

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Amusement Device Technical Advisory Committee (ADTAC)

Meeting – August 28, 2025 – 10:00 a.m.

**Virginia Housing Center
4224 Cox Road Glen Allen, Virginia 23260**

AGENDA

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VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Amusement Device Technical Advisory Committee - 2024 Code Change Cycle

Members

Danny Abner (representing third party inspectors)

Email address: doublea@atmc.net

Jeff Brubaker (representing operators)

Email address: astroevents@comcast.net

Michael Dellinger – (representing building officials)

Email address: mdellinger@albemarle.org

Brian Rath (representing operators)

Email address: Brian.Rath@kingsdominion.com

Casey Littlefield (representing building officials)

Email address: clittlefield@goochlandva.us

Nonmembers (who have asked to be notified of meetings)

Ken Martin

Email address: ken.martin.safety.usa@gmail.com

Darrell Scott

Email address: darrell.scott@outlook.com

Neil Holland

Email address: Neil.holland@roanokeva.gov

Marlene Jolliffe

Email address: mjolliffe@meadoweventpark.com

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Amusement Device Technical Advisory Committee

Summary Minutes of the January 27, 2022 Meeting – Goochland County Government Center –
Administration Building

Committee members present: Michael Dellinger, Wayne Fuqua, and Casey Littlefield. Danny Abner called in on a conference phone line.

DHCD Staff present: Jeff Brown and Travis Luter

Others present: Marlene Jolliffe

Jeff Brown called the meeting to order at approximately 10:00 a.m.

Mr. Brown welcomed new members Michael Dellinger and Casey Littlefield to the ADTAC and invited everyone in attendance to introduce themselves.

Mr. Brown provided an overview of the Code Development process. He also provided an update on the 2021 code development cycle such as calendar of meetings, submittal deadlines, etc.

Mr. Brown advised the ADTAC that due to the retirement of Chair Brian Gentilini, a new chair needed to be elected and turned the meeting over the Secretary Travis Luter for election of the Chair

Mr. Luter then called for nominations for Chair. Mr. Fuqua nominated Mr. Littlefield. The nomination was seconded by Mr. Dellinger. Mr. Luter called for nominations for Chair twice more. After hearing no further nominations, Mr. Luter closed the nominations for Chair. A vote was taken and Mr. Littlefield was unanimously elected as Chair.

Chair Littlefield opened the floor for the first item on the agenda, approval of the June 24, 2019 meeting minutes. The draft minutes of the June 24, 2019 meeting in the ADTAC members' agenda package were considered. Mr. Dellinger moved to approve the minutes with an editorial change to add Michael Dellinger to the list of others present who had not signed the meeting sign in sheet. The motion was seconded by Mr. Fuqua and passed unanimously.

Chair Littlefield then called for nominations for an ADTAC member to serve as the BCAAC representative. Mr. Littlefield nominated Mr. Dellinger. The nomination was seconded by Mr. Fuqua. Mr. Littlefield called for nominations for BCAAC representative twice more. After hearing no further nominations, Mr. Littlefield closed the nominations for BCAAC representative. A vote was taken and Mr. Dellinger was unanimously elected as the BCAAC representative.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning updating the referenced standards in the VADR. Mr. Brown provided an overview of how the referenced standards were researched and reviewed and suggested updating the VADR referenced standards to the newest edition of the standard. The ADTAC members generally agreed to approve updating the standards in the 2021 VADR to the newest edition as presented on pages 5 and 6 of the agenda package.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning the consideration of ASTM F24 Committee Standards not currently in the VADR. The ADTAC members generally agreed that the ASTM F24 Committee Standards not currently in the VADR, as presented at the bottom of page 6 and on page 7, not be added as referenced standards in the 2021 VADR.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning the Review of VAC 5-31.30 Section B Item 1. The ADTAC members generally agreed that a code change was in order to strike the words *“where no admission fee is charged for its use or for admittance to areas where the equipment is located”* from the section in the 2021 VADR. Chair Littlefield volunteered to draft the code change proposal for the ADTAC.

During discussion of the VAC 5-31.30 Section B Item 1, the ADTAC reviewed VCC Section 102.3 Item #7 and generally agreed that a code change was in order to ensure VCC Section 102.3 Item #7 aligned with VAC 5-31.30 Section B Item 1. Chair Littlefield and Jeff Brown volunteered to work together to draft the code change proposal for the ADTAC.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning whether the definition of “serious injury” should be added to the 2021 VADR or whether the reference in ASTM F747-21a was sufficient. The ADTAC members generally agreed that the definition of “serious injury” should be added to the 2021 VADR. The ADTAC members further generally agreed that the wording should come from ASTM F747-06, which is the 2006 edition of the standard. The ADTAC members also generally agreed that the words “serious injury” should be an italicized term in the 13VAC5-31-85. Chair Littlefield volunteered to draft the code change proposal for the ADTAC.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning other potential changes to the 2021 VADR.

- Danny Abner initiated a discussion related to generator permits and inspections.
- Mr. Abner also initiated a discussion related to the need for third party inspectors to have errors and omissions insurance as well as the amount of insurance to be required. Mr. Abner volunteered to draft and submit a code proposal related to the need for errors and omission insurance and the requirements of the insurance.
- Mr. Abner initiated a discussion related to the need for attendant or signage on all zip line courses platforms. Mr. Abner volunteered to draft a code proposal for signage requirements on zip line platforms. Mr. Brown advised Mr. Abner to collect data showing why the signage would be helpful to help garner Board consideration and possible approval.

- Mr. Abner initiated a discussion for the need to perform an in depth review of the referenced standards to decide what does and does not apply to amusement device in each standard. The ADTAC group generally agreed that this task was a major undertaking and could not be done by the May 1, 2022 deadline for the 2021 code cycle. The ADTAC further generally agreed to work to create a plan and attempt to get the review done for the 2024 code cycle through regularly scheduled meetings
- Mr. Dellinger initiated a discussion on climbing walls in swimming pools. The ADTAC members generally agreed to research the matter further and discuss at a future meeting.

There being no other business, the meeting was adjourned at approximately 12:15 p.m.

DHCD Staff Analysis of ASTM and ANSI Standards for Amusement Devices

(For the August 2025 Amusement Device Technical Advisory Committee meeting)

Existing Standard Number and Title	New (current, revised or withdrawn) Standard Number and Title
ANSI Standard No. B77.1-2022 Passenger Ropeways – Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors – Safety Standard.	ANSI Standard No. B77.1-2017 Passenger Ropeways – Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors – Safety Standard
F747-21a Standard Terminology Relating to Amusement Rides and Devices	F747-24 Standard Terminology Relating to Amusement Rides and Devices
F770-21a Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices	F770-24 Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices
F1159-16e1 Standard Practice for Design of Amusement Rides and Devices that are Outside the Purview of Other F24 Design Standards	(Same as existing)
F1193-18a Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices	F1193-25 Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices
F1957-99 (2017) Standard Test Method for Composite Foam Hardness-Durometer Hardness	F1957-24 Standard Test Method for Composite Foam Hardness-Durometer Hardness
F2007-18 Standard Practice for Design, Manufacture, and Operation of Concession Go-Karts and Facilities	F2007-24 Standard Practice for Design, Manufacture, and Operation of Concession Go-Karts and Facilities
F2137-19 Standard Practice for Measuring the Dynamic Characteristics of Amusement Rides and Devices	(Same as existing)
F2291-21 Standard Practice for Design of Amusement Rides and Devices	F2291-25 Standard Practice for Design of Amusement Rides and Devices
F2374-21a Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices	F2374-24 Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices

F2375-09 (2017) Standard Practice for Design, Manufacture, Installation and Testing of Climbing Nets and Netting/Mesh used in Amusement Rides, Devices, Play Areas and Attractions	F2375-25 Standard Practice for Design, Manufacture, Installation and Testing of Climbing Nets and Netting/Mesh used in Amusement Rides, Devices, Play Areas and Attractions
F2376-21a Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems	F2376-24 Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems
F2460-19 Standard Practice for Special Requirements for Bumper Boats	(Same as existing)
F2461-20a Standard Practice for Manufacture, Construction, Operation, and Maintenance of Aquatic Play Equipment	F2461-23 Standard Practice for Manufacture, Construction, Operation, and Maintenance of Aquatic Play Equipment
F2959-21 Standard Practice for Aerial Adventure Courses	F2959-25a Standard Practice for Aerial Adventure Courses
F2960-16 Standard Practice for Permanent Amusement Railway Ride Tracks and Related Devices	F2960-23 Standard Practice for Permanent Amusement Railway Ride Tracks and Related Devices
F2970-20 Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts	F2970-22 Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts
F2974-20 Standard Guide for Auditing Amusement Rides and Devices	F2974-24a Standard Guide for Auditing Amusement Rides and Devices
F3054-18 Standard Practice for Operations of Amusement Railway Rides, Devices, and Facilities	F3054-23 Standard Practice for Operations of Amusement Railway Rides, Devices, and Facilities

AD20-24

VRC: 13VAC5-31-20.

Proponents: Corian Carney, representing York County (corian.carney@yorkcounty.gov); Ryan Celestino, representing Ryan Celestino (celestino@nnva.gov)

2021 Virginia Building and Fire Code Related Regulations

Revise as follows:

13VAC5-31-20. Definitions.

A. The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

“Amusement device” means (i) a device or structure open to the public by which persons are conveyed or moved in an unusual manner for diversion, but excluding snow tubing parks and rides, ski terrain parks, ski slopes, and ski trails, and (ii) passenger tramways. For the purpose of this definition, the phrase “open to the public” means that the public has full access to a device or structure at an event, irrespective of whether a fee is charged. The use of devices or structures at private events is not considered to be open to the public.

“Bungee cord” means the elastic rope to which the jumper is attached that lengthens and shortens to produce a bouncing action.

“Carabineer” means a shaped metal device with a gate used to connect sections of a bungee cord, jump rigging, equipment, or safety gear.

“Certificate of inspection” means the certificate or sticker for amusement devices distributed by DHCD.

“DHCD” means the Virginia Department of Housing and Community Development.

“Gravity ride” means a ride that is installed on an inclined surface, that depends on gravity for its operation to convey a passenger from the top of the incline to the bottom, and that conveys a passenger in or on a carrier tube, bag, bathing suit, or clothes.

“Ground operator” means a person who assists the jump master to prepare a jumper for jumping.

“Harness” means an assembly to be worn by a bungee jumper to be attached to a bungee cord. It is designed to prevent the wearer from becoming detached from the bungee system.

“Inflatable Amusement Device” means an *amusement device* that is air-supported, having an independent blower or set of blowers dedicated to the device.

“Inflatable Amusement Park” means an air-supported *concourse or midway* that contains or supports multiple *inflatable amusement devices*.

“Institutional trampoline” means a trampoline intended for use in a commercial or institutional facility.

“Jump master” means a person who has responsibility for the bungee jumper and who takes the jumper through the final stages to the actual jump.

“Jump zone” means the space bounded by the maximum designed movements of the bungee jumper.

“Jumper” means the person who departs from a height attached to a bungee system.

“Landing area” means the surface area of ground or water directly under the jump zone, the area where the lowering device moves the bungee jumper to be landed away from the jump space and the area covered by the movement of the lowering device.

“Local building department” means the agency of the governing body of any city, county or town in this Commonwealth charged with the enforcement of the USBC.

“Operating manual” means the document that contains the procedures and forms for the operation of bungee jumping equipment and activity at a site.

“Passenger tramway” means a device used to transport passengers uphill, and suspended in the air by the use of steel cables, chains or belts, or ropes, and usually supported by trestles or towers with one or more spans.

“Platform” means the equipment attached to the structure from which the bungee jumper departs.

“Private inspector” means a person performing inspections who is independent of the company, individual or organization owning, operating or having any vested interest in an amusement device being inspected.

“Serious injury or illness” means a personal injury or personal illness that results in death; dismemberment; significant disfigurement; permanent loss of the use of a body organ, member, function, or system; a compound fracture; or other significant injury or illness that requires immediate admission and overnight hospitalization and observation by a licensed physician.

“Small mechanical ride” means an amusement device, other than an inflatable amusement device, where (i) the assembly time for the device is two hours or less, (ii) the revolutions per minute of any rotation of the components of the device is not greater than seven, (iii) the device has a footprint of less than 500 square feet, and (iv) the device does not invert a patron or lift a patron more than three feet in the air, measured from the ground to the bottom of the patron’s feet when the device is operating.

“Trampoline court” means a defined area comprising one or more institutional trampolines or a series of institutional trampolines.

“Ultimate tensile strength” means the greatest amount of load applied to a bungee cord prior to failure.

“USBC” means the Virginia Uniform Statewide Building Code (13VAC5-63).

- B. Words and terms used in this chapter that are defined in the USBC shall have the meaning ascribed to them in that regulation unless the context clearly indicates otherwise.
- C. Words and terms used in this chapter that are defined in the standards incorporated by reference in this chapter shall have the meaning ascribed to them in those standards unless the context clearly indicates otherwise.

Reason Statement: This proposal is intended to clarify and provide definitive language. It should prevent applicants and department staff from disagreement on what constitutes a single device as it applies to inflatable parks.

Cost Impact: The code change proposal will not increase or decrease the cost since this is just a definition for clarity.