



Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems¹

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1. Scope

1.1 This practice applies to the classification, design, manufacture, construction, and operation of water slide systems. Water slide systems shall be defined as rides intended for use by riders in bathing attire where the action of the ride involves possible and purposeful immersion of the rider's body either in whole or in part in water, and uses circulating water to mobilize or lubricate the rider's transportation along a purpose built path. This includes slides used with or without vehicles as defined below. The terms water slides, waterslides, and slides shall be considered equivalent when used in this practice.

1.2 For the purposes of this practice, a water slide system includes:

- 1.2.1 The flume,
- 1.2.2 The water-circulation system,
- 1.2.3 The starting platform with associated means of access and egress,
- 1.2.4 The structural supports,
- 1.2.5 Vehicles or other aquatic accessories that are part of the water slide as defined by the manufacturer, and
- 1.2.6 Means of slide termination.

1.3 This practice shall not apply to:

- 1.3.1 Any water slides installed in private residences,
- 1.3.2 Water flume amusement rides where contact with water is merely incidental (for example, log flume rides, shoot-the-chutes),
- 1.3.3 Amusement rides and devices whose design criteria are specifically addressed in another ASTM standard,
- 1.3.4 Lazy river type attractions operating at constant elevation, constructed in the ground, and

1.4 Pre-existing designs manufactured after the effective date of publication of this practice if the design is service proven or previously compliant, as defined in Section 3.1.26 of Practice F2291, and the manufacturer provides:

1.4.1 A historical summary of the water slide, or major modification as defined in Terminology F747, and

1.4.2 A statement that the design is service proven or previously compliant. Water slides and major modifications to water slides may qualify as previously compliant for five years following the date of publication of this practice. Thereafter, water slides and major modifications to water slides must qualify as service proven or meet the requirements of this practice.

1.4.3 Service proven or previously compliant designs shall comply with Section 8.

1.5 The values stated in inch-pound units are to be regarded as standard. No other units of measurement are included in this standard.

NOTE 1—The conversion factor from inch-pound to metric units is 1 in. = 25.4 mm, and 1 lb = 4.4482 N.

1.6 This practice includes an Appendix, which provides additional information to enhance the user's understanding of and application of the criteria presented in this practice, for example, rationale, background, drawings, interpretation, or commentary. The information in the Appendix shall not be considered a mandatory part of this practice.

1.7 *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

- D570 Test Method for Water Absorption of Plastics
- D638 Test Method for Tensile Properties of Plastics
- D790 Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
- F747 Terminology Relating to Amusement Rides and Devices

¹ This practice is under the jurisdiction of ASTM Committee F24 on Amusement Rides and Devices and is the direct responsibility of Subcommittee F24.70 on Water Related Amusement Rides and Devices.

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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.