

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

CARNIVAL AND AMUSEMENT SAFETY

GENERAL RULES

Filed with the secretary of state on

These rules ~~take effect~~ **become effective** immediately ~~upon~~ **after** filing with the secretary of state unless adopted under section 33, 44, or 45a(9) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by section 6 of the carnival-amusement safety act of 1966, 1966 PA 225, MCL 408.656, and Executive Reorganization Orders Nos. 1991-9, 1996-2, 2003-1, 2008-4, and 2011-4, MCL 338.3501, 445.2001, 445.2011, 445.2025, and 445.2030)

R 408.802, R 408.803, R 408.814, R 408.829, R 408.831, R 408.832, R 408.839, R 408.839a, R 408.844, R 408.848, R 408.872, R 408.874, and R 408.897 of the Michigan Administrative Codes are amended, R 408.815 and R 408.816 are added, and R 408.833, R 408.838, and R 408.843 are rescinded, as follows:

PART 1. GENERAL PROVISIONS~~R~~

R 408.802 Safety requirements for carnival-amusement rides and devices.

Rule 2. (1) Electrical wiring, apparatus, and equipment ~~shall~~ **must** be manufactured, installed, and maintained as prescribed in the national electrical code (NFPA 70), ~~2005~~ **2020** edition, published by the ~~national fire protection association~~ **National Fire Protection Association**. The provisions of the national electrical code are adopted by reference as electrical standards for the carnival and amusement rides and devices in this state.

(2) These adopted provisions may be purchased for a cost of ~~\$72.50~~ **\$121.50**, at the time of adoption of these rules, from the National Fire Protection Association (NFPA), ~~Customer Service Department, 11 Tracy Drive, Avon MA 02322~~ 1 Batterymarch Park, Quincy, ~~MA Massachusetts~~ **Massachusetts** 02169-7471-, Telephone ~~telephone:~~ **800/** -344-3555; ~~or 617/~~ -770-3000, website address: www.nfpa.org. A copy of this code and the general rules ~~of the board~~ are available for ~~public~~ inspection; ~~and purchase~~ **and purchase** at the Department of ~~Labor and Economic Growth~~ **Licensing and Regulatory Affairs**, Bureau of ~~Construction Codes Commercial Services, 2501 Woodlake Circle, Okemos,~~

Michigan, 48864, Phone 611 W. Ottawa Street, Lansing, Michigan: 48909, 517/-241-9233 9313, for a cost of \$121.50 at the time of adoption.

(3) The department adopts by reference the ASTM Standards on Amusement Rides and Devices, sponsored established by ASTM F-24 Committee, **ASTM Volume 15.07, November 2022 7th Edition, 2004**, as it relates to a carnival or amusement ride, as **that term is defined by the in section 2 of the act, MCL 408.652 Carnival-Amusement Safety Act, 255 PA 1966**. The adopted standards may be purchased for a cost of ~~\$87.00~~ **\$338.00**, at the time of adoption of these rules, from The American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, P.O. Box C 700, West Conshohocken PA Pennsylvania 19428- 2959, Customer Service, Telephone **customer service telephone: 610-832-9500**, website address: www.astm.org <https://www.astm.org/astm-bos-15.07.html>. A copy of this code is available for public inspection, **and purchase** at the Department of **Licensing and Regulatory Affairs** the ~~Department of Labor and Economic Growth, Bureau of Commercial Services Construction Codes, 2501 Woodlake Circle, Okemos, Michigan, 48864~~ **611 W. Ottawa Street, Lansing, Michigan 48909**, Phone: 517/-241-9233 9313, for a cost of **\$338.00 at the time of adoption.**

(4) The department adopts by reference the standards contained in the American National Standards Institute Safety (ANSI) requirements for aerial passenger tramways, ANSI B77.1 2017, for aerial passenger tramway amusement rides in this state. This adopted standard may be purchased at a cost of \$200.00, as of the time of adoption of these rules, from the American National Standards Institute (ANSI), 25 West 43rd Street, New York, New York 10036, telephone: 212-642-4900, fax: 212-398-0023, website address: <https://webstore.ansi.org/Standards/ANSI/ANSIB772017>. A copy of this code is available for inspection and purchase at the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa Street, Lansing, Michigan 48909, for a cost of \$200.00 at the time of adoption of these rules.

R 408.803 Definitions.

Rule 3. (1) As used in these rules:

(a) **“Act” means the carnival-amusement safety act of 1966, 1966 PA 225, MCL 408.651 to 408.670.**

(b) "Aerial passenger tramway" means any of the following devices used to transport passengers:

(i) "Single and double reversible aerial tramways" ~~which~~ means devices ~~in which~~ **that carry** passengers ~~are carried~~ in 1 or more enclosed cars that reciprocate between terminals.

(ii) "Chair lift, gondola lift, and monorail" means a device ~~in which~~ **that carries** passengers ~~are carried~~ on chairs, cars, or in gondola cabs attached to and suspended from a moving wire rope or attached to a moving wire rope or chain and supported on a standing wire rope, rail, or other structure.

(c) **“Amusement ride or amusement device” means a device or combination of devices or elements that carries, conveys, or directs an individual or individuals over or through a fixed or restricted course or within a defined area, for the primary**

purpose of amusement or entertainment. Amusement ride or amusement device does not include any of the following:

- (i) Aerial adventure courses.**
 - (ii) Aquatic play equipment.**
 - (iii) Buildings or concourses used in laser games or paint ball.**
 - (iv) Bungee jumping.**
 - (v) Devices operated on a river, lake, or any other natural body of water.**
 - (vi) Funhouses, haunted houses, and similar walk-through devices that are erected temporarily on a seasonal basis and do not have mechanical components designed to convey patrons.**
 - (vii) Hayrides.**
 - (viii) High speed go-karts capable of attaining speeds of 25 miles per hour or more.**
 - (ix) Human-powered devices.**
 - (x) Ice skating rinks.**
 - (xi) Inflatable amusement devices.**
 - (xii) Luge and bobsled tracks.**
 - (xiii) Mechanical bulls.**
 - (xiv) Parasailing.**
 - (xv) Playground equipment, including, but not limited to, soft-contained play equipment, swings, seesaws, slides, stationary spring-mounted animal features, jungle gyms, rider-propelled merry-go-rounds, and trampolines.**
 - (xvi) Rock walls.**
 - (xvii) Roller skating rinks.**
 - (xviii) Simulators that can be safely exited mid-ride.**
 - (xix) Skateboard ramps or courses.**
 - (xx) Skydiving simulators.**
 - (xxi) Stationary wave systems.**
 - (xxii) Trains or similar transit devices that can be or previously have been approved for use on the public transit system.**
 - (xxiii) Trampoline courts.**
 - (xxiv) Tubing and sledding hills.**
 - (xxv) Wave pools.**
 - (xxvi) Any other devices as determined by the department.**
- (bd)** "Amusement park" means a tract or area used principally as a permanent location for carnival-amusement rides.
- (e)** "Engineer's attestation" means a letter signed by a licensed engineer that states the device complies with the applicable act and rules as well as the standards and codes that are adopted by reference in R 408.802.
- (f)** "Gravity ride" means a ride installed on a manmade inclined surface that entirely depends on gravity for its operation to convey a passenger from the top of the incline to the bottom in a singular lane and conveys the passenger in or on a carrier, tube, bag, bathing suit, or clothes.
- (eg)** "Major breakdown" means a stoppage of operation from whatever any cause resulting in damage, failure, or breakage of a structural or stress-bearing part of a ride.
- (2)** A term defined in the act has the same meaning when used in these rules.

R 408.814 Definitions; ~~W. waterslide.~~

Rule 14. (1) "~~Water slide~~ **Waterslide**" means an inclined, **nonmechanical** amusement ride ~~which~~ **that** has all of the following characteristics:

- (a) Consists of 1 or more courses of varying slopes and directions.
- (b) Relies on gravity and not a mechanical system to propel its passengers.
- (c) Uses water to lubricate the course and to regulate passenger velocity. "~~Water slide~~" ~~does not include slides which are not separate amusement rides but which are customarily recreational equipment as evidenced by a vertical drop of 10 feet or less and a total linear slide length of 50 feet or less.~~

(d) Includes a landing area or runout designed to bring riders to a complete stop and allow them to exit the ride in a safe manner.

(2) "**Waterslide**" **does not include slides that are not separate amusement rides but are customarily recreational equipment as evidenced by a vertical drop of 15 feet or less and a total linear slide length of 50 feet or less.**

R 408.815 Routing sheets.

Rule 15. (1) Routing sheets that are in a paper or digital format are required to be submitted to the department by mobile operators at the time of application for a permit or annual renewal of the permit. Routing sheets must include all of the following information:

- (a) Specific address where the rides will be set up.
 - (b) Setup dates of the rides.
 - (c) Operation dates of the rides.
 - (d) Number of amusement devices on site, if available.
 - (e) Specific amusement devices on site, if available.
- (2) Additional locations must be updated with the department as soon as information is available.

R 408.816 Operational training and emergency response training forms.

Rule 16. Forms to track training for staff operating devices must comply with all of the following:

- (a) Be made available to the department on request.
- (b) Be maintained in a digital format that contains all of the information that is included in the paper forms and made available to the department digitally upon request.
- (c) Contain all of the following:
 - (i) The name of company.
 - (ii) The name of the device.
 - (iii) The state issued device number.
 - (iv) The staff member or members that have been trained.
 - (v) The date when the training was conducted.
 - (vi) The name of the trainer.
 - (vii) The training curriculum.
 - (viii) The signature of the trainer and the staff that were trained.

PART 2. DESIGN, CONSTRUCTION, AND OPERATION

R 408.829 Seating and carrying devices.

Rule 29. (1) Tubs, cars, chairs, seats, gondolas, and other carriers used on ~~rides~~ **a ride** shall **must** be designed and constructed as strong as practical. ~~Their~~ **A ride's** interior and exterior parts ~~that with which~~ passengers might come in contact shall **with must** be smooth, rounded, free from sharp, rough, or splintered edges or corners, and have no protruding screws or projections ~~which that~~ might cause injury. Parts ~~upon or against which that~~ passengers might be thrown **on or against** by action of the ride shall **must** be adequately padded to prevent or minimize the possibility of injury. The upholstery shall **must** be kept in repair, and no loose or flapping portions of upholstery or decoration shall ~~be permitted~~ **are allowed**.

(2) Propellers or other moving parts or decorations attached to tubs, cars, chairs, seats, gondolas, and other carriers shall **must** be securely fastened to ~~such~~ **this** equipment and shall **must** be keyed or otherwise secured so that they cannot come off during operation of the ride. Vanes, canopies, or other attachments ~~which that~~ might become disengaged shall **must** be secured with safety straps to prevent ~~their~~ **them from** flying away in case of breakage or dislocation.

(3) If a device on a ride is shown to have a deficiency or require repairs in the ride's tubs, cars, chairs, seats, gondolas, or other carriers used, the ride will be considered noncompliant as a whole and must not operate until returned to compliance based on the number of carriers on the device as follows:

(a) For devices with 10 or fewer carriers, the ride, as a whole, will be considered noncompliant and must not operate if 50% or more of the carriers are found deficient.

(b) For devices with more than 10 carriers, the ride, as a whole, will be considered noncompliant and must not operate if 25% or more of the carriers are found deficient.

(4) Subrule (3) of this rule does not apply to go-karts, bumper cars, bumper boats, or individual devices that can be removed or replaced as needed, including, but not limited to, train cars, log rides, or boat rides.

R 408.831 Safety retainers.

Rule 31. Tubs, cars, chairs, seats, gondolas, and other carriers used on a ride that depends ~~upon~~ **on** a single means of attachment or support shall **must** be equipped with a safety retainer to prevent the carrier, if it becomes disengaged from its support or attachment, from being catapulted from the ride and to prevent any action of the carrier ~~which that~~ might throw the occupants from the carrier while the ride is in motion. ~~This rule only applies to rides or situations determined to be hazardous after inspection by an authorized representative of the department and review of the conditions.~~

R 408.832 Permit-inspection decal.

Rule 32. (1) After a ride has been inspected and authorized for operation, the department shall issue a permit-inspection decal ~~which shall~~ **that must** be affixed to a basic part of the ride structure in such a manner as to be readily accessible to the

authorized inspector. The **permit-inspection** decal shall **must** set forth **display** the identification number issued by the department for the individual ride and other information ~~deemed~~**considered** necessary by the department.

(2) If the ride is ~~transferred to another owner/operator, sold,~~ rebuilt, or undergoes major alterations, it shall **must** be reinspected. ~~Upon~~ **After** completion of the inspection, a new permit-inspection decal shall **must** be issued.

~~(3) If a ride is transferred to another owner/operator or is sold, the permit-inspection decal shall be obliterated by the owner/operator before the transfer or sale.~~

~~(4)~~ (3) If a **permit-inspection** decal is mutilated so that it is no longer legible, the operator shall notify the department and a new **permit-inspection** decal shall **must** be issued.

R 408.833—Aerial passenger tramways; adoption by reference. **Rescinded.**

~~Rule 33. The standards contained in the American national standards institute safety requirements for aerial passenger tramways, ANSI B77.1-2006, are adopted by reference for aerial passenger tramway amusement rides in this state. This incorporated standard may be purchased from the American National Standards Institute, 25 West 43rd Street, New York, NY 10036, Phone: 212/642-4900, Fax: 212/398-0023, at a cost of \$125.00 as of the time of adoption of these rules. A copy of this code, published by the American National Standards Institute, is available for public inspection at www.ansi.org and the Department of Labor and Economic Growth, Bureau of Commercial Services, Carnival Amusement Safety Board, 2501 Woodlake Circle, Okemos, Michigan, 48864, Phone: 517/241-9233.~~

R 408.838—Leveling and alignment. **Rescinded.**

~~Rule 38. Corner posts, central columns, or support structures of a ride designed to operate on a perpendicular axis shall be plumb and secured so that the path of the sweeps or platforms shall be level and operate on a true horizontal plane at right angles to the axis of the pivot. A ride with carriers designed to operate on a horizontal axis shall be leveled so that the carriers orbit in a true perpendicular plane. The base of a ride that has a combination of orbiting planes or a ride that has carriers that operate normally in a plane other than true horizontal or vertical shall be leveled and plumbed and secured so that they will not tip or shift and will be stable under the most adverse operating conditions, except for a ride designed to permit flotation characteristics or flexibility or designed to operate properly whether the base is plumb or level or not.~~

R 408.839 Gravity rides.

Rule 39. A ride which is installed on an inclined surface, which depends on gravity for its operation to convey a passenger from the top of the incline to the bottom, and which conveys a passenger in or on a carrier, tube, bag, bathing suit, or clothes shall, in addition to other applicable rules, be in compliance with all of the following provisions: **In addition to complying with other applicable rules, gravity rides must comply with all of the following;**

(a) The frequency of departure of carriers from the loading area ~~shall~~ **must** be controlled by a ride operator. The minimum distance or time between departures ~~shall~~ **must** be determined by the ~~director~~ **manufacturer or designer of the device**.

(b) The ride ~~shall~~ **must** have an operator located at the loading area and an attendant at the unloading area.

(c) If the entire ride is not visible to the operator, then additional ~~attendants~~ **persons** shall be located at other stations along the ride to ~~assure~~ **ensure** complete surveillance of the entire ride. Two-way communication ~~shall~~ **must** be provided between the operator and other attendants of the ride.

R 408.839a ~~Water slides~~ **Waterslides**.

Rule 39a. A ~~water slide~~ **waterslide** that conveys passengers ~~shall~~ **must**, in addition to other applicable rules, ~~be in compliance~~ **comply** with all of the following requirements:

(a) Each ~~water slide~~ **waterslide** ~~shall~~ **must** be designed and constructed to have a minimum safety factor of 2.

(b) Each ~~water slide~~ **waterslide** ~~shall~~ **must** be designed and constructed to retain the passengers within the ~~water slide~~ **waterslide** during the ride.

(c) At each loading area, a hard surface ~~which that is other than~~ **not** earth and ~~which is~~ reasonably level ~~shall~~ **must** be provided. The surface ~~shall~~ **must** be large enough to accommodate the intended quantity of passengers.

(d) If the elevation of a loading surface of a ~~water slide~~ **waterslide** is more than 12 inches above the elevation of an adjacent area, then guardrails ~~shall~~ **must** be installed on the exposed sides of the loading area.

(e) A ~~water slide~~ **waterslide** may terminate in a swimming pool or in a body of water such as a lake, river, stream, or artificial lake or reservoir. The design of the ~~slide~~ **waterslide** and its termination point ~~shall~~ **must** meet the requirements of the act and these rules.

(f) If the landing area or runout of a waterslide is in a public swimming pool, the landing area or runout of the waterslide ~~shall~~ **must** be specified by the designer ~~in accordance with R 408.821 of these rules~~. Swimming in this area, other than to exit the flume, or landing, or runout area, is prohibited.

(g) If the landing area or runout of a waterslide is in an enclosed tank or in a pool used only to exit the waterslide ride, the landing area or runout ~~shall~~ **must** be specified by the designer ~~in accordance with R 408.821 of these rules~~. This landing area or runout is not a public swimming pool.

(h) ~~The quality of the water in a swimming pool termination point is governed by rules for public swimming pools promulgated pursuant to the provisions of 1978 PA 368, MCL 333.12522, and administered by the department of environmental quality. The quality of water in a termination point other than a swimming pool is governed by rules for bathing beach water quality promulgated pursuant to the provisions of 1978 PA 368, MCL 333.12544, and administered by the department of environmental quality.~~

(~~ih~~) **A Each** waterslide ~~shall~~ **must** have at least 1 attendant located at the loading area at all times when the ride is being operated for the use of the public. A waterslide attendant shall be trained, prepared, and capable of controlling the frequency of departure of passengers from the loading area. The design and operation of a loading area common to

more than 1 course ~~shall~~ **must permit** allow an attendant to remain knowledgeable of the disposition of each passenger. One attendant ~~shall be~~ **is** sufficient to dispatch riders on more than 1 course from a common loading area, if a mechanical system or operational controls are used to regulate rider dispatch on each affected course.

(~~ji~~) There ~~shall~~ **must** be at least 1 attendant in the unloading area at all times when the ride is being operated for the use ~~of~~ **by** the public. An attendant in an unloading area ~~shall~~ **must** be trained in cardiopulmonary resuscitation and ~~shall~~ **must** be trained, prepared, and capable of assisting any passenger exiting the ~~water slide~~ **waterslide**. One attendant ~~shall be~~ **is** sufficient to operate the termination point common to more than 1 water slide, if the ~~owner/operator~~ **owner or operator** the water slide ~~shall provide~~ **provides** sufficient attendants in the unloading area to ensure that each attendant can scan the entire area ~~for which~~ **that** he or she is responsible **for** every 10 seconds and respond within the area within 20 seconds.

(~~k~~**j**) If the entire water slide is not visible to the attendant at the loading area or if the attendant is controlling entry to multiple courses, then some form of 2-way communication ~~shall~~ **must** be provided between the attendants of the ride to ensure that passenger loading is stopped if there are problems.

R 408.843 ~~Personal injuries and deaths.~~ **Rescinded.**

~~Rule 43. (1) Provision shall be made to render first aid when persons are injured on or around any ride.~~

~~(2) An owner/operator shall report, in writing to the department, an accident resulting in injury to any person within 24 hours after occurrence.~~

~~(3) In addition to the requirements of subrule (2) of this rule, the owner/operator shall report to the department by telephone any accident in which a fatality occurs or a person suffers a fracture, concussion, laceration, or other traumatic injury requiring immediate surgical or medical care resulting from structural or mechanical failure of a ride, or in which it might appear that the construction, design, or function of the ride is directly involved. If an accident specified in this subrule occurs on a non-workday of the department, the owner/operator shall report the incident to the department by 9:00 a.m. of the next business day. The department, after consultation with the owner/operator, may require that the scene of an accident be secured and not disturbed to any greater extent than necessary for removal of the deceased or injured persons. If a ride is removed from service due to an accident, the department shall order an immediate investigation of the secured site and the ride shall be released for repair and operation only after the investigation is completed.~~

R 408.844 Mechanical failure reports.

Rule 44. The ~~owner/operator~~ **owner or operator** of a carnival-amusement ride shall report a major breakdown to the department within 24 hours after **the** occurrence of the incident by telephone or other ~~media~~ **means** of immediate communication. The ~~owner/operator~~ **owner or operator** shall confirm this report using the form provided by the department. This report ~~shall~~ **must** be forwarded to the department within 7 days after the occurrence of the reportable incident. ~~Upon~~ **After** being advised of a major breakdown, the department may order the ride to be withheld from operation and the department shall conduct an immediate investigation. The ride shall be

~~released for repair and operation only after completion of the department investigation.~~ **the department may require that the scene of an accident or major breakdown, or both, be secured and not disturbed to any greater extent than necessary for removal of the deceased or injured individuals. The department may order an immediate inspection of the secured site and the ride must be released for repair and operation only after the inspection is completed.**

R 408.848 Control and operation.

~~Rule 48. (1) A ride shall be operated by a person who is trained to operate the ride. The operator of a ride designed for the exclusive use of children and the operator of other rides for which the operator does not have mechanical or electrical controls shall be not less than 16 years of age. For all other rides, an operator shall be not less than 18 years of age.~~

~~(2)~~ An operator shall have knowledge of the use and function of normal operating controls, signal systems, and safety devices applicable to the ride and of the proper use, function, capacity, and speed of the particular ride at all times that it is being operated. When the ride is shut down, provision ~~shall~~ **must** be made to prevent the ride from being operated by the public. ~~A person~~ **An individual** other than a trained operator shall not be permitted to handle the controls of a ride during normal operation, except where the ride is designed to be controlled by the passenger.

PART 3. PROCEDURES

R 408.872 Emergency applications for permits to operate.

~~Rule 72. When an owner/operator~~ **owner or operator** has not previously intended to operate a ride in this state and has not made application for a permit to operate, the ~~owner/operator~~ **owner or operator**, ~~upon~~ **after** confirming a ~~Michigan~~ **Michigan** booking ~~in this state~~, shall notify the department and apply for a permit to operate. The notice ~~shall~~ **must** be given not less than 30 days before the book date. When an emergency booking makes the 30-day notice impossible, the ~~owner/operator~~ **owner or operator** shall notify the department of the booking by telephone or other means of immediate communication and shall confirm this notice in writing. The director shall schedule and arrange for inspection of the rides and the issuance of a permit to operate **in conjunction with the owner or operator to best serve the needs of both parties** ~~as will best serve the needs of the owner/operator~~ and the orderly administration of the act and these rules. **If devices require inspection before operation, the owner or operator shall make every effort to arrive at a location within this state and set up the devices to be inspected.**

R 408.874 Daily inspection.

~~Rule 74. A ride shall~~ **must** be inspected and tested on each day it is intended to be used. This inspection ~~shall~~ **must** be made by ~~a person~~ **an individual** commissioned to perform such inspections by the director. ~~Results of these~~ **Daily** inspection and performance tests ~~shall~~ **must** be **performed and** recorded in ~~the a~~ **a** manner prescribed, ~~and on forms provided,~~ by the department ~~and shall~~ **manufacturer or ASTM F-24 if** ~~manufacturer standards are unavailable, and must~~ be certified by the ~~person~~

individual commissioned to perform these inspections. **Physical or digital results of these daily inspection and performance tests must be maintained and available to the department for review.** These inspection reports ~~shall~~ **must** be retained at the operation site until the next inspection is conducted by the director. An ~~owner/operator~~ **owner or operator** shall not knowingly use, or permit to be used, a ride ~~which~~ **that** is not properly assembled or ~~which~~ is defective or unsafe in any of its parts, controls, or safety equipment.

PART 4. PARTICIPATORY RIDES - GO-KARTS

R 408.897 Remote idle system.

Rule 97. (1) Effective May 1, 2000, each go-kart ~~shall~~ **must** be equipped with a receiver for a remote idle system. A go-kart ride attendant shall control the remote idle system.

(2) If the remote idle system becomes inoperable and requires repair, then the track ~~owner/operator~~ **owner or operator** shall make a written request to operate the go-kart rides until the repair is completed. ~~The duration of the repair period shall not be more than 30 days.~~