

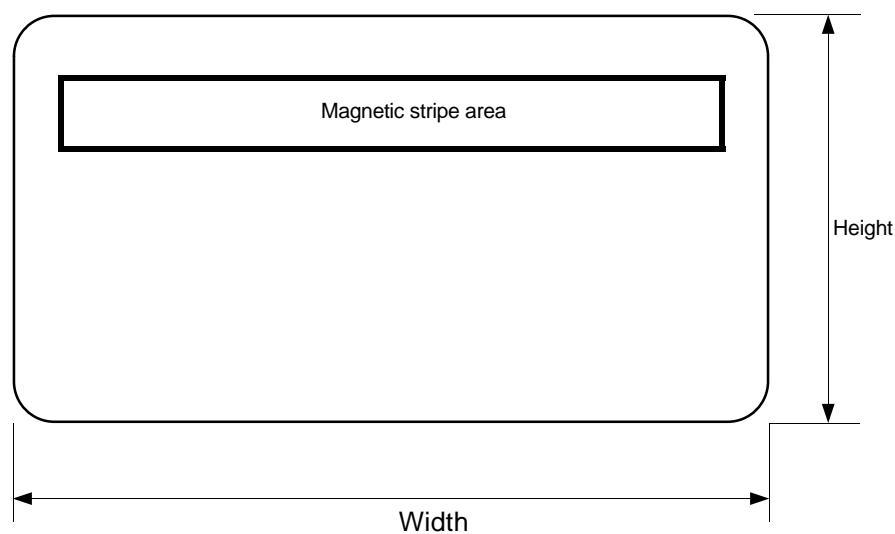
## Introduction

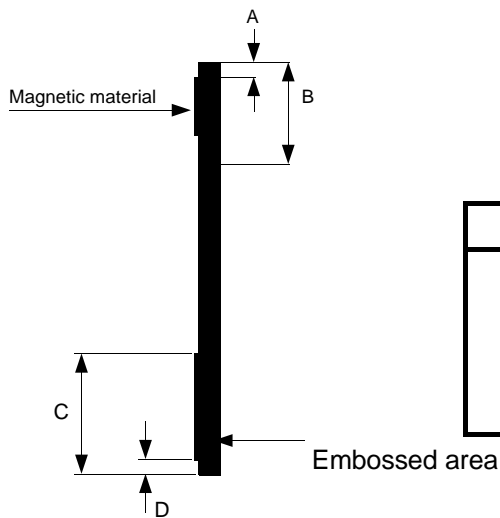
This application note is a brief summary of the standards required for the physical requirements of Magnetic Cards.

## Physical requirements:

The physical requirements should conform to those in Australian Standards AS 3521 - 1988 (or ISO 7810). The nominal dimensions of the three sizes of card are shown in the table below.

Card Type	Width		Height		Thickness	
	mm	in	mm	in	mm	in
ID-1	85.60	3.370	53.98	2.125	0.76	0.030
ID-2	105	4.134	74	2.913	0.76	0.030
ID-3	125	4.921	88	3.465	0.76	0.030





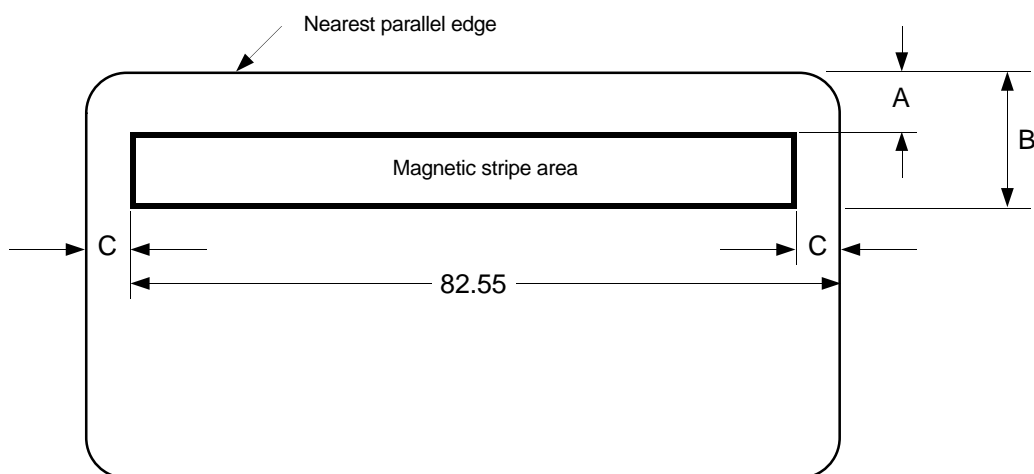
Dimension	mm	Description
A max	2.54	Top edge to magnetic track
B min	19.05	B - A distortion free area
C max	24.03	C - D Embossed area
D min	2.54	Lower edge to embossing

### Track Structure

Recording techniques and structure should conform to Australian Standards AS 3524-1988 (ISO 7811). There are two specifications for the magnetic track size, as described below. The magnetic medium can contain up to 3 tracks of data. Tracks one and two are read only while track three is read/write. Track 1 is the only alpha-numeric track, tracks two and three must be numeric data only.

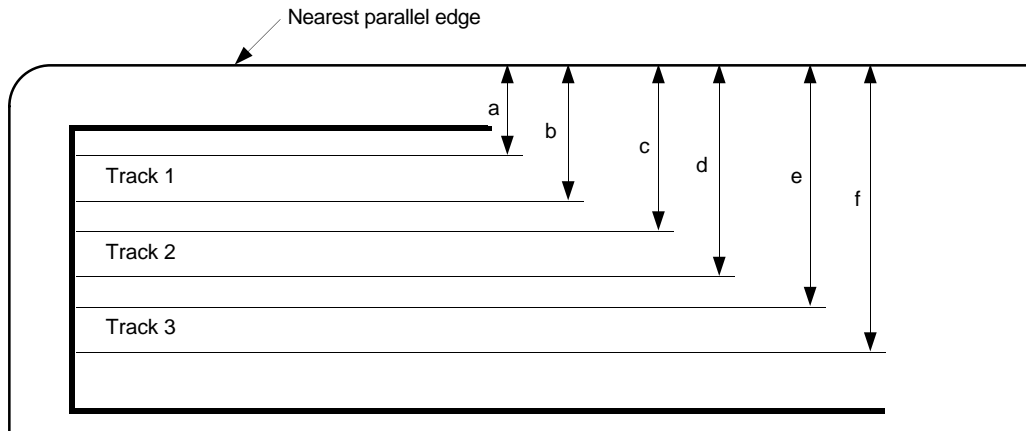
### Location of tracks

The location of the tracks are all with respect to the nearest parallel edge to the magnetic strip.



Dimensions mm	Single or dual track	Three tracks
A	5.54 max	5.54 max
B	11.89 max	15.82 max
C	2.92 max	2.92 max

### Location of Magnetic Tracks



	a	b	c	d	e	f
mm	5.66	8.46 - 8.97	8.46 - 8.97	11.76	12.01 - 12.52	15.32 - 15.82

### Magnetic track format of common cards

#### Track 1 data

SS	FC	PAN	FS	NAME	FS	ADD INFO	ES
%	FORMAT CODE	19 DIGITS MAX	^	25 ALPHANUMERIC	^	VARIOUS S	?

#### Track 2 data

SS	PAN	FS	ADD INFO	ES	
;	19 DIGITS MAX	=	VARIOUS	?	CR

**Notes:**

- SS - Starting String
- FS - File separator
- ES - End string