

This is the 5-X660-A Laser Cutter

These are the Rules:

- There is a **HIGH RISK OF FIRE** when laser cutting some materials. **Do NOT leave this machine unattended when cutting:** you will lose all access to the laser cutters.
- The laser cutters are available from **8AM to midnight, 7 days a week**. Do not use the laser cutters outside of these hours: you will lose your access.
- You are allowed to reserve time online for each laser cutter online for **1 hour per day for two consecutive days**. Be considerate and do not abuse the reservation system.
- When cutting plastic, wait 1-2 minutes after cutting completes before opening the lid so that the fumes disperse.
- Do not hand-cut your materials on top of the laser cutter. This can damage the plexiglass and result in a costly replacement. Notify the DM office if the plexi is cracked or damaged.
- To avoid retinal damage, do not stare at the laser beam while the laser is in operation.
- If you see repeated flareups while cutting, stop the laser cutter and adjust the cut settings, increasing the speed and/or decreasing the power.
- **In the event of fire, there is a fire extinguisher located right outside this room. USE IT.**

This is what you can cut

- Acrylic
- Cork
- Leather
- Mat board
- Melanine
- Plastic
- Wood

(If you have questions about materials, please ask the DM Office.)

This is what you CANNOT cut

- Corrugated cardboard
- Foam
- Glass
- Highly flammable materials
- Metals
- **PVC** (cutting PVC releases extremely toxic fumes)
- Reflective materials
- Stone
- Styrene

Here are some recommended settings:

For Vector Cutting

Material	Power	Speed	PPI
Acrylic	100	1.5	1000
Cork	30	1.6	100
Leather	50	3.4	200
Mat board	30	3.2	200
Plastic	30	1.2	150
Wood	50	2.6	250

For Raster Engraving

Power	Speed	PPI
27	100	500
80	75	500
23	100	500
36	80	250
19	100	500
100	50	500

*Materials in **RED** have a high risk of fire. **USE EXTRA CAUTION.***

If you have any questions or concerns, please visit the DM Office,
call us at 432-9655, or submit an error report online.

Laser Cutter AutoCAD Setup:

Step One: Setup your autocad file for the laser cutter bed size at 1:1 scale

Step Two: Type PLOT

At the plot window, choose the Laser Cutter you wish to use.

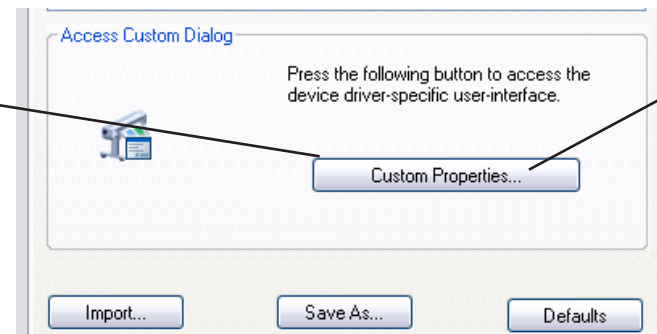
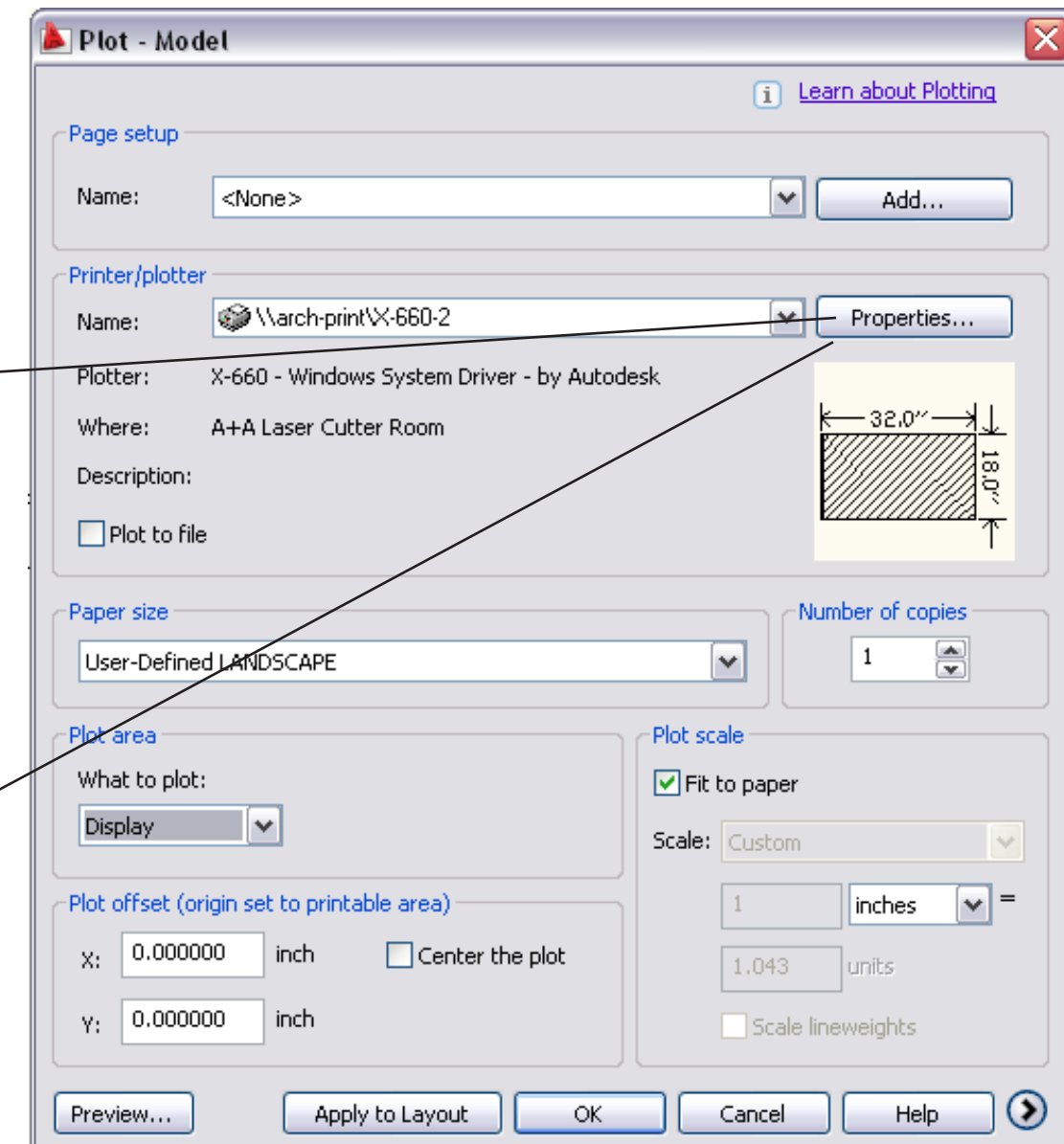
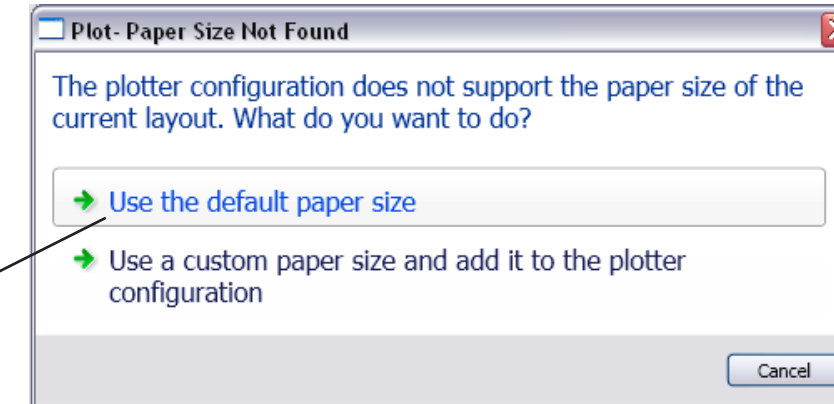
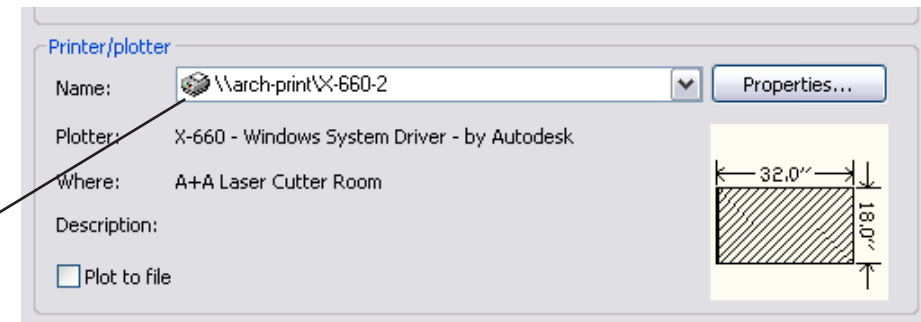
Example: “4A-X660”

At the Prompt, Choose:
Use the Default Paper Size

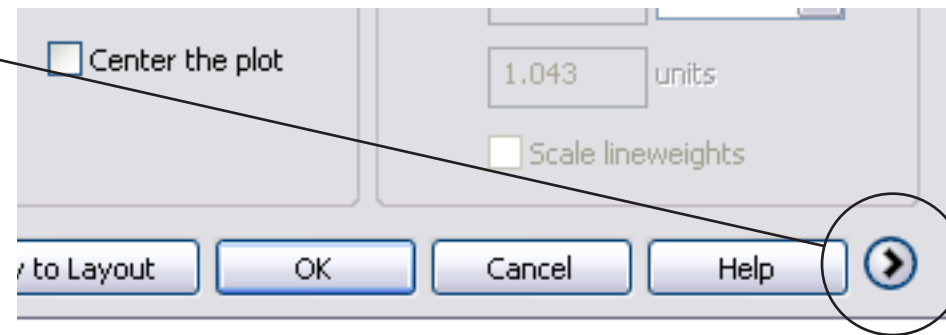
Step Three: Choose the Properties Button.

Then choose the Custom Properties Button

This will display the Laser Cutter Print Properties button. Refer to the *Laser Cutter General Setup* Instructions.



Step Four: Click on the Advanced Tab slide out



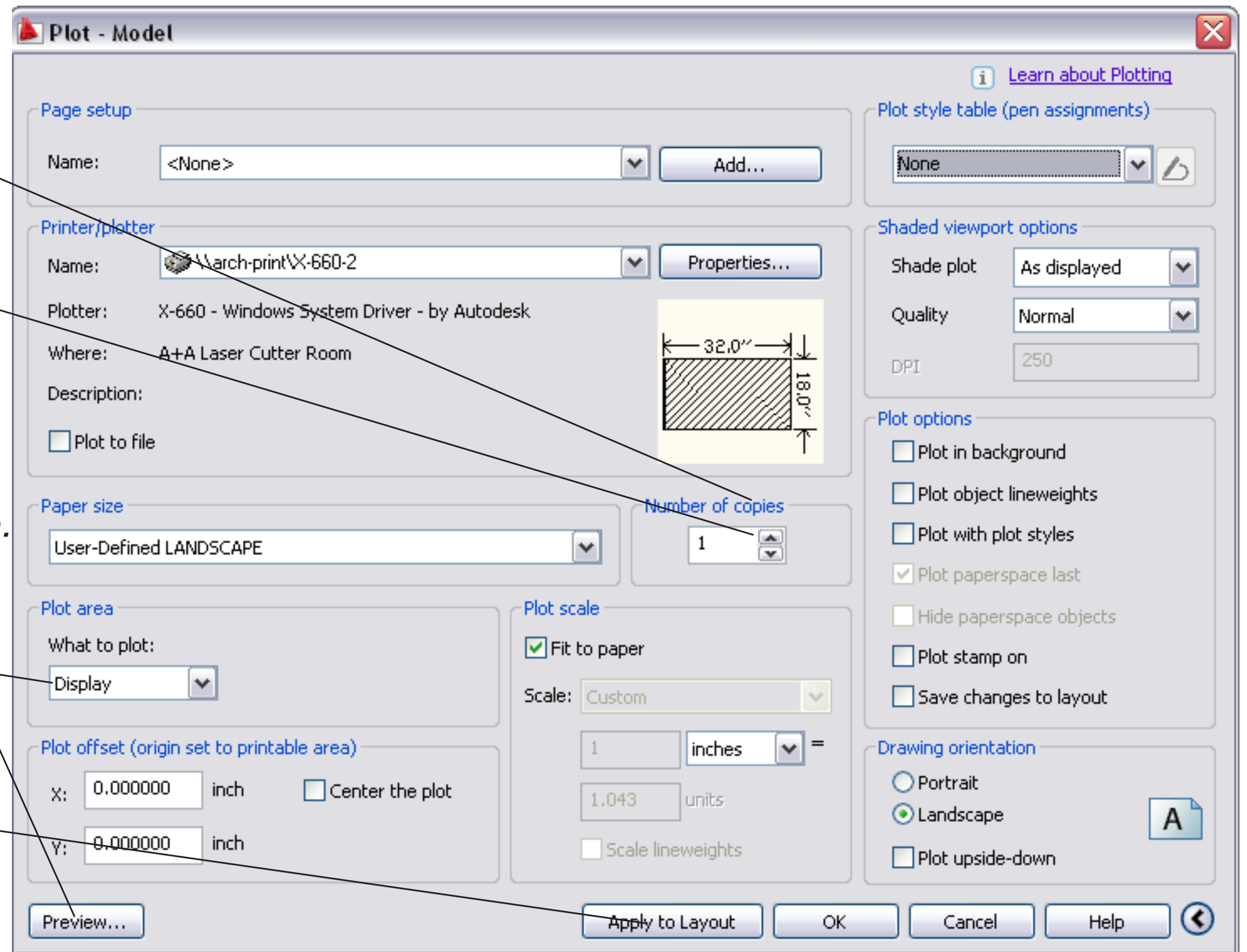
UNCHECK Plot with Object Line weights

UNCHECK Plot with Plot Styles

Note:
You **DO NOT** need to load a PMP file.

Click On Preview to check the plot area. Adjust as needed.

Click **OK** To send the job to the Laser Cutter



Setting Power and Speed for Laser Cutting

Open the file you wish to laser cut in its native application (usually AutoCAD), and select **Print** or **Plot** to send the job to the laser cutter. In the Print Dialog, choose the laser cutter you are sending to and click on the **Properties** button. The Printing Preferences window will appear.

In the Printing Preferences window, you need to:

- Select a **Pen Mode** for the line colors in your drawing by clicking on the square button.
 - For line drawings, click until pen mode is **VECT** (for Vector)
 - For images, click until pen mode is **RAST** (for Raster)
- For each line color in your drawing, click on the line color to highlight it, then adjust the **Power**, **Speed**, and **PPI** settings for that color. You can use the posted guidelines for your material if you're not sure what settings to use. Once you've set the Power, Speed, and PPI for that particular color, click **Set**. Repeat for the other colors in your drawing, if necessary.

Once you're done, click **OK** to use these settings and proceed with printing.

Make sure you monitor your job at all times, as using too low a speed and/or too high a power setting on certain materials can cause your material to ignite!

