

## CHOOSING THE RIGHT CARDS

### Material components

Not unlike most products on the market, printable plastic cards come in all sorts of materials, colors, thickness and other distinguishing features. Despite appearances, blank white plastic cards are not all alike. For an optimal image quality, choose graphic quality PVC cards. You can also select PVC/polyester composite cards. The latter are sturdier and better adapted for intensive uses. For all of your access control needs, we also provide smart cards with electronic chips embedded in the surface.

### Card format

CR80 (standard)

3.375 in. x 2.125 in. (86.5 mm x 53.98 mm)

### Card thickness

Minimal thickness: 0.015 in. (0.38 mm)

Standard thickness: 0.030 in. (0.76 mm)

Maximal thickness: 0.063 in. (1.60 mm)

### Necessary features for quality printing

Glossy white surface

Absence of dirt particles or grease stains

Absence of cracks or bumps

Absence of shim lines

Total flatness

### Printing area

The card printers we provide are designed to cover the card's surface from side to side (full bleed printing).

Cards produced using die-cutting often feature sharp edges. In turn, these edges are likely to cause fine lines to appear along the frame during full bleed printing.

If you choose to design your card templates using a graphic software, you should use a maximal page size of 1026 pixels (3.45 in./87.5 mm) x 642 (2.13 in./54 mm) pixels.

### Adhesive cards

Various types of adhesive cards are available. In-depth studies have proven that lesser-quality cards or cards of inappropriate format will cause problems during the printing process. Amongst these problems, one notes a lesser print quality, feeding failures, broken print ribbons and card jams.

### Contact cards

Smart cards need to conform to ISO 7816 standards stipulating that 'contact' elements are to be located under the cards' surface. It is ill-advised to try and print images or texts near the edges of the chip since print quality will likely be affected.

### The 4 types of cards

### Utility *Stress* cards

Utility *stress* cards are an ideal stock for patient cards and other embossed cards. Covered with a chemical additive which reacts to the pressure applied by the embossing hammer, they help ease the identification process by turning the protruding characters white.

### Super *Stress* cards

Ideal for embossing purposes, this stock also supports printing. The characters on the cards are clearly visible, which facilitates the identification of the card holder. As with *stress* cards, they contain a pressure-sensitive additive, which heightens the embossing quality even more.

### Graphic quality cards

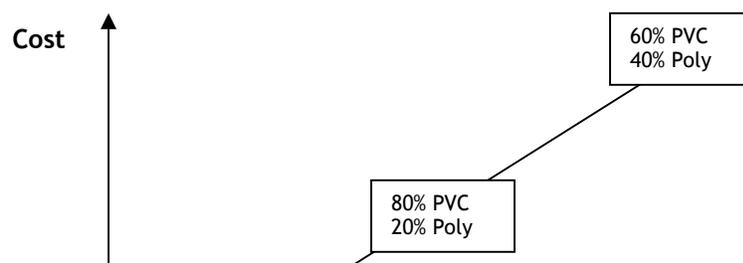
This stock is designed specifically for the use in card printers. Made with high-quality material, these cards are guaranteed to give attractive results. They are ideal for ID card production, be it photo or photo-less IDs, insurance cards, membership cards or loyalty cards. Thanks to a rigorous crafting process, the consistent quality of the product is always guaranteed. Our graphic quality cards are virtually spotless, devoid of scratches and dust specs liable to heighten the reject rate and cause costly delays to any production; these cards surpass even the ANSI (American National Standards Institute) standards. By adding a thin, clear film on the PVC surface, the cards adorn a glossy, durable finish. To top it off, we make sure to wrap the finished product in cellophane as to insure their protection against dust during the shipping and warehousing processes, which makes the immediately usable upon reception.

### PVC/PET composite cards

Designed to insure a greater longevity, this stock is crafted from a unique blend of PVC and PET, which multiplies the lifespan of your cards by up to six times. Imagine for a moment that your wallet contained a ten-year old, commercially-produced ID card that still looks good, a card that supports common add-ons such as signature panels and magnetic stripes just as well as the graphic quality cards you know and love. Well, people, this card is now available! It will allow you to produce a great many types of cards including student cards, lifetime membership cards, driver's licenses, ski passes or any other type of cards needing prolonged use under difficult environmental conditions.

### **Composite card properties**

The following graph demonstrates the evolving cost and flexibility of the different composite card stocks :



### **Magnetic Stripes**

There are two major types of magnetic stripe cards, dubbed Hi-Co and Lo-Co respectively. These denominations refer to the different levels of coercivity present in the magnetic elements therein. The higher the level of coercivity, the harder it is to demagnetize the card. Hi-Co cards (with the solid black stripes) account for 99.9% of all magnetic cards on the market. Their coercivity level equals 2700 Oe. Lo-Co cards (with the brown stripes), on the other hand, are becoming less and less popular, considering the growing popularity, and low cost of Hi-Co cards. Their coercivity level equals 300 Oe.