

Technical Reference

PROXIMITY CARDS – PROTECTING PHOTO BADGE PRINTING

Printed images on cards used for photo ID badging and/or for access control are subject to wear from normal handling, especially if the cards are also swiped through readers to read magnetic stripe or bar code data. These suggestions for AWID's GR and GRMAG graphics-quality cards will add life to the cards by protecting the printing.

Printing Directly on Cards

The popular means of printing personal identification on cards for photo badge purposes is the dye-sublimation process. This uses a printer, connected to a PC-based system with a CCTV camera, to apply the general background data (company name, department, color for access-level differentiation, etc.) plus the unique identification for the individual person (photograph, name, department, employee number, etc.) to the cards. Sometimes bar codes also are printed on the cards for numeric identification.

To protect the printed image from wear, the following techniques may be used.

Badge Holder

Badge holders of many types are available commercially. These clear plastic pockets hold the badge so that the printed information is visible. A clip or strap on the holder makes it easy to attach to the clothing. The material used for these pockets is compatible with the material of the cards and the printing on them. A proximity reader will read the card's code through the plastic holder without removing the card.

Overcoat

Most dye-sub printers can also deposit a protective clear coating over the printing on the card. This is done by replacing the dye (color) ribbon from the printer, and inserting an overcoat ribbon. The resulting card has a bright and uniform appearance, and life of the printed image is extended to a limited degree.

Laminated Film or Pouch

Thin film may be laminated to the card, over the printed image, using a card laminator that may be integrated into the printer or a separate product. The film, usually 0.001 inch ("1 mil") thick, provides good protection for the printed image, which usually lasts for the life of the card.

The laminating pouch is essentially the same, except it is in the form of a folded flap, and the plastic is thicker (up to 0.010 inch on each of the two flaps). The resulting card is up to 0.052 inch thick.

Printed Overlay

An alternative to printing directly on the card is the overlay, typically 0.010 inch thick. Dye sub printing for photo ID is applied to the overlay (not to the card) in the standard printer. Overlays have an adhesive, so that the overlay may be laminated to a flat plastic card, with or without proximity access control technology. The resulting card is about 0.042 inch thick. (This may work with AWID's CS cards also.)

Reference

Printer manufacturers' web sites, for blank cards, overlays, printer ribbons, and other supplies.

J.A.M. Plastics, Inc. – catalog or web site (www.badgeholder.com).