FOUNDATIONS and FOOTINGS using ArchiCAD

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The CAD Academy
We need to design the house before we start with the “construction” elements. To do this we are going to place some walls for our proposed new summer home.

We want this home to face a beautiful view and need to design windows to that view and a nice deck on the outside to sit and enjoy the view. To save money we are trying to keep the square footage around 1500.

Open ArchiCAD by clicking on the ArchiCAD ICON

Start a NEW drawing.

Select WALL and change the EXTERIOR wall to SIDING.

Be sure to change to MULTI-LINE drawing by selecting the ARROW at the right as show and hold down the pick button to get the options. Then pick to select the multi-line option.

Pick a beginning point as shown and head to the left. When at 180 degrees type in 45 on the keyboard. This is called DIRECTIONAL INPUT.
Head down 90 degrees and type in 36 for 36 feet. Archicad defaults to feet.

Head to the RIGHT 45 and then UP 36. If you see a HAMMER you can pick to close. If not select the last pick and RIGHT MOUSE CLICK and OK TO CLOSE.

Check out the WALLS by selecting GENERIC PERSPECTIVE from the NAVIGATOR.

When done select 1ST FLOOR to get back to work.
To quickly check out the square footage of the home select ZONE and select the measurement type as shown and change the text to say OVERALL.

Then PICK INSIDE the walls.

You should see a HAMMER. That is where you pick to place the text.

Zoom in using the scroll on the mouse or by selecting the ZOOM IN tool.

Looks like the square footage in OK.

Zoom back out by selecting the ZOOM ALL tool.
A quick way to remove information you don’t need it is
1. SELECT ARROW
2. SELECT ZONE
3. RIGHT MOUSE CLICK
4. SELECT LAYER
5. AND THEN HIDE LAYER

We are now ready to place a SLAB Under the building. Notice that the SLAB is 1 foot thick and have pine floors.
Hold down the SPACE BAR and you will see a MAGIC WAND. Select the OUTSIDE wall to PLACE the SLAB in PLACE.

Check it out using GENERIC PERSPECTIVE from the NAVIGATOR. Try the ORBIT tools to see various views. GO BACK TO 1st FLOOR

Now we are ready to place the FOUNDATION.

SELECT the WALL tool. Change the settings as shown. We want 8” high foundation. We have a 1’ slab so we will start at 1’8”. We will have a 6” offset and a width of 1’8”. Change materials to be CONCRETE LIGHT.
Change LAYER to SFNDN
Next we are going to change the way the FOUNDATION is displayed.
Select UNCUT LINES and change to DASHED as shown.

Select OK.

Pick each corner of the house. When you see the HAMMER you are closed.

OR

You may use the MAGIC WAND method by holding down the SPACE BAR and SELECTING an OUTSIDE WALL.

GO AROUND THE HOUSE AND SELECT OR PICK EACH CORNER. MAKE SURE YOU SEE THE BLUE GUIDE LINES. WHEN YOU SEE THEM YOU ARE SNAPPED TO THAT POINT.
We have a DISPLAY ORDER issue as our walls have disappeared.

Select the ARROW and then SELECT THE FOUNDATION WALLS. REMEMBER TO USE SHIFT TO ADD. RIGHT MOUSE CLICK. Select DISPLAY ORDER and then SEND TO BACK.
That looks much better.

This is how I visualize this vacation home.

Lesson is complete.