3M

MAGNETIC STRIPE CARD RECOMMENDATIONS

The following recommendations have been developed to help you select a Magnetic Stripe Card that will be fully compatible with the 3M™ SelfCheck™ System and provide excellent readability for your library over the long term.

1 COERCIVITY OF MAGNETIC STRIPE

A high coercivity stripe (sometimes referred to as a hi-co or high energy stripe) is recommended for use with the 3M SelfCheck system. Many banks are now switching to hi-co stripes on their cash and credit cards for the following reason:

1. They are much harder to erase

   ISO (International Standards Organization) 7811 Standard hi-co magnetic stripes require a greater magnetic force to erase data and therefore are less susceptible to accidental erasure. The ISO 7811 standard hi-co stripes can tolerate a magnetic field strength 10 times that of the traditional low coercivity magnetic stripe. Unlike low coercivity stripes, the hi-co stripe will not be erased by common items such as refrigerator magnets, magnetic badgeholders, electric motors or transformers. The energy required to change a magnetic stripe is measured in *oersteds*. Many of today's high coercivity magnetic cards typically measure 2000 to 4000 oersteds.

   If you utilize magnetic stripes on your library cards and use the 3M SelfCheck system, we recommend hi-co stripes that meet the following conditions:

   a. Exceed 2000 oersteds in magnetic strength

   b. Meet the ISO 7811 Standard requirements for high coercivity magnetic tape.

   Simply specify ISO 7811 as a requirement when you order magnetic striped library cards.

2 DATA STORAGE

Magnetic Stripe Cards have three tracks which can store data. The 3M SelfCheck system primarily uses track #2, which we recommend. If necessary, the 3M SelfCheck system can be programmed to read track #1. Track #3 can not be read by the 3M SelfCheck system.

3 PROTECTIVE LAMINATES

Protective Laminates should not be added over the magnetic stripe. They are not required or recommended.

4 CARD EMBOSSING

Do not emboss the card in the area that is inserted into the mag card reader (slot area). Embossing over the magnetic stripe will destroy the data on the stripe.

5 CARD DIMENSIONS

A card thickness of 0.027" - 0.033" is recommended (per A.B.A. standards). Typical card dimensions are 3.375" long by 2.125" high.

6 MAGSTRIPE LOCATIONS ON PATRON CARDS

We recommend one consistent location (per A.B.A. standards). The stripe should be placed parallel to the long edge of the card. The preferred location is on the back along the bottom of the card. The Magnetic Card should not be used on a keychain, as the keys may damage the mag stripe.

7 3M SUPPORT

If you are currently using a magnetic stripe card or are considering its use in your library, please submit 3 to 5 samples to your 3M Sales Consultant along with the 3M SelfCheck system Customer Checklist. We will verify their compatibility with the 3M SelfCheck system.

8 ADDITIONAL REFERENCES

1. The American Banking Association (A.B.A.) Credit Card Specifications.
2. The American National Standards Institute (ANSI).
3. The International Standards Organization (ISO).

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