



Standard Classification for Bicycle Usage¹

This standard is issued under the fixed designation F2043; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This classification covers bicycle usage conditions and a method of identifying bicycles and components for use within that system.

1.2 The values stated in SI units are to be regarded as the standard. The values in parentheses are for information only.

2. Referenced Documents

2.1 *Federal Standard*.²

16 CFR 1512 Title 16—Commercial Practices, Chapter 11—Consumer Product Safety Commission, Part 1512—Requirements for Bicycles

3. Terminology

3.1 *Definitions*:

3.1.1 *aftermarket, n*—components intended for use on a bicycle but not included as original equipment with the bicycle.

3.1.2 *bicycle, n*—two-wheeled, single-track, articulated vehicle with pedals and seat that is solely human powered.

3.1.3 *components, n*—devices or equipment added to a bicycle frame to render it a complete, functional unit (for example, brakes, shifters, gears, and so forth).

3.1.4 *conditions, n*—generalized description of surface environments or speeds where a bicycle may be ridden.

3.1.5 *drop, n*—event when only a single wheel leaves the ground at a time for a lower elevation in which the height of the drop is the maximum height above the landing surface of the lowest spot on the tire.

3.1.6 *jump, n*—event when both bicycle wheels leave the ground in which the height of a jump is the maximum height above ground of the lowest point of the higher wheel when both wheels are off the ground.

3.1.7 *sidewalk bicycle, n*—bicycle meeting the definition of a sidewalk bicycle as defined in 16 CFR 1512.

3.1.8 *technical skill, n*—advanced riding technique that requires rapid changes in speed, direction, and balance.

4. Significance and Use

4.1 This classification provides a uniform set of usage definitions within the bicycle industry. Included within this classification is a set of graphical indicators to provide retailers and consumers with an indication of the intended use of a particular bicycle or aftermarket components.

5. Basis of Classification

5.1 *Uses*:

5.1.1 *Condition 0*—This is a set of conditions for operation of a children's bicycle under appropriate parental supervision in a manner consistent with the child's bicycling skills. Bicycles intended for this use are "sidewalk bicycles." In addition, bicycles intended for this condition are limited to riders at least three years old and weighing less than 36 kg (80 lb). Bicycles intended for this use classification shall be identified in accordance with the labeling requirements of Section 6 using the graphical symbol (icon) illustrated in Fig. 1. The icon in this figure is black on a white background with a black border.

5.1.2 *Condition 1*—This is a set of conditions for the operation of a bicycle on a regular paved surface where the tires are intended to maintain ground contact. Bicycles intended for this use classification shall be identified in accordance with the labeling requirements of Section 6 using the graphical symbol (icon) illustrated in Fig. 2. The icon in this figure is green on a white background with a black border.

5.1.3 *Condition 2*—This is a set of conditions for the operation of a bicycle that includes Condition 1 as well as unpaved and gravel roads and trails with moderate grades. In this set of conditions, contact with irregular terrain and loss of tire contact with the ground may occur. Drops are intended to be limited to 15 cm (6 in.) or less. Bicycles intended for this use classification shall be identified in accordance with the labeling requirements of Section 6 using the graphical symbol (icon) illustrated in Fig. 3. The icon in this figure is green on a white background with a black border.

5.1.4 *Condition 3*—This is a set of conditions for operation of a bicycle that includes Condition 1 and Condition 2 as well

¹ This classification is under the jurisdiction of ASTM Committee F08 on Sports Equipment, Playing Surfaces, and Facilities and is the direct responsibility of Subcommittee F08.10 on Bicycles.

Current edition approved Nov. 1, 2013. Published December 2013. Originally approved in 2000. Last previous edition approved in 2009 as F2043 – 09. DOI: 10.1520/F2043-13.

² Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.