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We know ID. **It's what we do.**



**How to Strengthen the Security  
of Your ID Cards White Paper**

Are you always looking for ways to increase the security of your organization's ID cards? As a photo ID industry leader, you can put your trust in ID Wholesaler.



Our skilled experts offer some of their most common and easiest ways of making ID cards more secure.

### Adding security to your ID card

A best practice for secure credentials is to have multiple security checkpoints for both ID cards and the process in which you create and distribute your cards. To begin identifying where these checkpoints should be, we first need to answer some basic questions:

- For what reasons do you implement a visual ID badging solution for your employees?
- If security is driving the need for an ID badge solution, what do you want to protect?

Normally, it's one of the 4 Ps:

- o **People** – management, employees, contractors, visitors
- o **Products** – tangible or intangible (services) items an organization produces
- o **Processes** – confidential information, procedures, policies, data, strategy, etc.
- o **Property** – assets like a facility or building, computers, furniture, warehouse, etc.
- What happens if one or more of those items is compromised? Common questions to ask include the following:
  - o How does it affect my business?
  - o What's the impact on employees?
  - o What does a compromise ultimately cost?

### Let's look at the big picture

Security is an ever-evolving animal. With so much technology at our fingertips today, companies constantly have access to newer and better ways to protect their 4 Ps. Most organizations use one or more of the following modalities to heighten security as it pertains to their ID badge credential:

- technology card for access control
- photo id card for identification
- badge accessories (lanyards, badge reels and ID holders) to display ID cards

The more detailed your ID cards, the less likely you're going to find a threat *and* the greater assurance that your 4 Ps are protected.

## Example

### Photo ID cards

How do you currently validate the authenticity of your employee's credentials?

- Are you using the employee's photo?
- A company logo?
- If someone were to pull your company logo from your website and create a photo ID of themselves, how would you easily be able to identify this?

### Where to start

The greatest differentiator for ID desktop card printers is security – at multiple levels. There are printer technologies that can make ID cards secure by creating lines of defense against counterfeiting, alteration and other types of fraudulent credential production. There are also features built into printers that help protect the devices themselves – along with card stock and printing supplies – against theft or unauthorized use.

The first step in protecting the 4 Ps is to have the proper implementation process for creation and distribution of your ID cards.

Before finding the ID card security solution that's best for your company's requirements, you'll need to determine how you plan on rolling out your new credential program. Here are a few common steps that most ID card programs include:



- User rights administration
- ID badge policy
- Where you store your data (sensitive information)
- Where media or consumables are stored

The next step in protecting the 4 Ps is determining the visual security elements your business would like to incorporate with your credential. You can add visual security elements to both the card itself and the accessory used to wear your credential.

The equation for security is simple:

**A visually secure card + custom badge accessories = increased security**



## Considerations to strengthen your ID card visual security elements

**Rely on the printing style to make the ID secure.** You can print complex card designs that are difficult to duplicate. Choose from watermarks, fine lines, cameo effects or even micro-text. Micro-text is used on highly secure ID cards. Upon visual examination, micro-text appears as a regular thin line on an ID badge, but when inspected using a microscope or magnifying glass, the lines are actually repeating text that say "Authentic," "Genuine" or "Valid." Unlike most add-on security features, micro-text printing requires industrial equipment to produce, which limits this option to pre-printed cards.

**Choose layered additions.** There are choices for every need and budget, from basic elements like a simple foil to sophisticated solutions such as holographic overlaminates. The latter can contain an off-the-shelf holographic design, or you can create a custom design for even greater security — and brand enhancement.

Fluorescent overlays allow you to create highly secure and durable identification cards in one printing cycle without the added cost associated with lamination or overlay varnish.

**Use specialized supplies.** Oversized ID cards are easy to recognize and difficult to duplicate. There are few printers on the market with the capability to create these credentials, so the chances of someone having access to the right equipment to make a fake are slim. Expiring badges are ideal for visitors and contractors since they can be purchased in varieties that change color after a set period of time. In contrast to these highly visible solutions, UV ink gives you a way to covertly mark your cards as valid.

**Add unique content.** The starting point of any secure ID card design is a minimum 300 dpi color photograph. From a design perspective, the larger and more vivid the photo is, the easier it is to authenticate the cardholder. Photographs are the most basic security feature that you can add to your ID card, because they offer an easy way to quickly confirm a person's identity. While photos help reduce the possibility of fraud, they are not foolproof as photographs can be replicated using optical scanners and copiers.

Incorporating biometric data on your ID cards can include more than just a recent photo. You can add fingerprints and digital signatures to provide extra verification options. These can be stored as images in your employee files.

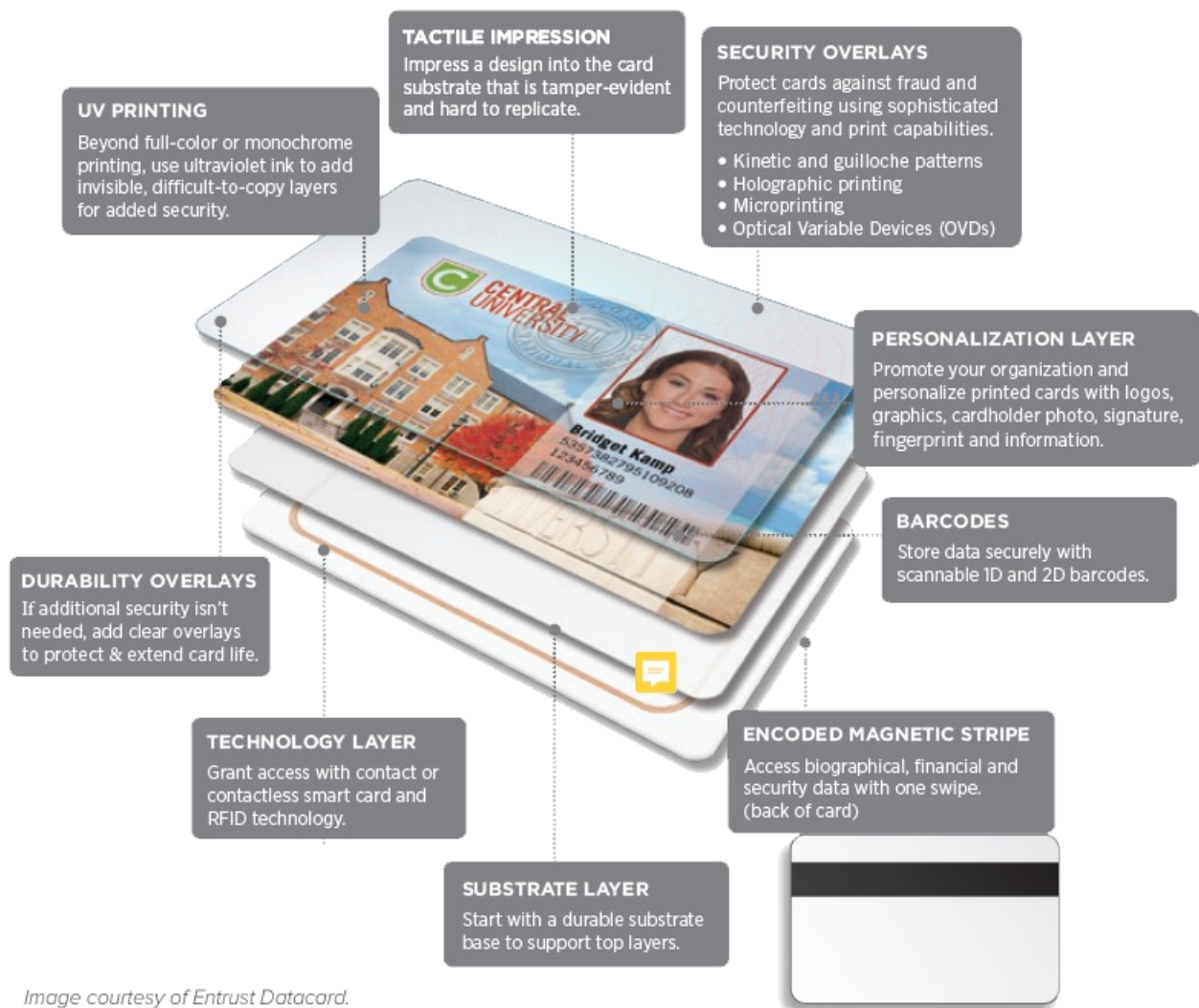
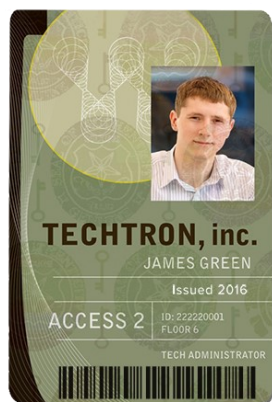


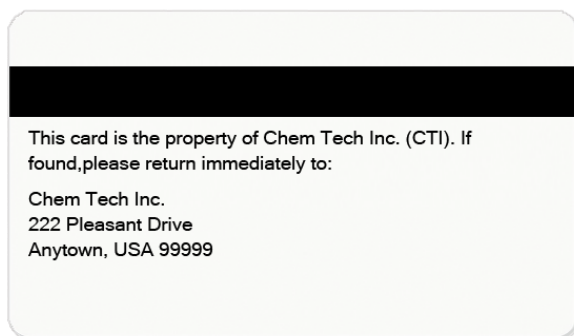
Image courtesy of Entrust Datacard.

**Incorporate encoding options.** It's also possible to add barcodes, encrypted information, magnetic stripes and chips to make your cards even more difficult to tamper with or forge.

- Barcodes are one of the most widely used forms of encoded ID cards and are easy to create. The information within a barcode can be encoded onto an ID card during the regular ID card printing process. Of all the types of card technologies available on the market today, barcodes are by far the least expensive (as well as very simple) to incorporate into your ID card issuance program



- Magnetic stripe cards are PVC ID badges with a band of magnetic material embedded in the resin on the back of the card. Magstripe cards store updatable information on a magstripe, which is read when the card is swiped through a magnetic stripe card reader.



- Proximity/RFID/smart cards use radio frequency (integrated circuit technology) to transfer data. When considering ID card security features, keep in mind that proximity cards are unique in that they do not have to be swiped through a magnetic stripe card reader, so they are a convenient solution for secure door access control or time and attendance applications. A proximity card reader sends out a field that activates the antenna coil within a prox card and charges the capacitor. Card data is then transmitted via the antenna coil to the prox card reader. If the data is accurate, access is granted, be it door entry or a monetary purchase.



**Secure your workstation with a Kensington lock.** A best practice in creating photo IDs is using a Kensington lock to protect all of your printing equipment. Many ID card printers offer a Kensington lock option that can be purchased along with the card printer.

This patented anti-theft locking system includes a metal patented anti-theft locking system includes a metal anchor with an attached metal cable that's covered in rubber, and the combination tethers your printing station to a single area.

## Photo ID tools to strengthen the visual security elements on ID cards

### UV printing

Ultraviolet (UV) printing is available with select printer models. By purchasing a ribbon with a fluorescent panel on it, you have the ability to put a customizable image or text on the card. One small catch: the image or text is only visible when placed under a black light.



### Watermarks

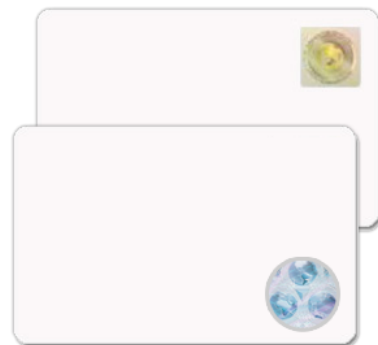
Many printer manufacturers offer the ability to alter or manipulate the overlay panel of ID cards to provide a stock or customizable watermark. It's a very cost-effective way to add a visual security element to your card and increase security. However, one drawback to manipulating the protective overlay panel is that depending on usage, the watermark and printed imagery tend to wear off quicker.



### Holographic foil ID cards

Cards with embedded holographic foil allow the customization of the image and its location, making it unique and difficult to duplicate.

These cards are a great way to increase visual security if you're printing on PVC or composite plastic card stock. However, it's important to note that they are not compatible with technology cards like proximity cards, smart cards, etc.





### Tactile impression

Tactile impression doesn't require the purchase of customized consumables. Instead, the equipment uses a heating process to put either a stock or custom stamp on the card's laminate during the printing process. Tactile impression also offers a physical element to cards that you can feel (the impression made by the stamp on the card). This one-of-a-kind, advanced security enhancement is available in the form of a mechanical die within the card printer's lamination unit.



### Custom lamination

This option offers both security and durability to cards. There are a variety of visual secure elements available – from micro-text to Guilloche patterns – that can be added to the laminate as standalone or in tandem. Minimum order quantities tend to lend this security option to businesses printing a higher card volume.



### Tools to strengthen the visual security elements of your badge accessory

#### Custom lanyards

A lanyard is an over-the-head attachment that presents an ID badge on an individual's chest. The options to customize a lanyard include material color options, lanyard attachments, and print.



Adding a customized printed logo or name of your company is a great way to improve the overall security for your organization. It's also a very simple and professional way to enhance your branding.

### Custom badge reels

A retractable badge reel can be used in tandem with a lanyard or can be worn individually on an individual's belt or clip on to an article of clothing.



The retractable feature works great for technology cards that require an individual to swipe their badge. A badge reel can be customized by adding text or a logo to the pad or rim of the badge reel providing a visually pleasing accessory and increasing the overall security of the credential.

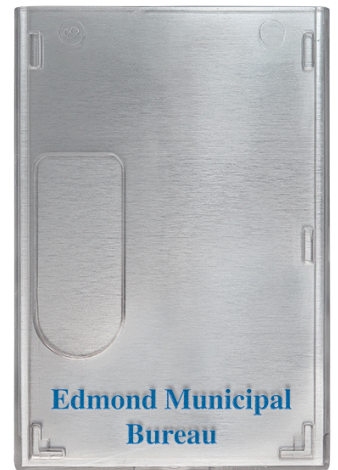
### Locking badge holders

A locking badge holder is just as it sounds: it's a badge holder that locks the card inside of the holder so that it cannot be easily removed or tampered with. Not only do locking badge holders provide increased durability for your ID card, but the locking mechanism maintains the authenticity of your ID badge.



### Custom badge holders

Customized badge holders offer the ability to put a logo or text on the badge holder itself. This provides an additional level of protection to your ID badge credentials.



## Options for Increasing Your ID Card Security

	Printer Type	UV Printing	Watermarks	Holographic Foli Cards	Tactile Impression	Available Custom Lamination
Maglcard Rlo Pro 360 LE	Direct-to-card		✓	✓		
Maglcard Enduro LE	Direct-to-card		✓	✓		
Fargo DTC1500XE	Direct-to-card		✓	✓		✓
Fargo HDP5600XE	Retransfer	✓		✓		✓
Datacard CD810	Direct-to-card			✓	✓	✓
Datacard SD460	Direct-to-card	✓		✓	✓	✓
Zebra ZXP Series 9	Direct-to-card	✓		✓		✓
Evolls PrimacyID	Direct-to-card			✓		✓

**Note:** All printers can print PVC and composite PVC-PET cards, but it's recommended to use composite cards in laminating or retransfer printers because of the high heat involved. Retransfer printers are recommended for technology cards. All printers can print barcodes and magnetic stripe cards, but an optional magnetic encoding module is required for programming the magnetic stripe.

One thing to keep in mind is that each of these security options can be combined to make your card as secure as possible while keeping the cost as low as possible. Combining these technologies along with popular visual security elements is a smart and affordable way to implement high security into your ID program.

No matter how you want to increase the security of your ID card program, you can trust the expertise of our friendly, knowledgeable ID Professionals. They'll listen to your security needs and work hard to help you find a solution that works best for your employees and your organization.

Call us today for a free consultation at (800) 321-4405. We're always happy to help!

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