



Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices¹

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1. Scope

1.1 This practice applies to the design, manufacture, and operation of inflatable amusement devices and their associated operating environments.

1.2 This practice specifically excludes inflatable devices that are used for professional exhibition or stunt work; safety and rescue activities; aerial or aviation structures or devices; exhibit floats; or similar inflatable devices.

1.3 *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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

F 698 Specification for Physical Information to be Provided for Amusement Rides and Devices

F 747 Terminology Relating to Amusement Rides and Devices

F 770 Practice for Operation Procedures for Amusement Rides and Devices

F 853 Practice for Maintenance Procedures for Amusement Rides and Devices

F 893 Guide for Inspection of Amusement Rides and Devices

F 1159 Practice for Design and Manufacture of Patron Directed, Artificial Climbing Walls, Dry Slide, Coin Operated and Purposeful Water Immersion Amusement Rides and Devices and Air-Supported Structures

F 1193 Practice for Amusement Ride and Device Manufacturer Quality Assurance Program and Manufacturing Requirements

¹ This practice is under the jurisdiction of ASTM Committee F24 on Amusement Rides and Devices and is the direct responsibility of Subcommittee F24.60 on Special Rides/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. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *inflatable amusement device, n*—an amusement ride or device, as defined by Terminology F 747, consisting of air-filled structures designed for use, as specified by the manufacturer, that may include but not be limited to bounce, climb, slide, or interactive play. They are made of flexible fabric, kept inflated by continuous air flow by one or more blowers, and rely upon air pressure to maintain their shape.

3.1.1.1 *Discussion*—This definition specifically excludes similar inflatable devices that are used for professional exhibition or stunt work, safety, and rescue activities, aerial or aviation structures or devices, exhibit floats, or similar inflatable devices.

3.1.2 *owner/operator, n*—the person or organization having overall control and responsibility for the maintenance, setup, and operation of the inflatable device.

3.1.3 *operator/attendant, n*—the person who has been properly trained and designated by the owner to direct the operation of the inflatable device.

3.1.4 *user, n*—a participant in the use of the inflatable device as defined by the manufacturer.

4. Significance and Use

4.1 The purpose of this practice is to delineate information regarding the design, manufacture, installation, operation, and maintenance of inflatable amusement devices.

5. Inflatable Amusement Device Design and Manufacture

5.1 Inflatable amusement device manufacturers shall identify the specified use of each inflatable device to the owner prior to or at the time of sale.

5.2 Inflatable amusement device manufacturers shall provide specifications, setup, maintenance, and repair instructions to the original purchaser in accordance with Specification F 698, Practice F 853, and Guide F 893 and shall include, but may not be limited to, the following topics:

5.2.1 Signage, setup, takedown, and storage specifications and procedures.

5.2.2 Inflation pressure(s).