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**QuickStart**  
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## QUICKSTART COURSE - MODULE 2 – PART 5

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Hello, this is Eric Bobrow. And in this lesson of the QuickStart course, we'll take a look at how you can change the settings of walls to adjust their height, thickness or material, how you can use the eyedropper to pick up the settings of existing elements, like walls, to draw a new elements similar to them; and use the syringe to transfer the settings into existing elements to make the match. We'll also look at options for trimming walls to remove excess pieces, and then switch gears to look at window, door and object settings, to see how you can adjust and fine tune the individual components of those elements. [0:44]

Now here I have the file as the last lesson ended up. And I need to clean it up. So I'm going to activate the Arrow tool, and I will click in empty space and start a selection. And end up, by clicking, I'll select a number of these columns and hit the Delete key to clear them out. I'll again, click in empty space, draw a rectangle, click again. It now has selected all those columns, hit the Delete key. And we're now a little bit tidier. So let's take a look in 3D, I'll go to the 3D view by clicking here or hitting F3. Now we're in a perspective view. I'd like to switch that to an axo view, which has a keyboard shortcut of Command+F3 on the Mac or CTRL+F3 I believe on PC. [1:32]

Now I'd like to change the exterior walls in a number of ways, and I'm going to go with the Arrow tool and select a wall. Now you'll notice that when I click to select one of them, it actually selected all four. That's because these walls were drawn using the box method, this rectangle here, drawing all four in one step. And under the Edit menu, Grouping was turned to the setting for Auto Group, so any time a number of elements are drawn together with Auto Group, they are put into a group. Now for future reference, I'm going to turn that off, so that when I draw new walls or new elements they aren't grouped, because I find that to be actually a little bit getting in the way of being effective. [2:18]

However, right now we can leave these four walls selected and grouped, but when they're grouped, we can't change the size or let's say stretch a wall or delete one of these walls without affecting the others. But we can change the parameters. So I will click on the wall icon in the Info box, this will open up the Settings dialog. Let's take a look at the height. It's 10 feet, which would be about 3 m, and I'm going to change that to 12 feet, so these will be taller. The interior walls could remain the same height. Perhaps we have a dropped ceiling in this building. I'll change the thickness of the wall, making it, instead of 9 inches, making it about 1 foot, which would be about 300 mm. And I'm going to go to the Model settings here and change the material. [3:05]

So the Model settings is in a panel. We can open and close panels by clicking the triangle. You may in your display have just the Floor Plan and Section showing. I'll open up the Model. And if necessary, if we don't have enough screen space, ArchiCAD will close another panel to make room for it. Now you'll see that this little picture here indicates a line next to a wall surface. And when I hover over it, it says, "Reference Line Material". What that's saying is that this top choice affects the surface that is associated with the reference line, which is the line that we were drawing; either for the box or the individual walls, that was a rubber band line. And so, if I want to change that side, I can go press down here. And let's perhaps choose a brick material. [3:55]

You'll see these materials may vary, depending upon what version of ArchiCAD you have, but typically they will have quite a few choices, they'll be grouped in terms of brick and stone and paint and other things. And you can navigate through it and try out whichever one you like. So I'll go ahead and choose the "Running Bond" here, that type of brick. I'll leave the edge color alone and the other side, which would in this case be the interior for these walls, since the reference line is on the outside. And I'll say OK. And you can see that the walls have now changed, they've gotten taller, thicker, and now have a pattern. I'll zoom in to take a look at that pattern. So I'll use the magnifying glass and zoom in. And you can see that although it's not photorealistic, it does represent brick reasonably well. So I'll go back to our previous view like that. [4:45]

Now I'm going to go back to the floor plan and start to draw some new walls. So I hit F2 to go back to the floor plan, and I'll just double click on the minus sign so that it will zoom out a little bit. So double clicking on the plus will zoom in, double clicking the minus will zoom out just twice or 50% enlargement. So I'll go to the Wall tool, and I'm going to switch, or choose, the poly wall method here in the geometry. This will allow me to create a number of walls connected together. And while I certainly can measure this, I'm just going to sketch something out. I'll move my cursor up right on the edge of the wall here. [5:26]

Now if your appearance when you're doing this looks a little different, you might be in an earlier version of ArchiCAD. I'm now in ArchiCAD 15, and these sort of pink globes or dots show up when we're on the edge of things. But in earlier versions, you wouldn't see that. You would see a guideline indicating a line in space going off in line with this wall. That being just a little side note, let me just click to start a wall and draw this down. I can do it just by sketching, or I can type in say 12 feet, and make it an exact number. Again, I can go off to the side, and perhaps just sort of do it proportionally, figure out what I like, or I can type in a value. So here, I'll just sketch, I won't type in anything. I'll just take it up to something that looks about like what I want. And then later I can tighten up the dimensions. [6:21]

Now when I bring it along to touch this other exterior wall, I'll get the cursor to change. You notice that when I'm outside, I have the white pencil. When I'm along the reference line or the guideline, I have a striped pencil, and when I touch the wall, I either have a perpendicular symbol or I'll have an intersection symbol right next to the cursor. Either of those will be good. I'll click. That completes that wall. And to complete the operation of all the walls, I'll click again right at that point where it still says "Distance 0", and that will conclude those walls. Now you notice that these walls are thinner than the exterior walls that I currently have. If I go back to 3D with the F3 tool, we'll see yes, they actually are like

the old walls were, similar to the interior walls. They don't have the material change or the thickness or height. [7:24]

Now I'm going to introduce you to the eyedropper by clicking on this little icon up here, the eyedropper icon. I can then go anywhere in the plan or 3D view and hover over something, and then click to pick up the settings. Now when I pick up the settings there, it actually changed the settings of the Wall Default. So basically it's saying that the next wall I draw will be similar to the settings I just drew. Now I'm going to draw it in 3D so we can see it. It's a little bit hard to see where I'm placing it, but ArchiCAD will give us a good preview so we can easily draw something just in context. And I'll click again to finish that segment of the wall, and click a third time on top of the previous one to finish the piece of wall. [8:18]

So you can see that the new wall that I just drew matched the wall that I used the eyedropper for, but it didn't change of course the other three or four walls that I drew a few minutes ago. So I'm going to use the Syringe tool. So the Syringe tool allows me to inject or transfer the parameters that I had in the default settings of the current tool into a compatible element. In other words, I can inject it into another wall, not into a chair. So I'm going to click, and you'll see how, by injecting it, it made that wall rise up and become thicker and have the right material. I can do this again with the Syringe tool and go back and modify this wall. Now, there are keyboard shortcuts for these, and you do not have to learn them, but they are very useful. So I recommend that you make a note here. Holding down the option key on the Mac or the Alt key on Windows will bring up the eyedropper. And I can go on top of a wall or any other element and click. [9:26]

Now to get the syringe, which will transfer those into an existing element, I can hold down Option+Command, or Alt+CTRL if you're on PC; and then I can click to inject it, and it still remembers or it still has that syringe active, as long as I hold my fingers down on those keys. Option+Command or Alt+CTRL. So I can actually go through multiple walls or multiple elements and change them all at the same time. So now let me go back to the floor plan, and let's take a look at what we've got. It looks pretty good, except that I perhaps might want to take out these interior walls, or the walls that were originally exterior that are now inside the building. [10:08]

To do that, I'm going to use the Trim tool. So I'm going to use one of the commands to the right of the Measure tool, where we have trim, adjust, split, adjust. These are commands that will change the shape of elements to suit your needs. I'll activate the Trim tool, and I'll go down to trim this wall here. You notice that after I activate that tool, the cursor changes to a scissors. When I go over the edge of the wall, the scissors change its appearance, so it has a black blade indicating that this is an element that could be trimmed. Now I'm going to click, and it actually didn't want to do anything. Let me just try it again. There is a message. As long as I hold down the mouse, that message will come up. [11:01]

Now depending on what version of ArchiCAD you have, you may or may not get the same message. But in this case it says, "Cannot change an item of a group. Use the Suspend Groups command to enable editing on it". So what it's telling me is that these walls remember the four original exterior walls are grouped, and as long as groups are active, I can't stretch or change the shape of any one of them or delete any one without affecting the whole group. So this option here, which we looked at briefly in a

previous lesson, will suspend groups. It's the same thing as going to the Edit menu, Grouping and choosing this command or using the keyboard shortcut that's listed here. [11:44]

But now that the groups are suspended, and you can see that this is got a color up here so it's active. In other words, suspend groups is currently in effect. Now I can go and use the trim, and I will then click on this. And when I'm on the edge of that wall, it will do a nice trim; it will trim it from one end of the wall to where it needs another piece. And I'll again do this with the scissors, and go to this wall. And you can see what a nice, clean job is done. Now unfortunately, when I use the scissors, I can just go to a wall like this that's freestanding, that's not touching anything, and click and expect it to go away. I'll click, and it makes just a little warning sound, because that isn't the way that you can delete things. It would be nice if you could use that same command. [12:42]

Now to delete something, I can hover over it, get a checkmark or Mercedes, right-click, that selects it. You notice that there are handles now here, and I can then go and say delete. That's one of the quick ways to delete. Now let me just undo these last few steps here, and redo them but using a keyboard shortcut. So we had a keyboard shortcut for the eyedropper which was Option or Alt. We had a keyboard shortcut for inject or syringe, which is Command+Option or Alt+CTRL, and we have a keyboard shortcut for trim, although it's not listed here, it is holding down the Command key or the CTRL key on Windows. So I hold down the Command key and while I have that down, you notice that the cursor changes to a scissors. When I let go, its back to the crosshair, indicating that I'm about to draw a wall if I were to click. [13:44]

So I press down the Command or CTRL key, go to the edge here, and click. Now I'm still holding down the Command key, so I can trim this other one. Notice that if I go to the corner of this, it does not highlight. But when I go to the edge it does show that. So in order to trim, you need to be on the edge of an element rather than a corner. And again, I'll delete this element instead by right clicking and saying Delete. That's one way to do it. So when we go back to 3D, we'll see the effect of the changes. Now let's take a look at editing some settings in Windows. So I will go to the Arrow tool and click on this window, and we'll open up the settings. [14:29]

So the window has many panels or the Window Settings dialog has many panels. The preview and positioning gives us overall size controls, and allows us to look at the window on plan or elevation or in various 3D previews. Now I'm going to go to the settings called "W1 Casement USA Settings". So this is the panel where it says something, the name of the window and the word settings, that generally in a library will give you a graphic controls. In other words, here are some basic sized, 5x6, but if I press down, you'll see that there is just a whole pop-up or array of options for different parts of the window. So let me look at something called Elevation and Opening, and you can see that it's indicating the basic shape here. [15:25]

Let me go switch actually to Sash Options, that's what I want, and you'll see that when we look at Sash Options, I can switch it, for example, to make a grid instead of having no mullions. And this will have the separator glazing bars drawn. Now I can have as many or as few as I want. I will just change it to 3x2, since I don't think we need quite as many divisions, and I will say OK. And we'll see down in the 3D

window, once I finish that, that it's updated. I'll zoom in a little bit so we can see the effect, and then I'll click outside so it is deselected. So I've just changed the window to have a different glazing pattern. Let's look at some other options that we can do. I can select this window by holding down the Shift key to get the Arrow tool, and then clicking on the window settings icon, I can bring that up. And let's take a look at, for example, the Frame and Sash. [16:30]

Now here we can see the width of the frame. And I could make this wider. Let me just make this 3 inches wide, so it's going to be a rather wide frame here. And you'll see that it actually made this change the size. Let me undo it, and you can see the change here. So these changes, sometimes it's hard to know exactly what the effect is going to be, or what is going to be controlled. For example, this is the sash width. And let me make that one noticeably wider and say OK. And you can see, ah, there. That's a very wide sash frame. So sometimes you'll be able to figure out on your own what these are by the picture, and sometimes you may need to just experiment and see what effect it has. Now I'm looking at the dimensions but let's look at the option for fills and materials. And so if we look at the frame material on the outside here, I'm going to change this to a green color and perhaps mesh it on the inside. That could be independent or painted differently. [17:45]

Now this is for the frame material. Let's look at let's say the Sash options. And the sash, the glazing bar, they also have a material. So let me go and change this color on inside and out to match that green. So now the window should look quite different when I say OK. And you can see that it has changed. But I missed some parts of it. So I need to go - I wanted to make it all green around here. I can again select it and go back in, and perhaps figure out that this might be under, let's see, Casing Settings here. And the casing needs to be adjusted to the same materials here. And say OK. And now that looks much more uniform, but this sill actually looks different. [18:44]

So again, I'll go back in and make a quick change here. I'll look for Sill and Stool settings. And let me change this sill material to that same green, and perhaps the stool, which would be the framing piece below this sill, and the apron. So I can change all of these until they match. Now I'm looking at the materials, but perhaps I want that sill to stick out more. So I would switch back by clicking on this icon here to the dimensions, and perhaps look at the dimension that indicates how far the sill protrudes and change that. I'll just make that wider and say OK. So at this point, I now have a window that has the color green on all of the framing and sash and sill parts, and I've changed the dimension of the sill. [19:40]

So if I like that window, I can hold down the Option key or Alt key to get the eyedropper, and pick up the settings. And then I can go and hold down the Option+Command or Alt+CTRL to get the syringe and inject it into another window. So now you can see how very quickly, after I've made a decision or changed the look of one window, I can transfer that look into another window. Now they are independent, so I can select this window, for example, and change its size. It doesn't have to be the same size. I can make it 4 feet instead of 6 feet, but it will still have the same style. Now this is true in doors as well. [20:23]

Let's go ahead and put in an entry door. So I'll just click to pop in a door here, and let's take a look at this in 3D. So if I zoom out in 3D and orbit around, we'll see that this particular door - and I'll just roll the mouse wheel in to be able to look at it. This door is just very simple; it just shows the opening lines. I'll turn off the Orbit mode by clicking on this again. And now I'll go to the Arrow tool to be able to select the door. So by clicking on it, now I can select it. And perhaps I want to make this door a little bit more ornate, so when I select it and click on the icon for the door, I can look at the settings. And you'll see here, "Door Panel" is one of the options. [21:13]

So in the same way as windows, you can go into any part of the door parameters. And in this case, I have a nice preview, so I can flip through it. And perhaps pick this eyebrow for a panel option. And perhaps I want to actually put a handle on this. So I'll go to the "Edited Handle Outside", meaning I'm making a change or I'm about to affect the outside one. So let's just put on a nice handle here. So we can have independent handles on inside and outside, or no handle on one side but a handle visible on the other. [21:52]

So let me just say OK, and you'll see that door shows up. And let's just take a look as I orbit around. In this case, the door thinks that the side that we're looking at is the inside. It's certainly the side that it's coming from; because it's going to open into the building of the way I set it. So let me go and select this. And we'll again go with the handle. I'll say I want to go to the other side and change it to a certain handle, and say OK. And now you can see that handle has shown up there. So sometimes the parameters are little confusing, you just simply play around with them, until you get the look that you want. [22:38]

Now let's take a look on the floor plan at the area where we have the cabinets. And you'll notice we have a problem here, because the cabinets were set where the walls were originally a certain depth, and now the cabinets are sticking into the walls. So in order to change that, first of all I'm going to go and select one of the cabinets by clicking with the Arrow tool in one of its corners, and then I'll Shift+click, hold down the Shift key and click on the other one. Now, I want to move them, and there are different ways to do it. The simplest right now is to go right click and say Move, and then in the submenu, choose Drag. Or simply type Command+D or CTRL+D. Now I'll go and click on the corner, because it basically says, "What am I grabbing?" And I'll just grab this. [23:28]

Now I could snap it directly to this corner, which looks perfect. It has a checkmark. But sometimes it's a good idea just to move it away and then repeat the drag. And then you can see precisely which point you're snapping to. So that's just a little tip there, that if you can't quite see what's going on, maybe move the elements out of the way, and then move them back once you can see more clearly. Now, you'll notice that these elements do not have end lines. In other words, the cabinet does not show a termination. The lines are sort of optional, because maybe you're going to have another cabinet connect to it. But in this case, I'd like to make sure that it shows the end line here. [24:13]

So I'll select it and go to the icon for the Settings dialog for the cabinet. And again, in the same way the settings dialog here, as opposed to the Preview and Positioning, the Settings one gives me options for the details of the element. So if I go here down to appearance, you'll see that there is something called

Edge Visibility. Now you may not remember where this is, but you can always just flip through them. You can go back and forward through them until you see the one you want. And so when I get to the appearance again, I can press down on Edge Visibility and choose. Now this cabinet is reversed. In other words, it's upside down or rotated around from its original position in the library. [25:03]

So I'm going to pick the left side here in this choice, which will then actually give me a line on what appears to be our right side. Because imagine you're looking at it from inside the building. Now if you make a mistake, you'll get a line on the wrong side, and you can simply correct it, much like we did with the handle on the door. So this corner cabinet, again, I'll select this and open up the settings. And then I'll go again look at the appearance. And in the appearance, this time I'll take the right side as the end line here and say OK. And you can see how it now looks a little bit more appropriate. [25:44]

We've covered a lot in this lesson, and it's worth taking a moment to quickly review. The wall settings we looked at how you can change the height, the thickness, the material of walls; and then use the eyedropper to pick up the settings of the walls that were changed to be able to draw new walls that were similar. And then looked at how the syringe tool can be used to transfer those settings into existing elements to make them match. We looked at trimming walls to remove excess pieces using the Trim command, both from the toolbar as well as the keyboard shortcut. [26:22]

Then we switched gears and looked at the Window tool to see how you can adjust the detail parameters such as the material or thickness of the casing or the trim or the sill. And we saw similar options with the Door tool and the door panel, and the Object tool, and things like the end lines for the cabinets. So this concludes the fifth lesson of the second module of the QuickStart course. Thanks for watching.