



BEST PRACTICES COURSE – WEEK 13 – PART 1

Guide Lines

© Copyright 2012 by Eric Bobrow, all rights reserved

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

Hello, this is Eric Bobrow. And in this lesson we'll take a look at tools that you can use maintain and develop alignment relationships between elements. We'll start out looking at guidelines, and see how they behave in ArchiCAD 10 through 14, and then I'll explain some of the key differences as we move into version 15. And then later in a following lesson, we'll take a look at the ruler, and the use of the Shift key for constraining your mouse along a desired angle. [0:00:35]

So let's get started. I'm going to draw with the Wall tool a box of walls here, and I'll just make this sort of an arbitrary size, let's say 50' x 30'. And that would be about 15 x 8m or 9 m. Now let's just do a quick review of stretching with the Marquee tool. If I activate the Marquee tool and draw a box around the top part of this building and click while the marquee is active on an element that ArchiCAD recognizes, and then move up in the direction I want, you'll see that the tracker shows that I can move this on the angle that I am snapping to, which is on one of the guidelines. And I'm going to type in 5', that's about 1.5m longer. [0:01:22]

Now if I wanted to affect just one side, I could draw the marquee around one side and then click on this corner, and then move it up let's say 10'. Just type in the 10. And that's about 3m. And you can see that affected the two walls that were included, just the one end that was included. And now the building is not rectangular, it's got an angle on the top edge, which is what I want for this lesson. So I'll hit the Esc key to get rid of the marquee, and we'll start drawing some elements and exploring how guidelines work. [0:01:58]

So I'll set myself up with drawing a single wall, and I'll just start to draw it going down here. And you'll notice that there's a guideline showing up at this vertical orientation, 90°. And as I move around, there are guidelines showing up every 15° as I move around. And so of course I can snap to any of the axes or to one of those angles specified. Now I can line this up, I can take it down in line with the bottom of the other walls, the building, by simply positioning my mouse over the edge of this, waiting for a moment; and in ArchiCAD 10 through 14 you will see an orange guideline show up immediately. [0:02:42]

And then I can slide my mouse over without clicking and wait until I have it looking about perpendicular. And then I'll see the perpendicular snap cursor and click. So that was how I can align this while making it go down in line with the bottom of the other wall. Now let's say that I wanted to take this wall, select it, and stretch it. Let me just zoom in a little bit. I want to stretch it up in line with this corner of the other

building. Now, there's no edge for me to line up with, because the edge is on an angle. So what I need to do is simply point at this location, wait for part of a second, and then when the blue dashed lines show up, move my mouse without clicking along that line that I want to pay attention to. [0:03:36]

And you'll see ArchiCAD changes it to a dashed orange line. And then I can go find the perpendicular snap or the intersection snap, depending upon exactly the steps you take. This would be the intersection of the vertical guideline with the horizontal one, or it might be a perpendicular snap if it had not actually created the vertical guideline. So that is how we work in ArchiCAD 10 through 14 here. Let's continue with some of the exploration within this version, and then later we'll return and look at how it looks in version 15. [0:04:12]

So suppose I wanted to take this angled wall and stretch it. If I press down on the endpoint and use the pet palette option to stretch, and I go off and extend it, there is no snap that is available immediately that I can see. But if I move my mouse over the edge of the wall itself and pause there for a split second, you can see that it is now showing me this dashed orange guideline, and I can easily snap to, for example here, the intersection here where these two walls would meet. Now if I wanted to make this other wall stretch down, I can hold down the Shift key and select it, click on it, and then press down on the endpoint and again stretch it. [0:04:54]

And this time when I stretch it, I'll look for the checkmark. So now these walls are precisely meeting. Now let me just undo this and show you a slightly simpler way. If I have that wall selected, and I select the other wall that I would like it to join to, I can use the Intersect command from the toolbar. And you see how easy that is to work. And in fact, if I go back a couple of steps, three steps here, I can have these two walls selected, and I can actually just use the intersect even before I have stretched them, so that they will extend to meet each other. [0:05:29]

Now let's take this angled wall, and let's say we wanted to stretch it longer and remove the gap in between. Or let's just say we wanted to stretch it longer. I'm going to press down on it and use the stretch option in the pet palette. And again, instead of just immediately stretching it, I'll pause for a minute over the body of the wall to get the guideline, and then I can stretch it, easily snapping to that. Now suppose I wanted to remove this in between, because I really want to have these two separate areas, two separate segments, but keep the linear relationship, then I can use the Trim command within the toolbar and click on this edge. [0:06:10]

You'll notice that the scissor shows up as the cursor. And when I go along the edge, the scissor has black handles and indicates that I can click and trim. Let me just undo back one step, and then deselect. There is a keyboard shortcut. Hold down the Command on Mac or the CTRL key on Windows, and you'll get the scissor to show up, and then you can click when you get the black blades. So you must make sure that nothing is selected, and press down the Command or CTRL key to get that option available. Now let's say that I wanted to do a wall parallel to this wall, so let me just do it arbitrarily. I'll just start it somewhere in space. [0:06:51]

Now you notice that there is a guideline that looks quite tempting. It's looking pretty much like its parallel. But I look and I see the angle says 15°. And frankly, I'm not sure that that's the right angle. So

what I'm going to do is go along this edge, pause my mouse on it without clicking, I get the orange guideline. And then you will see up near the top of the screen, there is this parallel guideline offered. And when I move along it, you can see it has the symbol, the parallel, and in this case it says angle zero, which is not really angle zero of course, but its zero relative to the guideline that I last selected. [0:07:31]

So that actually is what I wanted is parallel to that. Now I'm going to undo that, because I'll leave it in this case, and in this orientation or configuration. And I'll go to ArchiCAD 15 and we'll take a look at how that works. So ArchiCAD 15, I'll draw a box of walls here the same size, say 50' x 30'. And again repeat the same exercise here with the Marquee tool, then draw a marquee around this. Now you'll notice that the marquee is thin rather than thick. That is an option here that we can change at any time. This, when it is thick, it affects all stories. So if I had more stories in this project, it would affect all the entire side of the building. But if I have it with the thin marquee, then it will only affect the current story. [0:08:26]

And again, I can click on an element that ArchiCAD recognizes; move along the guideline and type in that I would like to make this 5' longer in this direction. And then I can do the marquee here, and take it up perhaps the 10' that I want, just on that one side. And then use the Esc key to cancel the marquee. So now I will proceed with the actual lesson here. And we'll go with the Wall tool. And I'll draw a single wall in this case going down here. And again, I have a snap with the guideline, and in ArchiCAD 15 you can see the letter Y show up, so that when I'm on an axis like the X or Y, it does give me that indication which makes it easier to understand where I'm going. [0:09:14]

Since guidelines show up in 3D, this can be a real help. Now in ArchiCAD 15 it only by default has every 45°, so it doesn't have the 15° increments, although you could change that if you wish. Now I want to go in line with this bottom edge, so I'm going to position myself along the edge, and you'll notice that I don't see a dashed guideline show up, but I do see this orange dot. If I click on the orange dot in ArchiCAD 15, then the guideline shows up, and I can easily go get that perpendicular snap. So that is quite a significant difference. We are going to be exploring that again and again as we look at other operations. [0:10:00]

Now I'm going to select this wall and stretch it. I'd like to stretch in line with this point. I'm going to position my cursor as I did in previous versions on this point, and nothing happens, because ArchiCAD 15 is not programmed to show guidelines unless you tell it to. So what I'm going to do is something that is very simple, although it takes a little getting used to. Simply press down the mouse and move in the direction of the guideline. You can see that my cursor there is showing that I'm on that guideline. The blue dashed line is shown up, and when I let go, it then will give me the guideline. [0:10:40]

And then I can use that perpendicular snap. Let me just undo and I will show you one more time. I'll stretch this, and I'll go to this edge, and I will press and hold and move in the direction of the guideline that I want. And when I let go, as long as I am letting go on that guideline, then it will leave it as a guideline for me to snap to. So now let's take a look at the diagonal. So if I select this wall, and I want to stretch it, again, if I stretch it longer, I get no guideline. If I pause over the body of the wall, I don't get

an instant guideline, but I get the orange dot. Click on it, I then get a guideline I can snap to and stretch. [0:11:19]

And as before, if I wanted to shorten this wall, I can stretch it down until it snaps. But, let me undo that. Let's just select these two walls and use the intersect, and you can see how easy that is. Or if I undo it back, you'll see that these two walls are selected, and they are too short. Use the intersect and they will extend to meet each other. So very simple and same as other versions. And I will select this diagonal one, and I want to stretch it longer. Again, if I stretch it longer, immediately I don't get any snap, if I move along its edge, I get the orange dot that I can click on. And then it becomes easy to extend it. [0:12:02]

And if I want to trim this piece, it's the same thing. I'll use the trim option here and click on it. Or if I have nothing selected, I can press down the Command or CTRL key, get that same scissors, and when the blades turn black, click to trim it. Now, if I want to draw a line in parallel here, you can see that there is no 15° snap, so it's not confusing. But again, I need to go to the edge and wait for the orange dot to show up and click on it, and then I'll get a line. And then if I move along to the parallel line, you can see the parallel indicator. And it actually has a little yellow highlight to make it a little bit easier to see. [0:12:50]

So let's undo that gear. And let's take a look at the settings within ArchiCAD 14 for guidelines under the Options, Work Environment, Guidelines. So I've gone back to ArchiCAD 14. And this applies to 10 through 14. You see that the work environment settings for guidelines have a lot of different options. The main ones I will explain briefly. Pausing over an edge, it will extend the guideline automatically after just a very short time. You might want to make this a little longer if you find that they show up all over the place and get in your way. [0:13:27]

Similarly, when you pause over a point, like the corner of the building, it will extend guidelines in certain directions, in this case, the main axis lines that you could then use, and that happens when you just pause. And then finally, the other option that I will point out here is the 15°. And if you wanted, you could change it to 45°. Now let's take a look in version 15 at the options here. So in the Options, Work Environment, Guidelines, in 15, we'll see that the controls are much simpler. It is set by default to 45° instead of 15°, although you could change that. And there are no other controls related to how long you need to pause for the guidelines to show up. [0:14:12]

Because in version 15, you need to actually press on the orange dot to get a guideline along an edge, or you need to press and hold and drag with the mouse as a gesture from a corner point that you are indicating, and then it will create that guideline. So it becomes simpler here, and you just have to learn a couple of manipulations or ways to approach it with the mouse. And now if you have further questions about guidelines, you may want to look at my YouTube video, which I will be embedding on the page here, but it's one of the free ones that I've created that is on ArchiCAD 15 guidelines. And I do go through some more demonstrations of the use of guidelines that you may find quite interesting. [0:15:01]

So this concludes our lesson on guidelines in ArchiCAD 10 through 14 and version 15. The most important things to know about and to use in terms of variations for construction. I'll be continuing with tools for working with the alignment of elements in the next lesson where we'll take a look at rulers and the Shift key and how you can control those options. I look forward to reading your comments and questions on the page down below, please post them. I look forward to reading them. Thanks for watching.

[END OF AUDIO, 0:15:38]