



Designation: F2959 – 19

Standard Practice for Aerial Adventure Courses¹

This standard is issued under the fixed designation F2959; 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 reappraisal. A superscript epsilon (ε) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This practice establishes criteria for the Design, Manufacture, Installation, Operation, Maintenance, Auditing and Major Modification of Aerial Adventure Courses.

1.2 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

- E543** Specification for Agencies Performing Nondestructive Testing
- F747** Terminology Relating to Amusement Rides and Devices
- F770** Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices
- F1159** Practice for Design of Amusement Rides and Devices that are Outside the Purview of Other F24 Design Standards
- F1193** Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices
- F1772** Specification for Harnesses for Rescue and Sport Activities

F1950 Specification for Physical Information to be Transferred With Used Amusement Rides and Devices (Withdrawn 2008)³

F1957 Test Method for Composite Foam Hardness-Durometer Hardness

F2137 Practice for Measuring the Dynamic Characteristics of Amusement Rides and Devices

F2291 Practice for Design of Amusement Rides and Devices

F2375 Practice for Design, Manufacture, Installation and Testing of Climbing Nets and Netting/Mesh used in Amusement Rides, Devices, Play Areas and Attractions

F2974 Practice for Auditing Amusement Rides and Devices

2.2 ANSI Standards:⁴

ANSI B77 Passenger Ropeways - Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors - Safety Requirements

ANSI Z359 Fall Protection Code

2.3 CDC (Center for Disease Control) Growth Charts:⁵

CDC Basic Body Measurements

2.4 European Standard:⁶

EN 280 Mobile elevating work platforms - Design calculations - Stability criteria - Construction - Safety - Examinations and tests

EN 12277 Mountaineering equipment - Harnesses - Safety requirements and test methods

2.5 NFPA Standard:⁷

NFPA 1983 Standard on Life Safety Rope and Equipment for Emergency Services

2.6 SAE Standard:⁸

SAE J833 Human Physical Dimensions

¹ This practice is under the jurisdiction of ASTM Committee F24 on Amusement Rides and Devices and is the direct responsibility of Subcommittee F24.61 on Adventure Attractions.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

⁵ Available from Centers for Disease Control and Prevention (CDC), 1600 Clifton Rd., Atlanta, GA 30329-4027, <http://www.cdc.gov> [Search: anthropometrics].

⁶ Available from European Committee for Standardization (CEN), Avenue Marnix 17, B-1000, Brussels, Belgium, <http://www.cen.eu>.

⁷ Available from National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169-7471, <http://www.nfpa.org>.

⁸ Available from SAE International (SAE), 400 Commonwealth Dr., Warrendale, PA 15096, <http://www.sae.org>.