

Dead-on Accurate -- Walls, Doors, Windows, and more!

From My Cousin Vinny (1992), 20th Century Fox

<http://www.amazon.com/My-Cousin-Vinny-Joe-Pesci/dp/630592970X>

Vinny Gambini: Well, how could you be sure you used 16 foot-pounds of torque?

Lisa: Because I used a Craftsman model 1019 Laboratory Edition Signature Series torque wrench. The kind used by Caltech high energy physicists.

And NASA engineers.

Vinny Gambini: Well, in that case, how can you be sure THAT's accurate?

Lisa: Because a split second before the torque wrench was applied to the faucet handle, it had been calibrated by top members of the state AND federal Department of Weights and Measures... to be dead on balls accurate!

[She rips a page out of a magazine and hands it to him]

Lisa: Here's the certificate of validation.

Vinny Gambini: Dead on balls accurate?

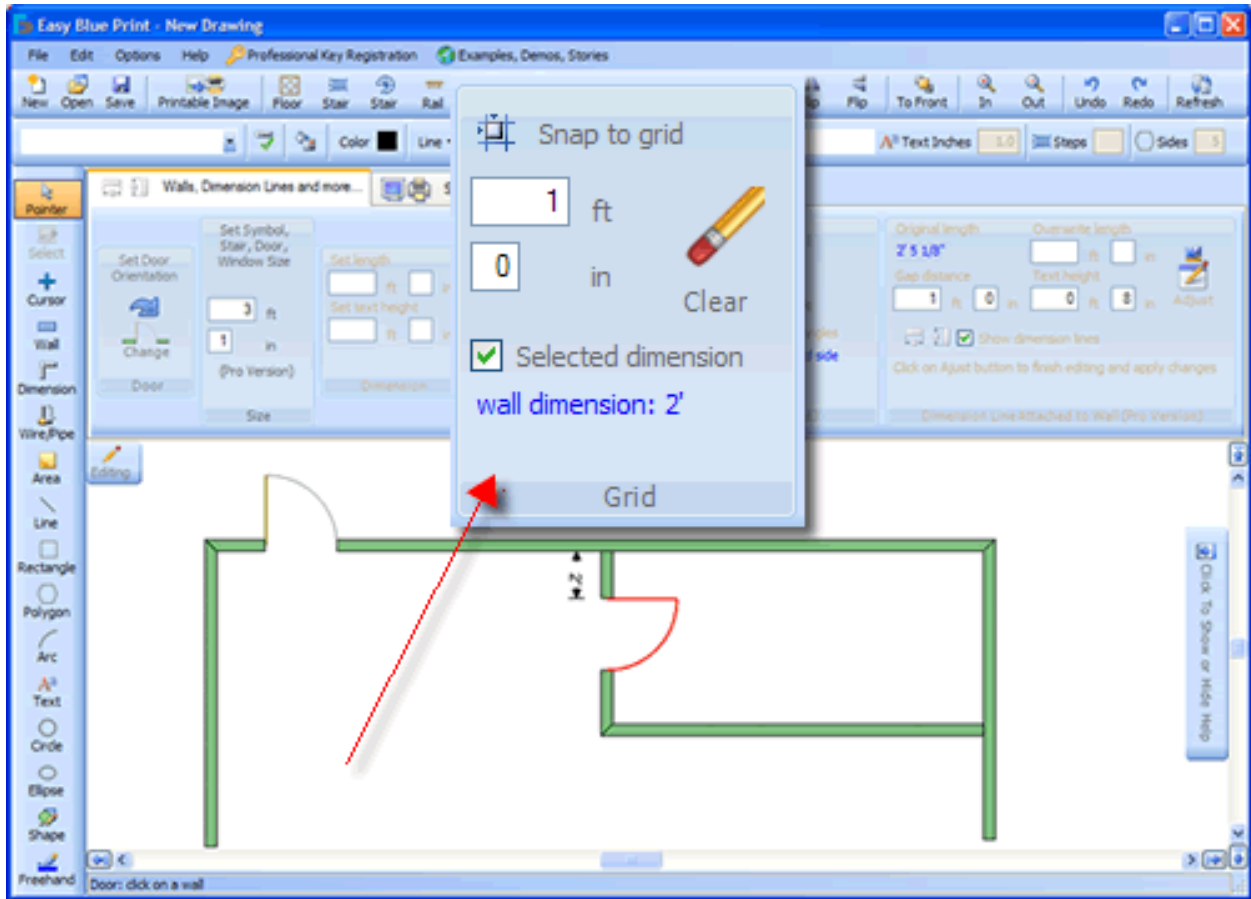
Lisa: It's an industry term.

Do any of the following look interesting?

- Distances.
- Rooms with footage and dimensions.
- Door/Window positioning.

Do you want to *quickly* draw a blueprint with *accurate*, labeled distances, using just a couple of simple mouse clicks? Surprisingly, you only need to learn a **single technique** -- the "snap to grid" technique -- to do it. This "snap to grid" technique always works whenever you need to draw anything with an accurate distance.

To start, here is my suggestion for how you should, in your mind's eye, try to picture Easy Blue Print:

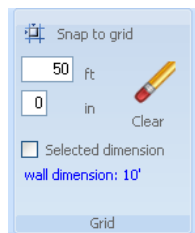


This picture should immediately give you a better intuition about how things really work in Easy Blue Print. In other words, the snap to grid box is the only thing you really need to learn how to use.

In fact, this “snap to grid” box will be the supercharged engine that will drive whatever we do for the rest of this chapter. Let’s quickly demonstrate its simple, yet brutal power.

Imagine you have to create a 200 ft long wall. You *could* painstakingly draw this long wall, *inch-by-inch*, carefully **scraping** your mouse, pixel-by-pixel, across the screen. But, how patient are you? It’s like showing up to the race track with a **pogo-stick**.

Here’s a **shortcut**: type in 50 ft, 0 inches into the “snap to grid” boxes.



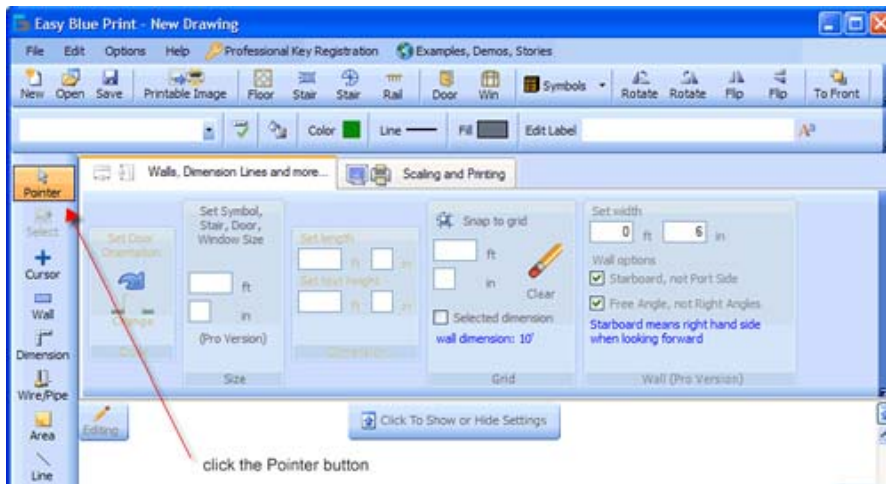
NOW draw your wall:

- Click on the draw wall button (see button on the left side that just says “wall”).
- Left click your mouse in the drawing area.
- Slide you mouse **recklessly fast** to the right.

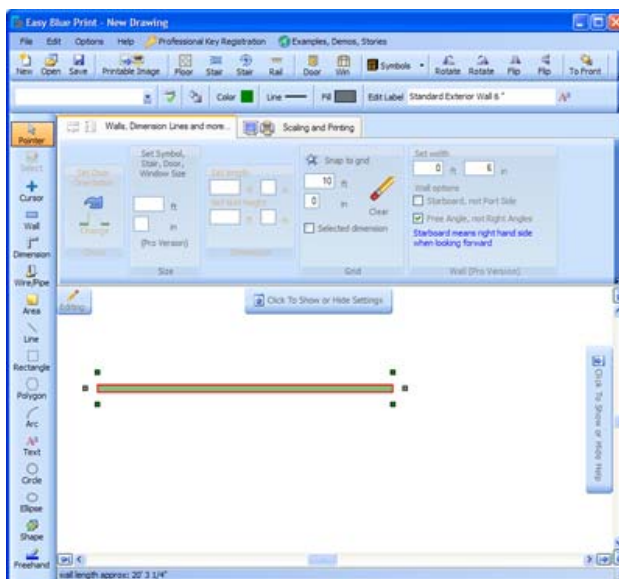
Immediately, you’ll notice that your wall seems to jump like a **jackrabbit** from one 50 foot increment to the next: 50 ft, 100 ft, 150 ft.... Yeah, that’s fast.

But, we need to add some **control**. To make things simple, we’ll illustrate what we’re talking about by using a 20 ft long wall.

First, click the pointer button:

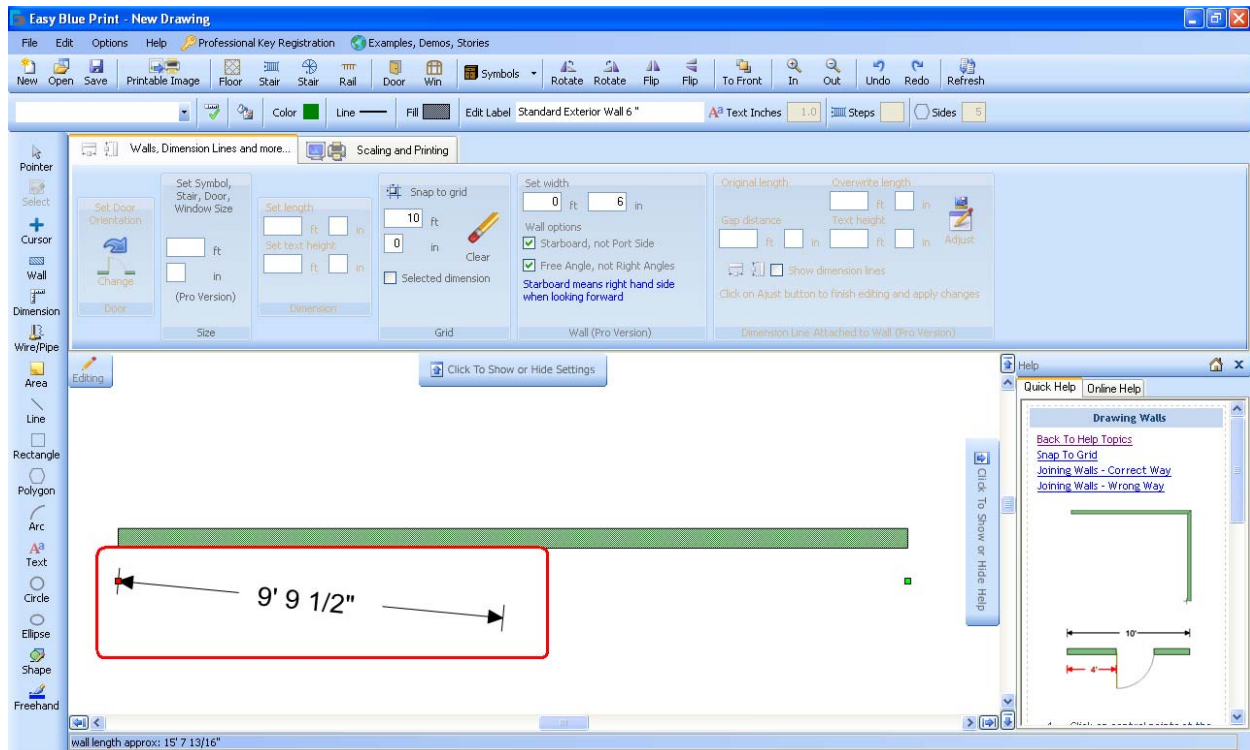


Next, click on the 20 foot long wall.



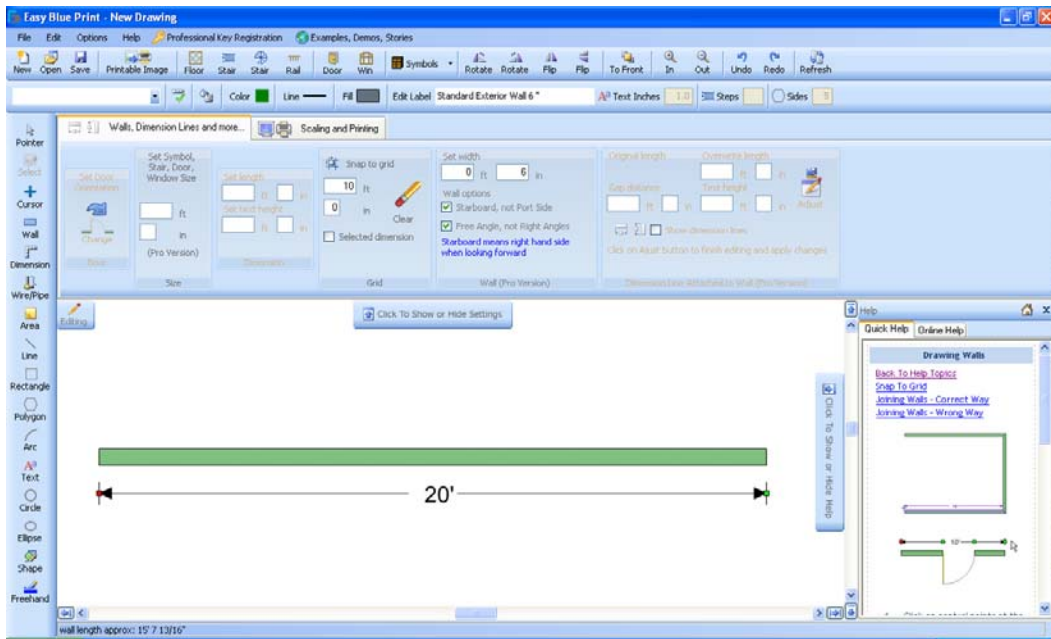
See the green corner points that appear above and below the wall (ignore the grey control points that appear at either end of the wall)?

Go ahead and **click** on one of the green control points. As soon as you click on one of the green control points, a dimension line suddenly **leaps** out of the control point you picked, ending at the tip of your mouse cursor.



You're now only one click away from creating the single most powerful object in any drawing you will create -- a **Wall Dimension Line**.

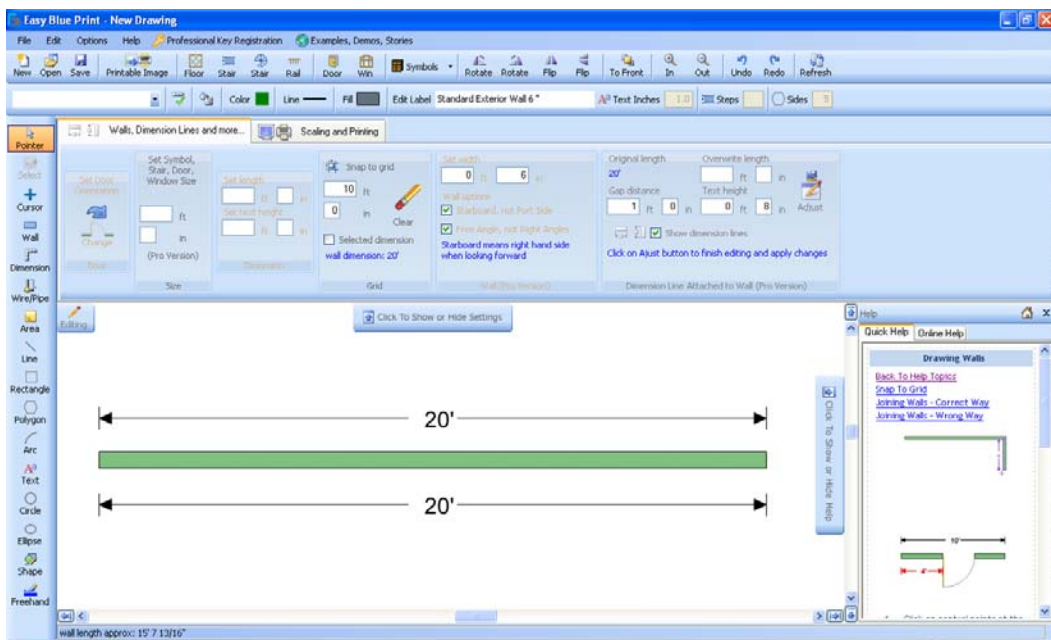
If your heart isn't beating fast at this point, *start paying attention*. Go ahead and **finish drawing** your **wall dimension line** by clicking on the **other** green control point sitting alone at the other end of the wall.



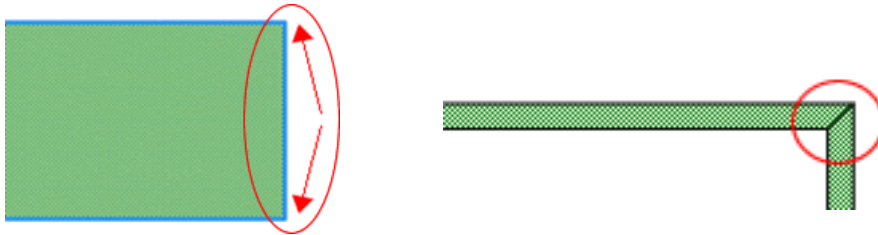
We've created our first wall dimension line.

“So what?!” you’re thinking. Believe me -- this simple line will give us all the traction we need to harness the full power contained in the “snap to grid” box.

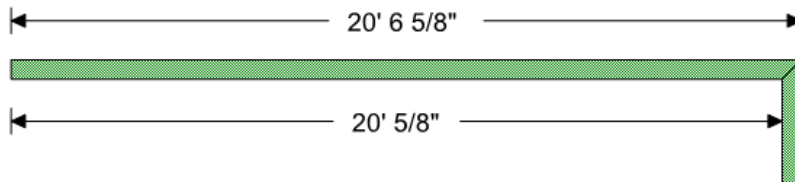
We’re going to do something now that seems almost redundant. Using the pointer tool (again), select the wall **again** and add **another** wall dimension line, but this time add it to the *other* side of the wall:



Looking at the diagram above, it suddenly becomes clear that a wall doesn't really have a **single** "wall length." It will also become even clearer now, because we are going to pick the wall drawing tool again, and then click in the circled region below to create a wall corner:

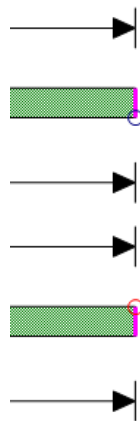


Notice how the walls sides that you are creating get *lengthened* or *shortened* in order to automatically create the **wall corner**. Most importantly, the two sides are two different lengths now.



Don't worry. We actually haven't lost any control. The real question is, "do you want the **top** or the **bottom** of the wall to stay **fixed** at 20 feet after you finish drawing the wall corner?" It's completely up to you, and it's easy to control.

Let's revisit what happened **right before** we clicked our mouse to create the wall corner above. Can you see what happens as you **jiggle** your mouse at the end of the original 20 foot long wall?

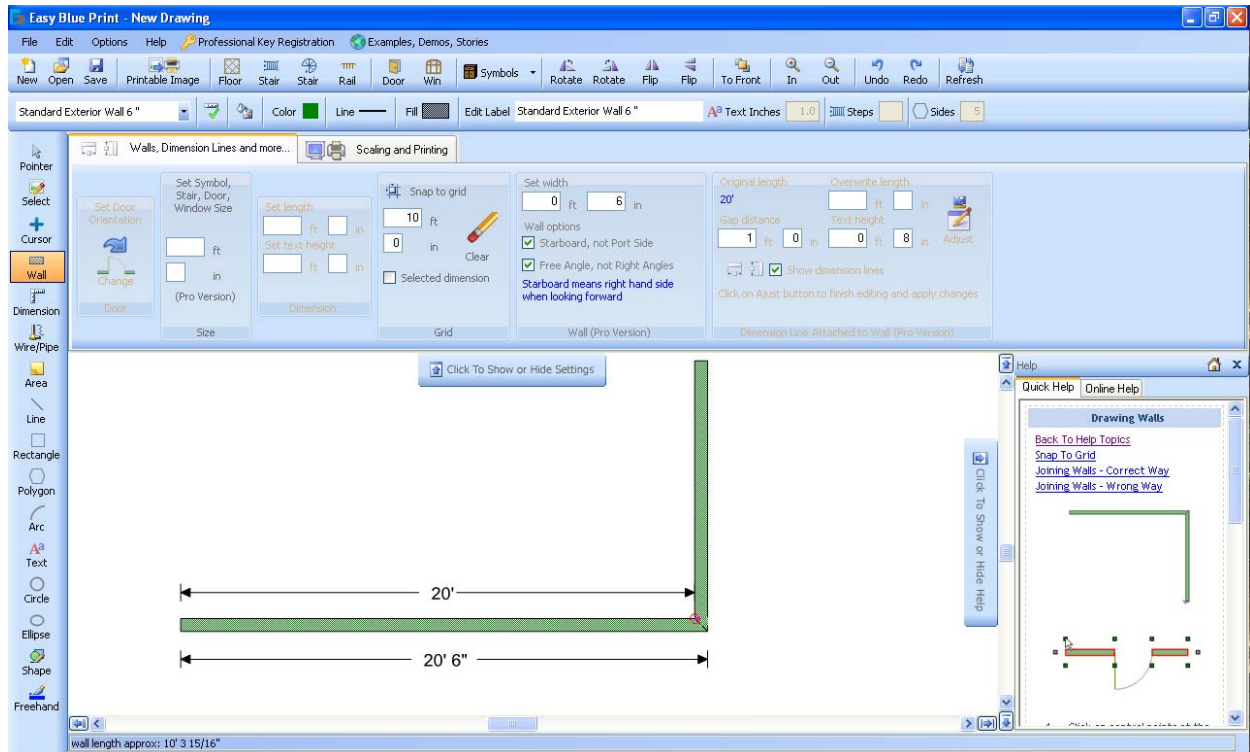


"What ARE those circles around the corner points of the wall?" you're probably thinking. Lean into your computer screen and look closely – notice what happens as your mouse begins to trespass into the territory of one of the corner points of the wall.

An electric-colored circle seems to perfectly surround the corner point as soon as your mouse tries to draw near. Essentially, the corner point is telling the mouse, "Back off – I'm in control now, and I'm not budging if you decide to click right now." But, this is **fantastic** news if you're trying to **preserve** the length of the wall side that is **connected to that corner**

point. The length of that side won't change.

Here's a quiz. **Which** corner point did I click on in order to create the following drawing?



By clicking on the **top** corner point, we were able to connect the new vertical wall to the **top** corner of the **existing** horizontal 20 foot long wall. So, both walls are, in effect, **sharing** that corner point. This means that the length of the **top** side of your previous wall is *preserved* (the top two points of the 20 foot horizontal wall side haven't changed at all).

Cute? Sure. Dramatic? Not yet. You're probably asking, "What happens when I accidentally bump something, or if my situation is more complicated than the one you described?"

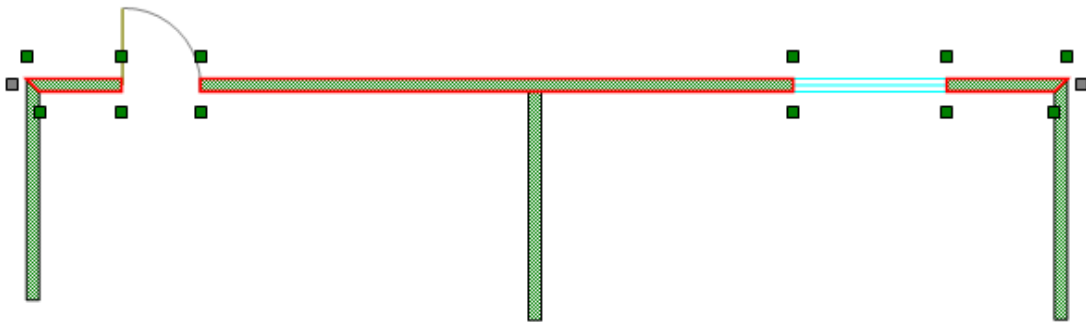
The One Dead-On Accurate Trick That Always Works

The full "snap to grid" technique is savage. This technique delivers tremendous power **and** neck-bending traction – at the same time.

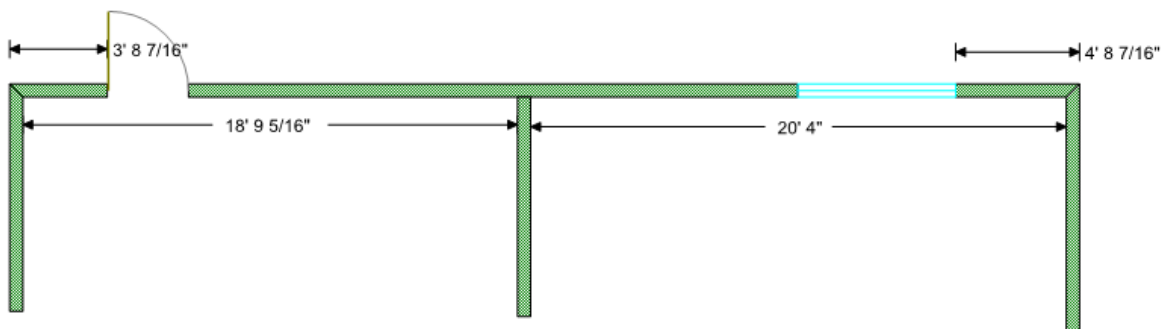
We'll first prepare a ludicrously absurd test track. Begin by drawing a wall with two corners, joined to two other walls, at the ends. Be careless and carefree. In fact, go ahead and smack the "clear" button in your snap-to-grid area before you do any drawing at all.

Add a door and window to your wall too. And, to mix it up a bit, add a "child wall" too. To add this child wall, just draw a wall that **doesn't** connect to the main wall's corners, but instead connects to the **side** of the main wall.

Finally, use your pointer to select your main wall.



Clicking on various control points along the side of the wall, start adding dimension lines willy-nilly, measuring several distances along either wall side. Whatever your whim, the level of ludicrously in your drawing should compete at least with what is shown in the drawing below:

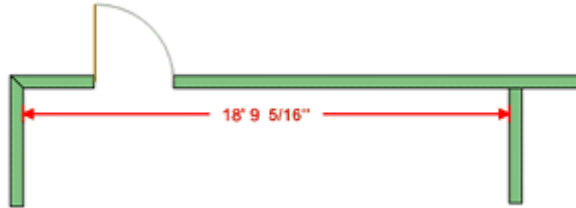


I'm certain that you can carve a more dimension-rich shape, but the drawing above gives us at least a little drama. We have at least four dimensioned distances, and at least five different...things...connected to our main wall.

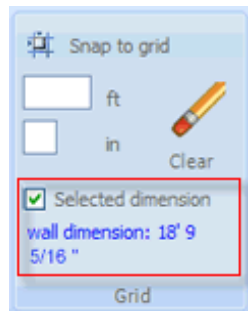
To prepare for what's going to happen next, go ahead and type in a jack-rabbit distance (like 5 feet) into your snap to grid boxes and fasten your seatbelt.

Here now is the “snap to grid” technique:

1. PICK, with deliberate care, a **specific** wall dimension line (with your pointer tool.)



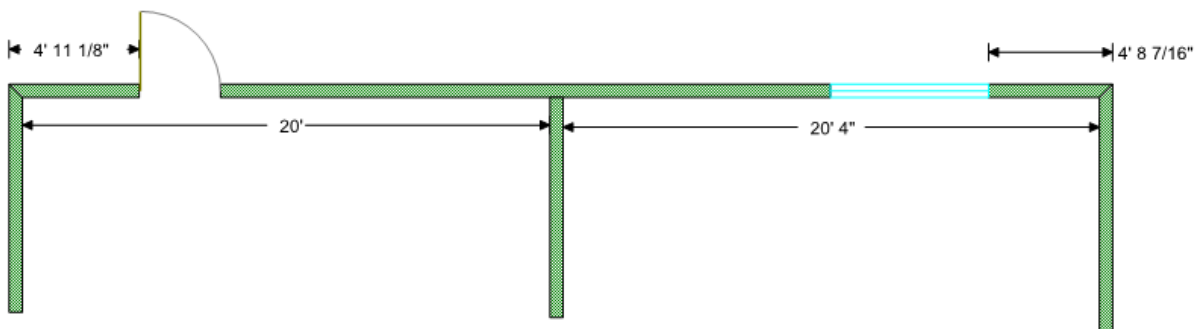
2. FILL a “I-know-what-I’m-doing” CHECKMARK in the “selected dimension” check box (in the snap-to-grid area).



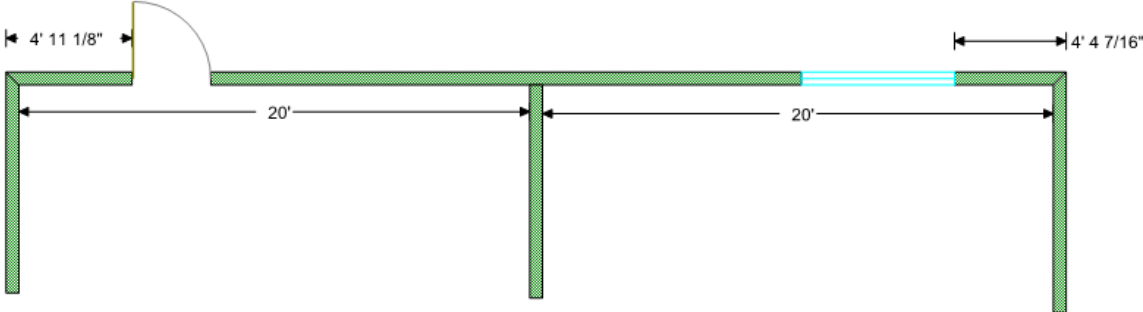
3. SWIFTLY SLIDE your target object to its exact position.

Quickly! Tell me how you would use only a few mouse clicks to make your first “room” (see above) 20 feet wide?

1. CLICK, CLICK, CLICK --really make sure it’s selected-- the 18' 9 5/16" dimension line (see above)
2. CLICK in the “selected dimension” CHECK BOX (in the snap to grid area).
3. CLICK – and slide – the leftmost vertical wall to the LEFT...



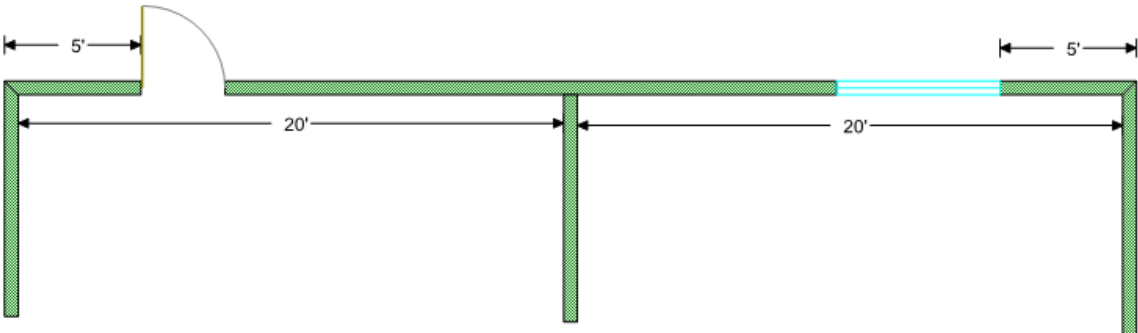
Do the same for the room to the right. THINK: how would you do it?



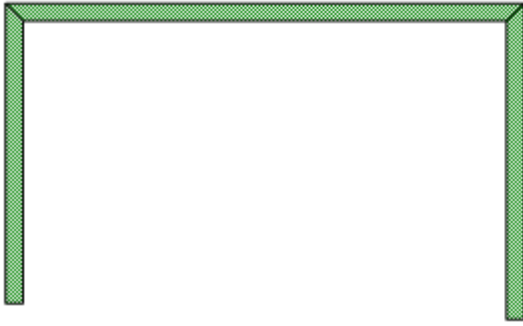
How would you position the door 5 feet from the corner of the house?

- 1. Click on the 4' 11 1/8" dimension line (see above).
- 2. Check the "selected dimension" check box.
- 3. Slide door.

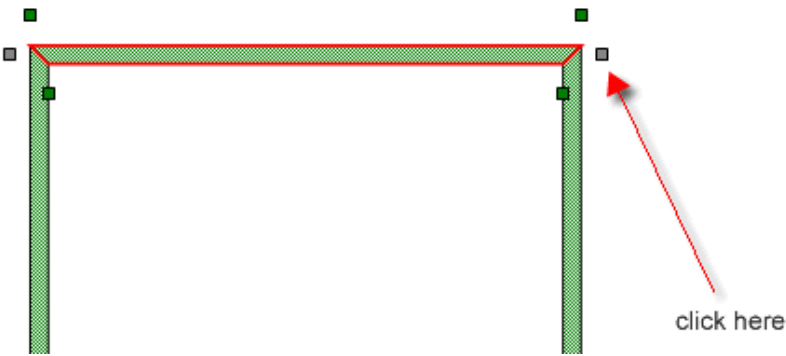
Do something similar for the window. You get the idea.



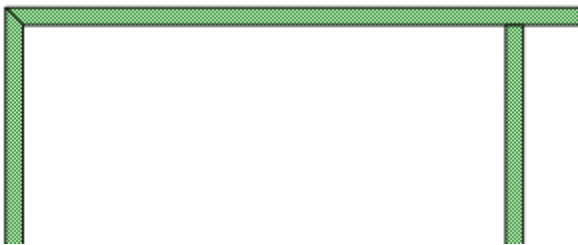
There is no **limit** to the things you can now do. Imagine you wanted to add a second room to the right of the room below.



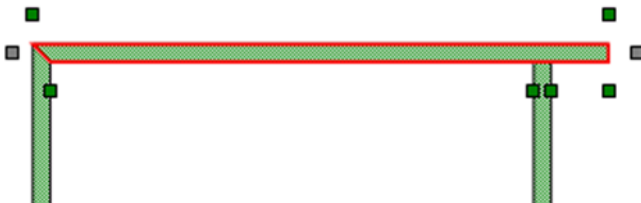
We want to edit the main horizontal wall, so let's select it with our pointer tool.



Click on the rightmost grey control point to begin extending the wall...but only do the extension a few inches or so ... we just want to get the extension started.



Is there any way to control this extension process using our technique? To use our technique, we'd need to have a wall dimension line to select. Let's add one. Select the main wall:



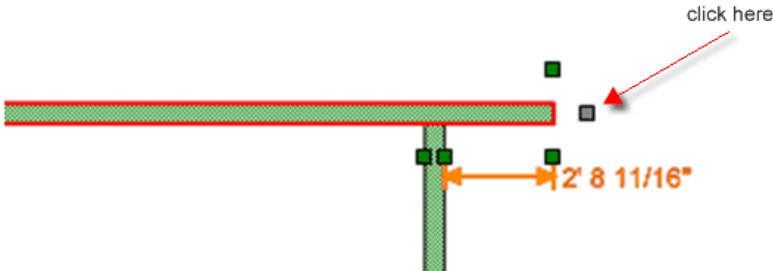
Click on two control points to create the wall dimension line.



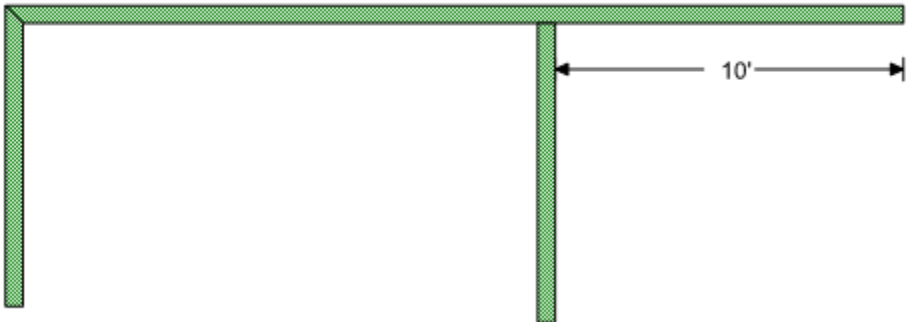
Can you see that the rest of the process of extending the wall is now the same as before?

- 1. Select the wall dimension line.
- 2. Place a check in the "Selected dimension"checkbox.
- 3. Do your edit operation (click, drag, move, whatever).

In this case, our "edit operation" is going to be a wall extension. As before, we select the main wall, and click the grey control point.



A couple of jackrabbit jumps later, and we are finished:



That, in a nutshell, is how to get up-and-running with accurate dimensions in Easy Blue Print. It's that easy, and it's easy to do over and over again.

1. Pick a wall dimension line, deliberately.
2. Check "Selected Dimension" checkbox.
3. Do edit operation, as if you weren't really worried about accurate distances at all.

I almost forgot: and jump like a *jackrabbit*.