ADA: Let’s Get Physical

**Joel Hagen:** Hello and welcome to the Legrand | AV podcast, The Download, special series edition. We're digging deep into the ins and outs of making AV technology ADA compliant. I'm Joel Hagen, your guide through this special series. Thanks for joining me on this journey about the Americans with Disabilities Act or ADA for short.

Consider this podcast series a sort of companion piece to Legrand | AV's publication, “ADA in AV: Making AV Technology ADA Compliant.” The guide is the most comprehensive publication specifically for the AV industry about the ADA that we know of. This podcast and the guide are meant to serve for educational purposes only, not as legal advice. If you are looking for specific guidance or details, you should contact the folks at ADA.gov. Over the four-part podcast series, we'll be taking a larger view of the ADA in general, universal design, and how designing with the ADA in mind creates a better experience for all, audio considerations for conferencing and learning spaces, and what else to expect with conferencing, education, and digital signage applications.

For this first episode, we're starting with the questions we get asked the most. At nearly every trade show or training session we do, the question comes up about how to use or install a particular mount within the ADA guidelines, primarily about protrusion limits, or how far something can stick out from the wall at a given height.

And for good reason. They are rightly concerned about safety. Protrusion limits are ultimately about safety more than any other of the guidelines we cover for this topic. Bumping into an unexpected object can cause serious injuries. We'll talk about that, but it's important to note that safety is just one of the concerns we need to consider when designing for ADA compliance.

Remember that the key tenet of the ADA is to provide equal opportunities for people with disabilities. That includes equal access to AV systems. That means making sure controls are usable and reachable and that the spaces we create are navigable for those with limited mobility. So let's start talking about how to make sure your AV equipment lives in the sweet spot for operable parts, reach ranges, protruding objects, and other physical considerations.

To do that, I'd like to bring in our first guest expert for the series, Kathryn Gaskell. Kathryn Gaskell's tenure at Legrand | AV started in 2013 as a product manager for Chief, where she helped launch some perennial favorites like ConnexSYS video wall display mounts onto the AV scene. She moved to director of product management for Chief before taking on her current role as director for eco-design and regulatory for Legrand | AV. I'm grateful to her for joining the podcast to speak to the nuts and bolts of the physical space requirements for ADA compliance. Welcome to the podcast, Kathryn.

**Kathryn Gaskell:** Thank you so much, Joel. Appreciate it.

**Joel Hagen:** As someone that's been in the industry for a while, what are the top questions you get about ADA compliance when it comes to AV solutions?

**Kathryn Gaskell:** So specifically coming from the Chief brand it was often about protrusions from the wall. Keeping the depth less than four inches with the technology. Allowing everyone to navigate corridors and pathways without running into something. That was definitely by far the number one question.

**Joel Hagen:** And the ADA covers a lot of ground. What do you think are the key components of the law that apply or that AV professionals should be aware of?

**Kathryn Gaskell:** You're really keeping in mind everyone. Understanding who is going to use that space and what their goals are for that space to make those spaces and equipment accessible for all.

**Joel Hagen:** What you see as the common challenges in achieving ADA compliance? Is it that you arrive on site and all of a sudden the display is way too deep or?

**Kathryn Gaskell:** Well, I actually don't think it's that difficult anymore. I mean, clearly, I'm not trying to say “all you gotta do” because designing spaces is complicated, but as someone is creating a space for customers, they need to think about how it's going to be used.

How can I make it adaptable and accessible so that customers can get the most out of the space and use it safely. So really diving into that design thinking and really designing, you know, around all people. You know, I'm not trying to minimize the work that is involved, but it's important to think of the “who” is going to be living in that space.

**Joel Hagen:** Getting back to the protrusion and some of the limits, what is the difference between a wall protrusion and a floor-supported mount, and when do you have to worry about the four inches versus how do you adjust a site to accommodate something that might have to be out a little farther? Maybe it's tilted or something?

**Kathryn Gaskell:** So really, it depends on where you are. Depending on who your local jurisdiction is and who will be coming to survey and what they define as corridors or pathways. So be cautious of that. Ideally, you're driving to design for all spaces, but making sure that the wall protrusion is not past the four inches.

Floor support is different because it's mobile. It can be moved out of that space and out of the way for those that need it to be not a detriment to the space. So paying attention to the wall protrusion is the number one for those that have site assist.

**Joel Hagen:** A key number. Also, in addition to the four inches write this down people “27 inches and 80 inches.” Why is that the danger zone for protruding objects?

**Kathryn Gaskell:** So if you can imagine someone with sight assist, the 27 inches above the finished floor, they will not catch that. So if something's beyond the four inches from the wall, they might run into it. And above 80 inches should be enough clearance for someone's head. So it's about safety in this instance.

**Joel Hagen:** Moving on to another topic that relates to physical spaces and how things work, what is an operable part and why should we know?

**Kathryn Gaskell:** Anything that will have interaction with the person using the space is an operable part. That could be a control button or display. It could be an interactive display where there's content or learning on it.

So making sure that it's reachable and accessible for all whether someone's in seated position or standing or young or more senior. Making sure that they can reach and use, either turn on something, turn it off, adjust it via the control panel, or be able to leverage an interactive display with all the learning.

**Joel Hagen:** And the standard for ADA reach range is the 48/15 rule. Can you tell me what that is and when does it apply?

**Kathryn Gaskell:** So that is similar to the 80 and 27 we discussed. The reach range needs to be between 15 inches off the floor to 48. If you think about leaning over, 15 is pretty low. Typically we won't go that low, but you need to be addressing that.

And then no higher than 48 because if you're in the seated position, making sure that you can touch the operable parts is important.

**Joel Hagen:** You know, a lot of ADA systems have a floor recess to poke through or something. That is outside of that 48/15 rule application?

**Kathryn Gaskell:** So that's really not an operable part. That is more of an install so that they're able to attach or plug in something. But that's usually done by someone else in the space, not necessarily the user.

**Joel Hagen:** Okay. Another key component AV designers need to know is how work surfaces play into a design. What are the top things to be aware of when it comes to work surfaces like lecterns and desks and, you know, all these things that AV installers might have to work with?

**Kathryn Gaskell:** Well, the clearance underneath the surface is important to making sure that … I think everyone's tucked under a table before and hit the legs. That's common, but making sure we're not adding anything else that someone will run into. Maybe it's the devices that are running something or a controller or more wire kind of control box – making sure that those are cleared so someone can get under the table like I am right now and not run into anything.

**Joel Hagen:** And so it's kind of like a “measure the height” after you've added anything that might be under there. Otherwise you wouldn't notice.

**Kathryn Gaskell:** Right, and or make sure, you know, find the farthest spot from where you think most of the people would be using that table. There's probably a space that would be optimal.

Maybe it's in the middle and it's tucked in a little deeper. It might be a little hard to install at first, but there's lots of solutions that you can install brackets and then attach something else afterwards after you've fully populated it. So, making sure that's out of the way and not a obstruction for someone sliding in underneath that table.

**Joel Hagen:** All right. Let's talk about how to best design spaces for people who use wheelchairs. A lot of that is out of the AV person's hands, it's more of an architectural thing on where rows of seats are going to be, but there are things that AV professionals should understand about it. What should they know and why should they know it?

**Kathryn Gaskell:** I'm going to be a little repetitive again. How the space is going to be used by all, right? What are the use cases of a space? It might be a corporate facility that they are turning that space over often. They're resetting those meeting rooms or the huddle rooms, the other spaces that they're connecting on.

How does the customer want to best use the space? Getting clarity that early on in the design process is pretty important. And then adjusting appropriately.

**Joel Hagen:** We’ve talked a lot about the physical requirements of an ADA space, but there's always differences of interpretation. I know even within our organization, we've gone through some solutions asking “does the column count or doesn't it?” Just a lot of hand wringing and being careful.

And I guess to that end, who should people contact if there is a question about ADA compliance in an AV design?

**Kathryn Gaskell:** It's best to contact your local inspector. You need to be on the same page of what they're looking for and what their requirements are. It's all local codes. I shouldn't say all local codes are different, but they could be different. And you want to make sure you're adapting to that local code appropriately.

**Joel Hagen:** And now I think that it would be a good time to talk solutions, but before we get to that, why can't we say a specific product is ADA compliant?

**Kathryn Gaskell:** So the product is, in itself… Just a product that's sitting in a box isn't compliant. It's one piece of the puzzle. It's the whole application of the product and all of the products that create the solution and the space. Once it's installed and applied, then it would be reviewed for compliance. So again, the depth of the wall, off the wall. Without a TV and a mount and that wall, I don't have that depth.

So the mount itself isn't appropriate to be judged.

**Joel Hagen:** Okay. And given that caveat, what are some go-to solutions that when installed correctly help achieve ADA requirements for everything we've talked about? Work surfaces, protruding objects, wheelchair considerations, you name it.

**Kathryn Gaskell:** So, there are quite a few solutions on Legrandav.com to look for anything that keeps a TV less than four inches off the wall. But not only just a wall mount, but we also have solutions that are floor-supported, So they create that sight-assist moment for those walking down the hall. Tempo floor support mounts. Equally - over floor raceway so people aren't rolling over multiple cables and can control the cabling really nicely. So multiple solutions are available. Really check out our solutions for each of those spaces.

**Joel Hagen:** Awesome. Well, that wraps it up for this episode. Thank you for sharing your expertise today, Kathryn.

**Kathryn Gaskell:** Thank you. I appreciate it.

**Joel Hagen:** That was a lot to absorb. I know. Thanks again to Kathryn Gaskell for all the insight. If you want to learn more and want to learn more right now, I've got news for you. Our freshly published ADA guide for AV is available right now at LegrandAV.com. You'll be able to peruse these topics and many others at your leisure.

This is just the beginning of the series. Next time, we're going to take a step back for the big picture of the overall mission of the ADA as well as the range of people it covers. The best part – designing for the ADA has benefits for every single person who encounters an AV space. We'll dig into why that is.

Until then... this podcast series is intended to be used for educational purposes only. The intent is to serve as a guide to ADA regulations pertaining to the installation and usage of audio visual technology. However, none of it should be construed as legal advice, nor should you rely on this content without obtaining your own project specific verification.

Those seeking additional details or legally accurate definitions of the ADA's audio visual technology requirements should contact www.ada.gov. The Download is a product of Legrand | AV, written and hosted by Joel Hagen. Editing provided by Beth K. Gibbs of Lift podcasting. Have a great ADA day.