



Standard Safety Specification for Components, Assembly, Use, and Labeling of Consumer Trampolines¹

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1. Scope

1.1 This safety specification covers the components, the assembly, and the use of consumer trampolines.

1.2 This specification is delimited in its application to trampolines of (1) a minimum bed size of 3300 in.² (21 300 cm²), (2) a minimum height of 20 in. (51 cm), (3) intended for the purpose of continuous, vertical jumping activities and (4) intended for consumer use.

1.3 This specification is intended to reduce the demonstrated hazards associated with the use of trampolines by consumers. Trampolines primarily used by consumers are in home environments. This specification is not intended to apply to institutional trampolines. Trampolines that adhere to this specification are not recommended for use by children under six years of age.

1.4 This standard does not purport to address all of the hazards associated with trampolines. The standard's existence alone will not necessarily prevent injuries. Like other physical activities, trampoline use involves the risk of injury, particularly if the equipment is used improperly.

1.5 The primary units given in this specification are in the inch-pound system.

1.6 This specification includes the following sections and selected subsections.

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2. Referenced Documents

2.1 ASTM Standards:

F 355 Test Method for Shock-Absorbing Properties of Playing Surface Systems and Materials²

2.2 Other Standard:

ANSI Standard Z535.4 Product Safety Signs and Labels³

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *access device, n*—a device used for access to or egress from a trampoline bed including, but not limited to, trampoline ladders.

3.1.2 *bed, n*—flexible surface which the user contacts in the course of bouncing on a trampoline.

3.1.3 *bouncing, n*—the action considered as normal use of a trampoline consisting of continuous, vertical jumping wherein each landing is in near proximity to the previous landing.

3.1.4 *consumer trampoline, n*—a trampoline intended for use in a home environment.

3.1.5 *folding-type trampoline, n*—a trampoline whose frame can be folded when not in use. See *portable*.

3.1.6 *frame, n*—the framework constructed of rigid supportive materials from which the bed is suspended.

3.1.7 *frame padding, n*—shock-attenuating protective device(s) that attaches to the frame to cover the frame and suspension system.

3.1.8 *institutional trampoline, n*—a trampoline intended for use in a commercial or institutional facility.

3.1.9 *ladder, n*—see *trampoline ladder*.

3.1.10 *legs, n*—the framework constructed of rigid materials which support the frame above the ground or floor.

3.1.11 *mat, n*—a common, though nonpreferred term referring to bed.

3.1.12 *portable, adj*—able to be easily moved without disassembly, though usually requiring the assistance of devices

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² *Annual Book of ASTM Standards*, Vol 1507.

³ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

such as roller stands. Folding-type trampolines are often intended to be portable.

3.1.13 *roller stand, n*—a device that is used to assist in rolling/moving a folding-type trampoline frame.

3.1.14 *suspension system, n*—the bed-supporting system made up of elastic devices that connect the bed to the frame, for example, steel extension springs.

3.1.15 *trampoline, n*—a rebound device activated by vertical jumping, upon which gymnastics skills and exercises are performed.

3.1.16 *trampoline ladder, n*—a ladder-like device specifically designed for use with a trampoline and designed to be easily removable.

4. Included Components

4.1 When a trampoline is offered for sale, it shall include the following: (1) a frame, (2) a bed, (3) a suspension system, (4) frame padding, (5) an information packet, and (6) suitable markings.

4.2 When a trampoline is offered for sale, a trampoline ladder shall not be included as a component part or within the same packaging.

4.3 When a portable trampoline is offered for sale, it shall include all of the components in 4.1 plus appropriate roller stands.

4.3.1 For folding-type trampolines, the information in 7.5.1 and 8.3.3 shall also include the following:

4.3.1.1 Use two or more strong people to open and close folding-type trampolines.

5. Materials and Manufacture

5.1 The suspension system shall be designed so as to protect the performer from injury due to contact with the sharp ends of the trampoline springs.

5.2 The frame padding shall be designed to remain securely attached to the frame.

5.3 Except for necessary seams, the frame padding shall cover the entire top surface of the frame and be wide enough to completely cover the entire top surface of the suspension system and frame. Satisfaction of this requirement shall be evaluated with no load on the bed.

5.4 The frame padding shall be of a color which contrasts with the color of the trampoline bed.

5.5 Height of the bed from the ground or floor shall be sufficient to prevent the bed from contacting the ground or floor while bouncing.

5.6 The trampoline shall be designed such that no part of the frame or legs can be contacted by the bed while bouncing.

5.7 All information, instructions, and warnings shall be provided in English in addition to any other formats used, for example, graphical, video, multilingual, etc.

6. Performance Requirements

6.1 The shock-attenuating material used in the frame padding, as measured to include the frame and a minimum of 2 in. from the inside edge of the frame, shall limit the severity index to less than 450, when the same thickness as used in the frame padding is tested in accordance with Test Method F 355 using a 20-lb (9-kg), 20-in.² (129-cm²) round, flat head dropped from

a distance of 2 ft (61 cm).

7. Information Packet

7.1 *Packet Marking and Contents:*

7.1.1 Each trampoline shall be accompanied by a separate packet of materials, with the following notice:

Assembly, Installation, Care, Maintenance, and Use Instructions

WARNING

Read these materials prior to assembling and using this trampoline

7.1.1.1 This notice shall, without font or layout being implied, be well highlighted, and in enlarged boldface type in contrast to other text.

7.1.2 The packet shall contain: (1) assembly instructions, (2) care and maintenance instructions, (3) warning information, and (4) use instructions.

7.2 *Assembly and Installation Instructions:*

7.2.1 The manufacturer's assembly instructions for the trampoline shall be clearly written and presented such that the trampoline can be properly and safely assembled.

7.2.2 The manufacturer's assembly instructions shall emphasize the importance of properly attaching the frame padding securely to the frame and in correct position prior to using the trampoline. The manufacturer shall provide a diagram illustrating the correct placement of the frame padding relative to the frame.

7.2.3 Any specific use limitations placed on the trampoline by the manufacturer shall be included in a statement appearing in a box at the bottom of the first page after the following notice:

WARNING

7.2.4 Trampoline installation instructions shall be supplied by the manufacturer to aid the purchaser in proper installation and placement of the trampoline. The installation instructions shall include the following information:

7.2.4.1 Adequate overhead clearance is essential. A minimum of 24 ft from ground level is recommended. Provide clearance for wires, tree limbs, and other possible hazards.

7.2.4.2 Lateral clearance is essential. Place the trampoline away from walls, structures, fences, and other play areas. Maintain a clear space on all sides of the trampoline.

7.2.4.3 Place the trampoline on a level surface before use.

7.2.4.4 Use the trampoline in a well-lighted area. Artificial illumination may be required for indoor or shady areas.

7.2.4.5 Secure the trampoline against unauthorized and unsupervised use.

7.2.4.6 Remove any obstructions from beneath the trampoline.

7.2.4.7 The owner and supervisors of the trampoline are responsible to make all users aware of practices specified in the use instructions.

7.3 *Care and Maintenance Instructions:*

7.3.1 Trampoline care and maintenance instructions shall be supplied by the manufacturer to aid the purchaser in the basic