



QUICKSTART COURSE - MODULE 1 – PART 3

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Hello this is Eric Bobrow, and in this section of the QuickStart course we'll look at selection, navigation, and basic editing of elements.

Here we have the project that I was working on in the previous module which is untitled. And for safety, I think it would be a good idea to save it. So to save an ArchiCAD project, you go to the File menu, choose Save, or use the shortcut Command+S or CTRL+S. You'll see that it gives you the opportunity to name it, so I'll call this "QuickStart building 1". And it gives me the opportunity to say where I would like to store it. So in this case I am going to put it into my folder for the course materials that I'm developing. [0:50]

It is going to be saved as a solo project, which means that it's a project that I can work on. Someone else could open it if I give it to them, but it's not going to be able to be shared directly. ArchiCAD has the ability to share a project using its teamwork functionality. But we're not going to use that of course right now. We don't have to worry about any of the other things, just make sure that it's named properly and it's put into a folder on the desktop or wherever you would like. And then save. And you see that now it says "QuickStart building 1" here at the top. [1:27]

Now let's look at selecting elements and what you can do when you select these elements. I click on the Arrow tool to put myself into the most common type of selection mode. And I'll go with the arrow and move on top of a wall. And you can see how, when I position my arrow there, it changes its cursor. It now has an arrow with a little Mercedes indicating that I'm on the edge of something. It also gives me a preselection highlight, that blue glow, and it gives me a little preselection information. Meaning that it's telling me this is a wall, and it's got certain height and thickness and layer. [2:15]

And when I click on it, it changes color to a different one, this case indicating that it's selected. And you can see that the information about it has changed to indicate that I'm right now over a wall and it's already selected. Because sometimes you may have many things selected, and you're trying to finesse it to add or take away, and it helps to be able to see if you're on top of something you've already selected. [2:41]

Now if I don't want it to be selected, if I don't want to do anything, I can move outside, basically where I'm not going to click on any real element and click. And you'll notice how the handles and the color go away. I'll go back and again click on this wall, and this time I'll go up to this other wall on top and position my mouse there. And you can see that, again, it has the preselection color blue. It shows that

there's a wall, the little floating information that's translucent. And when I want to select it, I click. And you can see now it's changed. So by clicking, I have selected this one, but I had ArchiCAD just ignore or forget the other one. [3:29]

Now if I want to select both of them, then I would want to go over this second wall like this, and hold down the Shift key. When I hold down the Shift key, and then click, now both of these are selected. Now, you'll notice up at the top of the screen that it says "All Selected: 2". That means that I have two walls selected. Sometimes we may have many things selected, and sometimes it may be some walls and some objects or columns, etc. This will tell me how many items or elements I have selected. And if I want to select a third one, of course I can Shift+click on a third one. So it's very easy to select multiple elements just by holding down the Shift key and going on top of each one in turn, and now there are three selected. [4:18]

Now suppose I wanted to make a change to these elements. I could go in, for example, in the information. Right now it says that it's 9 inches thick which would be about 1/4 of a meter, 250 millimeters. Let me just make it thicker, I'll make it 1 foot thick. So I'll type in 1 foot, and you can see, after a split second delay that the walls have gone noticeably thicker. So by having them selected, it allows me to modify their settings in the information box, or potentially when I open up the wall settings by clicking on the wall icon, I can change it here. Let me just make it even thicker just so we see the change very obviously on plan. [5:02]

Now I can change the other things, I can make its height or materials or other things different, but for now this is going to be the most obvious that we can see. Now if I go to 3D, we'll see that instantly these walls are also changed in 3D. Now suppose I wanted to deselect one of these, because I wanted to make some changes just to two of them. To deselect something, I can hold down the Shift key and click on the element. And you'll notice that now, only the two walls are selected. Let me put them back to the original thickness, 9 inches. And you can see how they've changed, but the one in the middle was not affected. So by Shift clicking, we can add or take away from the selection set. And therefore, change the effects of an action such as when we changed the properties or parameters of an element, or we decide to drag or do some other modifications. [6:09]

Now, I can select multiple elements another way. If I click in empty space where there is nothing to be selected and move you'll see the cursor start to draw a shape. In this case a rectangular containing box, or fence. And as I move it across, you'll see that it highlights more and more of the area. Now when I click a second time, you'll see that all of the elements that were inside became selected. So this is a very basic selection method that's done with the Arrow tool, but drawing an area boundary. [6:58]

Now in order to deselect, remember I could click in an empty space, but there is another way to deselect, sometimes very useful, hit the ESC key, which is the key on the upper left of your keyboard. I hit the ESC key, and things become deselected. The ESC key is used for variety of things. It generally will stop what you're doing. It will cancel the selection, it'll cancel movement or editing, it's a good way to just sort of say, "Oh, let me just stop right here and start over." [7:32]

Now when we're selecting things with the Arrow tool, there are some options here in the geometry.

There's one that relates to selection, whether you're going to select elements that are partially enclosed or elements that are entirely enclosed, or direction dependent. The one that I had right now, you can see this little icon has a little rectangle, and it's showing that it's partially enclosing an element. I'm going to see what that means. The one that I've got right now, if I bring a box over the corner it will select both of those walls. If I switch to this mode here, it says it will only select it if the elements are totally enclosed. That means when I click here and I go over there, notice that the symbol has changed; it's now got a dashed line on the outside. And I click again; neither of those ones were selected. [8:32]

However, if I go say down like this, it's going to select just the vertical wall because that one was totally enclosed whereas the horizontal joining walls were only partially enclosed. So this is a great way to be able to focus in on what you want to select. This one resembles what we see in some other CAD programs, where you're depending upon which direction you go. If I go from left to right, it's going to be only selecting things that are completely enclosed. I'll hit the ESC key to deselect, and what about if I go from right to left? You'll notice that the appearance is different and it's now automatically giving me anything that's partially enclosed. [9:18]

So these options here can be switched at any time using the mouse when you have the Arrow tool active. Now in addition, you can also change your marquee selection to any irregular shape. So, we had it in a rectangle. If I choose an irregular or polygon shape, then perhaps I might be able to draw a box of some arbitrary shape. And I can click any point twice to finish it, or I can go back to the first point. When I click again, you can see that it selected everything that was partially enclosed; it did not select the one on the right. Well imagine that there were some things in the middle of the building that I wanted to avoid selecting. This might make it easy to control that. Because I can actually click in and out, as many points as I want to create that polygon. [10:14]

The rectangle was the most common one, and then we do have a variation that is the rotated rectangle, similar to when we were drawing the walls in an earlier module. So I'll click on empty space to deselect, and now when I want to select here, if I click two points, this determines a rectangle. And then I can select things there. In this case, it doesn't make much sense, but sometimes a building as parts of the design on an angle, and this to make it easier to select those elements on a similar angle here. So let's put it back to the most standard one, which is a rectangle, and my preferred one, which is a partial selection that works most of the time I think the simplest four are used. [11:03]

Now, I'm going to go and this is a button here that says fit in window, and this will allow me to zoom to extend. So this is another term for it. So now I've just zoomed out to see the building, plus in this case, the markers where the elevations are going to be projected from. Now I'm going to zoom in again on an area, and let's just look at some selection options beyond the arrow, area selection and individual selection. There is this button here, the third one that you see, it's called Quick Selection. Now with Quick Selection, I can go and say, in the middle of this wall and click, and it selects it. But with Quick Selection off, by clicking that, then when I'm in the middle you'll notice that the cursor actually looks like just a normal arrow. It's not sensitive to the wall. So when I click, I'm now drawing a box here without it sensing the wall right away. [12:22]

So we'll be looking at this in a better context to understand it in a later module of the course. But basically, having the Quick Selection on is convenient for most purposes, but there are times when you'll want to turn it off so that it doesn't actually - so when I press down here to start a draw a box, it doesn't actually just grab this element. Because in fact, pressing on an element and then starting to move in one gesture is a way to drag it very quickly. So I'll just hit the ESC key. You remember that ESC key allows me to cancel certain things. So I hit the ESC key and that ESC key just cancelled the operation. [13:07]

Now to select a door or a window, I need to go either to a corner point, let's say the end of the door swing, or to the end of the opening here. Or depending upon the settings, I can click in the middle of the door opening of the wall. Now the reason I say depending upon the settings is that if I have Quick Select turned off, like this, then when I go into this area here I will not be able to select the door. And in fact, it won't me select doors or windows using the area selection. It's just one of the odd interface things about ArchiCAD that Graphisoft decided, that when you do an area selection you'll select independent elements, but doors and windows are parts of a wall, and so they won't put handles on these. [14:06]

In order to select the door or window, you need to select by arrow clicking on a door, on one of its handle points, or grips, like this. Or if your marquee if you deselect this and have the Quick Select active, then I can go in the middle of this area here to select it. But I can't do an area selection to select doors. Now these doors having selected the two of them, I could change their size. So for example right now there's 3 feet, that's just under a meter, maybe 900 mm. And I could change this to 2 foot 6, so they would be a little bit smaller. [14:46]

And you'll see how it will update. So we can select multiple doors or windows or any other type of element and make a change that will affect all of them. Now, when I go to 3D, I've already demonstrated that the changes in the thickness or other properties of an element will be seen, and of course that's to be expected. There's a consistency between it. We can of course also select things right here in 3D. So for example, I'll point at this window and change its size. Perhaps change the width of this even bigger, make it an enormous window. [15:27]

Now as a casement window, it probably doesn't make sense for it to be that wide. But certainly we could have a storefront window or another type of a ribbon window that could be any size that we want. I'll just put this back to a different size here. So we can select things in 3D by pointing at them and you'll notice that the arrow gets this little symbol next to it that is a Quick Select magnet. And the preselection highlights are exactly like they are on the floor plan. And the information about the wall as well is showing. So we can do this, and I can Shift+click on multiple elements and change them. So for example, if I change the height to 12 feet, which would be about 4 m, you can see how that's updated. [16:23]

So we can make very similar changes that interface. The basic approach is quite similar between 2D and 3D, which this of course is what you would expect. Now when I change the size of this window say from 4 feet to 6 feet, look at how the opening changes. In other words, which way it gets bigger when I change it to 6 feet. You'll notice that it got bigger only in one direction, because you may recall in the earlier module, I placed it by this corner. In other words, I anchored it and said, "This corner is

important, create a window starting from that corner". So that anchor is very important. Now on the other hand, I think this window - and we'll just rotate. [17:12]

I'll use the Orbit command to rotate around. If I select this window here, and let me finish the orbit by clicking again on it. And let me make this window say, instead of 2 foot 6, let me make it 6 feet. We'll see it got wider in both directions, because the anchor point of the window, the insertion point, was in the center. So when you place an element, it is not strictly necessary, but it's very useful to think what's important. Am I thinking about the center of this, or the corner? Or in some cases for walls, it may be the face of framing inside the wall, the depth of the sheathing or the surface along the framing components. So when you're putting in an element that ArchiCAD does pay attention to your anchor or insertion point, it uses that information to help when you make a change. For example, to change the size or type of window, door or wall to see what point is going to stay fixed and what point is going to adjust. [18:24]

I'll go back to the floor plan. Let's take a look a little bit at navigation. So here is that button that I clicked once before that says "Fit in Window". That would be the equivalent of zoom to extend in some other CAD programs. We've already look at the plus sign, where I can zoom in on this. I can also double click. And you can see how it zooms in to twice. So this was at 175, but if I double click on the minus, it will go back out. And I can double click of course again and again to get it smaller and smaller. [19:06]

Now these percentages are related to the paper size that this drawing is set up for. And the paper scale is setup to allow you to see the size of text and other markers in relationship to the building elements, because obviously these walls are internally represented based on their size in the real world. I think this was 60 feet long is what I had, which would be about 20 meters. But the information in terms of the markers, for example, the door and window markers, and this is just one style. But the size of the text and the size of the circles or other markers are based on the printing scale. [19:53]

So we'll be looking at that of course in much more detail later. But if I click on this percent, this puts it approximately at the real size of the paper printing, when it's at quarter inch, which would be about 1:50. Now I've been zooming in and out using the plus and minus and occasionally using the hand or pan tool to move sideways, and of course using the Fit in Window. There are a number of other options here. We don't need to go into most of them, because these four are going to get us pretty much as many locations as we need. But this one is very interesting. Previous zoom. I'll click on that, and I'll click on it several times. And it's like a history of where I was looking as I click on it. And then there's next zoom. So if I back up, I can go through this. [20:51]

So here's a way that you could use this. I'm going to zoom in on an element like this, then I will zoom out to fit in window. And then I'll zoom in on another element. So here I am in one part of the project, I can go back and back again, and now I'm in another part. And I can go forward and forward again. So this is a great way to navigate, in certain cases, to use these previous zoom and next zoom options in the navigation area. [END OF AUDIO 21:30]