

Technical Reference

GR AND GRMAG CARDS – PRINTING FOR PHOTO ID BADGES

Recommended Procedures for Printing and Laminating

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AWID's ISO-type cards may be used as photo ID badges by printing images directly on the cards' surface or by laminating separately printed overlays to the cards. This applies to AWID's GR and GRMAG proximity cards. The cards' material (polyvinyl chloride, or PVC) and surface finish (very fine matte) are suitable for direct printing or for film lamination.

All of the popular printers that use the dye sublimation process to deposit and bond dye to the cards' surface may be used for AWID's graphics-quality cards. Printing and laminating may be applied to either or both sides of the cards.

To assure best results, the printer or laminator must be set up using all available adjustments before starting the process. Printers and laminators may have adjustments for some of the following factors:

- (a) **Dye Sublimation Intensity** – The setting should result in the highest quality image.
- (b) **Card Thickness** – The setting should be 0.033 inch (0.84 mm) for a printer, or 0.033 inch (0.84 mm) plus overlay thickness for a laminator.
- (c) **Pressure Applied to Card** – The setting should be the minimum necessary for good results. See instructions for the printer or laminator.
- (d) **Temperature** – The setting should be the minimum necessary for good results. See instructions for the printer or laminator. PVC softens and deforms permanently above 160 Fahrenheit (71 Celsius).
- (e) **Speed of Card Motion** – The setting should be the maximum that produces good results.

Recommended Procedure

1. Keep the cards in their cartons and shrink-wrap to assure cleanliness.
2. Select the correct dye ribbon for the printer and for the card type.
3. Turn the printer's power on.
4. Set all available adjustments, as described above.
5. Wait the time recommended in the instructions for conditions to become stable.
6. Handle cards by squeezing them on the edges. Wear clean cotton gloves.
7. Run a number of sample cards to be sure of good results.
8. Check the sample cards for consistent printing quality *and* for correct reading with an AWID reader.
9. Test *all* cards with an AWID reader before starting the printing or laminating.
10. Print or laminate the cards.

QUESTIONS? Contact the printer's or laminator's technical support, or Customer Service at AWID.