



Title: **Printing on Glass with the Gerber Solara ion™ & Gerber CAT | UV™**

Product: Gerber Solara ion & Gerber CAT | UV

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Summary: This document explains the important precautions and hints necessary to produce a good result when printing on glass with your Gerber Solara ion and Gerber CAT | UV.

Rigid Substrate Standards

The Gerber Solara ion's and Gerber CAT | UV's rigid substrate standards apply to the use of glass as a substrate.

- ◆ Maximum rigid material width is 64" (1.6m/162.6cm).
- ◆ Maximum rigid material thickness is 1" (25.4mm).
- ◆ Maximum rigid material length with roll-to-roll option is 120" (3m/304.8cm).
- ◆ Maximum rigid material length without roll-to-roll option is 100" (2.5m/254cm).
- ◆ Minimum sheet size is 12" x 12" (30.5cm x 30.5cm).
- ◆ **Rigid material must be flat within 0.03" (0.76mm).**
- ◆ Warped material may jam in the printer.

Preparing/Cleaning the Glass

- ◆ Clean the flatbed of the printer before printing, as any debris will scratch the non-print side of the glass.
- ◆ Clean the glass with 99% isopropyl alcohol or a glass cleaner that does not contain additives as these may leave streaks that show up after printing.
- ◆ The glass to be printed must be wiped clean of any dust and debris. Wipe the glass in a fluid motion in one direction, pushing the dirt off the edge of the glass.
- ◆ Do not wipe the glass using a circular motion which can result in moving the dirt around into swirled patterns which may be visible after printing.
- ◆ Wait until the glass is fully dry before loading or printing on it.

Choosing the Correct Side of the Glass on Which to Print

During the manufacturing of glass, the liquid glass is rolled onto a molten zinc slab. As it hardens, one side is in contact with the zinc and one side is exposed to the air. The side of the glass that is in contact with zinc during production may contain contaminants, so printing on the

side exposed to air is recommended. To determine which side of the glass is the “air side”, follow these steps.

- ◆ Darken the room in which you are testing the glass.
- ◆ Shine a short-wave UV light onto both sides of the glass.

Note: When using the UV light, be sure to follow all safety precautions provided by the manufacturer.

- ◆ The zinc side of the glass will be cloudy. The best side for printing, the “air side”, will reflect the UV light.

Helpful Hints for Printing on Glass

- ◆ When printing a job for backlit glass it might be necessary to use double strike printing. See the Application Note: “Double Strike Printing on the Gerber Solara ion & Gerber CAT | UV.”
- ◆ Consider reversing the image in your RIP software before printing which allows the unprinted side of the glass to face outward, thereby protecting the print from exposure.

Printing on glass

- 1 Clean the heads. (Repeat every four hours of printing.)
- 2 Prep the material. (Normalize and clean the glass and the flatbed.)
- 3 Place the glass “air side” up (see previous directions) for best results.
- 4 Select the material type: Flat
- 5 Load the material, taking special care to place the glass on the flatbed gently so it does not scratch.
- 6 Especially if you will be printing double strike, tape the material down on all sides, ensuring that there are no wrinkles in the tape.

Note: Taping the glass is essential when double strike printing as the job needs to print two times with the glass in exactly the same location.

- 7 Adjust the UV shield for flat material.

Using your selected RIP software

- 8 Open, adjust and arrange your image(s). If you want to view the image from the unprinted side of the glass, make sure to reverse the image.
- 9 Select the appropriate material profile and page size.
- 10 Select the print quality. (ion: 2-pass, 4-pass or 8-pass; CAT | UV: Performance, Production, Quality)
- 11 Send the job to the printer.
- 12 View job information to confirm that the correct material is loaded.
- 13 Press RUN JOB to begin printing your job.
- 14 UV lamps will warm-up. (If lamps are not to proper temperature.)
- 15 Job will begin printing.

16 If printing double strike, as soon as the job is finished, select the same job using your selected RIP software.

17 Without moving the glass, send the job to the printer again.

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