
**Identification cards — Thin flexible
cards —**

**Part 3:
Test methods**

Cartes d'identification — Cartes flexibles fines —

Partie 3: Méthodes d'essai

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 15457-3 was prepared by Technical Committee ISO/TC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

This second edition cancels and replaces the first edition (ISO/IEC 15457-3:2002), of which has been technically revised.

ISO/IEC 15457 consists of the following parts, under the general title *Identification cards — Thin flexible cards*:

- *Part 1: Physical characteristics*
- *Part 2: Magnetic recording technique*
- *Part 3: Test methods*

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Identification cards — Thin flexible cards —

Part 3: Test methods

1 Scope

Thin flexible cards (TFC), the subject of this International Standard, are used to automate the controls for access to goods or services such as mass transit, highway toll systems, car parks, vouchers, stored value, etc.

For these applications, data can be written and/or read by machines using various recording techniques such as magnetic stripe, optical character recognition (OCR), bar code, etc.

This part of ISO/IEC 15457 specifies the test methods and procedures required to carry out measurements of the magnetic stripe and encoding characteristics of thin flexible cards.

Many of the standard methods available for checking physical properties of base materials are intended to be applied to samples cut from continuous material or large sheets. However, all test methods given herein, unless explicitly stated otherwise, apply to finished cards.

The test methods described are to be performed on separate samples. It is not intended that any individual card should pass through more than one test procedure, unless explicitly stated.

Acceptance criteria are not covered by this part of ISO/IEC 15457.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 186, *Paper and board — Sampling to determine average quality*

ISO 187, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples*

ISO 291, *Plastics — Standard atmospheres for conditioning and testing*

ISO 534, *Paper and board — Determination of thickness, density and specific volume*

ISO 1831, *Printing specifications for optical character recognition*

ISO 2144, *Paper, board and pulps — Determination of residue (ash) on ignition at 900 °C*

ISO 2409, *Paints and varnishes — Cross-cut test*

ISO 2471, *Paper and board — Determination of opacity (paper backing) — Diffuse reflectance method*

ISO 2758, *Paper — Determination of bursting strength*

ISO 3274, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Nominal characteristics of contact (stylus) instruments*

ISO 4094, *Paper, board and pulps — International calibration of testing apparatus — Nomination and acceptance of standardizing and authorized laboratories*

ISO 4287-1, *Surface roughness — Terminology — Part 1: Surface and its parameters*

ISO 5626, *Paper — Determination of folding endurance*

ISO 5627, *Paper and board — Determination of smoothness (Bekk method)*

ISO 5629, *Paper and board — Determination of bending stiffness — Resonance method*

ISO 5636-3, *Paper and board — Determination of air permeance (medium range) — Part 3: Bendtsen method*

ISO 6383-2, *Plastics — Film and sheeting — Determination of tear resistance — Part 2: Elmendorf method*

ISO 8295, *Plastics — Film and sheeting — Determination of the coefficients of friction*

ISO 8570, *Plastics — Film and sheeting — Determination of cold-crack temperature*

ISO/IEC 7811-2, *Identification cards — Recording technique — Part 2: Magnetic stripe — Low coercivity*

ISO/IEC 7811-6, *Identification cards — Recording technique — Part 6: Magnetic stripe — High coercivity*

ISO/IEC 10373-1, *Identification cards — Test methods — Part 1: General characteristics*

ISO/IEC 10373-2, *Identification cards — Test methods — Part 2: Cards with magnetic stripes*

ISO/IEC 15457-1, *Identification cards — Thin flexible cards — Part 1: Physical characteristics*

ISO/IEC 15457-2, *Identification cards — Thin flexible cards — Part 2: Magnetic recording technique*

IEC 60454-2, *Specifications for pressure-sensitive adhesive tapes for electrical purposes — Part 2: Methods of test*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 15457-1, ISO/IEC 15457-2 and the following apply.

3.1

substrate

material of which the TFC is made without any recording media

3.2

composite

material made from at least two layers of different material, one of which is paper