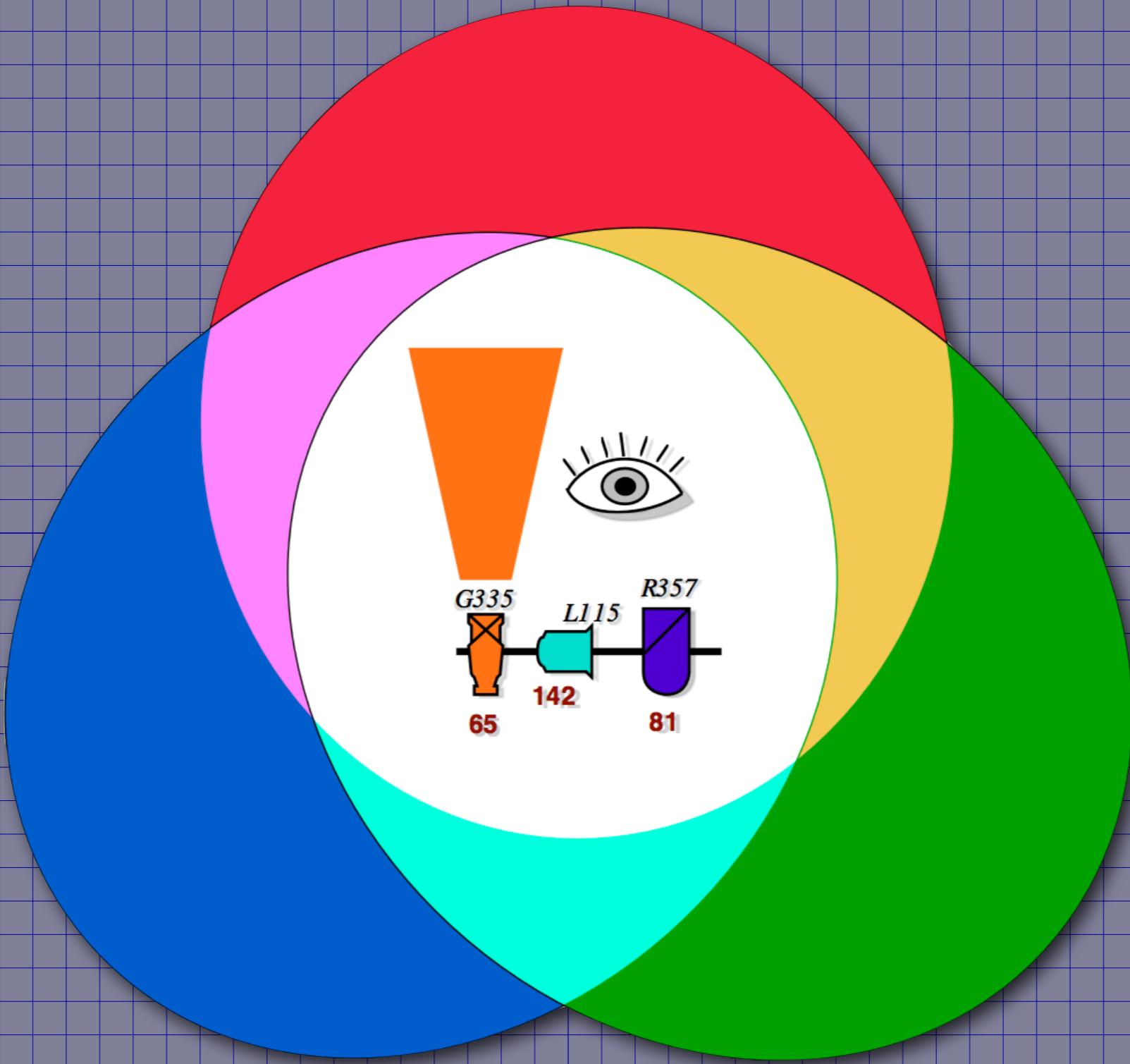


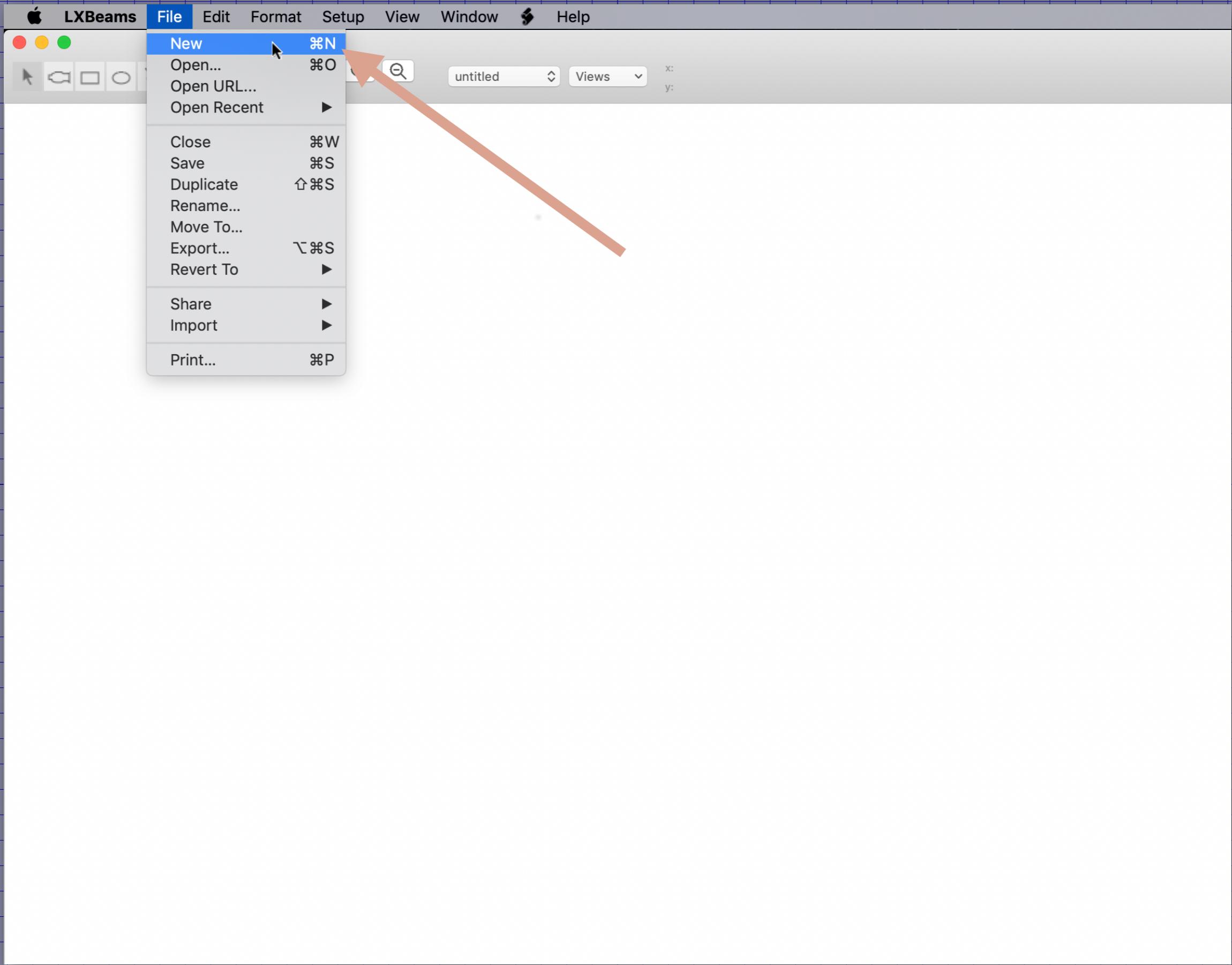
# DXF & Components



IATSE 728 Workshop 2020

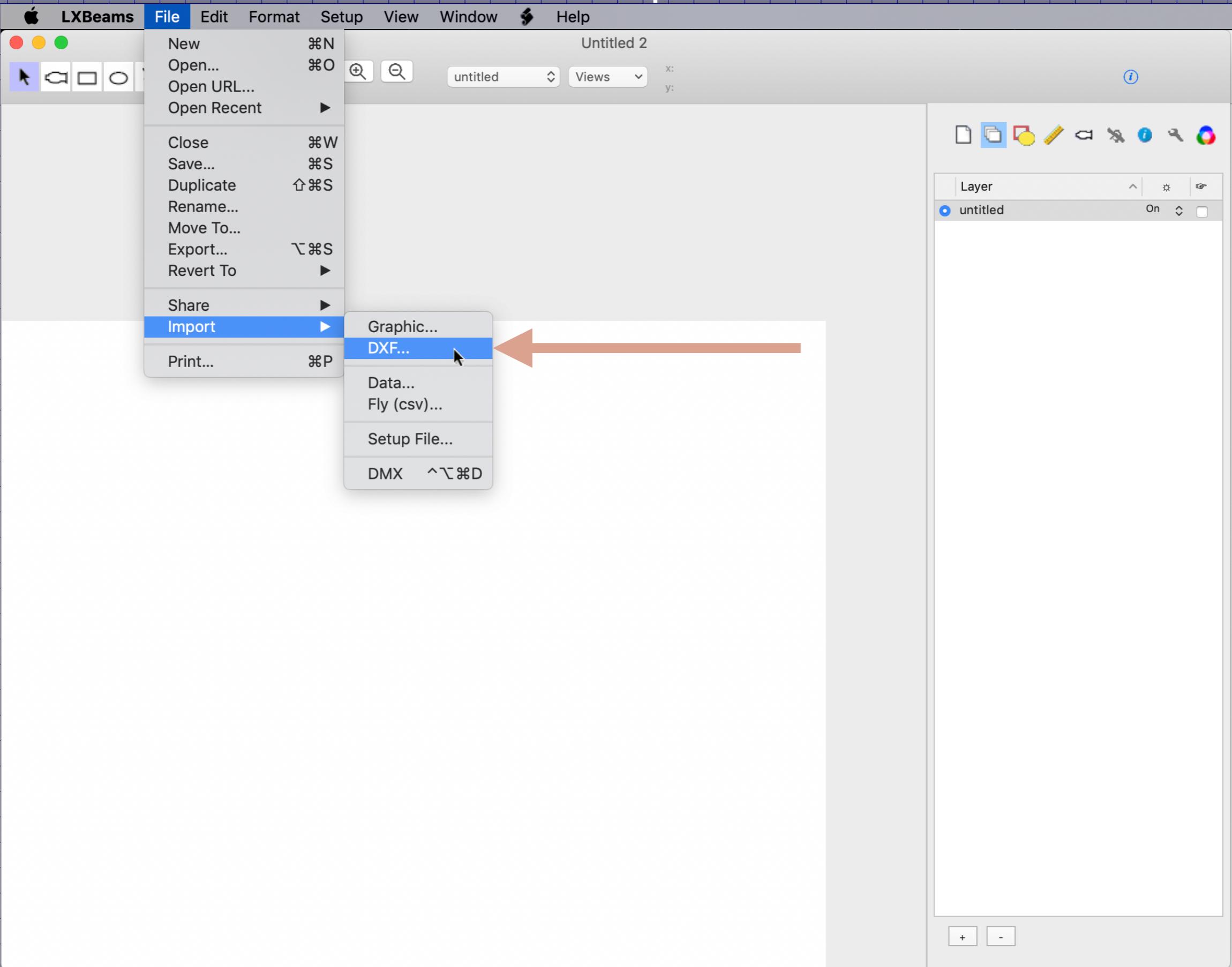
©2020

# Start with a new file.

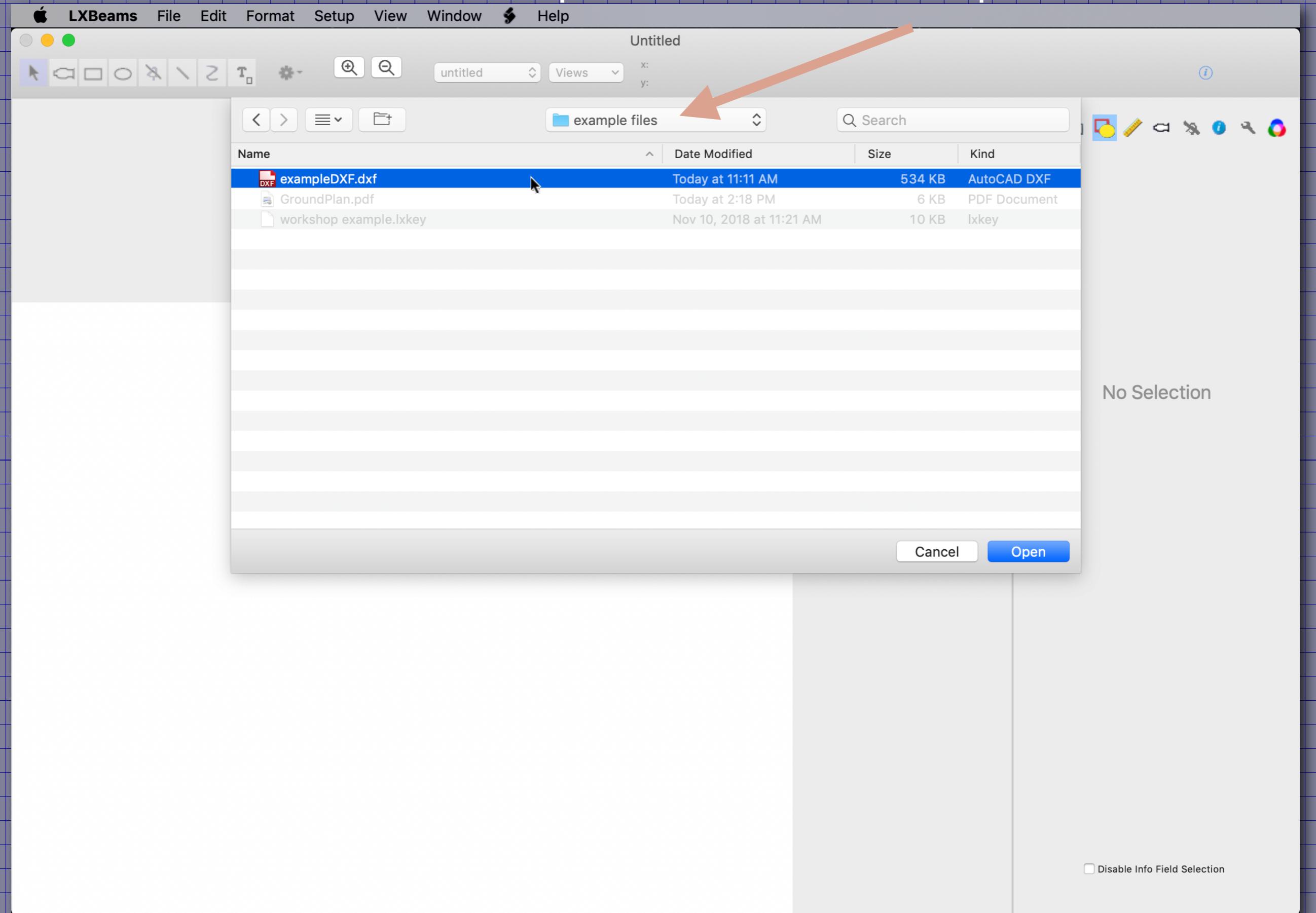


Choose File→New

# Choose File→Import→DXF...



Locate the exampleDXF file and click Open.



exampleDXF.dxf is in the example files folder

opendesign.com has a handy DWG<->DXF converter

The screenshot shows a web browser window with the URL [opendesign.com](https://www.opendesign.com) in the address bar. The page title is "ODA File Converter | Open Design Alliance". The main content features a large blue header "ODA File Converter" over a background image of a wireframe mountain range. Below the header, there's a section titled "ODA File Converter" with a list of input parameters. At the bottom, there's a "Downloads" section with a link.

News ▾ weather ▾ sports ▾ Home ▾ art ▾ misc sets ▾ Apple ▾ Develop ▾ chd ▾ UW ▾

Ovation F-145WW | CHAUVEST Professional

ODA File Converter | Open Design Alliance

OpenDesign alliance

Free Trial Products Solutions Demo Pricing Community

ODA File Converter

ODA File Converter

ODA File Converter application features a graphical interface and a command-line interface, and accepts the following inputs:

- Source directory
- Target directory
- Input file filter such as \*.dwg (default is "\*.dwg;\*.dxf")
- Output version/type
- Recursive flag
- Audit flag

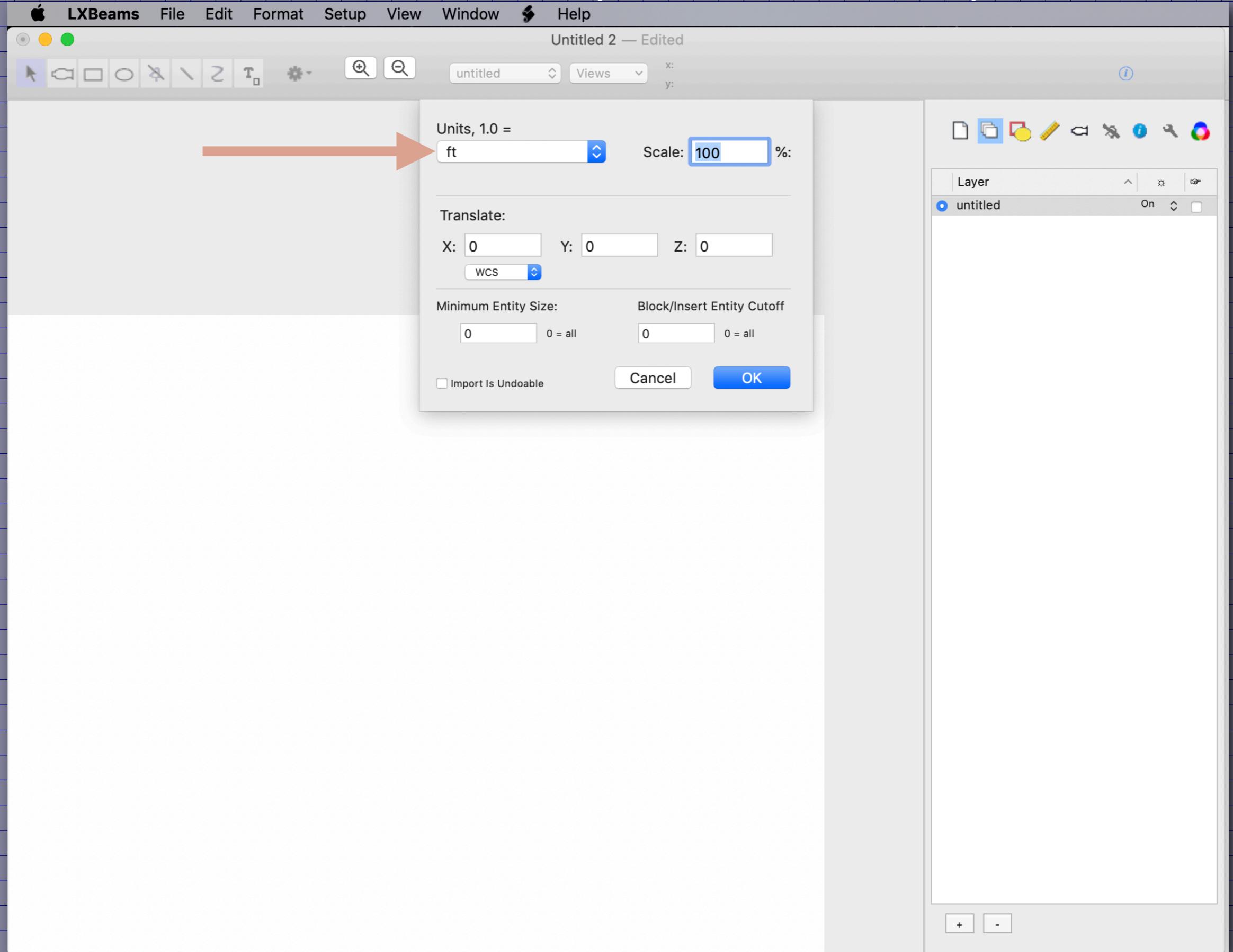
Upon execution, the application identifies all files in the specified source directory that match the specified filter, then loads and saves each of these files to the specified output directory as the specified output version/type.

If the audit flag is enabled, an audit/repair operation will be applied to each file as it is loaded. If the recursive flag is enabled, subdirectories within the source directory will be processed recursively.

ODA File Converter Downloads

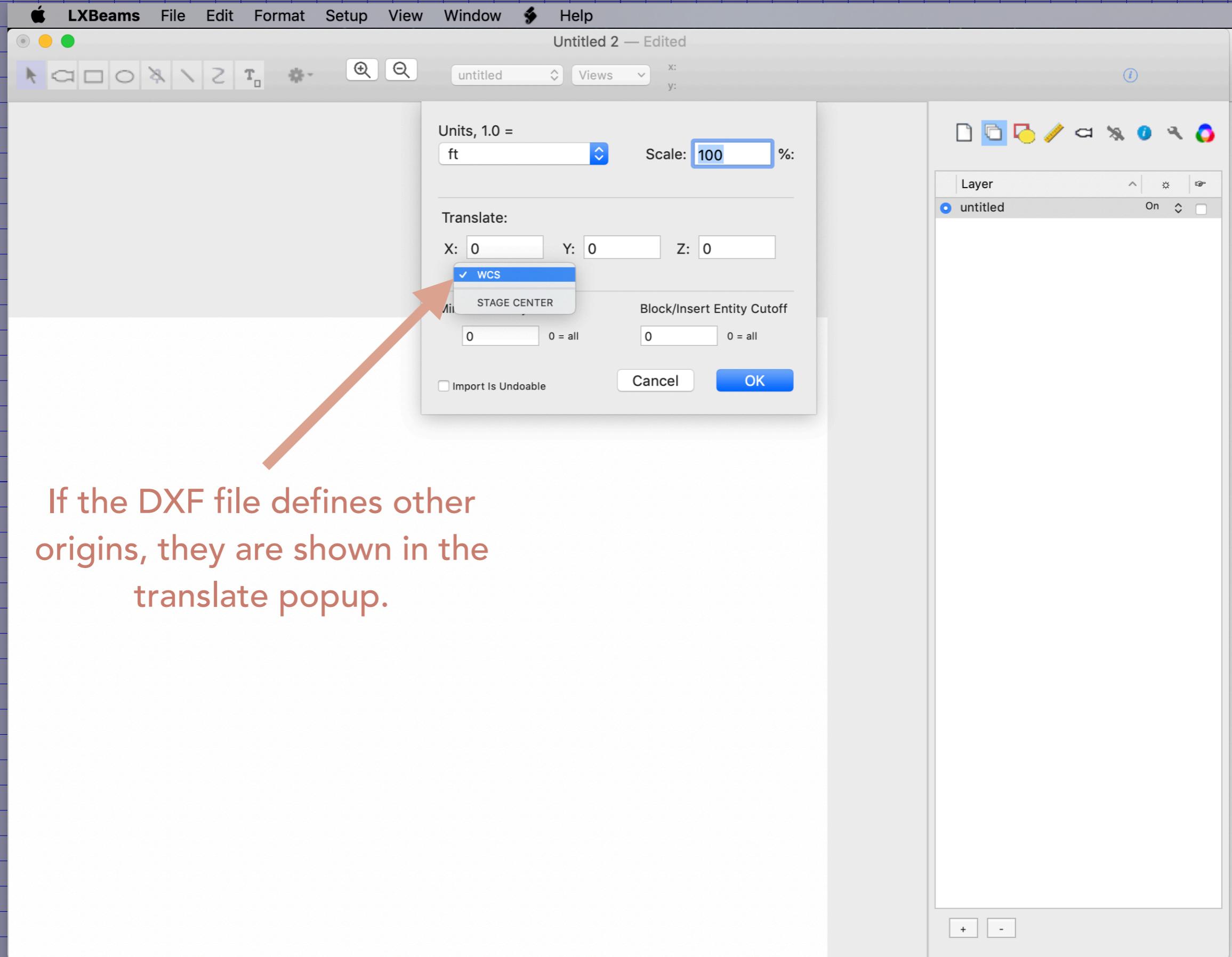
[https://www.opendesign.com/guestfiles/oda\\_file\\_converter](https://www.opendesign.com/guestfiles/oda_file_converter)

The dxf file is read and you have options of how to import its contents.



If the DXF file specifies the units that LXBeams recognizes, they will be shown.

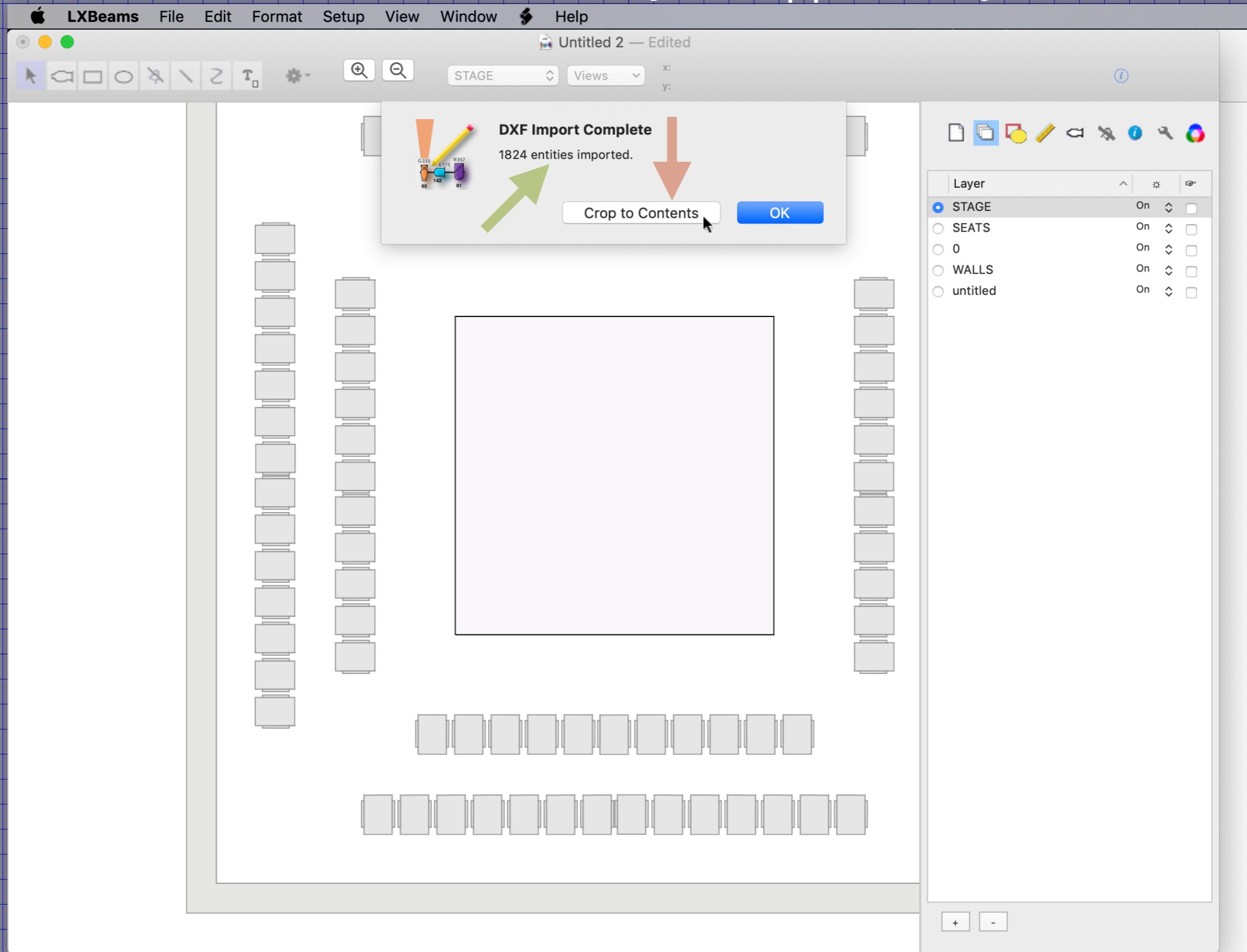
# The coordinates are relative to the origin of your file.



If the DXF file defines other origins, they are shown in the translate popup.

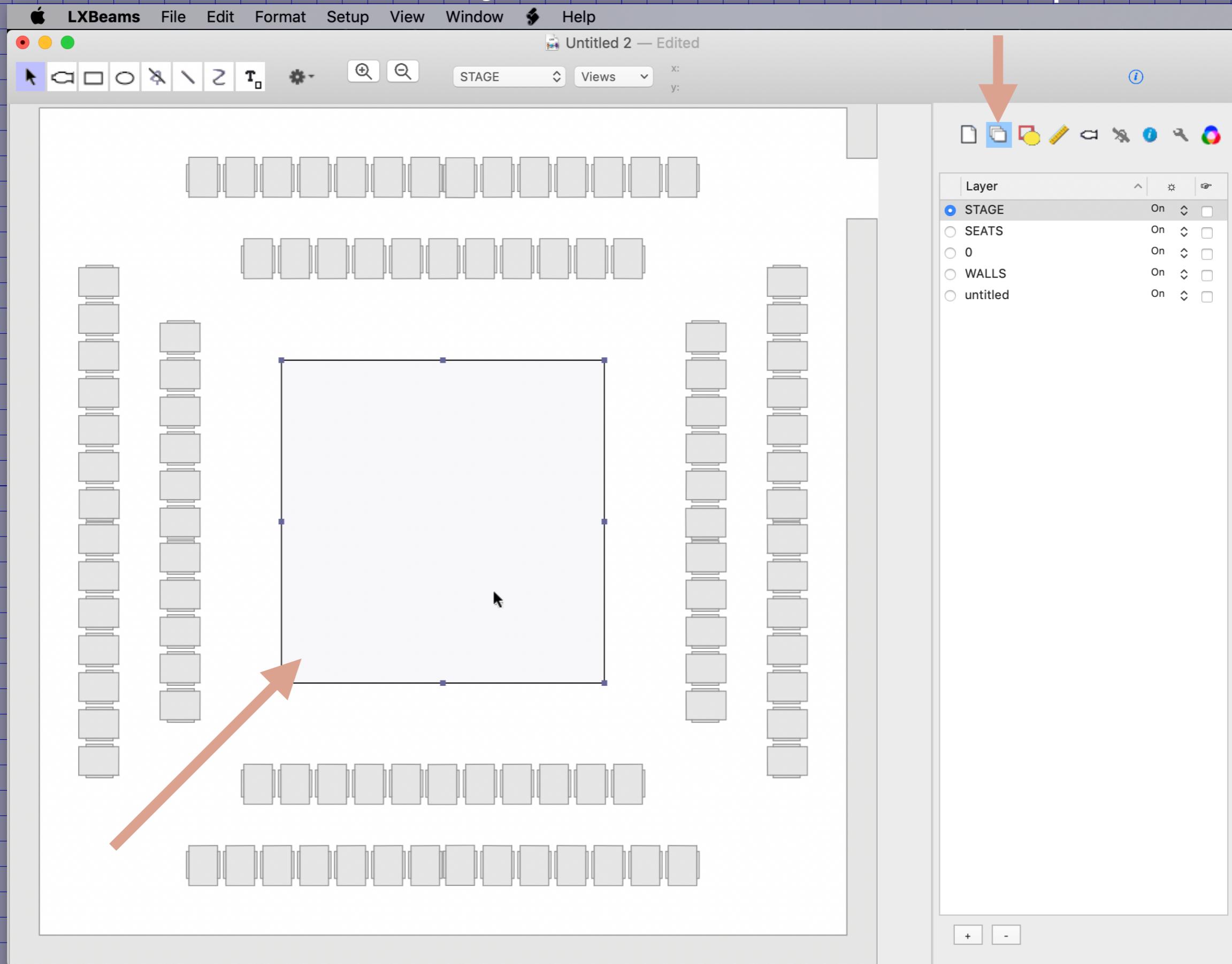
Leave the import using world coordinates and click OK.

# Not all entities in a DXF file may be supported by LXBeams.



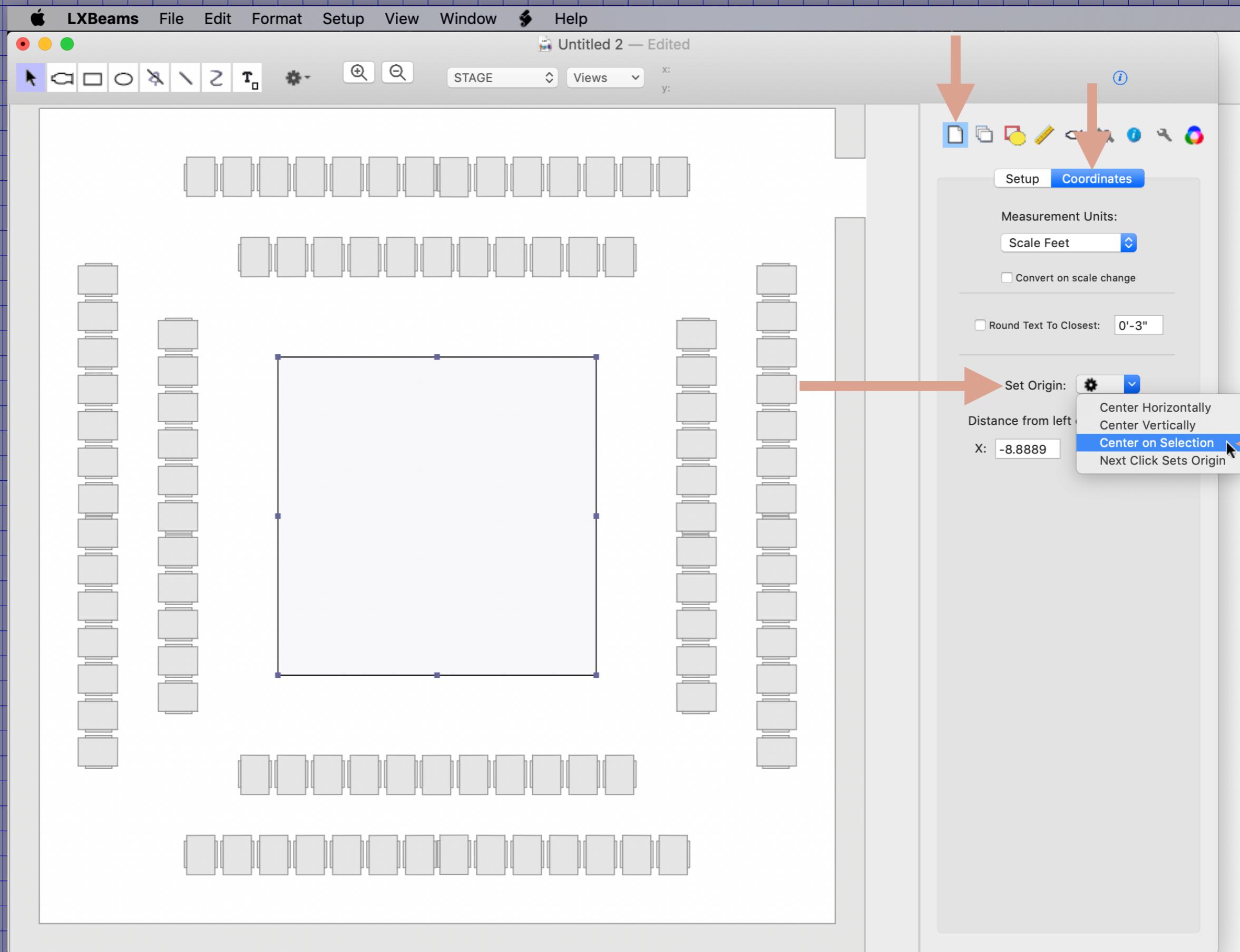
Click Crop to Contents to trim the plot size when the import completes.

# A number of new layers have been added to the plot.



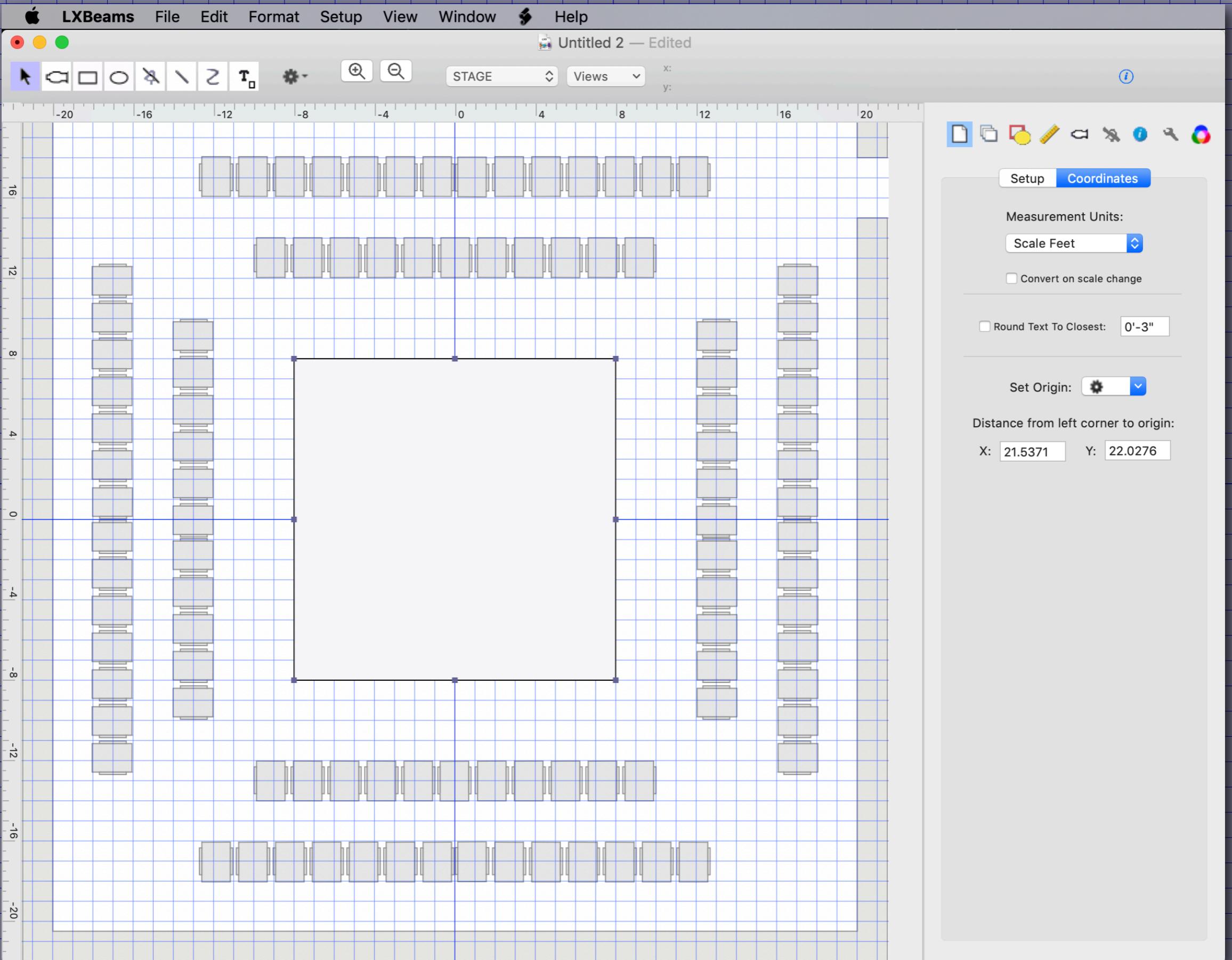
In the STAGE layer click the rectangle in the center to select it.

# Go to the Document/Coordinates tab.



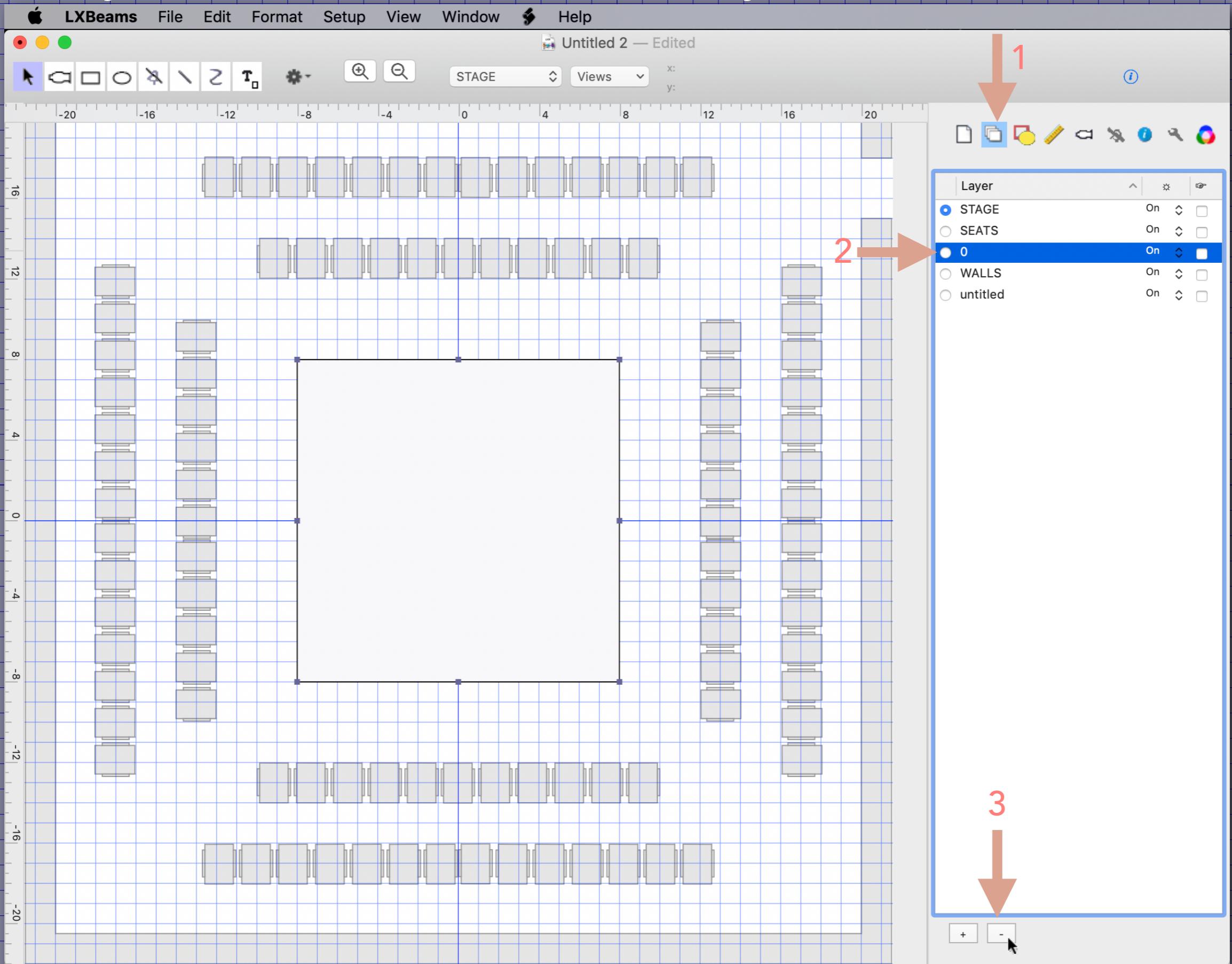
From the Set Origin popup, select Center on Selection.

# Choose View→Show Rulers and View→Show Grid.



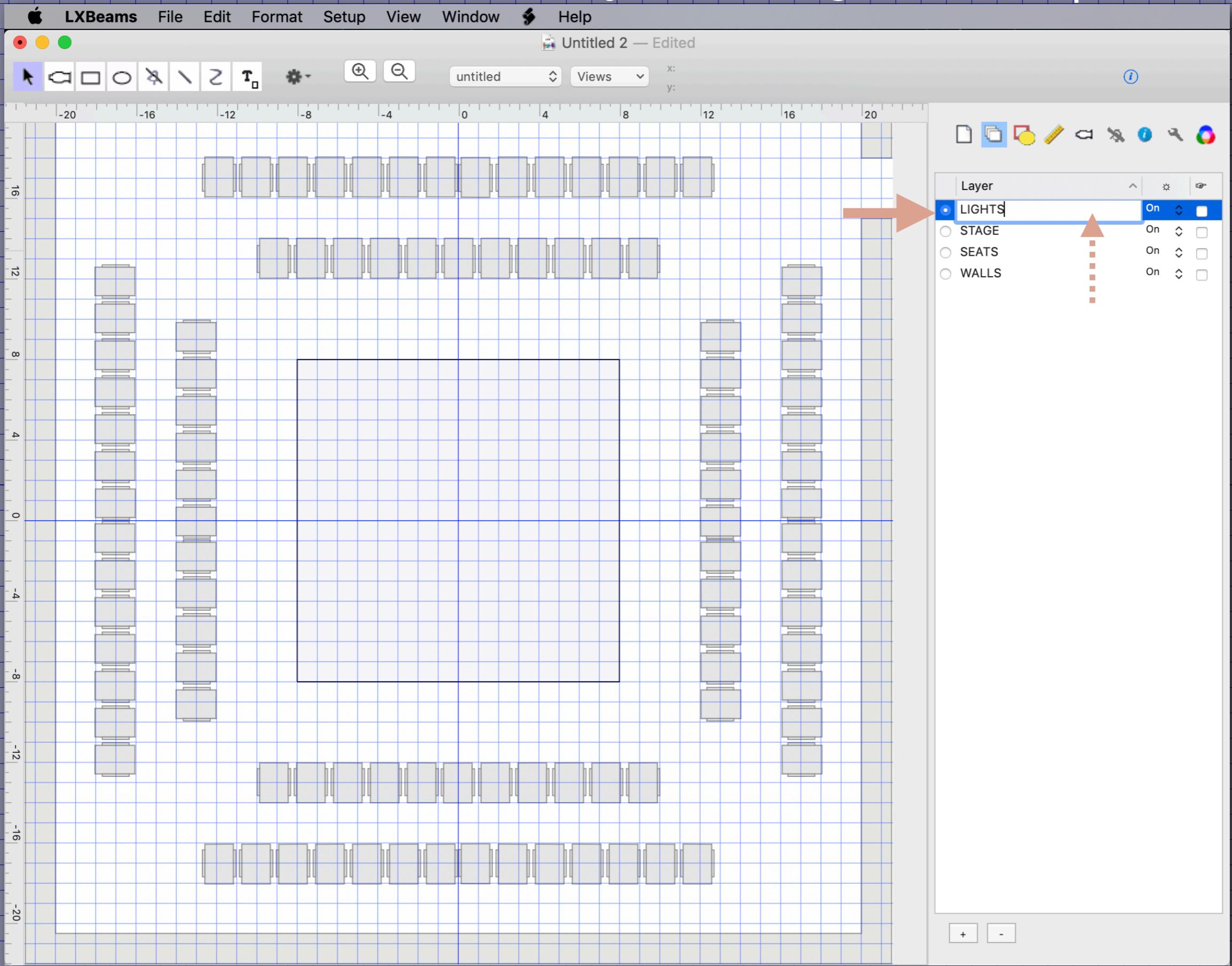
You can see the origin is centered on the stage area.

In the Layers tab, select the row for the layer named “0” and delete it.

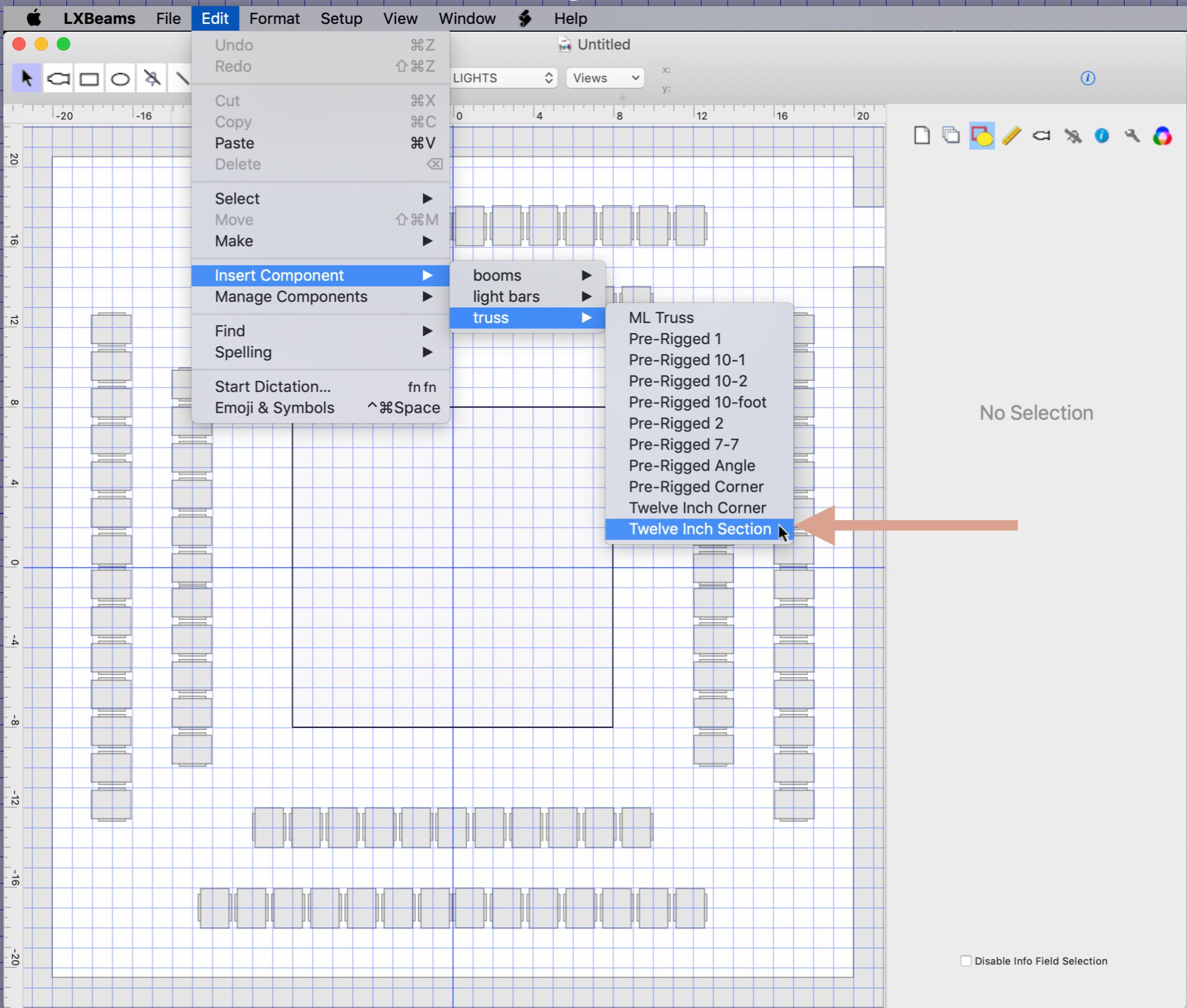


Layer “0” is the default layer found in almost all DXF files.

# Rename the “untitled” layer and drag it to the top.

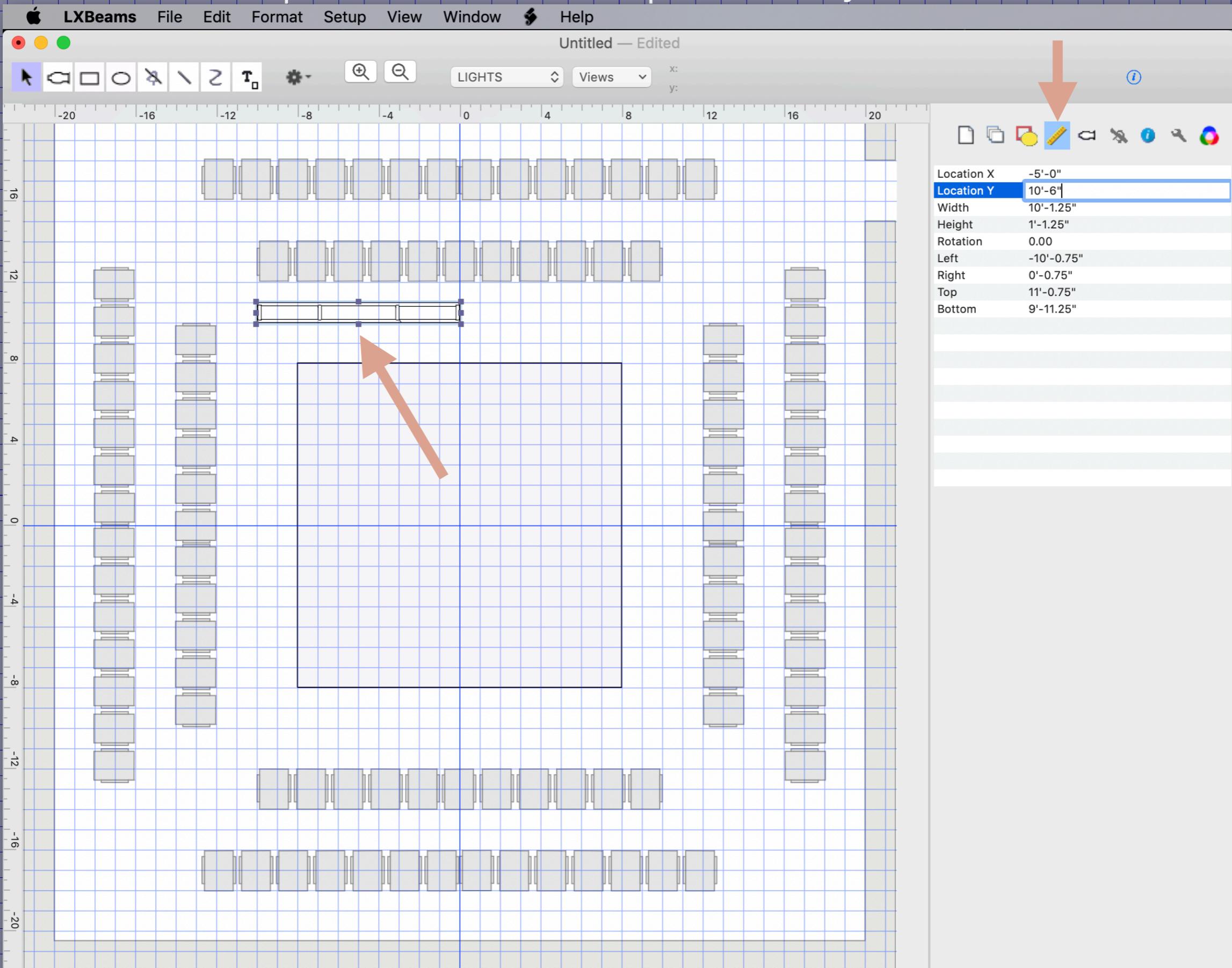


Click in the drawing area to switch focus.



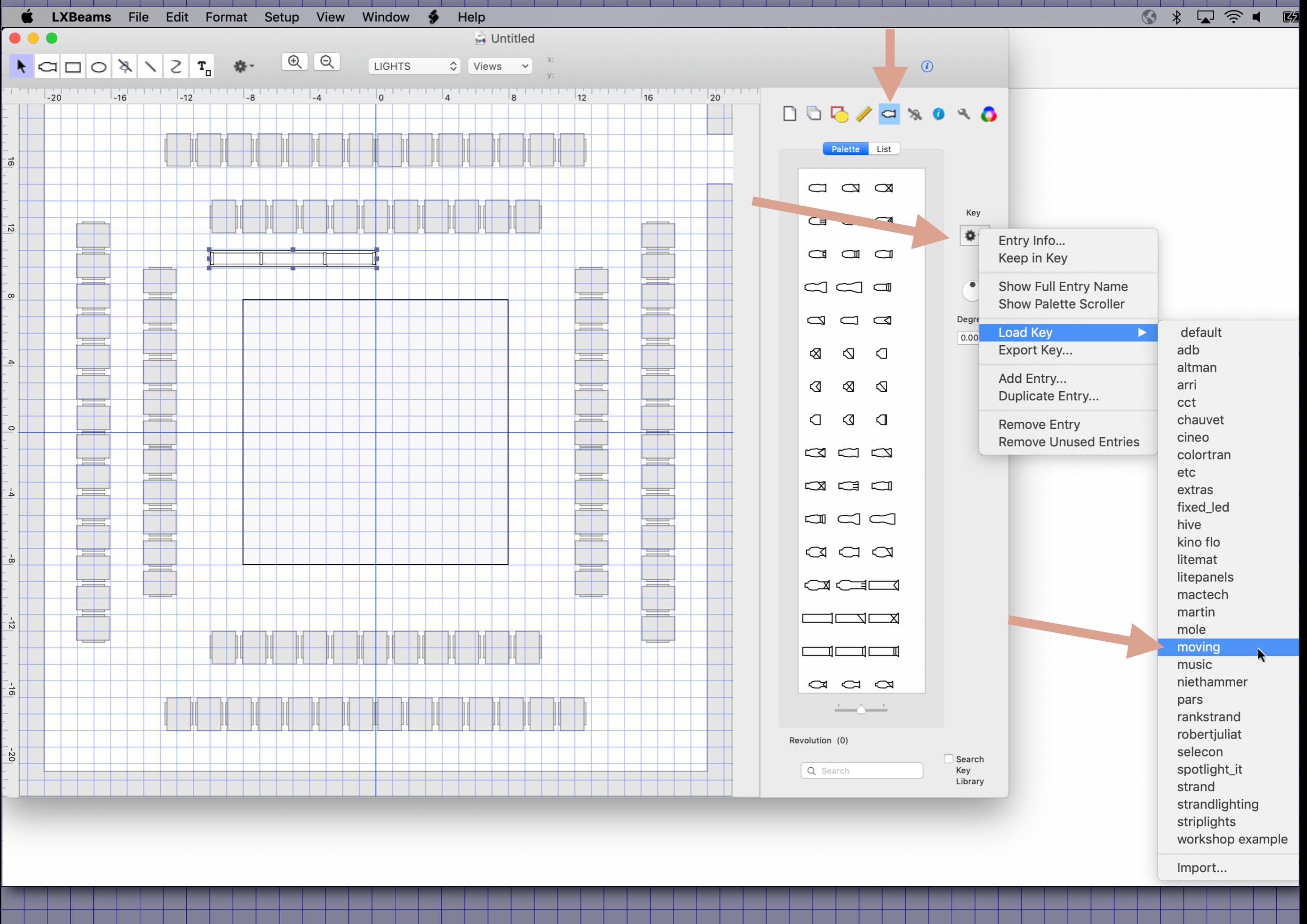
Choose Edit → Insert Component → truss → Twelve Inch Section

(The component is added at the point where you last clicked).

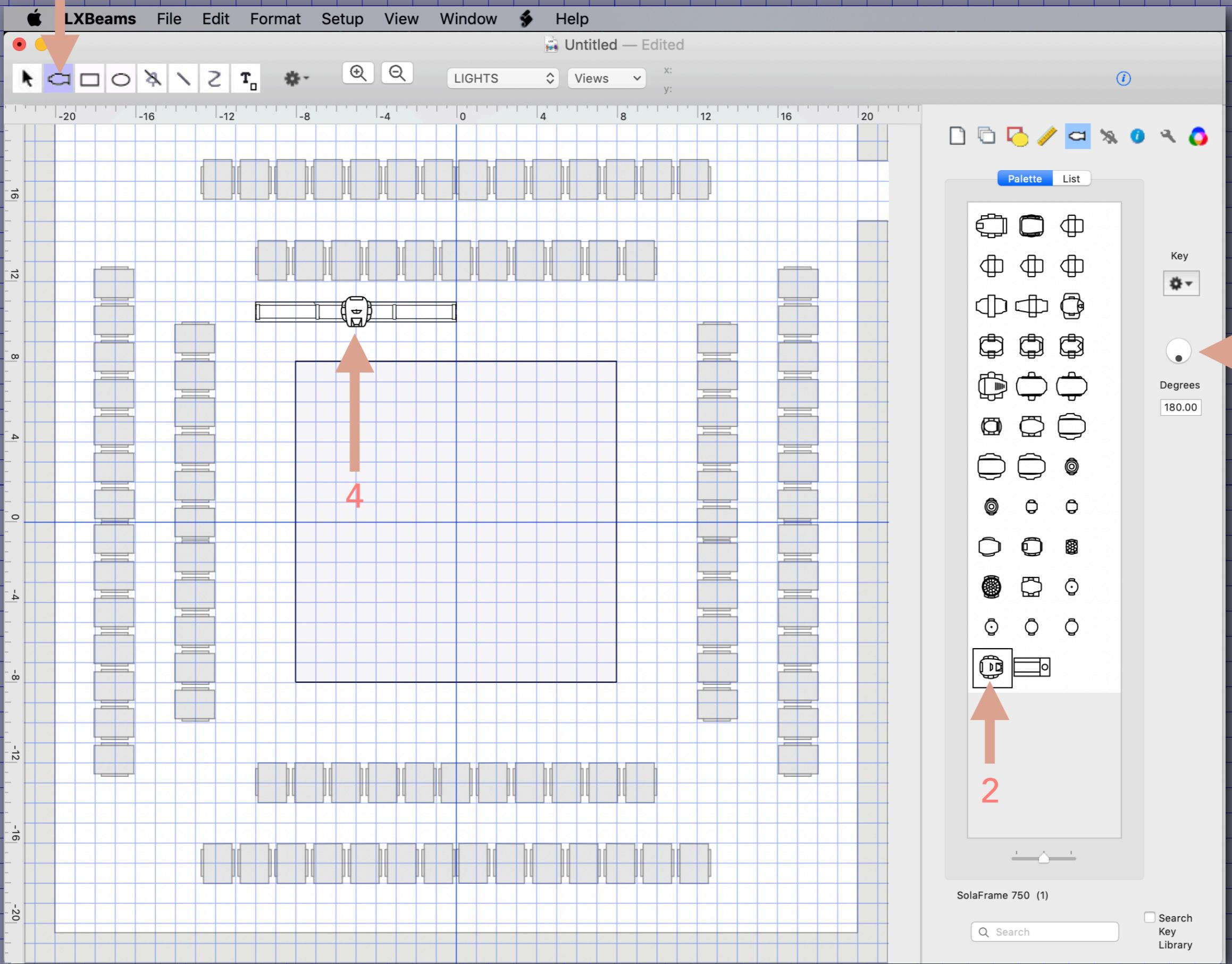


Position the truss. You can use the measurements tab to locate it precisely.

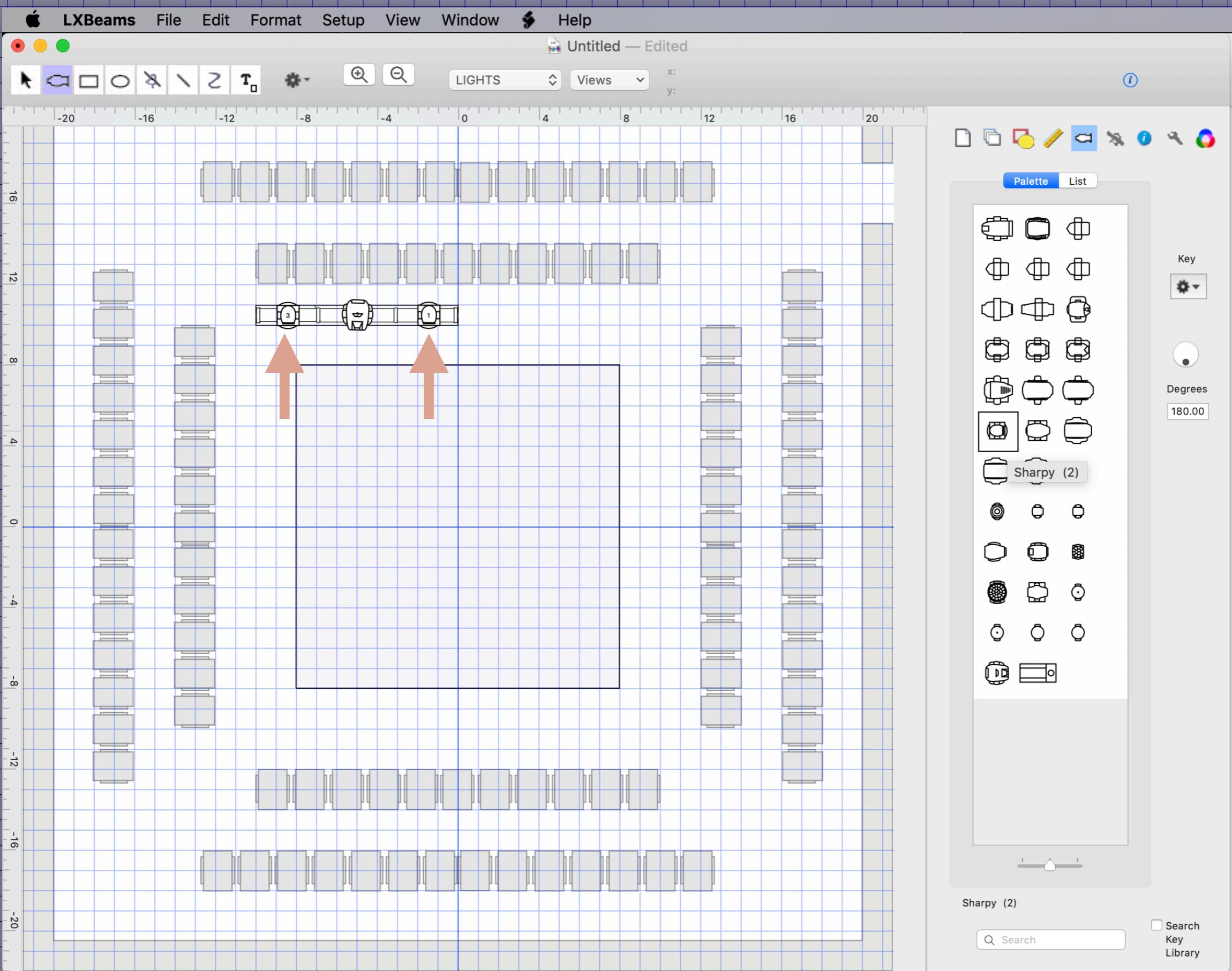
In the Symbols tab, use the popup to load the "moving" key.



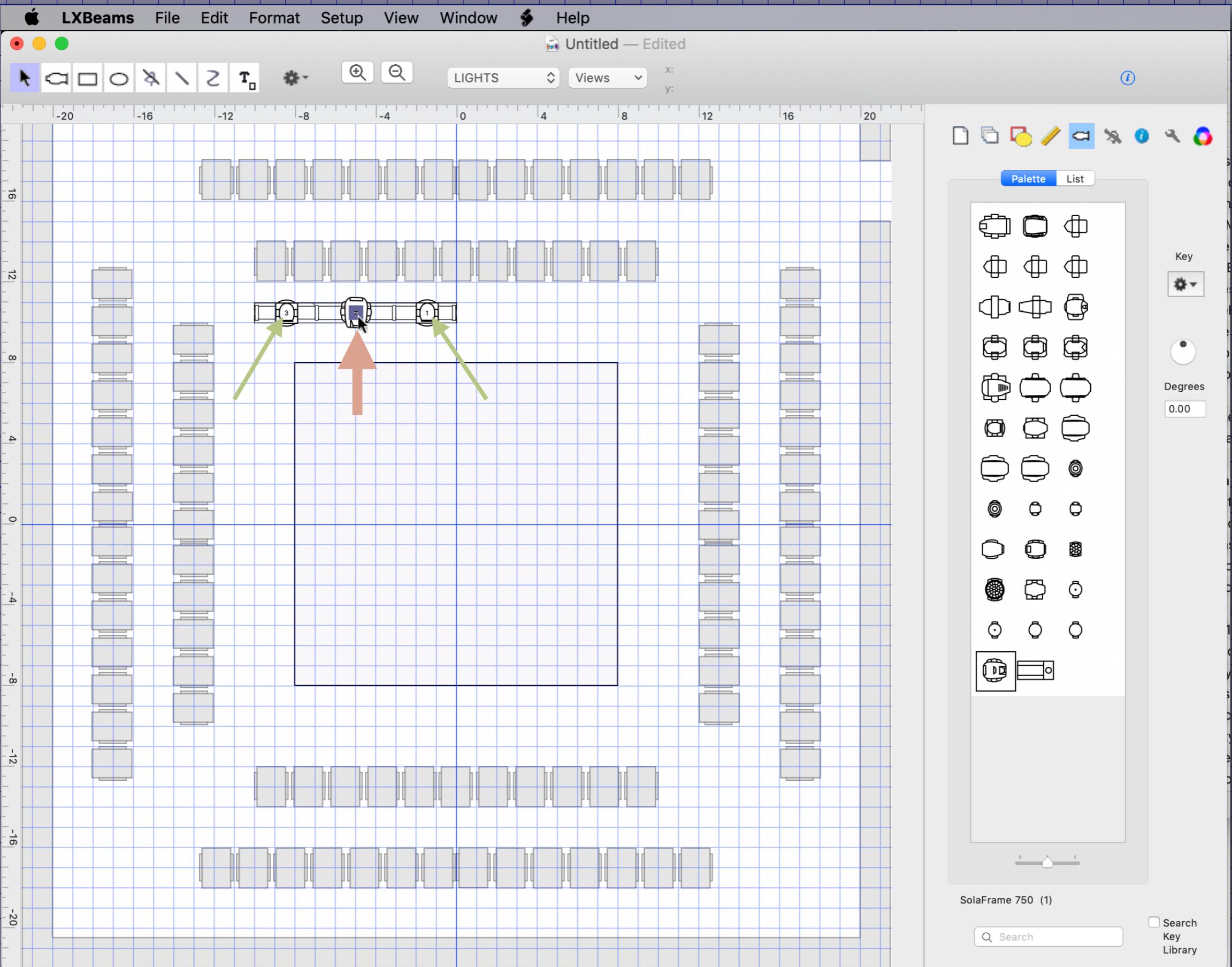
1 Use the symbol tool to draw a mover in the center of the truss.



# Draw a couple more movers.

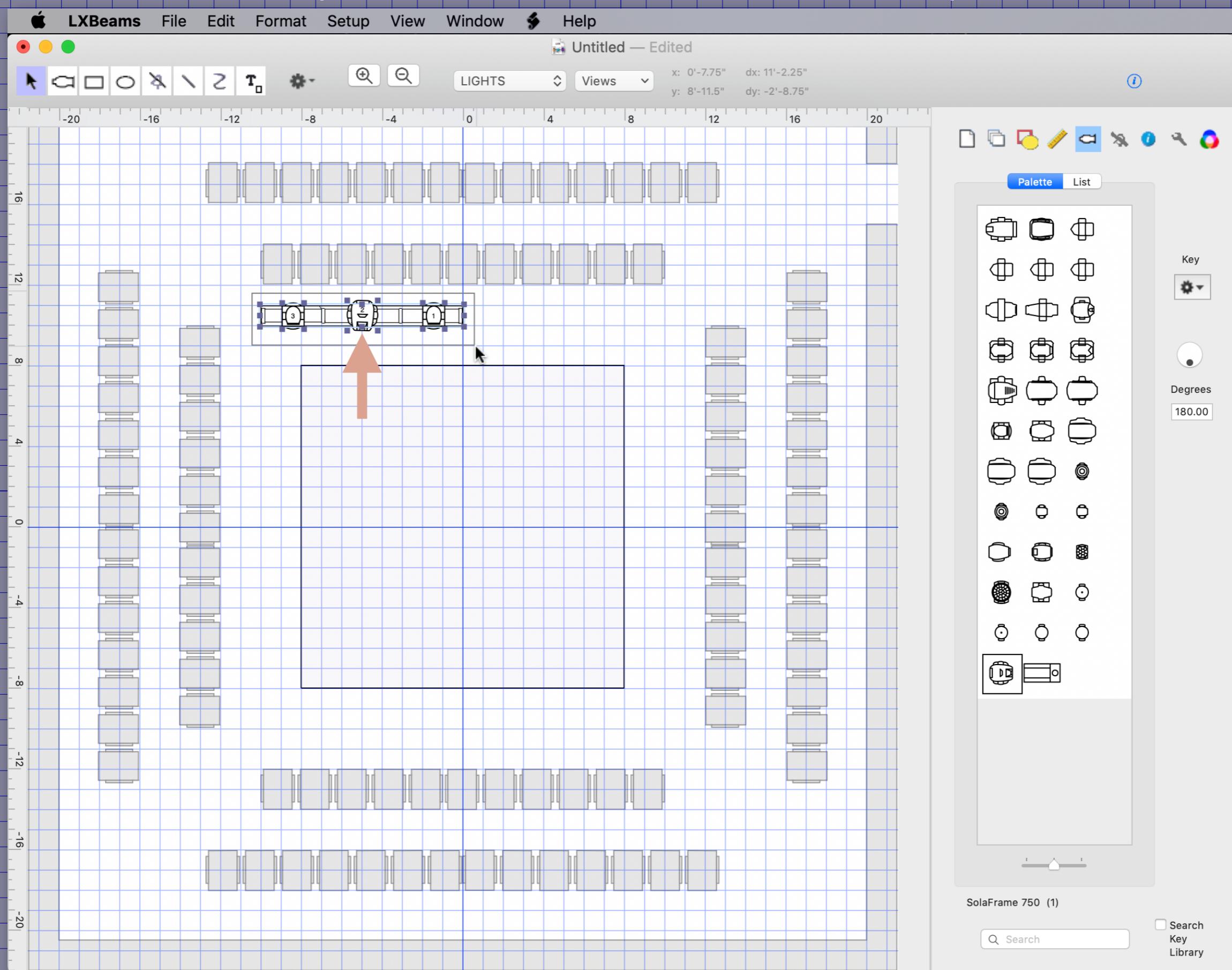


The lights are numbered because the truss group includes a position.



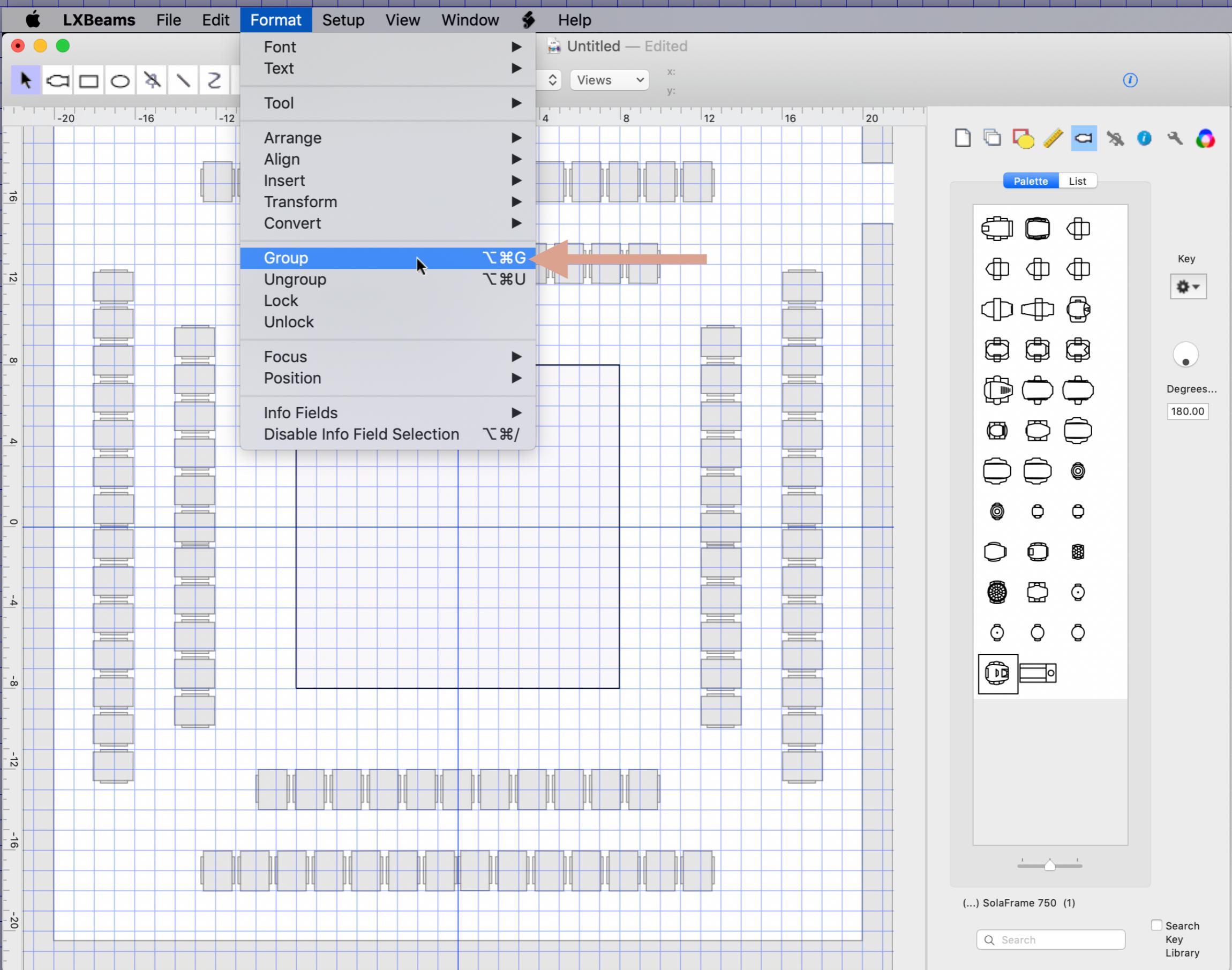
Hold down the option key and click to select the number field of the larger mover.

Use the up arrow key to nudge the number field upwards.



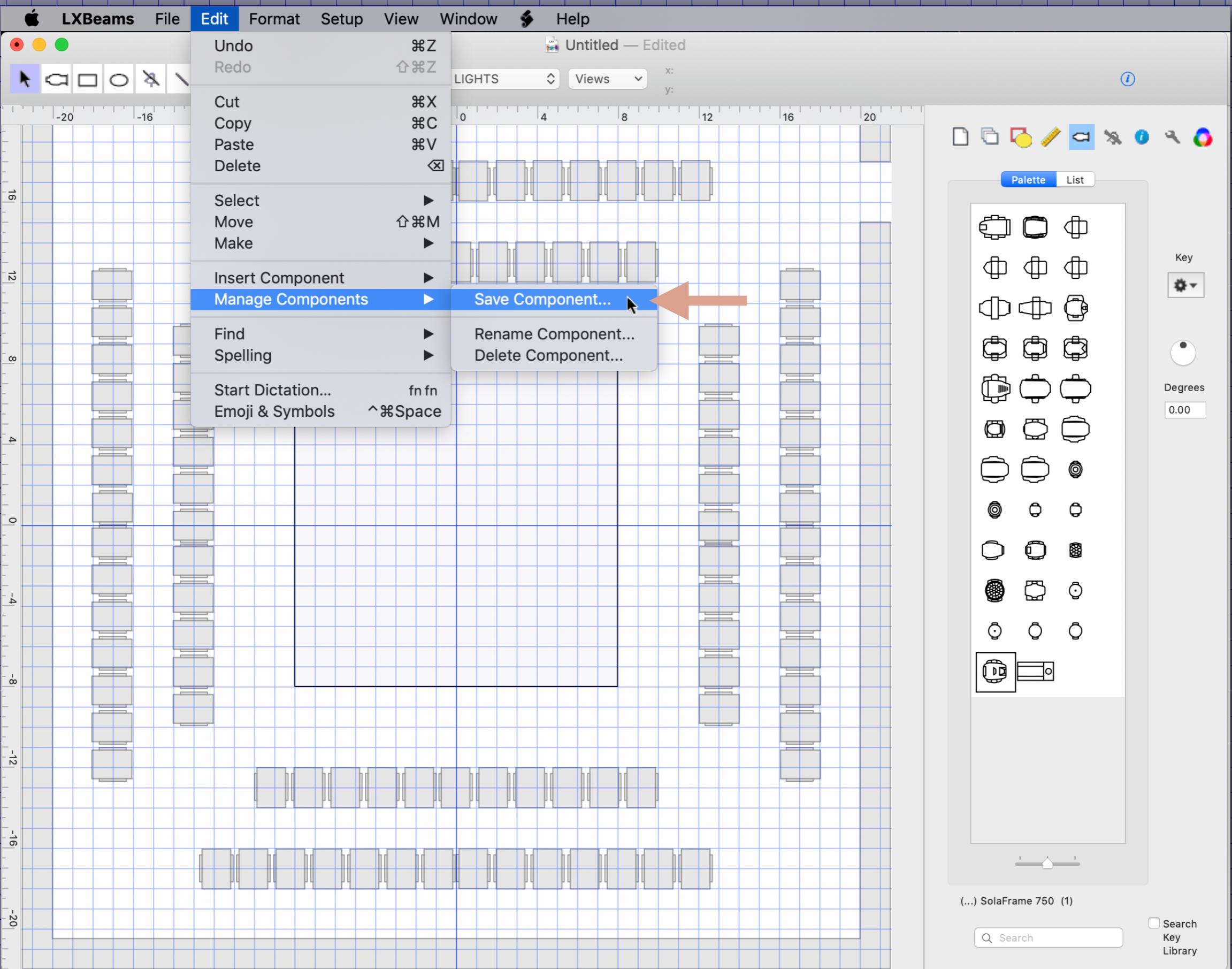
Then, drag the arrow tool to select the truss and the movers.

# Choose Format→Group.

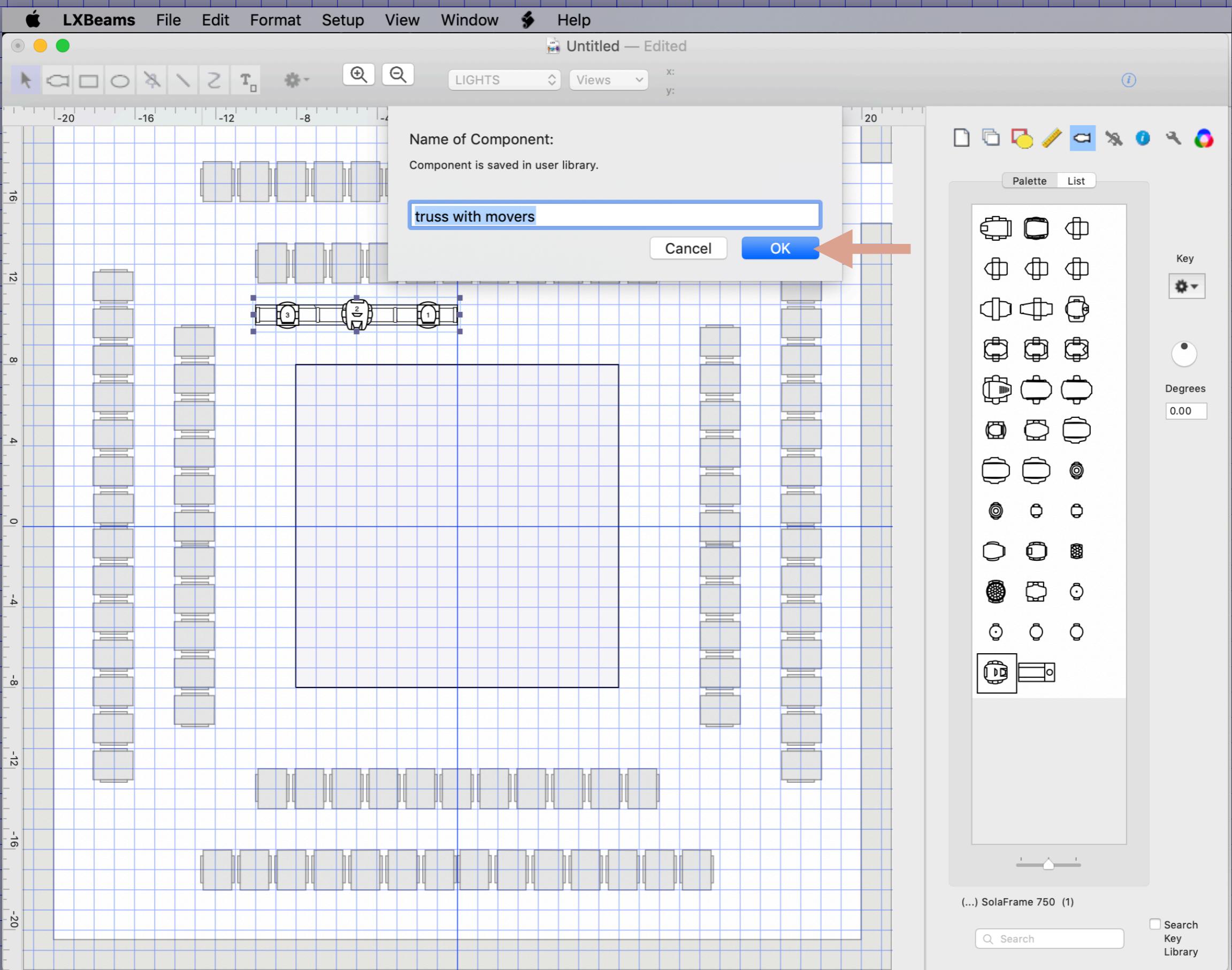


Grouping allows rotation as a unit.

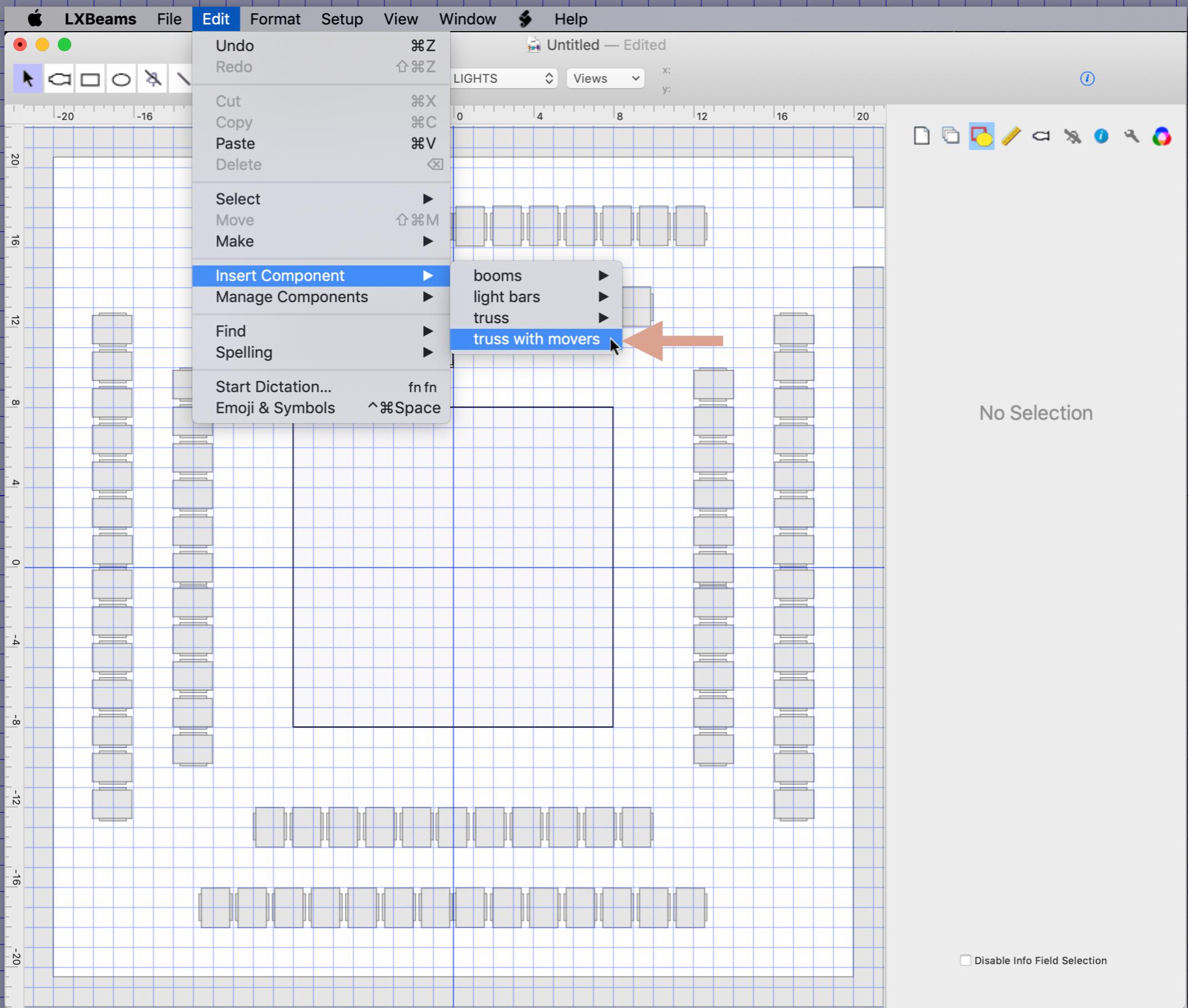
# Choose Edit→Manage Components→Save Component...



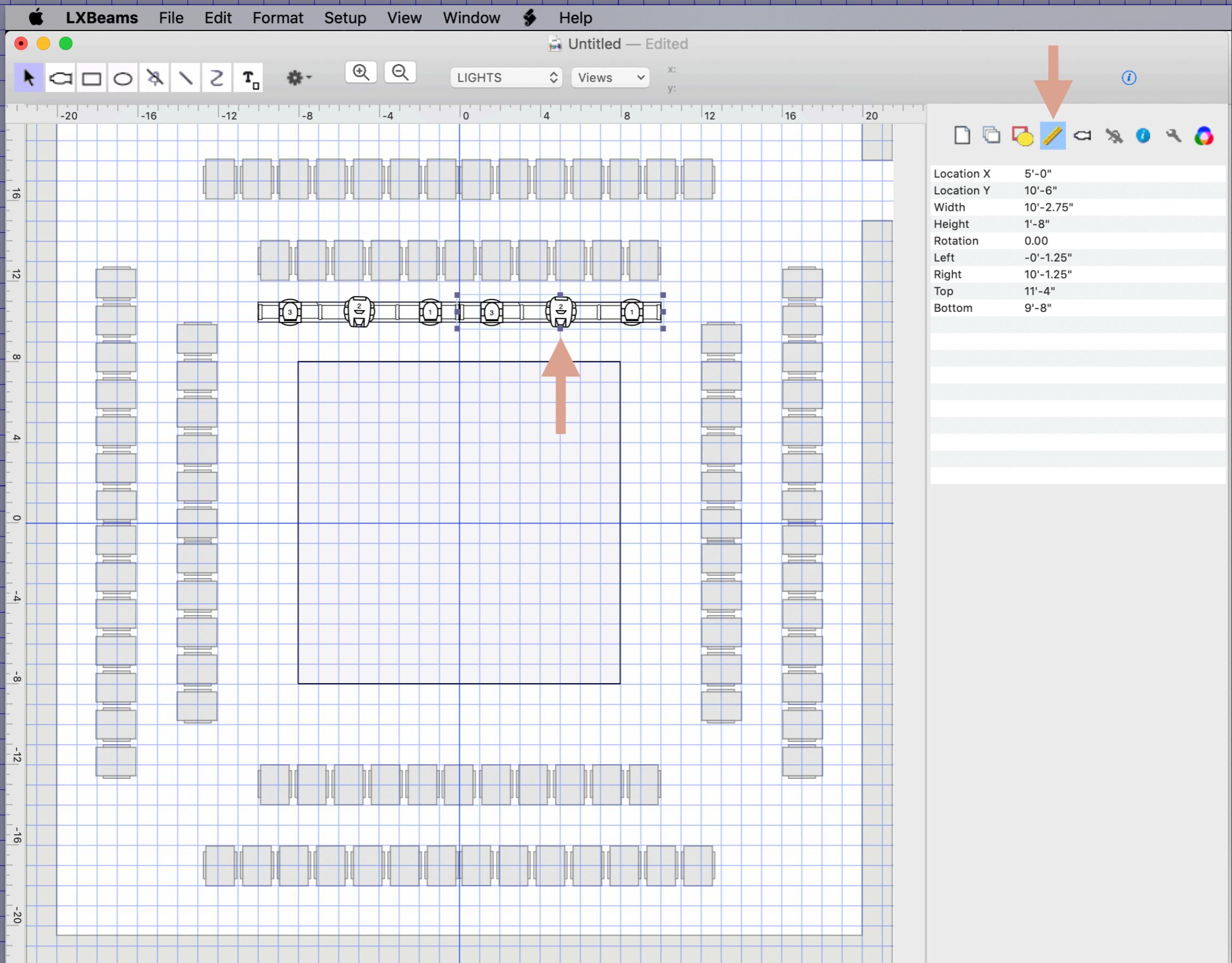
# Name the component and click OK.



# Choose Edit→Insert Components→truss with movers

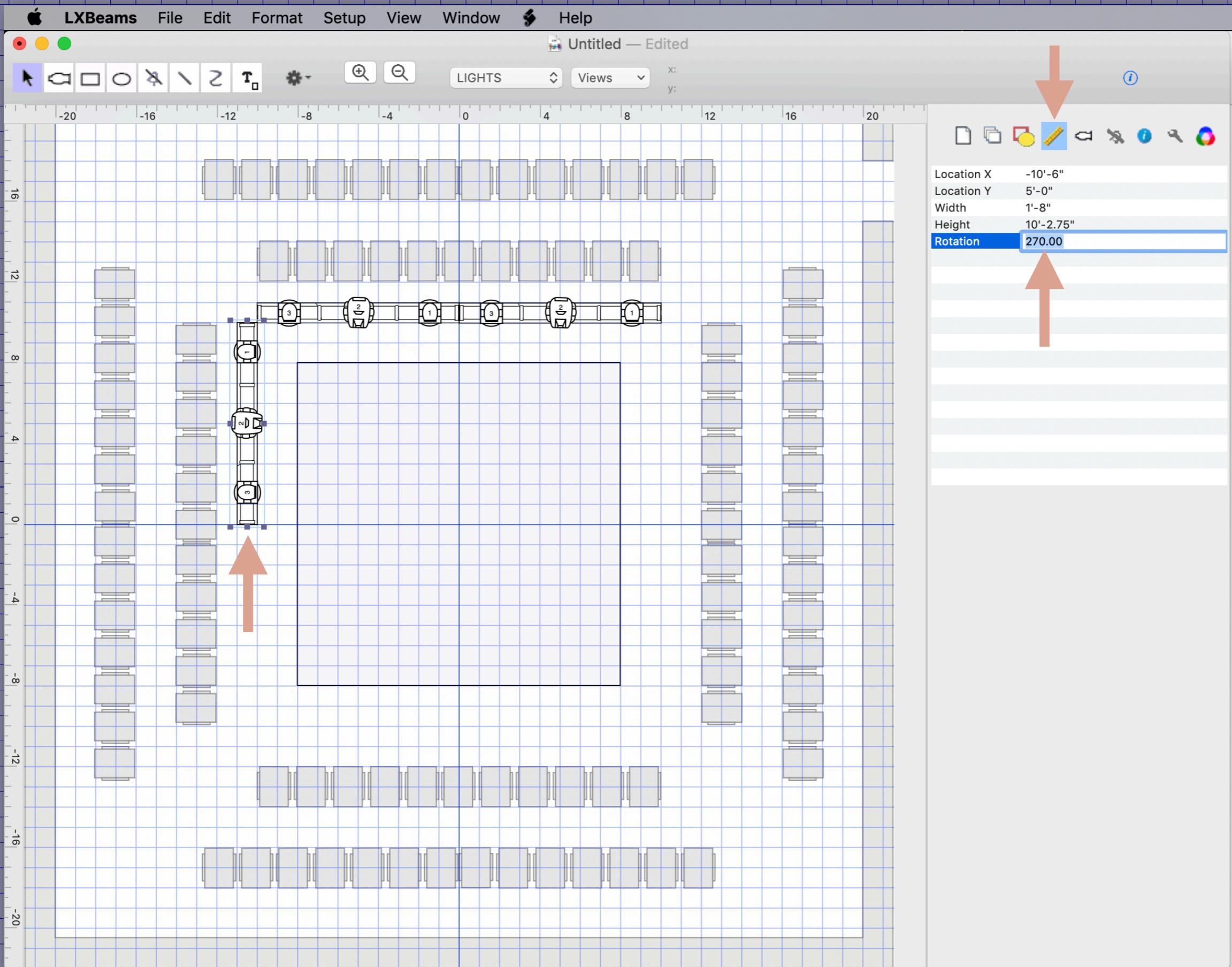


Place the new section of truss next to the first one.



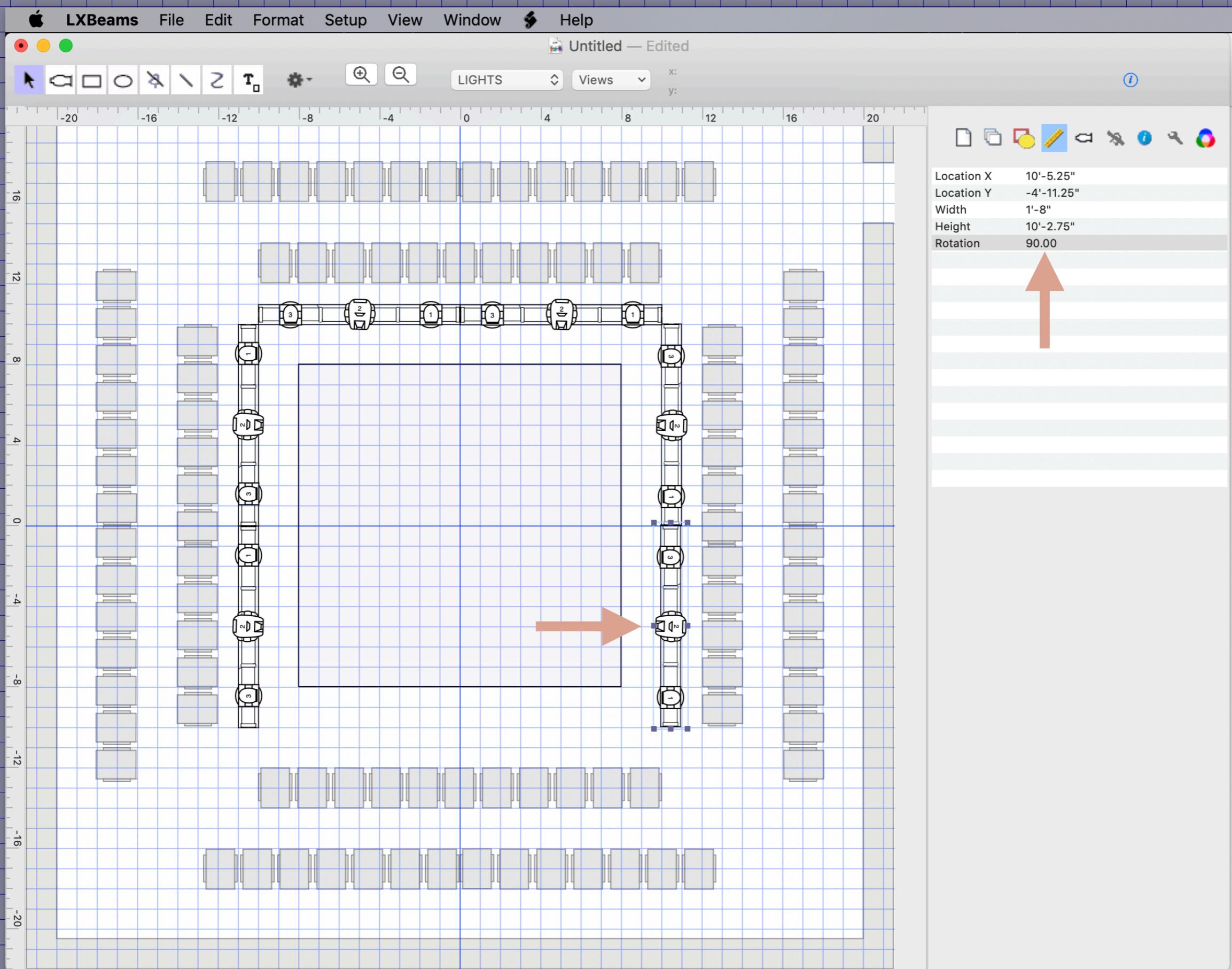
Again, the measurements tab can make this precise

Insert another. Rotate it to 270° and place it on the left side.

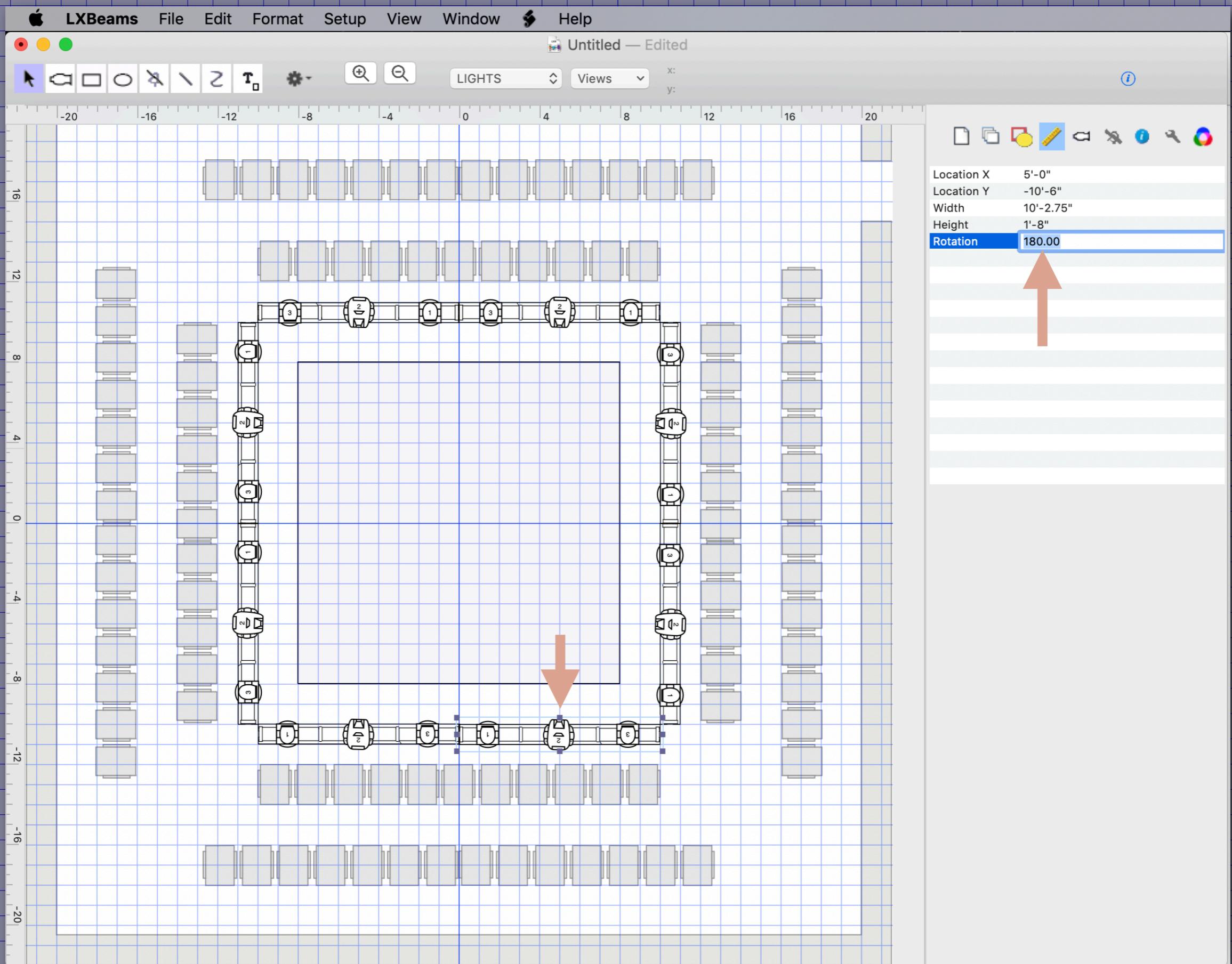


You can rotate in either the drawing properties or measurements tabs.

Insert more, rotating the ones on the right to 90°.

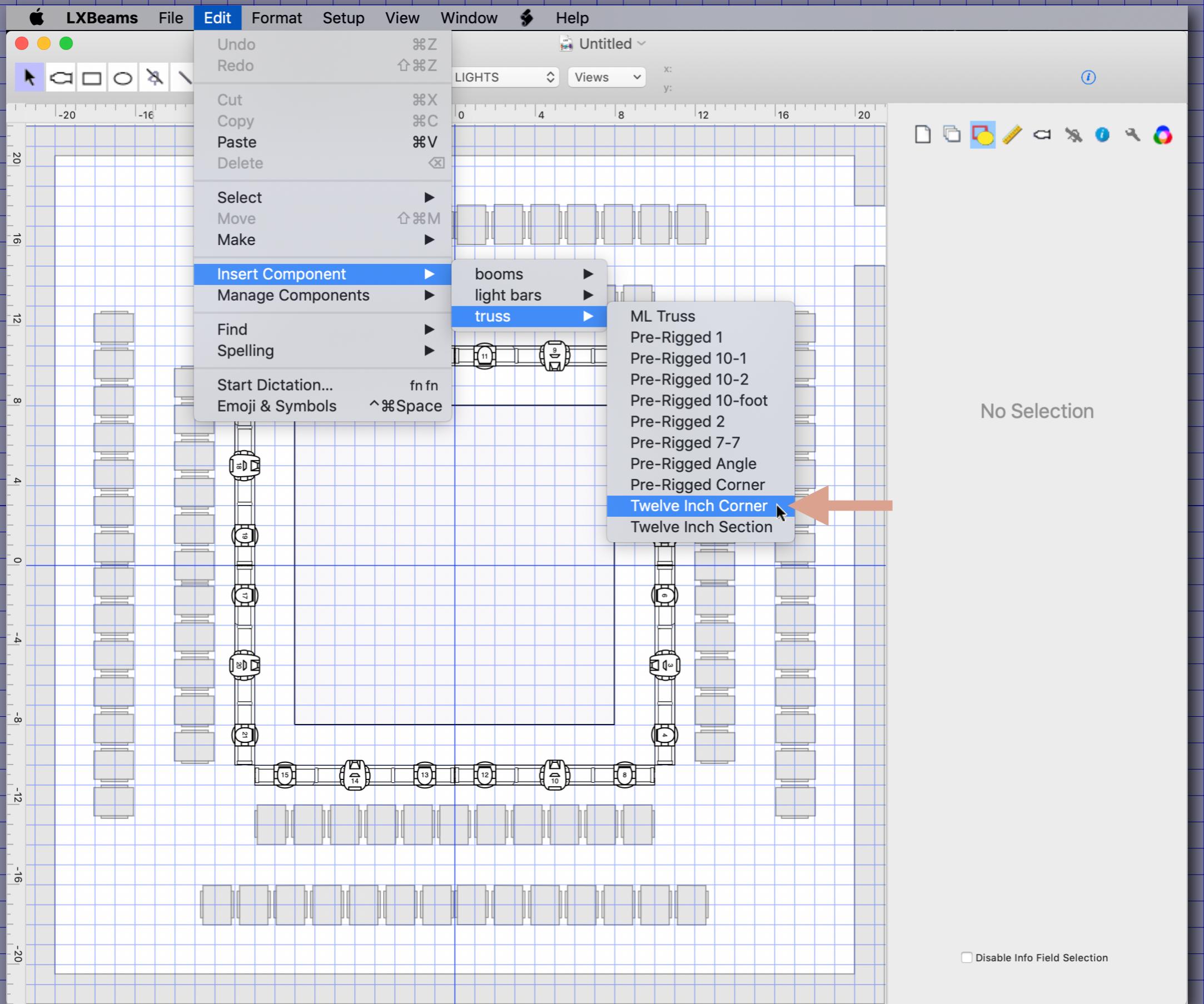


Insert more, rotating the ones at the bottom 180°.



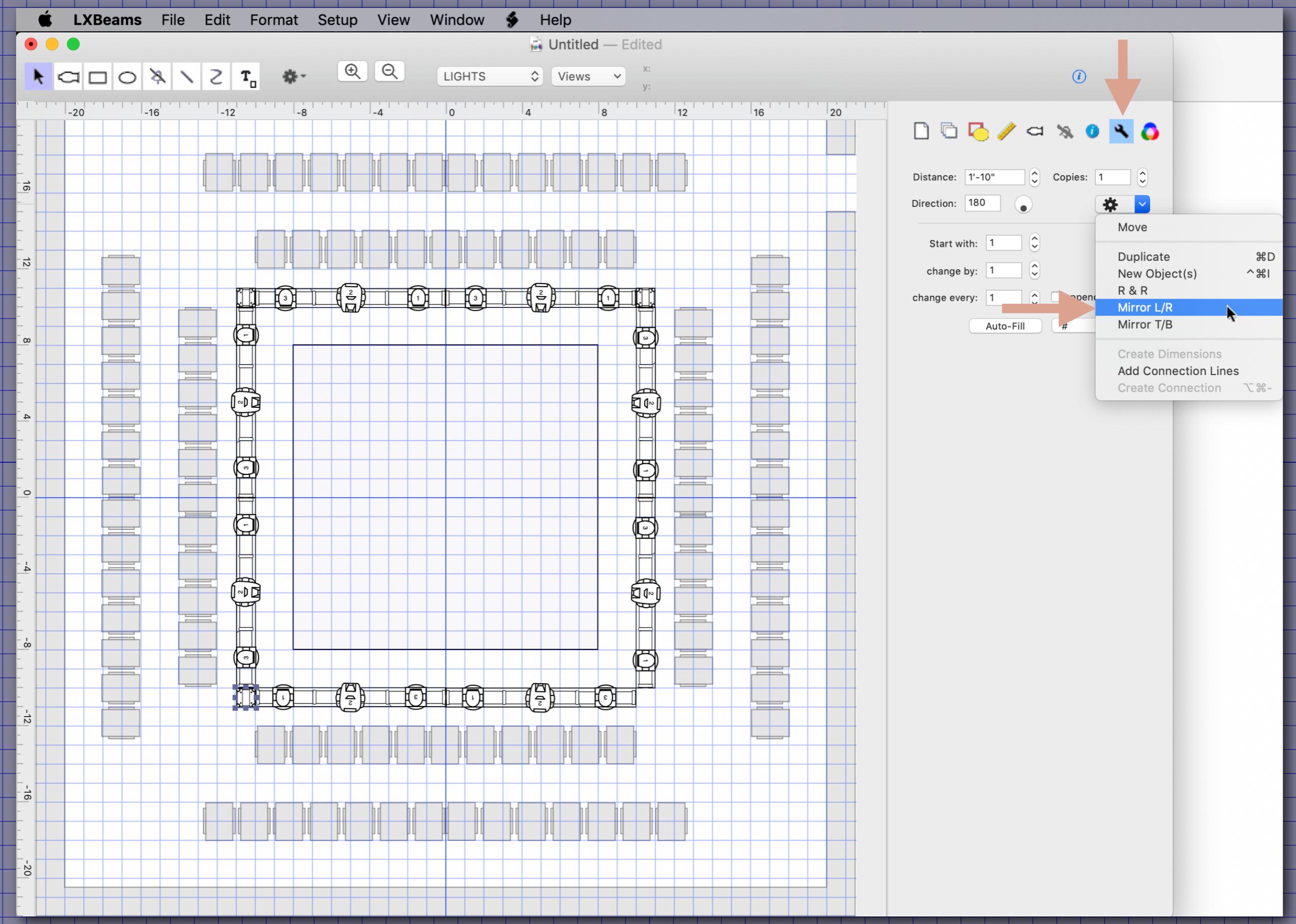
Again, the measurements tab can make this precise

# Choose Insert Component→truss→Twelve Inch Corner.

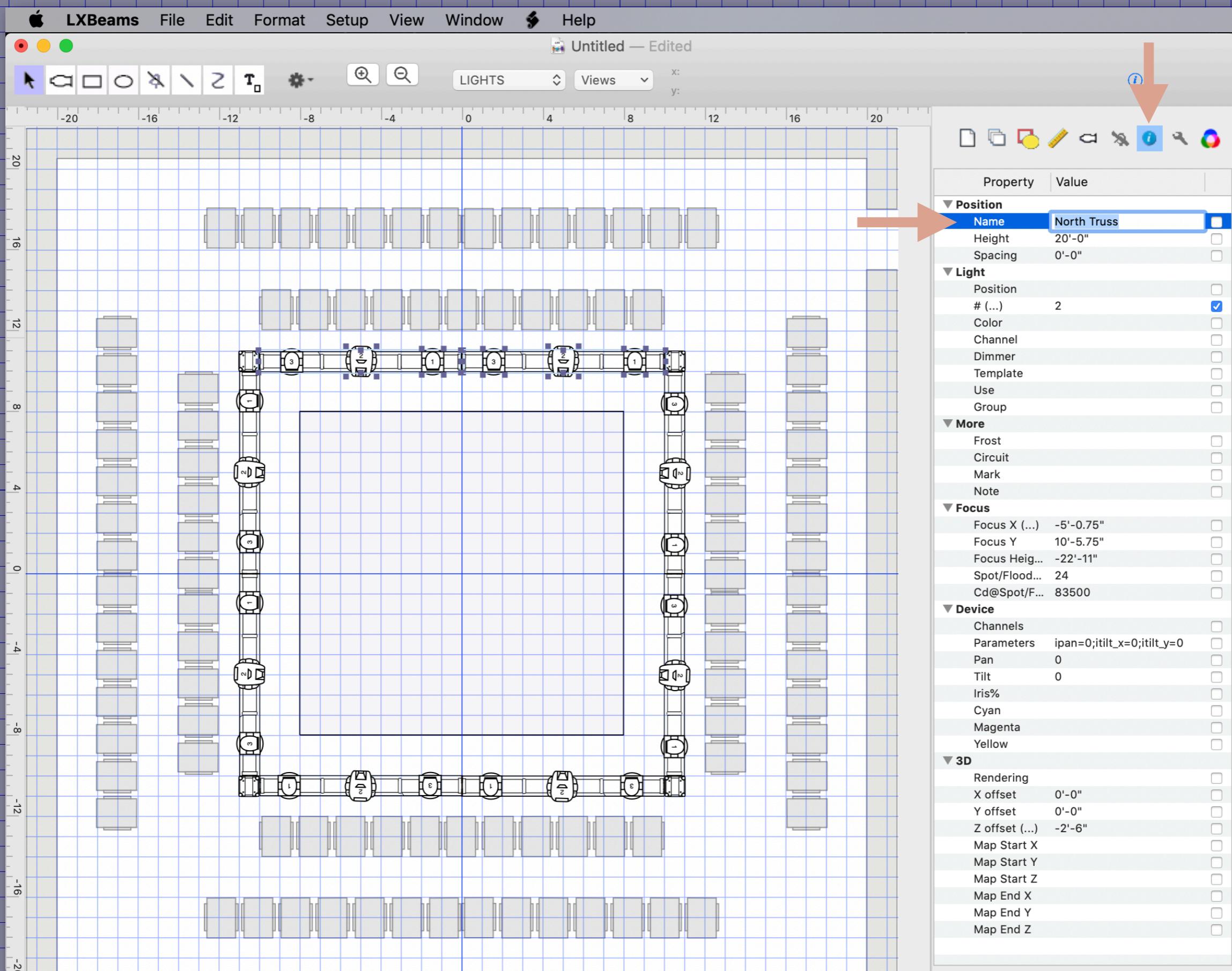


Do this 4 times, placing the truss element in each corner.

Or, place one corner and use the tools tab to make mirror copies.

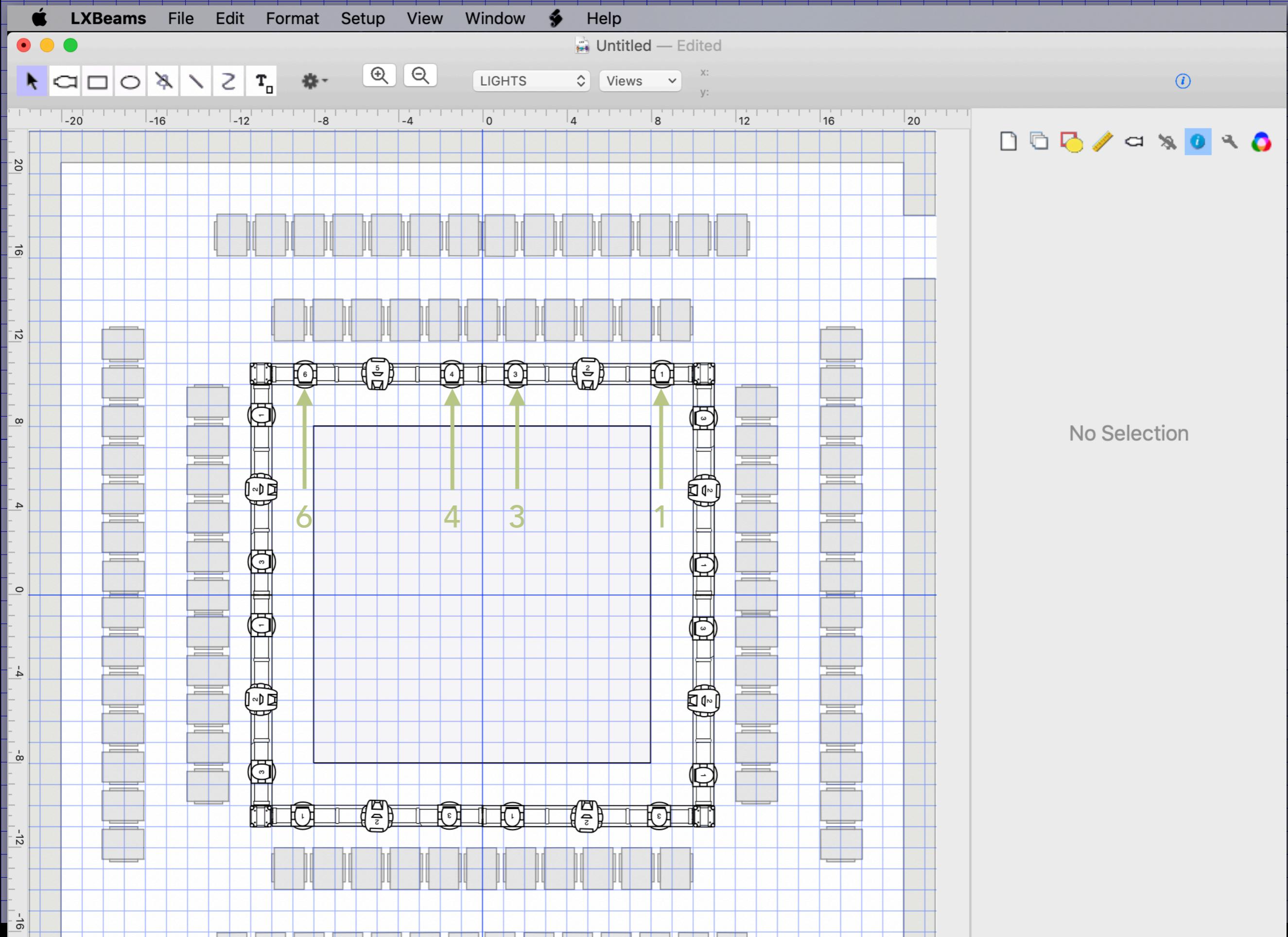


Drag the arrow tool so that the top trusses are selected.

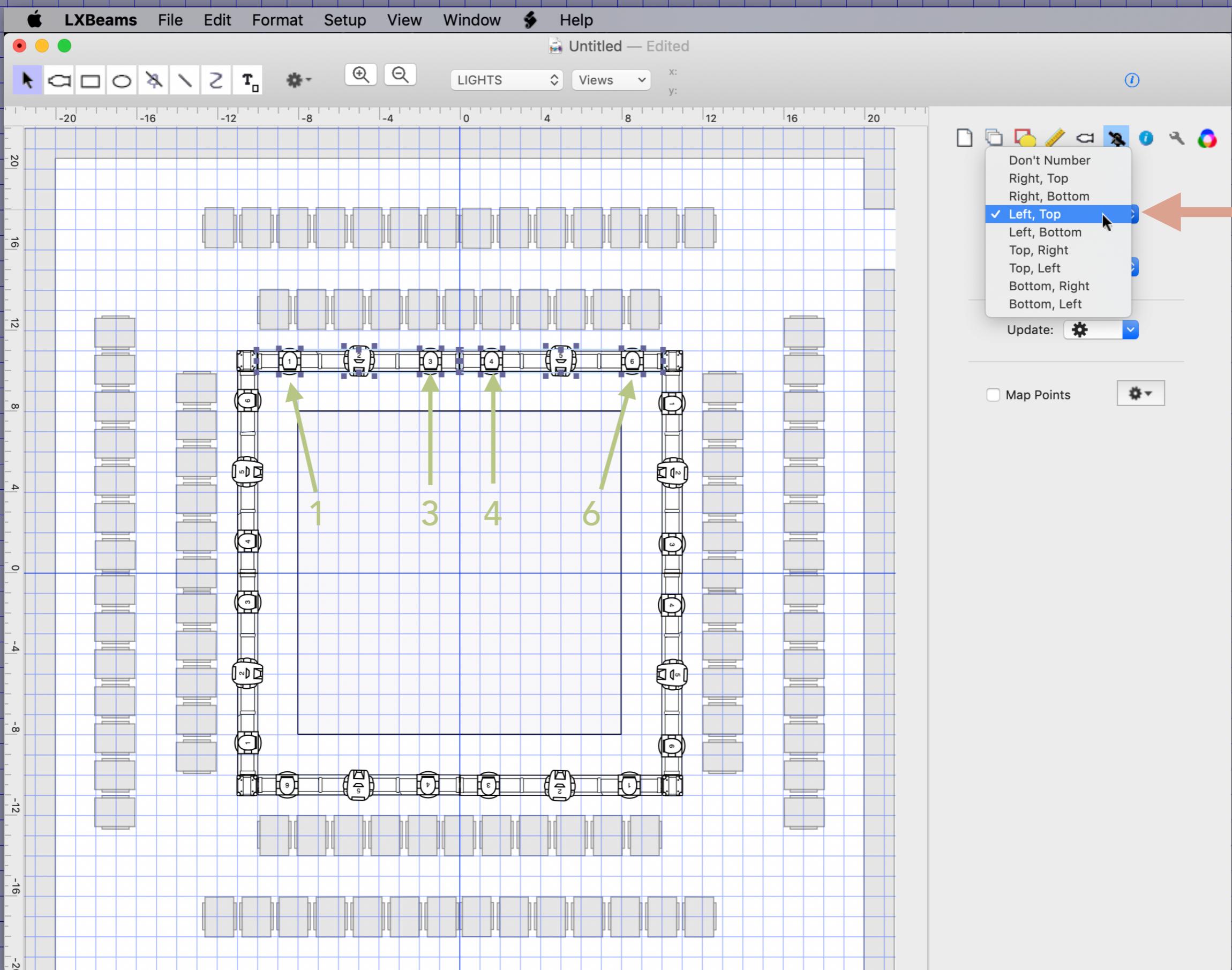


Edit the position name for the two sections in the Info tab.

The lights are numbered across two positions with the same name.



You can change the numbering in the Position tab.



When you make a change to a group, the change is applied to the entire group.

# In this section we've looked at

## Importing a DXF file.

- Import depends on correctly interpreting the units used.
- Placement of graphic objects imported from DXF depends on the coordinate system used (world or user).

In this section we've looked at  
using components.

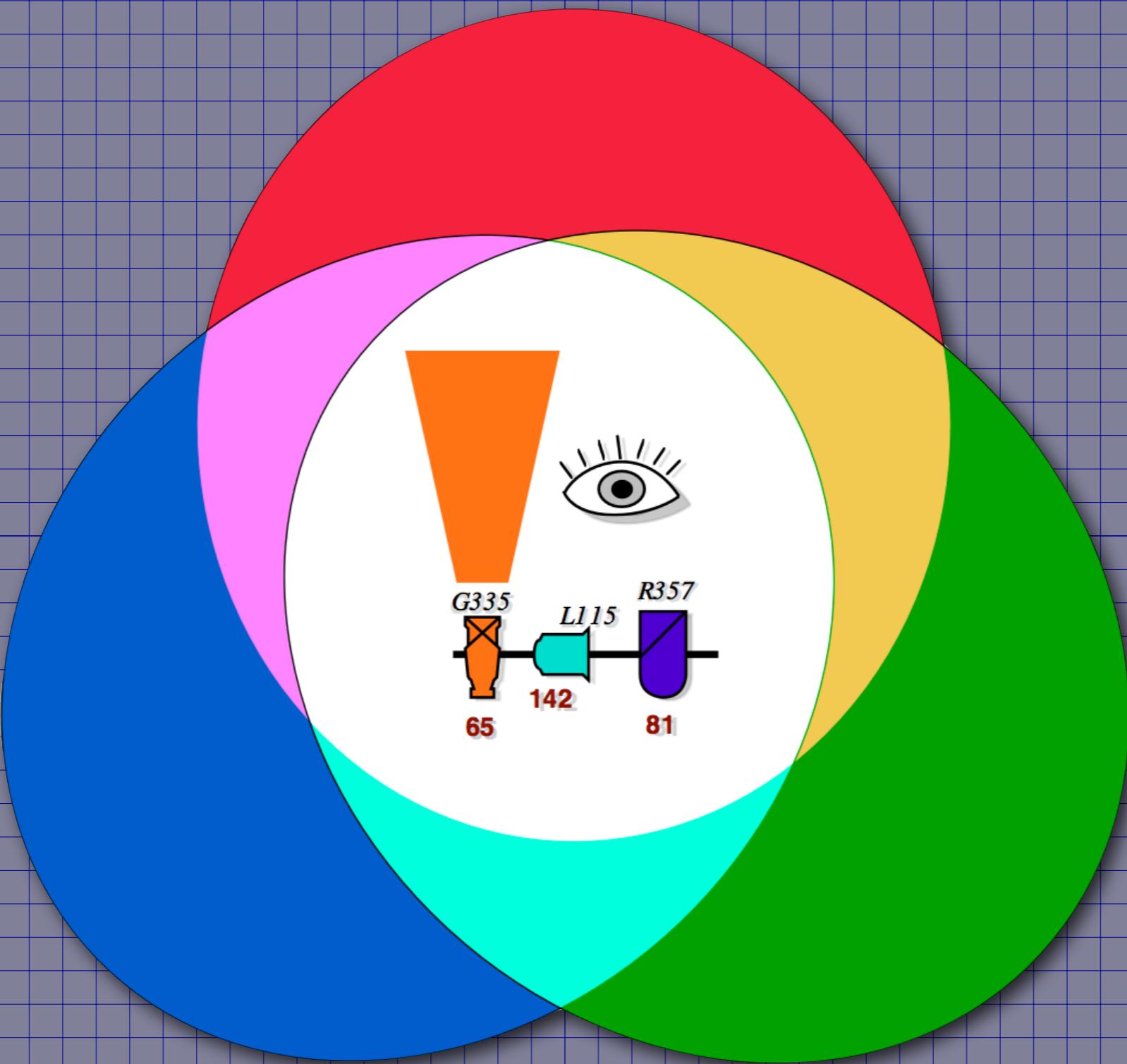
- Components are like copy and paste.
- Components are a way of storing a small collection of re-usable objects.

We also looked at numbering across multiple segments of a position.

# Try It Yourself

- Open LXWorkshop files/Camera Boom
- Make a component.
- Insert it into your original Exercise 1 file.

<https://www.claudeheintzdesign.com/lx>



[claudeheintzdesign@gmail.com](mailto:claudeheintzdesign@gmail.com)

©2020