of ASL interpretation. So that's one perfect example of how just just one element or one, one dimension, the mental aspect is relevant to both, communication for people with visual disabilities and indeed people who are deaf.

00;21;13;06 - 00;21;31;19
Karen Brown
It's so interesting because I think most people think of obstructions as something that would, they would bump into or trip over physical. And we're talking about obstructions as something that's not there and obstructs your ability to use the space equitably.

00;21;31;22 - 00;21;59;08

Dr. Mark Iantkow
Or interpret what the space is like. Yes. Lighting is vital. Well, when I had partial sight, lighting was vital for me. And if I had sconces on the side wall that that really ... interfered with how I perceived my, the built environment. A good, a good rule of thumb is to use that expression is to have evenly distributed overhead lighting and avoid any side lighting whatsoever for people with partial sight.

00;21;59;11 - 00;22;08;05
Karen Brown
Right. Okay. The next obstruction is something that no designer ever wants to be accused of : over design.

00;22;08;07 - 00;22;36;17
Dr. Mark Iantkow
Yeah. Yeah. All right. Yeah. Perfect. Here's a perfect example for you. For years, for years have been trying to get, you know contrasting nosing on stairs into the, into the building code. And it's there partly it's there for emergency egress. But, you know, some designers pick up on that really? Well, you know, you go into these darker theaters and, you know, sometimes they're even illuminated the nosing on stairs.

00;22;36;17 - 00;23;01;12
Dr. Mark Iantkow
So you're you're not tripping up or down the stairs, going into a dark theater. And, and sometimes a bright white, I always stress, you know, you don't have to be bright orange. You don't have to be obtrusive with our designs so they can be complimentary, but at least put put on a contrasting nosing on stairs for anyone, not only person with with partial sight.

00;23;01;14 - 00;23;26;23
Dr. Mark Iantkow
Now, this is where the over design comes, comes into effect. I have run into designers who, “Oh, geez, you know, we have to really accentuate that nosing. I'm going to put in like, oh, a five six centimeter depth on the nosing so that you can really define nosing.” Trouble is then that creates, creates an optical illusion.

00;23;26;26 - 00;23;43;22
Dr. Mark Iantkow
You're looking down at the stairs, you know, a series of steps and you get confused as to what's the nosing and what is the trick. And that can be actually dangerous, you know, not only for a person with visual disability, people who are sighted as well.

00;23;43;25 - 00;23;47;26
Karen Brown
Absolutely. Ron did you want to weigh in on that?

00;23;47;29 - 00;24;35;15
Ron Wickman
Yeah. This is, this is a good time for me to mention that, it just in this like that we're just finishing February here. So just in the last couple of months, I've been taking in a number of, of Zoom presentations, sessions by by other thinkers and, and designers working in the world of, of accessibility and, one, one of them recently was, not so much a Zoom presentation, but just, our working group with the Rick Hansen Foundation and we're constantly getting together discussing the, their certification program, the Rick Hansen Foundation certification program, and making sure that we're updating the criteria that allows a, a

00;24;35;18 - 00;25;05;25
Ron Wickman
building to get, analyzed by the foundation and, whether it would receive a Rick Hansen certification or not. And what kind of ties into that is, is it recently we were we we just met and, we were presented with, three, three kind of prerequisites that, when when you're looking at a building there are some key features of a building that we look for.

00;25;05;25 - 00;25;34;21
Ron Wickman
So we would look for these features and make sure that they they've all been addressed. And if they haven't been, then we probably won't go any further into, analyzing the building because these, these key features are required. And, of the three, I'll

mention them here, emergency systems with visual alarms. So that's often not a code requirement.

00;25;34;24 - 00;25;57;06
Ron Wickman
And the visual alarm, obviously, helps those who are deaf. So if it's only audible, then the alarm could be going and somebody who is deaf may not hear it. Think about being in a bathroom, for example. Another one is, is having assisted listening and communication systems, being provided at service counters. So that's often missing.

00;25;57;09 - 00;26;29;21
Ron Wickman
And the third one, which ties in with what Mark's been talking about, is the tactile warnings at stairs. So those three things are consistently missing in building design. And that's the detriment to that building and getting its Rick Hansen certification. So it's very telling what Mark's saying about stairs. Again, that has a lot to do with the fact that for designers we're often told the the building code and standards and requirements relate to those who use wheelchairs and people who use wheelchairs don't

00;26;29;21 - 00;27;00;14
Ron Wickman
and shouldn't use stairs. Some, some Olympian, some Olympians in wheelchairs can go downstairs. But I don't recommend, and it is something that, you know, I remember being on our barrier free design committee here in Alberta with Mark, and it just floors me that even to this day we've both been around, you know, 30 years, sounding like woodpeckers on everybody's brain saying what, what what about the the contrast on the nosing on stairs.

00;27;00;21 - 00;27;19;26
Ron Wickman
Well, to this day, it's still not in the code. So it's just you see it. You see it often because, there's certain facilities like rec centers are here in, in, Edmonton and Calgary. I would say the same thing that it's just part of their, the city standards, but it's not part of the Alberta Building code.

00;27;19;29 - 00;27;23;19
Ron Wickman
Nor the national building code.

00;27;23;21 - 00;27;24;06
Karen Brown
Right.

00;27;24;11 - 00;27;25;08
Dr. Mark Iantkow
Interesting.

00;27;25;11 - 00;27;39;26
Karen Brown
The last obstruction that caught my eye, Mark, was anthropometrics. So if you could first tell our listeners who don't know what that is and then tell us why it's an obstruction.

00;27;39;29 - 00;28;12;27
Dr. Mark Iantkow
Sure. Anthropometrics are actually the reaching abilities, from an able-bodied person. Anthropometrics relate to, you know, on an average sized person who's standing, and you might, might have seen that the Canadian standards image of, of, you know, an individual with, with the arms stretched in different directions. So it's essentially how a person relates their body to the built environment, the reaching abilities, the walking abilities.

00;28;13;00 - 00;28;41;25
Dr. Mark Iantkow
This this space is required to ambulate comfortably and safely within a structure. So anthropometrics more from a disability perspective however, relate to our adaptive mobility devices. So anthropometrics say for a person sitting in a wheelchair are important in terms of the reaching abilities that person would would require in order to function with within a built environment from from that sitting position in a wheelchair.

00;28;41;27 - 00;29;09;20

Dr. Mark Iantkow
And similarly, a person using a white cane. Anthropometrics are important in terms of how we sway our white cane in front of us and crutches, etc. so in terms of dimensions of access design, I kind of split anthropometrics in two categories, and this is important too. It's not only the linear dimensioning in terms of how we utilize our adaptive equipment within a built environment that are important.

00;29;09;23 - 00;29;36;25
Dr. Mark Iantkow
So the turning radius, for example, for a wheelchair or the turning diameter, and indeed the the heights of counters to provide that, that circulation space under the counter for a person in a wheelchair, but also the configuration of the space is important. So it's only linear dimensioning, it's the configuration of the space. And a good example of the configuration of the space

00;29;36;27 - 00;30;10;08
Dr. Mark Iantkow
you know, older style access to washrooms have that vestibule. You're going through two doors, and you go into a door, into a vestibule, and quite often to go into the washroom, you have to turn and go down a corridor and then turn again to go into the washroom itself. Well, the configure configuration of that space for a person utilizing a wheelchair is really difficult if you don't have the proper turning radius from that first door and then the proper turning radius into the second door, to go into the washroom, that can be extremely difficult.

00;30;10;11 - 00;30;28;02
Dr. Mark Iantkow
So I've split the anthropometrics, the reaching abilities from a person in a wheelchair, or utilizing a white cane, into the two categories of the configuration of the space. And indeed, the overall dimensioning. I hope that helps.

00;30;28;05 - 00;30;52;20
Karen Brown

It does. It really does. Mark, another thing that you commented on and wrote about, is something that will probably be eliciting comments from both of you. The paradoxes of access design. This was so interesting because it certainly points out the differences from A to Z. Are you able to comment on that, both of you? Let's start with Mark.

00;30;52;23 - 00;31;24;12
Dr. Mark Iantkow
I, I and Ron, you might have some feedback on this. The, the the old standard example, and maybe I overused it, are curb ramps or, you know, blended curbs or sometimes they're called depressed curbs on, on, on street corners. So the paradox of design between disability groups and it doesn't have to be between disability groups. It can be a disability group and say, the sighted world or the embodied world as well.

00;31;24;12 - 00;31;49;29
Dr. Mark Iantkow
But the paradox of design, let's say for a person in a wheelchair accessing those curb cuts like concrete curb cuts on street corners compared to, say, a person who's totally blind using a cane, are, are thus. For a person using a white cane, the steeper the slope, the more cane detectable that slope will be. So the steeper it is,

00;31;49;29 - 00;32;14;01
Dr. Mark Iantkow
that's wonderful for cane detectability for a person who's totally blind. But the problem is, for a person in a wheelchair, they get their front foot supports quite on that, that extreme slope. So for them they want a more gradual slope. The trouble is, the more gradual the slope becomes, the less cane detectable that same slope becomes for cane detectability

00;32;14;01 - 00;32;48;22
Dr. Mark Iantkow
for a person who's blind so, it's almost as if one disability access consideration is conflicting with another disability access consideration and and hence it sets up a paradox. And that's and

that's indeed why we had a lot of research back in the late 1970s as to what the compromise would be. The best compromise would be in terms of those curb cuts, and we came up with curb cuts standards at that time in the late 70s and into the 1980s, throughout throughout our province.

00;32;48;25 - 00;32;53;05
Dr. Mark Iantkow
Just that's just one example of a paradox. Ron. Any comments?

00;32;53;08 - 00;33;23;02
Ron Wickman
Well, yeah, just just to add on that, you know, the the original curb cut as well was at the corner of, of a curb. And so there was one which, would lead the individual out into, if you kept going straight, you would go in a diagonal straight into traffic. Right? So in a wheelchair, you'd go down the curb, cut and kind of turn to your left, or turn to your right to make your way across one street or, or the other.

00;33;23;04 - 00;33;49;06
Ron Wickman
For, for somebody who was blind before the introduction of the tactile warning surfaces, that became very dangerous. So then that sort of morphed into having two curb cuts, which again, the resistance is, “well, that's two that's twice as expensive as one.” And you know, but again, now that's commonly what we see is the two.

00;33;49;06 - 00;34;18;05
Ron Wickman
And thinking about what Mark was saying, the latest that I'm, I'm reading about and hearing about in urban design is to create streets now that are without curbs at all. And, this kind of idea that we could integrate, cars and pedestrians and bikes kind of all in one, like on one, like big, massive street that somehow we'd all sort of make work, right?

00;34;18;05 - 00;34;40;17
Ron Wickman

Which is, is a fantastic idea, but, somewhat dangerous, I guess at the same time, because we're so used to having things done a certain way. But the for me, the paradox has always been, as Mark said, and just to reinforce what Mark's saying is we tend to focus on one disability before talking about the next

00;34;40;17 - 00;35;00;10
Ron Wickman
so we we, we come up with a solution to make things wheelchair accessible and then wait until somebody goes, “Yeah, but that doesn't work for somebody who uses a cane.” And then they're like, “Oh, okay, now what do we do?” Right? And rarely do they go back to the drawing board and like start from zero and work their way back.

00;35;00;12 - 00;35;22;02
Ron Wickman
They go, okay, well okay. We got a curb cut so now we'll put some tactile warning surfaces and, and so you're just building upon one thing after the other. And again that's sort of the paradox, right, is, is nobody's really critically thinking about how this all works for everybody, and largely because there really isn't anybody that has that kind of knowledge,

00;35;22;02 - 00;35;40;06
Ron Wickman
right? But it's, it's a lot it's a lot to know, you know. So, and have you been around like Mark and I, Mark in his 70s, me now in my 60s, we bring 100 and over 130 years of experience now lived experience working.

00;35;40;08 - 00;35;40;20
Dr. Mark Iantkow
Yeah.

00;35;40;22 - 00;36;01;29
Karen Brown
That that's actually a perfect segue into something that Mark wrote or said, perhaps both that just because something is universally designed doesn't mean it's functional. I mean, that is just such an

important statement. And I can just see designers everywhere slapping themselves on the forehead and going, but, but, but but yeah, right.

00;36;02;00 - 00;36;35;25
Dr. Mark Iantkow
Is is it. And it's a challenging discourse to a challenging discourse in a sense. And I think it's important to understand and I'm going to use the word accessible. Just because something is accessible doesn't necessarily mean it's functional. And I'm going to give you a specific example, right. Yeah. Both of you might be aware within the CSA standards right now as of 2023, there is a specific CSA standard on accessible dwellings.

00;36;35;28 - 00;37;08;07
Dr. Mark Iantkow
And it's CSA B-652, and in that they, they've kind of lay out as one option for a galley kitchen. Personally, I don't think galley kitchens can be accessible for anyone in some ways, but more so for people in wheelchairs. Now here's, here's, here's the difference between accessibility and functionality. Yes, you can have a galley kitchen that might have access to the sink, you know, good, good

00;37;08;09 - 00;37;36;20
Dr. Mark Iantkow
turning diameter under the counter for, for, access by wheelchairs. You might be able to access the stove top on, you know, on the, on the, on the opposite parallel counter and access the fridge on the opposite parallel counter. But right in that, that, standard it says that you can't, you could have a separation between the two counters in the galley kitchen of 2100mm.

00;37;36;22 - 00;38;01;20
Dr. Mark Iantkow
Well, let's look at the functionality for a kitchen, a galley kitchen, period. It's functional because for an able bodied person, that individual can just turn around from one counter to the other. They can go from the sink over to the stove without taking even half a step. So that eliminates the functionality. Yes, you can have access to the sink.

00;38;01;20 - 00;38;30;23
Dr. Mark Iantkow
Yes, you can access to the fridge, you can access the stove. And indeed, a countertop oven. You might be next to the sink there, but is does it make it functional that you have to go 2100 mm is about seven feet to access the other counter. So there's a difference between what can be accessible but not necessarily functional.

00;38;30;25 - 00;38;52;18
Karen Brown
Right. Ron, what would your comment be on that? I, I, I'm bracing myself because I know you have a lot to say about things that are designed in one way but aren't functional. I mean, how much have we talked about end users? And and it's much more difficult in a public space, certainly, than it is in a private home.

00;38;52;21 - 00;39;28;19
Ron Wickman
I think, because I may sound like a broken record, I've, you know, said this so many times, but I, I what I want to say right now and today is, is just tell you just a really quick story, so that sounds like it’s going to be really long. It's not, but it's just very it's a recent presentation that I took in, and I really, really, admired, both the architects of this school and the, and the, the expert, the accessibility expert that was hired as well.

00;39;28;21 - 00;39;45;16
Ron Wickman
And it's, it's a it's a school for young people who are hard of hearing and deaf in Washington. And the name of the school, just escapes me right now, but, never, ever, never, ever in my. Oh.

00;39;45;18 - 00;39;48;18
Karen Brown
What was that? Mark? Did you know the name of it?

00;39;48;18 - 00;39;57;04
Dr. Mark Iantkow

I think Gallaudet. Yeah, it could be for the deaf , Gaullaudet in DC. Gaullaudet University.

00;39;57;04 - 00;40;21;14
Ron Wickman
You know, it could be. Yeah, yeah, yeah, yeah. It's a it's a new building. So it's, there is a, there was. there is another building there, but this is like a brand new one. And the architects are from Seattle and the, and then the expert is, is, a gentleman who has spent his career designing for people who are hard of hearing and deaf.

00;40;21;14 - 00;40;52;11
Ron Wickman
So this particular firm is, is very focused in that, in that area. So they they went through the whole presentation of the school and how, how, how important it was to engage the people who would end up using that building. So, you know, they talked about, for example, corners in hallways being transparent. So they're largely they were curved and they were glass at the corners so that you could kind of see somebody coming from, you know, at a 90 degree turn, basically.

00;40;52;11 - 00;41;18;09
Ron Wickman
Right. You could see somebody coming. And they talked about the the whole issue of, you know, having intuitive wayfinding and, and having clear sight lines for, again, for people who are deaf. But what really intrigued me was, towards the end of the presentation, the architect said, you know what? I've never, I've never been part of something so satisfying as a, as an architect to do something that was so functional.

00;41;18;09 - 00;41;44;12
Ron Wickman
Like, I really understood that this was better than anything I had ever done that, you know, kind of met code and, and, you know, achieved my building permit and occupancy permit status. This was something special. And the, the experts, consultant said, well, you're the first architect that actually has ever listened to me and

like, actually took what I said to heart and implemented these things.

00;41;44;14 - 00;41;59;14
Ron Wickman
And I was like, oh, man, I want to have that moment before I die, too. So I'm saying it here and now. I've never had, I've never had that experience when I've been a consultant for another architecture firm, right. And I'm probably I'm not going to get hired now, but,

00;42;02;18 - 00;42;22;02
Ron Wickman
ones that have hired me are going to be mad at me. But, you know, again, like, they just sort of they've always been kind of pushed to the side and told, you know, just, you know, make sure that it meets code, right, and, and, and that's why, you know, by and large, I don't work with other architecture firms as their, as their expert witness or, or expert witness, as their expert consultant,

00;42;22;04 - 00;42;52;11
Ron Wickman
because I'm not, I'm not used the way that I could be used, right, and I am an architect. I'm trained as an architect. I'm registered. I can I can design the whole building if, if need be. So that was, that was very satisfying to hear that. And I hope that that's a trend that will continue, as we move forward with other firms that have heard that story and see the actual value of of the architects that are, you know, taking the time to become experts in the various areas.

00;42;52;13 - 00;42;53;01
Karen Brown
Well, at the very.

00;42;53;01 - 00;42;54;03
Dr. Mark Iantkow
Least that.

00;42;54;06 - 00;42;55;29

Karen Brown
They can say, sorry. Go ahead, Mark.

00;42;58;04 - 00;43;25;15
Dr. Mark Iantkow
I could add to that, Ron, functionality doesn't have to interrupt esthetics either. You know, functionality can, can actually enhance esthetics. So and this is where a lot of architects who don't know universal design or haven't studied universal design can get, get into a panic mode and say, oh, you're going to have these horrible looking lifts and you're going to have, you know, orange colored contrasting

00;43;25;15 - 00;43;39;12
Dr. Mark Iantkow
nosing. No, no, it can be, it can be designed very esthetically pleasing as well. So I just like to underscore, you know, underline that functionality does not necessarily have to interrupt esthetics.

00;43;39;14 - 00;44;05;09
Ron Wickman
Never, never. And in fact, it only to me only enhances the beauty, you know, when you see color and texture contrast in a built environment and it's done on purpose and not, you know, not just for the visual esthetic, like visually ten people are going to look at something and go, five, we're going to say I love it, and five are going to say I hate it, or, you know, two are going to say they love it, two are going to say they hate it, and the other will be indifferent to it.

00;44;05;09 - 00;44;21;01
Ron Wickman
But no matter what, you'll never get a consensus. But you know, when you have something that's color and texture contrasting and you say, this is why it is the way it is, nobody argues with you on that because it's it looks great and it's functional.

00;44;21;03 - 00;44;45;14
Karen Brown

At the very least, they could consult with people who do know. Ron, we did our last podcast celebrating your 30 years of architecture and one of the, the very strong points that came out of that was to make use of the resources that are out there that are out there, call the guy in Japan, call Mark. Yeah. And and consult and find out what their experience would be

00;44;45;21 - 00;44;53;00
Karen Brown
and, and don't be so closed off to accepting the advice that they give.

00;44;53;03 - 00;44;54;14
Ron Wickman
Absolutely.

00;44;54;17 - 00;45;23;17
Karen Brown
Right. Well, this has been a fascinating podcast. And I think we could probably go three times as long with all of the things that you've written, Mark, and and the, the points that you made in your YouTube video. I will link both of those things to our show notes for anybody who wants to explore any of these topics that we've discussed further, but, I'll as, as always, give my guests the opportunity to make their closing statements, if you will, something that you want to highlight, something we missed.

00;45;23;19 - 00;45;29;12
Karen Brown
But, Ron, let's start with you, and, and we'll leave the last word to Mark.

00;45;29;14 - 00;45;58;06
Ron Wickman
Sure. I just the the last, presentation that I just just took in last week that I wanted to mention is, is a is very timely, I guess, in terms of our discussion here. It's a, it's a group that's studying what they call critical access studies. So this is, some names that I, I've heard before, but, I've never really heard the presentation quite the way that they did.

00;45;58;08 - 00;46;21;13
Ron Wickman
And just to read a couple of sentences from this, the one slide that they showed, they, they had nothing about us without us. So that's a common statement that we've heard in the past. Nothing about us without us. So definitely the critical access studies is, is dependent on people with disabilities themselves being part of the whole process.

00;46;21;15 - 00;47;03;23
Ron Wickman
But here they say going beyond minimum standards and functional understandings of access, critical access has developed rich terminologies and cutting edge design practices, both of which could transform the way that architects understand why access matters. However, the field has made little impact on these disciplines to date by enabling cross-disciplinary conversations between the disabled experts, developing these new concepts and practices, and disabled architects specializing in accessibility, disability meets architecture, amplifies the creative potential and practical application of these new ways of thinking and doing

00;47;03;23 - 00;47;25;08
Ron Wickman
accessible design. So, Mark's recent videos that he's done and writings that he's done is very much in, in, in, in keeping with what, what the latest trend is, I would say in, in our, in our discussions around accessibility, accessibility, universal design and inclusive design.

00;47;25;11 - 00;47;29;13
Karen Brown
Thanks, Ron. Mark, your parting words.

00;47;29;16 - 00;48;04;15
Dr. Mark Iantkow
If I could add to that, Ron, I'm glad. I'm glad I'm finally, Ron's out there beating the bushes every day. I'm kind of in an academic role now. I'm semi-retired, but I just want to underline what Ron

has, has, stressed as well is that, you know, it's important that we as building users with various disabilities, cross disabilities, any disability, be involved from the conceptual stages right on up to the, to the final approvals for occupancies, of particularly public structures.

00;48;04;17 - 00;48;25;18
Dr. Mark Iantkow
But when it comes to your own living environments, it's even more important then that the individual inhabitants with that specific disability be involved in the conceptual stages right into the final occupancy approvals. So, I'll leave it at that. And it's been a privilege and, and, I really enjoyed today, Karen and Ron.

00;48;25;20 - 00;48;43;18
Karen Brown
Well, thank you very much. Thank you to both of you for joining. Mark, I learned so much reading through your paper and watching your YouTube video and today was just the icing on the cake. So, my thanks to Ron for introducing us. And my thanks to both of you for joining here today.

00;48;43;20 - 00;48;45;04
Ron Wickman
Yeah. Thanks again Karen.

00;48;45;06 - 00;49;04;25
Karen Brown
Thank you. Well, thank you to all of our listeners and viewers, and we will look forward to seeing you on the next episode of Real Life Renos : The Podcast.