



SLOVENSKI STANDARD SIST EN ISO 4210-2:2015

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Kolesa - Varnostne zahteve za kolesa - 2. del: Zahteve za mestna in trekking kolesa, kolesa za mlade, gorska in tekmovalna kolesa (ISO 4210-2:2015)

Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles (ISO 4210-2:2015)

Fahrräder - Technische Anforderungen an Fahrräder - Teil 2: Anforderungen für City- und Trekkingfahrräder, Jugendfahrräder, Geländefahrräder (Mountainbikes) und Rennräder (ISO 4210-2:2015)

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Cycles - Exigences de sécurité des bicyclettes - Partie 2: Exigences pour bicyclettes de ville et de randonnée, de jeune adulte, de montagne et de course (ISO 4210-2:2015)

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97.220.40	Oprema za športe na prostem in vodne športe	Outdoor and water sports equipment

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EUROPEAN STANDARD

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Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles (ISO 4210-2:2015)

Cycles - Exigences de sécurité des bicyclettes - Partie 2:
Exigences pour bicyclettes de ville et de randonnée, de
jeune adulte, de montagne et de course (ISO 4210-
2:2015)

Fahrräder - Sicherheitstechnische Anforderungen an
Fahrräder - Teil 2: Anforderungen für City- und
Trekkingfahrräder, Jugendfahrräder, Geländefahrräder
(Mountainbikes) und Rennräder (ISO 4210-2:2015)

This European Standard was approved by CEN on 8 August 2015.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN ISO 4210-2:2015) has been prepared by Technical Committee ISO/TC 149 “Cycles” in collaboration with Technical Committee CEN/TC 333 “Cycles” the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2016, and conflicting national standards shall be withdrawn at the latest by March 2016.

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INTERNATIONAL
STANDARD

ISO
4210-2

Second edition
2015-09-01

**Cycles — Safety requirements for
bicycles —**

Part 2:

**Requirements for city and trekking,
young adult, mountain and racing
bicycles**

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Cycles — Exigences de sécurité des bicyclettes —

Partie 2: Exigences pour bicyclettes de ville et de randonnée, de jeune adulte, de montagne et de course

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
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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).

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).

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

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](http://www.iso.org/foreword)

The committee responsible for this document is ISO/TC 149, *Cycles*, Subcommittee SC 1, *Cycles and major sub-assemblies*.

This second edition ~~is a technical revision of the first edition (ISO 4210-2:2014)~~ and replaces the first edition (ISO 4210-2:2014), which has been technically revised.

ISO 4210 consists of the following parts, under the general title *Cycles — Safety requirements for bicycles*:

- *Part 1: Terms and definitions*
- *Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles*
- *Part 3: Common test methods*
- *Part 4: Braking test methods*
- *Part 5: Steering test methods*
- *Part 6: Frame and fork test methods*
- *Part 7: Wheels and rim test methods*
- *Part 8: Pedal and drive system test methods*
- *Part 9: Saddles and seat-post test methods*

ISO 4210-2:2015(E)**Introduction**

This International Standard has been developed in response to demand throughout the world, and the aim has been to ensure that bicycles manufactured in compliance with this International Standard will be as safe as is practically possible. The tests have been designed to ensure the strength and durability of individual parts as well as of the bicycle as a whole, demanding high quality throughout and consideration of safety aspects from the design stage onwards.

The scope has been limited to safety considerations and has specifically avoided standardization of components.

If the bicycle is to be used on public roads, national regulations apply.

For the purposes of improving repeatability and reproducibility and considering the applicability to all types of bicycle and the size and influence of the operator, the machine test method reflects today's state of the art and is preferred to the track test method.

Unless there is evidence of improvement of the test track method in the future, this method will be made informative for the next revision. Users of this International Standard are invited to provide their feedback to ISO/TC 149/SC 1.

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Cycles — Safety requirements for bicycles —

Part 2:

Requirements for city and trekking, young adult, mountain and racing bicycles

1 Scope

This part of ISO 4210 specifies safety and performance requirements for the design, assembly, and testing of bicycles and sub-assemblies having saddle height as given in [Table 1](#), and lays down guidelines for manufacturer's instructions on the use and care of such bicycles.

This part of ISO 4210 applies to young adult bicycles with maximum saddle height of 635 mm or more and less than 750 mm, city and trekking bicycles, mountain bicycles, and racing bicycles that have a maximum saddle height of 635 mm or more including folding bicycles (see [Table 1](#) and [Figure 1](#)).

This part of ISO 4210 does not apply to specialized types of bicycle, such as delivery bicycles, recumbent bicycles, tandems, BMX bicycles, and bicycles designed and equipped for use in severe applications such as sanctioned competition events, stunting, or aerobic manoeuvres.

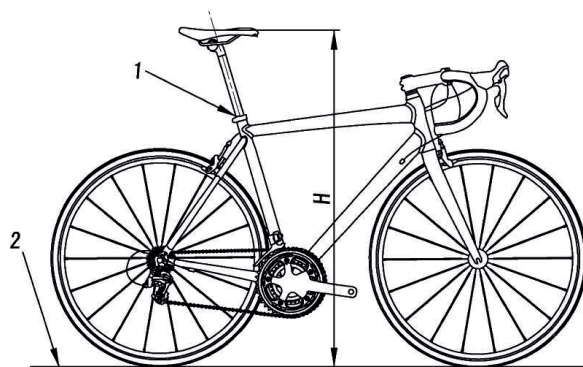
NOTE For bicycles with a maximum saddle height of 435 mm or less, see ISO 8124-1, and with a maximum saddle height of more than 435 mm and less than 635 mm, see ISO 8098.

Table 1 — Maximum saddle height

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Dimensions in millimetres

Bicycle type	City and trekking bicycles	Young adult bicycles	Mountain bicycles	Racing bicycles
Maximum saddle height	635 or more	635 or more and less than 750	635 or more	635 or more



Key

- H* maximum saddle height
- 1 minimum insertion-depth mark
- 2 ground plane

Figure 1 — Maximum saddle height