



THE
Best Practices™
Helping ArchiCAD users
get the most out of their software
COURSE

QuickStart
COURSE

QUICKSTART COURSE - MODULE 2 – PART 3

copyright 2011 by Eric Bobrow, all rights reserved

For more information about the QuickStart Course, visit <http://www.acbestpractices.com/quickstart>

Hello, this is Eric Bobrow, and in this lesson, we'll look at choosing and placing objects from the object library, and setting the camera position for viewing in perspective.

One thing I forgot to show you in the previous module was placing doors close to a corner. So I'm going to use the magnifier and say, "Zoom in on this area". And let me switch to the Door tool. Now, I'm just going to go ahead and place a door here by its side or corner. And I'd like to place it a specific distance away from the intersection of these two walls. So we've already gone through this, we have the option of changing with a special snap, the distance from something like 10 feet or 3 meters to a different value. Perhaps let's set this to 4 inches, which would be I guess about 10 cm. And now, if I move close to the corner here, you'll see a whole bunch of little snap points. Let me zoom in a little bit more, and we can see what happens. [1:12]

So as I go close, you'll see how that works. I can click on one of these, and again it says, "Do you want to put the door on this side or that side?" I'll click on the appropriate one, and then I'll say which way I want it to swing in. And you can see that the gap of the 4 inches has been observed. Now, what's very powerful about this is that if I do have additional similar doors, I can go and place them in almost instantly. So let's just see how, if I take this wall and I use that Adjust command that I showed you earlier, adjust it to this reference line, you can see how it extends. And perhaps if I zoom out a little bit, and just take this wall and tell it to stretch by pressing down on it and using the Stretch option here, and then just line it up. I'll just take it a little longer. [2:12]

And then take another wall and say, "Connect it over and get a perpendicular snap." Sometimes you need to zoom in to make sure you're getting the perpendicular snap, rather than snapping to one of those little 4 inch marks. So sometimes those marks can get in the way, and so I might actually turn off the special snaps in that case. But let's say that I wanted to put in other door. I simply go here, go close to this corner. There's the 4 inches, click. There's a door. Let's go back to the previous view. Remember this zoom allows me to go back to the previous view, and I can go in and just very quickly go find. And if your eye is good, you'll actually be able to snap even without getting very close. You can see how this is precisely the same distance. So that 4 inch snap, or 10 centimeter snap from the corner to allow for framing can be used for multiple doors. Just bang, bang, bang; and it can be a real timesaver. [3:25]

Now however, I generally find that having something like that gets in the way when I'm working, so I'm going to put it back to halfway; or I may just turn off the special snap entirely when I don't want to see all of those things showing on screen. So now, let's take a look at how we're going to place some

objects into the scene. So the Object tool has a picture of a chair on it. And when I double click on this, it will open up the settings. It's one way that you can open up the settings for a tool is to double click on it. The other way is to click the icon in the info box. Now when I open this up, you'll see a preview of, in this case wouldn't you know it, some chairs. So let me go pick a particular chair that I find useful, and let's take a look at this dialogue box just to start out. So here we have a preview of the chair. Here we have its name repeated, and we have some other information about its height. So for example, it's sitting on the current story at the base of zero, meaning it's essentially going to be sitting on the floor. And it has a certain size, 2 feet; which would be about I guess 700 mm, and that's its dimension in both directions. And then as a certain height which is about 2 foot 7, which would be I guess about 900 mm. [5:03]

Now we're looking at it in a plan view. Here is an elevation, here is an angled view. And here is a colored, or shaded, preview. These four are all live previews, this one here is exactly the same image we were looking at there. And the difference is that this won't change. If I were to change any of the attributes about size or color, it won't update, whereas this one for example would change if I were to update that. And finally, there's one more preview that sometimes is used to give a weblink for an object, but isn't very frequently seen. So I'll just put it back to the plan and say OK. [5:48]

Now I'll place the chair by simply clicking. And you can see it appears in the room, let me just roll my mouse in to zoom in a little bit, and you can see the chair has appeared on the plan. Let's go to 3D by clicking up here or hitting F3, and let's use the Orbit mode here by clicking on that. And I can just pull down my view, and there's the chair. Now, I'll go back to the floor plan, and let's look at the object tool and pick out a different object. So when I double click on the object tool, it opens it up. And we can see that there are a variety of different chairs in this folder. Now the organization of the Object Library will vary depending on what country you're in. But in general, there's some organizational structure of course. [6:41]

You'll see that right now I'm in a folder called "Chairs", which is in a folder called "Seating". And if we wanted to look at something like a table, we may be able to figure out that in the Office section, here's tables for offices, and of course there may be another place for tables. Let me just pick a simple desk here. We can see what this look like. Now, let's just say that we wanted to make it a different size. You'll see that it has two dimensions for the length and for the width or depth. Let me just make this a little different proportion. If I look at this on the plan, and I change it from 5 feet to 4 feet, we'll see that it won't be quite as elongated. And when I look at in 3D, you can see the change. Perhaps if I make it 3 feet wide, then you'll see that it looks a little bit smaller, squatter there. [7:45]

So we can change this value or perhaps make it even longer. Let's say 6 feet. And now it's going to be quite elongated. So generally, we can make changes here and see it in the preview, and then decide how we'd like to place it. Now, the table is set right now going left to right or horizontally. But I can rotate this around. Now I can do it either by typing in a value here, let's say 90°, or I can move my mouse with in here and if I click, you can see how by clicking, it moves in one of the directions. I'll click again, keep going, and you can see each time I do it, it rotates 45°. So let's say that this is the angle that we want to get it to for this particular seating arrangement. I'll just say OK, and I'll place it. [8:43]

Now I want to make the chair face that, so I'll go with the Arrow tool and select a chair by going on top of any part that ArchiCAD recognizes, making sure that it highlights it, and click. And then I can open up the settings by clicking here on the icon in the info box. And you'll see that I can rotate this around, perhaps by clicking, by moving the mouse until I get that little rotational arrow. And now you can see it's moved. Or I can type in a value. So let's say that, and you can see now this chair is facing the table a little better. Now, of course we can adjust the chair, its position. And we'll be looking at dragging in a moment. But let's just look at placing a different type of an element now. [9:41]

So I'm going to go back into the Object tool, double click on the Object tool and we'll open it up. And let's say that I wanted to get a cabinet. So I could go say looking through this to try to find it, but there's a nice shortcut. I can go up here where it says Folder view, instead of going to a different folder manually, I can say "Find Library Parts". And when I do that it says, give me a keyword. And I'll type in "Cabinet", and then I'll hit Enter or Return, which is the same as clicking "Find". And you'll see that it finds all the library parts that have the word "cabinet" in there. And one that I'd like to get to demonstrate right now would be a corner cabinet. [10:26]

So this corner cabinet, you can see is rotated around in a particular orientation. Let me just look at rotating it another 45°. Now you'll notice that these little "X's" exist. These are the handles when you select the element on the plan, and they also function as the insertion point. So if I would like to put this into the corner, I can click, and set that as my insertion point. And then go to the corner, and you can see how it precisely fit in there. Let me go and open up the Object tool again, and this time we'll choose a normal cabinet, base cabinet here. And let's say that I want to put it so that it's facing the south wall, or the lower wall on my screen. And then I'd like to have it connect on this side. So in other words, this is going to be my insertion point so that it neatly connects to the corner cabinet. [11:34]

And I'll say OK. So I'll move along the cursor until I find the checkmark that indicates that I'm right at the node or corner point, and click. And you can see how it beautifully fills in there. Let's take a look in 3D and see what we've got. So we're seeing the chair rotated, the table in place, and let's just use that Orbit to take a view around, and you can see the cabinets in the corner of that room. Now, we're in an axonometric view. Let's switch to a perspective view. You can see that next to the icon that I've been using to go to 3D is a choice of axonometric or perspective. So perspective will have foreshortening. [12:24]

Now there are many different ways to move around here, and I can use the Orbit tool, but that's not going to actually help me to get inside the room very easily. So what I'm going to use is the preview, Navigator Preview. When we're in a perspective, when I click on this, you'll see it brings up a little window. I'll just grab it by its title bar and I'll make it a little bit wider, and you'll notice that this is a little miniature of the building. Now if I grab this handle, basically just press down and move it, I can move around, and I can actually move into the space. And I can also take the target, which is what my center view here, and move that. So I can then move with this until I get a view that I like. [13:18]

Now in this case, I'm looking from within the room, but I am looking, I'm a little bit high. So let me just turn in this preview, let's say "Show from side". And you'll see when it shows from side, that I'm actually

a little bit too high. So let me move it down until I'm perhaps at a level that seems natural. And then perhaps adjust the target so that I'm looking straight across, or at a convenient location. So we can switch here and show from the top, and we can also show it from the side to fine tune that and rotate this around. So this is just one way that we can adjust our view, is using the Navigator Preview. [14:03]

So I'm just going to close this up, but you could leave this onscreen, you can move it to the side if you had enough space on your monitor, or even to a second monitor. Now if I go back here to axonometric view, you'll see that I'm back at the previous view. And I can go back and forth, and there are some keyboard shortcuts as well. So we can put it back into perspective. So we can navigate easily between the 2D floor plan and the 3D view, and have different variations of the 3D view as well. Sometimes we want to be very specific about where we're standing, and so we can use the Camera tool. So right now, we've been looking at the Object tool, we've of course worked with the Wall, Door and Window tool, these are all the 3D tools that we have. And then down in this area are the documentation tools for linework and dimensioning and annotation. [14:58]

And then there's a group called "More". This may be different, depending upon the version of ArchiCAD you're in, but when I click on More, it should open up an extra group of tools. If you have a large enough monitor, you may see all of these arrayed neatly without having to open and close them. But I'll activate the Camera tool, and you'll notice the Camera tool has some settings. 5 feet, which would be about 1½ meters. And it's basically saying that this would be eye level, looking in a certain direction. So if I wanted to stand back here and look over this desk, this is saying that I'm going to stand here and look towards this particular angle. Now in order to see the particular view, I'll go to the Arrow tool and select this camera. [15:48]

And then I'll go to 3D, and you'll see now I'm in a slightly different view because of the camera position. So if I go back to the floor plan, if I do move this camera around, perhaps grab this end, and say that I'd like to reposition just this one point here, then when I go back to 3D, we'll be in a different perspective. So whether you put down a new camera or you manipulate that camera, then you're going to be able to control different viewpoints on the plan. Now the camera won't print, but I do find it gets in the way of working, so for simplicity right now, I'm just going to delete that camera, but it will remember that 3D view as the last one that we were working in. [16:46 END OF AUDIO]