

## **QUICKSTART COURSE - MODULE 7 - PART 1**

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Hello, this is Eric Bobrow. And in this lesson, we'll take a look at how to create interior elevations for your ArchiCAD project. Now this exercise became a lot simpler in ArchiCAD 11, when the Interior Elevation tool was added into the toolbox. It's just below the section and elevation tools, and it will give you something like a section for each face or wall that you want for the room. [0:27]

Previously there were two methods of doing it. And so if you have ArchiCAD 10 or the Start Edition before this Marker tool was introduced, you could create several sections, each facing a different direction from wall to wall and floor to ceiling. Or you could use the Interior Elevation Wizard, which created a series of views, but they were not live. They were sort of generated from the model at that point in time, but not actually updateable very easily. So with the tool that it was introduced in ArchiCAD 11, we have a single marker, or we can put in a number of markers, each facing a different direction; indicating the drawing number and sheet number of the drawings that are being created. [1:10]

The marker exists of course on a layer, and so you can turn it on or off depending upon whether you want to see it in any particular drawing or view. And you can create, in terms of the geometry:

- views of the individual faces or walls or directions
- polygon, for perhaps only two or three sides of a room or some irregularly shaped room boundary
- a rectangular group of walls
- a rotated rectangle.

Now, it has a bottom to top height, this would specify how far it should look. And generally, you should set that to the height of your ceiling. But if you have an irregular shape or perhaps a slanted ceiling or roof, then you might want to use the option where it will look at the zone that is in the room. So we won't cover that in this lesson, but that does give you some more flexibility. [2:02]

Now the name of the interior elevation, generally you are going to pick up the name of the room. So I'll just call this "Kitchen", and I'll go and zoom in on the kitchen area. And I'll place this interior elevation by clicking on one corner, then the other corner. That defines the boundaries, how far ArchiCAD should look. Any walls that are touching those boundaries will be included, and the features, such as doors and windows within the walls will be included as well. Now for cabinets and other things to be seen, you

need to pull back or indicate how far away from the wall you need to stand to be able to see them without obstruction. So I'll click here to say that this is as far as I need to do. Now you see the marker has been placed, and it's in a funny position. It's getting in the way of the name of the room. [2:51]

So I'll go and click on the marker with the Arrow tool to select it. And you can see that when I select it, we can see the boundaries. And we can also see these little light green lines that it indicate how far away its going to stand when it's generating those views. Now I'll press down on the center of the marker, and use the pet palette option to move just the sub element rather than the whole group, and that allows me to reposition the marker, perhaps in a convenient location. Now, all the texture that says DRGID, that's the drawing ID. And the layout or sheet number will be shown down below. So we'll be seeing the numbers of those drawings, so where you can find them on the layout sheets. [3:33]

Now, let's just see in the Project Map, we'll see that in the interior elevations group of viewpoints, that there's now a group called "Kitchen". And when I open that up again further, I can double click and view any of them. And so you can see that here's one view, and I'll take another view of this. Now this is a live view. In other words, although it quickly came up like a drawing, it actually, when I select anything like this element here, this is a cabinet. And perhaps if I select both of these cabinets, I can make a change to them. I'll open the Object tool. You can see that it's talking about the cabinets here. I'll go and perhaps switch the door style from style 1 to a different style like this, perhaps this one here, and say OK. [4:24]

And you can see how it updates very quickly to give a different look. So we're actually changing the 3D model. And if I were to change anything about the size or move things in this view, it would also affect the floor plan and any other view that would show this. Now, I'm going to go to the View Map, and we'll see that because there is a clone folder for the interior elevations, it automatically has this new set of views added called Kitchen. And these views here have a certain setting. In other words, they're using a certain layer combination and scale, 1/4 inch, which would be roughly 1:50 in the metric system. Now, I'm going to go ahead and use these views to place them onto a sheet. [5:17]

So I'll go to the Layout Book, and let's say that we need to create a sheet just for interior elevations. I'll go right click on a convenient subset, or perhaps a layout within a subset, and say I'd like to create a new layout in that subset or below the layout that I pointed at. And so I give it a name; and it will use whatever sheet size was the default, or I can change that if I want. And I'll just go ahead and create it. And you can see that here is now is a new sheet waiting for the interior elevations to be placed. I'll go to the View Map, and I'll go grab this particular group and just drag it onto the sheet. So I grab that icon, and when I do that, it will generate those. You can see the little drawing update in the upper right corner here. [6:07]

It's generating each of those and then it's placing them on the sheet. Okay, so they are neatly arranged, although they're a little bit too high. You can change the settings in the master layout for where these are going to be positioned when you do it automatically. But I can simply go ahead with the Arrow tool and select all of them, and then perhaps use the option with the pet palette to reposition them as entire drawings, as opposed to individually, and reposition them. And let's just zoom in on this area, and we'll

see what they look like. So, that looks pretty good. But perhaps I want to change the scale, because clearly they are a little bit small on the sheet, and interior elevations would often be at a different scale. [6:55]

So I'll go back to the View Map, and I'll highlight this group of views and click on the settings. And then change it from 1/4 inch to a foot to 3/8. So it will be 50% bigger. You can make your own choice in terms of the metric standards that you might want to go to, change it from 1:50 down to 1:20 perhaps, and I'll say OK. It now generates new views here, and now these need to be repositioned. So I can just go ahead and grab this and move it, perhaps use the Shift key when I'm moving these things to make sure that as I move it in a direction it stays horizontal. [7:33]

So as I start to move it, if I press the Shift key, it will lock in on an angle. So I think that's pretty good for now. Let's go and create some new interior elevations in some of the other rooms. So I'll go back to the ground floor here, and we'll zoom over to the living room. Now I'll go back to the Interior Elevation tool and change this to "Living Room". So what I do that and draw a box say from this corner down here to this corner, and I want to pull it in far enough so that it can clear the staircase that's on the left side there, and click. And again, I'll need to move this marker. So I'll click once to select it, and press again, make sure that I've got the option in the pet palette to reposition just the marker, and get it into the right position there. Let's take a look at a couple of options that come up. [8:31]

So the living room now shows up, and I can go to let's say this view here, and it generates. Now you notice that we're seeing part of the stair, because the stair is going up in this area. And perhaps that's actually a little bit confusing. If I go to this other view here, we'll see the actual stair as it goes up. And this one is pretty clear, but the other one, perhaps we want to change and not include that for the interior elevation drawing. So I'll right click in empty space in the middle of this drawing, and choose "Interior Elevation Settings". By the way, you can use this right click in empty space to change the settings for sections or elevations or some of the other viewpoints that you might need to adjust. And this will essentially be the same as selecting the marker on the floor plan for that interior elevation, and changing some of its settings. [9:31]

So for example, if I go to the Model Display, we can see that there's an option to Hide Cut Elements. So this is unique to the Interior Elevation tool, you won't find this in the Section tool, because obviously in a section, you do want to show cut elements. But here in the Interior Elevation tool, we might want to change that. And there are other options here to perhaps make a shaded elevation. You can fill the surfaces with shaded color, and then you'll have a colored elevation. And you can even turn on shadows from a light source if you want. I'll just say OK here, and you can see by turning off the cut elements, it's made that drawing quite a bit clearer. [10:11]

Now I notice that it's still set at 1/4 inch to a foot, so let me just select the settings for the group of views as opposed to the one view, and change this to the 3/8 to a foot. Now really, what I want to do is select the clone folder here as a whole and change its settings to be the desired scale. So that way, it will automatically whenever I create new ones, inherit that. Now let's go back to the floor plan and put in some views of the bedroom. And this will use another variation that is useful. So I'll go back to the

Interior Elevation tool, and instead of doing a box, I'm going to do a polygon. Why? Because this one wall on the left has no useful information. There's no window, door, or cabinet. So really I only need to do these three sides of the room. [11:09]

So I'll click on the three sides with the Polygon method, and when I get to last point, I'll click one more time to finish it. And then you can see this line that's being drawn, it says how far away do I need to get from the walls to be able to see these elevations properly? Now the marker here, you can see has three sides, and I can reposition the marker. Say select it and reposition it just like I did before. Or another option would be to change the marker. If we open up the settings of the marker itself, we can change the marker here to have individual ones for each direction. And there are different settings for the size and how it's going to be represented, but let me just say OK. And we'll see those particular individual ones. [12:01]

So if I select an individual one like this, I can move perhaps that marker into a new position, perhaps select a different one, and move the marker wherever it's going to be convenient. So let's look at how we will place these additional interior elevations onto the sheet. so I'll switch to the Layout Book and go back to the interior Elevation page here. And then I'll go to the View Map, and I'll go to drag these views on. Now I'm noticing that the living room views here, that was the second group that I did, and the third group of just the three, I had the wrong name on it. So this is because I didn't change the name of the marker before I created it. So in order to do this properly, I'm going to go back to the Project Map, and just select the group in the Project Map, because this is like selecting the marker on the plan. I can change the settings of that marker. [13:07]

And for example, I can go ahead and change this to "Bedroom". So by changing that name here, then that will change it in the Project Map, and it will also change it in the View Map. So generally, it's a good idea to start the changes that you make as early a place as you can. For example, the Project Map. And it'll be inherited in the View Map as well as the Layout Book. So now, I'm going to go and perhaps just grab these two and drag them onto the sheet. When I do that, it will generate all of those views, and it will place them where it thinks that they'll need to be arranged. Sometimes this does it just beautifully; sometimes it may overlap drawings that have been repositioned. And in fact, you can see that while these lower ones are all positioned nicely, that the - and I'll just drag them using that pet palette option to drag them, I'll just write them down perhaps here for now. [14:20]

A couple of the views, this is the kitchen, but this one here is the living room, and let's see. If I hover over it, that's the kitchen, that's a kitchen, but this one over here is the living room. So let me just grab those, take these two, and make sure that I'm dragging the whole thing. So this now repositions these. So the automatic placement of the drawings, sometimes you may need to give ArchiCAD some help. I'll again just position these. And here, I'll actually snap it into position, and then maybe move the drawings a little bit sideways, and then reposition the groups. So, the automatic placement is a good starting point, but you'll often need to just reposition them to get them to fit nicely on the page. So I'll just get these repositioned, and again, always pay attention to what the pet palette option is, so that you're getting the right effect. [15:38]

So I'd like to have the orientations, the south, east, north or west automatically placed on the names of the drawings. So what I'll do is I'll highlight one of the sets. This is the same as selecting the marker on the floor plan, and go into the settings for it. And one of the things we can do, in addition to setting up the name, which obviously is already there, I can use this little symbol of the Auto Text to put in the elevation orientation. So this is putting in a reference that is like a field that will update as each particular drawing is created. And I'll say OK, and you'll see within a few seconds that it updates to say Kitchen north, east, south and west. And we can do this for each one of them in turn. If you don't do it before you create them, then you'll have to do it one at a time. If you change the settings for the marker before you start creating these things, then simply by setting a room name or a marker name, it will automatically be able to pick that up. [16:40]

Now how does ArchiCAD know which direction is correct, north, east, south, west, etc.? Basically it will look at where you set the North Arrow. So under the Options, Project Preferences, Levels and Project North is where it's set now in ArchiCAD 15 and 14. And this command was adjusted somewhere around ArchiCAD 13. Before that, the north position would have been found in your 3D Projection Settings under the Sun Control, where you could choose the north position that would help you to determine where shadows are being cast. But here we have the project north arrow, and if I move this around, let's say that its over to the side a little bit like this, you pick whatever that angle is, you type in. [17:30]

Here you see it says "Kitchen north". Let me say OK. And we'll see that that will update, and now it says "Kitchen east". So basically it determined that orientation based on the position of the north arrow. So if you were in ArchiCAD 10, 11, 12, somewhere in there, you would go to the View menu, under 3D View Mode, 3D Projection Settings, you can then control something about where you're looking at the model, but there's this button called More Sun. And in that More Sun, you can control things like how bright the sun is, etc. But also, where is the Project North? Now in the later versions, it says "Open project preferences to change the project north". We were just there a minute ago. But if you're in earlier version of ArchiCAD, this is where you'd find it. [18:24]

So again, that's in the More Sun option here, in the command that is under the View menu, 3D View Mode, 3D Projection Settings. So that is where you would set the north arrow in earlier versions of ArchiCAD. So this has been Eric Bobrow. This concludes our lesson on interior elevations. Please share your comments and questions on the page down below, I look forward to reading them. Thanks for watching. [18:53]