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## Road vehicles — Roof load carriers

*Véhicules routiers — Porte-charges de toit*



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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.

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 ISO documents 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 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)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 40, *Specific aspects for light and heavy commercial vehicles, busses and trailers*.

This first edition cancels and replaces ISO/PAS 11154:2006, which has been technically revised.

The main changes are as follows:

- update and revision of document structure, which results in renumbering;
- update and revision [Clause 2](#);
- update and revision [Clause 6](#);
- addition of test procedure [\(6.4\)](#);
- addition of lane change test [\(6.11.3\)](#);
- addition of brake test [\(6.11.4\)](#);
- revision of [6.12.2](#), changing application of force from 10 min to 1 min.

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).



# Road vehicles — Roof load carriers

## 1 Scope

This document applies for roof racks of passenger cars and light commercial vehicles up to a permissible total weight of 3,5 t according to ISO 1176 and specifies requirements and test methods for these. It is also valid for roof racks mounted on trailers.

So-called magnetic or suction foot racks, i.e. roof racks whose attachment on the vehicle is only via magnetic forces or vacuum, are excluded from this document.

This document provides safety-related requirements under consideration of the weight, centre of gravity, air resistance and other safety-relevant properties for structures of roof racks for which no other technical or statutory regulations otherwise apply and which are not listed in 4.2. In individual cases, test requirements can extend beyond these requirements.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 179-1, *Plastics — Determination of Charpy-impact properties — Part 1: Non-instrumented impact test*

ISO 3888-2, *Passenger cars — Test track for a severe lane-change manoeuvre — Part 2: Obstacle avoidance*

ISO 4210-2, *Cycles — Safety requirements for bicycles — Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles*

ISO 4892-2, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps*

EN 15194, *Cycles — Electrically power assisted cycles — EPAC Bicycles*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 3.1

#### **roof rack**

device, which is attached directly or indirectly via other roof rack forms on the roof of passenger cars or vehicles derived from this and which are suitable for the transportation of loads (3.2)

### 3.2

#### **load**

transport goods which can be transported with the *roof racks* (3.1) provided for this