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## Identification cards — Physical characteristics

*Cartes d'identification — Caractéristiques physiques*



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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)) or the IEC list of patent declarations received (see <http://patents.iec.ch>).

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Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

This fourth edition cancels and replaces the third edition (ISO/IEC 7810:2003), which has been technically revised. It also incorporates the Amendments ISO/IEC 7810:2003/Amd.1:2009 and ISO/IEC 7810:2003/Amd.2:2012.

The main changes compared to the previous edition are as follows:

- the test method and criteria for opacity has changed; previously the test method used a spectrophotometer and criteria included both visible and IR light; the present method uses 2 frequencies of only IR light and a reference material to establish compliance;
- criteria for cards containing certain types of IC's has been added (formerly these were in the specific IC card standards but as the same requirement applies to many types of IC cards they have been placed in this document);
- the heat deflection test (formerly Annex A) has been placed in ISO/IEC 10373-1;
- the clause on light exposure has additional explanation;
- the overall size tolerance of the ID-1 size returned card has changed (5.2);
- patch layer peel strength has been added and is lower than other values (8.7);
- address for availability of optical reference media has changed.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

This document defines the minimum physical requirements for the identification card and is used by the following identification card standards for recording technologies. Other standards not listed here may also refer to this document.

- ISO/IEC 7501 (all parts), *Identification cards — Machine readable travel documents*
- ISO/IEC 7811 (all parts), *Identification cards — Recording technique — Embossing and magnetic stripes*
- ISO/IEC 7812 (all parts), *Identification cards — Identification of issuers*
- ISO/IEC 7813, *Identification cards — Financial transaction cards*
- ISO/IEC 7816 (all parts), *Identification cards — Integrated circuit(s) cards with contacts*
- ISO/IEC 10373 (all parts), *Identification cards — Test methods*
- ISO/IEC 10536 (all parts), *Identification cards — Contactless integrated circuit(s) cards — Close-coupled cards*
- ISO/IEC 14443 (all parts), *Identification cards — Proximity integrated circuit(s) cards*
- ISO/IEC 15693 (all parts), *Identification cards — Vicinity integrated circuit(s) cards*
- ISO/IEC 11693-1, *Identification cards — Optical memory cards — Part 1: General characteristics*
- ISO/IEC 11694 (all parts), *Identification cards — Optical memory cards — Linear recording method*
- ISO/IEC 24789 (all parts), *Identification cards — Card service life*
- ISO/IEC 18328 (all parts), *Identification cards — ICC-managed devices*

NOTE Notes in this document are only used for giving additional information intended to assist in the understanding or use of this document and do not contain provisions or requirements to which it is necessary to conform in order to be able to claim compliance with this document.