QUICKSTART COURSE - MODULE 7 – PART 3

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Hello, this is Eric Bobrow. In this lesson we'll take a look at schedules and indexes in ArchiCAD. These are quite similar, except that schedules deal with elements and indexes deal with drawings or layouts. So a typical schedule would be a door schedule, which lists all of the doors in the project that meet a certain criteria, whereas an index might be a list of all the layout sheets in the project. [00:25]

We'll start with the index, because it's a little bit simpler, and then move on to the variations of schedules. So I'll scroll down in the View map, and we'll see that here is a sheet index that already exists in the standard template in the United States. Here it has a list of all the current sheets that are in the project. If I go to the Layout Book here, you'll see the names of the sheets obviously are already included. Now, if I change the name here, this is a list of what it sees on the right side, but if I change the name, for example, this sheet actually has multiple drawings, so it's "Floor Plans", then when I do that, you can see that it changed to "Floor Plans". It's still got the number, the A-101, etc. But now the name has changed. [1:12]

Now I could change the number, and I could also change it over here in the same way under the properties for it. But I'll point out that the number is right now automatically being assigned based on where it is in the drawing set. And if I change it, then it will become a custom ID. And then I'll just have to make sure that it's manually corrected or updated as needed. Now where does this show up in your drawing set? Well let's take a look at the floor plan sheet, and let's look at the cover sheet. So here's the cover sheet with the schedule or the index included. And let's see. What if we were to add a new layout here? So I'll just go and, for example, I'll right click on the layout and say New Layout, and we'll just call this "Test Layout", and say Create. You'll see it shows up underneath as "A-102 Test Layout". So it's in the list here. [2:10]

Now if I go back up to the cover sheet, and you'll see that it's updating. And when I zoom in on it, it has that "Test Layout" included. And in the same way, if I were to delete this test layout here, of course it will warn me that you can't undo that. Well I'll just delete the one I created. And as soon as this is updated, and I can go and right click on this and say Update. Then you'll see that it brings itself up to date. So that's the basic idea. Now let's take a look at the formatting of this. So I'll right click on the index and say Open Source View. Let's just like when you point at a floor plan or an elevation or a section, will bring up the editing area where you can modify the settings. So in terms of the look, you can, for example, make it smaller or bigger, depending upon what's going to suit your needs. And you can adjust things including of course the names or values of the fields. Let's just say that we want to

change the list here, so Layout List instead of an index. I just change it. I just click on it and it gets updated. [3:18]

Now, let's look at maybe changing the size of the text. Sol, right now it's at 14 point. Let me just make it 10 point, a little bit smaller, and we'll see what happens. You notice that it changes both the headline and the field references, so if we were to make this say 18 point, it would be rather large for both. And we might need to adjust, for example, the width of this field to be able to include it. Now what is the word "Published" referring to? Well remember that in Publisher, you can compile multiple sheets that you'd like to output either for printing, plotting or saving as DWG or PDF. And you might just say, "I'd like to do the certain selected sheets in a particular action". There's an option to say publish the whole set or publish only parts of them. And what this will do is when you do a partial publishing of certain items, it will have a check box or fill in this box for the ones that are included. This makes it a little easier when you're submitting some things to consultants or for approval, to show perhaps a longer list of all the sheets, but indicate which ones are included in the particular transmission.   [4:34]

Now let's take a look at schedules, because they actually are quite similar in basic idea. Now the schedules, we're seeing that in the View Map in the U.S. version, there are some schedules included. You may find in the international version that there aren't, and I'll show you how to create the Schedule View. Now, I'll double click on "NCS Door and Frame" schedule. So this stands for the National CAD Standards, which is a common standard body in the United States. And it's one type of a schedule. It's a list of the doors in a tabular spreadsheet sort of format. And you can see that it's got the door numbers, which are called Mark, it's got some sizes and it's got some other fields. Now if I click in any one of these, you'll see that it becomes an editable field. Let me take this a little bit bigger, so we can see it better. And so I can type in say it says material, and I'll just call this "Wood" here for this door. [5:32]

Now, I'll go down to, for example, Fire Rating here, and I'll say "1 hour". And so we can just put this information in just one by one, and so it becomes just a graphic that we can put onto the layout sheet. However, it is tied to the actual elements in the project. So right now, I have the first row that I'm working in, and that one is selected. And there's a button here that is up above that says that it's going to select the item or items and zoom to it on the plan. So I'll click on that. And what you'll see is that it actually is on the floor plan looking at that door. If I zoom out a little bit, you can see which door it is, and you can see here it's this entry door. Now, if I open up the settings of the door, so just like we would do to edit any of the appearance of the door, there is a set called the parameters, which we've looked at for certain things. But down at the bottom here, is says Parameters for Listing. So we haven't looked at that before. Let's just see. If we scroll down, you can see the 1 hour is put into a field called Fire Rating. So obviously, whatever I put into the schedule will show up for the element. And whatever I change or type in here will also show up in the schedule. So it's a two way connection.   [6:59]

Now this says Type: Wood. And remember it said "material" or MATL in the schedule. So the word that's here isn't necessarily what we'll see in the schedule. In fact, if we look here, there are ones that are called "User Defined 1, 2, 3, 4, 5. These are fields that you can put in anything you like. So I'll say "Test 1", and perhaps "Test 2", and we'll just see what these are here. So I'm filling in some things, and I don't know where they'll show up in the schedule. But the schedule can pick any of these text fields and

put them in. So there is also here one called Note or Remarks, and we'll say "This is a test". So we can put in something special order, or whatever information we want. I'll just say OK, and having done that, if I go back to the schedule, we'll see some of the information update. And perhaps I can close the information on the side by clicking on this little triangle. That allows us to see this a little better. And then I'll use the zoom, the green button here or the Restore button, that would be an upper right on Windows, we'll see this better. So you can see that the one that I put in for "Test 1" was put into the Louver Width, and Test 2 was the Louver Height.   [8:25]

So basically what would make a note of it is that we can either put in information, for example, about the Louvers, if we were using that in the schedule, or we can put it in, just make a note that it's in User Defined 1. It's just an arbitrary place where you can enter that information. Now, this is just one way of having a schedule. It's a tabular list. Now I'll open it up here and we'll take a look at the fact that we can switch from records by rows to records by columns. Now this probably won't work for this type of schedule. You can see it's a little bit of a mess. But if we look at the 0, 1, 2, 3 etc., now that each individual door is at the head of a column and all the information down below relates to it. So while I wouldn't use it for this list, it is used for ones that have pictures quite successfully. So I'll just change this to records by rows, and we'll switch over to the international version and see how that works. [9:23]

So I'm going to switch to the ArchiCAD international project file that we been working on, and let's take a look at the door schedule that is in that that template that was used. So you'll see that there is under indexes here, there's a sheet index. It's going to be very similar to the one we had a minute ago. It has the number and the layout name and then publish. And then it has some space for remarks. So this is just an option, one more field. And I'll be showing you how you can add fields or take them away from the schedule shortly, or from an index. But there is no actual place for the schedules, at least in the View Map. So what I'll need to do is go to the Project Map, and you'll see if I double click on Door List, we've got a rather different appearance that will come up. So you can see here we've got the doors with preview images, both their elevation view and their plan representation. Let me just make it a little bit bigger so we can see this better. [10:28]

Now unlike the tabular one, most of these fields are things that we cannot edit. For example, the orientation left to right. That's based on how it's placed on the floor plan. We can't edit that and have the door flip. And of course the symbol of the door on the plan and elevation is not something that we can go and rework right here. Now there are some things that we can edit, such as the sill height and head height, but they act, in this case, a little bit unexpected. You'll see that the width and height here is actually tabulated for us, and is displayed with an X to indicate that it's a certain width by a certain size. So this is actually putting the information about the width and height from the element, and then displaying in a way that is considered very easy to understand. [11:26]

Now if I change the head height here, for example, to 2,200 to make it a little bit taller, you'll see that the sill height actually updated, because the size of the door was set at 2,100. And this just changed the elevation. So it basically made a sill, raise the door up in the wall a little bit. So while this number is editable, it did not change the size of the door, and so it's not doing what we want. [11:53]

Now there are some other variations here that I'm going to show you. You'll see that it has Quantity. And it says number 1 and 4. Now notice that we have a door here that's a certain size, and another one. This is a right and left, these are individual. Except that this one, there are four of them. And the next one has a panel. Let me uncheck "Show uniform items as a single entry". And you'll see that it expands. And now there are four of the ones with the left hand swing, then the right hand swing, and then it goes on. So in other words, what was in one column has been expanded, whereas if we have "Show uniform items as a single entry", then it will collapse this into a single group. [12:40]

Now the quantity is something very nice to have listed. And obviously, we can't just type in a number arbitrarily. It's figuring out how many doors there are that are that size. So let's look under the scheme settings here and see how that's working. So the scheme settings are a way to control what is included in a particular index or schedule. You'll see that the door list is listed as one of the ones that exist in this project. You can have quite a few of them. You can duplicate any of them to create new ones and then modify the duplicate very easily, or just start from scratch and say Create New. [13:17]

Now the first thing that is important to understand is the criteria. It's saying that the door list will include all door types. Now you could be listing windows, you could be listing Objects, etc. And there could be some more categories or more restrictions. For example, you could list all of the objects that are on the plumbing fixtures layer and then get a plumbing fixture list. So we won't really go into that. But you can add criteria and experiment with how this will list different types of things. Now, the criteria I'll close up, and I'll show you the fields. So in the fields, what you'll see is that it's got the name of the part, it's got a quantity, zone number, so these actually correspond to what we're seeing on the right side. Now where did these come from? You can see Library Part name, and these first three have a little arrow. And on the left side, you can see this arrow indicating general parameters. [14:12]

Now when I open this up, you can see that there's a lot of different things in here. Some of them are gray. For example, Library Part name is gray, because it already is placed on the right side. And so is quantity. So essentially, by dragging something from the left to the right, it becomes part of that schedule. So if you want to modify the schedule, you can simply move these around or add to them. [14:34]

Now in addition to the ones that are general here, there's also ones that are specific to doors and windows. And you can see when I open that up, that the symbol, which would be the plan representation, and the 3D view in this case from what it's calling the back as opposed to the front, is what are going to be shown and are what created these previews. Now let's just cancel out of this and let's go back to the U.S. version and say let's look at the scheme settings for this one. So I'll go back to the scheme settings for this one, and you'll see that its criteria says it's looking for door types. So in earlier versions it might just say door, but there is an option for all door types once you have ArchiCAD 12, because that possibly could include doors and curtain walls and things like that. And there's another criteria here in saying that the library part name is not "Empty door". So this would say don't show in the list, a punch-out, just a hole in a wall, that's done with the empty door object. So it's just a little bit more restrictive. You can also do some criteria, for example, to leave out existing doors or windows, and I can be part of this area. [15:48]

Now again, we've got our general thing, it's got the ID. It's got the width and height that came from the window. Now these are actually editable. In other words, I could actually change the width and height here, because they, instead of it being a calculated field, it's an editable field. The only way to really know that is just to click in here and see if it can be edited. If it can be edited, then try it and see what happens. Now you'll notice at all of those other text items, they have this A, B, C here, refer to the glazing, and remember there was one for the fire rating and things like that. So these are additional fields that have been put in here. Now, you'll see, for example, Note/Remarks is one of them, and that's where you would put in the comments. [16:33]

Now, I'm going to show you in the international version how you would add a field like that. For example, if we wanted to have note or remarks down below here. So we'll go and go back to the scheme settings where we can control things like the criteria. But let's look at what are called Additional Parameters. So the Additional Parameters allows me to find other things that I might want to put in the schedule fields, including all of those text ones that we saw in the U.S. version. So I'll click on Additional Parameters. Now this can be a little bit of a confusing dialog box, because the first thing you have to do is pick a library part. And then you get to see what parameters are available, and the list can be rather lengthy. [17:15]

Now we're in ArchiCAD 15, so I will look at the ArchiCAD Library 15. These other ones are actually not part of the main library, they're some supporting components. Now in the ArchiCAD library 15, I will open up the one that is the ArchiCAD Library 15 LCF, or Library Container File. And I'll just continue looking in the Object Library until I find, in the basic library, the doors. And then in the doors, I need to figure out which one I want, so I will open up the wood and plastic doors and to go wood internal doors on here. And you can see that I can select, for example, just a simple D-1 Door here. Now you'll see that it has a bunch of parameters. I'll scroll through the list. And you don't have to understand all of these. In fact, most then you can ignore. We probably want to go down to the bottom area of the list, where you'll see things like the text items that are near the end. [18:12]

So for example, Note and Remarks is down near the end here, and it's just one of the many text items. I'll just grab this and drag it over to the right. This will add this selected additional parameter to the schedule. You can see now it's shown up on the right side. And you can move these around. You can actually change, for example, if we wanted the 3D view above the 2D symbol, you can grab it, use the little double arrow symbol on the left side to move things. And if I want to, I can highlight anything here. For example, maybe I don't want the zone number, and I can click on remove. And then it will take that out. [18:49]

So it's pretty intuitive once you experiment with it. And I'll just say OK. And what we're going to see is now there's a place for the Note/Remarks. So I can actually type in some text here. Now you'll see that this field here, I'm not sure why the doors are showing this extra space. I believe there's an option to show the clear space. In other words, for certain things like cabinets and doors, there's an option to show the space that maybe you shouldn't install anything permanent in that area. The clearance that it requires. And so that's what's showing here. But the main thing I want to point out is that is not tall enough. [19:29]

So just like I change the width of the column for when the text got bigger, I can also change the height of the column by just dragging it down. And you can see how when drag it down, it will extend that column here. So now, this is going to look a little bit better. Now the scale of all these things is something available for setting. If you want, you can have it at a fixed scale like 1:50 or 1:100 or 1/8 inch scale or things like that. But you can also just say, "Reduce preview to fit into cell". And in earlier versions of ArchiCAD it would automatically do that. Now that's just an option. And if you have enough room for it then obviously is nice to be able to have the, all at a common scale, so you can see which ones are bigger or smaller. More important with windows and doors for the most part, but definitely a useful part. [20:26]

Now, we can also add automatic dimensions here. So when I click on this, you can see how it's put in some dimensions along here, and there are various settings for the dimensions such as what is it dimensioning to. And you can experiment with these to see how far away the dimension line is from the door, etc. So there's a lot of different options that you can experiment with. Now, this schedule has been created, and perhaps I want to see it on a layout sheet. So how do I do that? Well, ideally what you're going to do is go to the View Map and create a New view. So there are no views here, so I'll just right click on an existing view. For example, the sheet index, and say that I'd like to - actually, no I don't want to do that. I just want to highlight it and click on the button that says "Save Current View". So that will save a view of the current window which is this schedule, it will give it a name, "Door List". That's just fine. And here's where you set the scale. [21:24]

So if I set it at 1:100, then obviously, that's the scale that would be. That would be roughly 1/8 inch scale for U.S. users here. So let me say Create, and now it shows up in the list here. And let me go to let's say the floor plan sheet, and I'm going to put the door schedule on this sheet. If could go of course on a sheet with interior elevations and window schedule and stuff, but I'll just drop it in here. And you'll see within a few seconds it updates and it creates a graphic for that. And if we zoom in a little bit, we'll see that it is truly in scale to how the doors are next to it. So this schedule here, when I select it, we might want to have a title underneath it. But then again, we might just want to use where it says door list, we just use that as a title without having one underneath. If you don't want to have a title underneath, then you can, with it selected, scroll over here and perhaps change it from whatever title type it's using to No Title. And then it will just sit by itself. [22:32]

So there are many other variations that we can do for schedules. But I think this is going to get you a lot of the way towards using them. The one other thing that we need to do is to actually look at the numbering of the items. So I'm going to go back to the U.S. version here. And you'll see that the numbers 0, 1, 2, 3, 4, 5. Now when I highlight any one of these, I can go and select it on the plan and see what it is. And then of course and we can say well maybe that one should be number three or whatever. But it would be a little confusing to try to number it blindly here. So let's take a look at the plan and see how that is best done. So I'll go to the floor plan, and you can see that each one of these doors, and I'll just zoom in a little bit, has a number associated with it. Depending upon your settings, the marker may look different. But it does have the number showing. [23:29]

Now where can you set that number? Well there are two places. You can go into the Door Settings. And in the Door Settings, if I close up some of these other things here, we'll see that there is a tab called Listing and Labeling. And then we can change it. Actually, I'm sorry, in the later version, like ArchiCAD 15, it's under Tags and Categories. And here's where it says "01". In earlier versions before 15, it was under Listing and Labeling. I apologize there. Anyway, so you can change it here. So let me just make this 15, and say OK. And we'll see that that number updates of course immediately. And of course it would change on the schedule. Now, it's a little bit cumbersome to have to go into the Dialog box, so you can just select the door, and you can scroll over in the Info box. And you'll see the same number is there. So let me put it back to "01", and you'll see it update. So you can literally go to each door. And suppose I wanted to change this one, and just change it to "19" or whatever. So we can just select them one at a time and go around the project, perhaps in a clockwise or counterclockwise order, and just update those. And of course, that will update things in the schedule. [24:46]

Now if you want to do this even faster, I suggest you look at my video tutorial on how to number windows and doors faster. I'll put a link below this video that will direct you to that video tutorial. There is an option under the Document menu, under what is called Schedules and Lists, that is Element ID Manager. And I explain how you can work with that to automatically number the doors or windows in the sequence that you select them. So you can basically select them in a clockwise or counterclockwise sequence one at a time, and then use the Element ID Manager to number them, starting at one or starting at whatever number you find useful. For example, on the upper story, you might want to start them at number 19, because you 18 doors on the ground floor. [25:36]

So this concludes our lesson on schedules and indexes. While there's a lot more to learn about it, this will give you an introduction to you how you can put in information into the schedules, how you can place those schedules onto layout sheets, and basically how the whole system interconnects So this has been Eric Bobrow. Please share your comments and questions down below. I look forward to reading them. Thanks for watching. [26:06]