

TECH TIP

Laser Engraving Stencils

Stencils are rigid cut outs of text, logos or shapes used for blocking off areas during painting. Stencils have a variety of decorative and industrial applications and are re-useable. The key to laser cutting a stencil is using the correct material. Stencils have traditionally been made from an oil board material which is an impregnated paper product and not very laser friendly. A thin polyester material is recommended as it is rigid enough for the task and laser friendly. Beware that some non-laser friendly materials are made from plastics that *outgas hazardous fumes*.

The polyester stencil material should lay flat on the laser bed to create crisp edges. Keeping thin plastics flat is best done with the [MultiMat](#) or using some double stick tape.

- Open a new file in CorelDRAW - Go to File>Import to bring in the vector graphic or to Text>Insert Symbol to use a symbol from the DRAW library. Add text if desired. This example utilizes a symbol from the Webdings font in CorelDRAW. Go to Text>Insert Symbol Character and select the Webdings font.



Remember – when modifying vector graphics, it is important to remove the fill and turn the outlines to red hairlines.

- Now add a hairline border around the graphic so when the stencil is engraved it is cut out from the larger piece of polyester material.
- Place the polyester material on the [MultiMat](#) inside your laser. The tiny pieces of material that are being cut away from the sheet can fly up into the exhaust. This has the potential to cause a fire and render the laser inoperable. Do not let this happen!
- For best results keep air assist ON. The settings for a 35-watt laser are 20 speed and 20 power.



You may need to adjust the power settings for your laser to achieve the best results.



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