



Title: Trial Printing on Unqualified Material

Product:	Gerber Solara ion™ & Gerber CAT UV™
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Summary:	This procedure provides a step-by-step guide to do a trial print on material that has not yet been tested and approved by Gerber.

Important Considerations When Using Unqualified Materials

If a material is dimensionally stable and less than 1" (25.4mm) thick, there is a good likelihood the Gerber Solara ion and Gerber CAT | UV can print on it. There are far too many possible substrates for Gerber to test all of them. While the printer can safely apply ink to most materials, adhesion and colorfastness will vary, so make sure you test your materials and use common sense. Some materials like cardboard can bow during printing and must be taped down.

Remember that exposure to UV lamps can change the characteristics of materials. Not all brands of the same material will react similarly to UV light. Likewise, materials that are not designed for printing may vary even if they are the same brand.

Note: Highly reflective materials are NOT approved for use on the Gerber Solara ion or the Gerber CAT | UV. Avoid using mirrors, mirror-finished materials, unpainted metals, and other reflective substrates which pose a risk of damage to the printer.

Note: Do not try to print using bent or warped material, even if there are is only minor bending at the edges. Any material that has a bow in the middle or is bent at the corners could scrape the platen or contact the print carriage and cause damage, so make sure to inspect the entire sheet and ensure that it is taped flat.

Note: Use care when printing on unqualified materials. Damage to the printer as the result of test printing or printing on materials other than those recommended by Gerber is not covered by the Gerber Solara ion and Gerber CAT | UV 12-month warranties. See the Gerber website www.gspinc.com/applications for an up-to-date list of recommended materials.

Rigid Substrate Standards

- ◆ Maximum rigid material width is 64" (1.6m/162.6cm).
- ◆ Maximum rigid material thickness is 1" (25.4mm).

Note: All materials have a tolerance on their advertised thickness, so users should physically measure each sheet to make sure it does not exceed the 1" (25.4mm) maximum thickness specification, or damage to the printer will result.

- ◆ 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). (See "Printing Small Jobs" later in this document.)
- ◆ **Rigid material must be flat within 0.03" (0.76mm).**
- ◆ Warped material may jam in the printer.

Trial Printing on Untested Material

- 1 Identify material characteristics and select the most similar material profile in your RIP software. See Application Note: "Understanding Material Profiles for the Gerber Solara ion/CAT UV" for detailed information on choosing or obtaining a material profile for Gerber qualified materials visit www.gspinc.com/applications.
- 2 Properly clean the substrate with 99% isopropyl alcohol and a clean, lint-free cloth according to the procedures noted in the application note "Preparing Substrates for Printing" or in the *Gerber Solara ion and Gerber CAT | UV Owner's Guides*.
- 3 Validate material flatness (for printability the acceptable flatness tolerance for a rigid substrate is no more than a 0.30" variation). If the material is flexible, make sure it is smooth and properly taped down, with no edges that are folded or bent.
- 4 Make sure rigid material complies with the Rigid Substrate Standards noted previously.
- 5 Load material using prescribed practices, set pinch wheels and UV shield accordingly.
- 6 Send test job from your RIP software to the printer.
- 7 Start the job and monitor the output constantly until job is completed. If any problems are apparent, stop printing immediately to avoid damage to the printer.
- 8 Evaluate ink cure and adhesion.

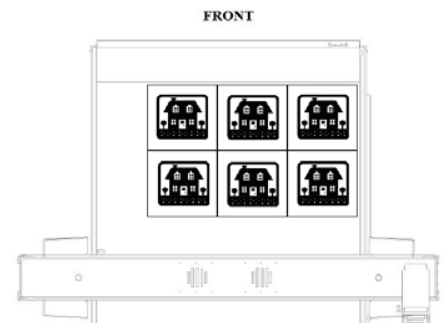
NOTE: If ink is not fully cured after printing, please allow one to two hours for the ink to complete the curing process.

Troubleshooting

- ◆ If color is inaccurate see the application note "Spot Color Replacement in ImageRIP."

Printing Small Jobs

- ◆ When printing small jobs (when the graphic width is less than 48" (122cm)), UV curing may be less than optimal when using 360 two-pass bidirectional mode for the ion or Performance modes for the CAT | UV.
- ◆ To ensure proper ink curing, create a repeat job and arrange the sign blanks across the table so that the total width is more than 48" (122cm).



- ◆ For unique printing applications, GSP recommends using 360 four-pass unidirectional mode or another higher quality mode for then ion and Production 1 unidirectional mode or higher for the CAT | UV to ensure adequate exposure to UV light which results in proper curing. For best results when printing unusual materials use 8-pass unidirectional mode for the ion and Quality modes for the CAT | UV.
- ◆ Make sure the environmental humidity is at the low end of the specification of 20% to 60%, non-condensing.

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