

## **Clearinghouse Rule 08-054**

The Wisconsin Department of Commerce adopts an order to repeal Comm 34.01 (12), Comm 34.16 (2) (b), Comm 34.18 (2) (e) Note, Comm 34.22 (4) (c) Note; Comm 34.23 (2) (b) and (c), Comm 34.23 (3) (c) Note and (d) Note, Comm 34.24 (6) 3. Note and 4. Note, Comm 34.27 (2) (c), Comm 34.28, Comm 34.32 (3) and (7), Comm 34.34 (1m) (f) and Note, and Comm 34.38 (2) (e);

to renumber Comm 34.16 (2) (a), Comm 34.18 (1), Comm 34.22 (6), Comm 34.23 (1), Comm 34.23 (2) (a), and Comm 34.32 (4) to (6);

to renumber and amend Comm 34.15 (3), Comm 34.27 (3), and Comm 34.29 (3) (b);

to amend Comm 34.01 (9), Comm 34.08 (2), Comm 34.24 (6) (d) 1., Comm 34.25 (1), Comm 34.285 (1), Comm 34.29 (2), Comm 34.31 (4), Comm 34.35 (2) and (3), and Comm 34.39 Note;

to repeal and recreate Comm 34.001 Note, Comm 34.01 (3), Comm 34.04 (4), Comm 34.08 (1), Comm 34.16 (3), Comm 34.22 (4) (b), Comm 34.23 (4), Comm 34.26, Comm 34.31 (1), and Comm 34.34 (3);

to create Comm 34.001 Note 2, Comm 34.002 (3), Comm 34.03 (5), Comm 34.15 (3) (b), Comm 34.16 (4), Comm 34.18 (1) (b), Comm 34.22 (4) (d), Comm 34.22 (5) (f), Comm 34.22 (6) (b), Comm 34.23 (1) (b), Comm 34.24 (3) (e) and (f), Comm 34.24 (6) (d) 5., Comm 34.27 (3) (b), Comm 34.29 (3) (b) 2., Comm 34.31 (5), Comm 34.31 (6), Comm 34.32 (2) Note, and Comm 34.32 (6), relating to amusement rides and affecting small business.

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### **Analysis of Rule**

#### **1. Statutes Interpreted**

Statutes Interpreted: s. 101.17, Stats.

#### **2. Statutory Authority**

Statutory Authority: ss. 101.02 (1) and 101.17, Stats.

#### **3. Related Statute or Rule**

Statutes: ss. 101.19 and 101.12 (1), Stats.,

#### **4. Explanation of Agency Authority**

Under the authority of s. 101.17, Stats., the Department of Commerce has oversight of various mechanical devices and equipment, which includes amusement rides, in order to protect public safety. The Department fulfills this responsibility by promulgating the Amusement Ride Code, under chapter Comm 34.

## **5. Summary of Proposed Rules**

Chapter Comm 34 establishes minimum standards for the design, construction, operation, maintenance and assembly of amusement rides. The amusement ride code has not been subject to an overall review and update since 2003. The proposed revisions primarily clarify existing rules. In some instances the proposed changes keep the rules consistent with each other and with other Commerce codes. The few significant changes include:

- A department inspection prior to a permanent ride opening to the public for a ride which required plan review and approval. The owner of the ride is to notify the department at least 5 days prior to ride opening to the public to facilitate the department's inspection. [Comm 34.08 (1) and (2)]
- The preparation of operating fact sheets by ride owners for operators and attendants and training for operators and attendants. [Comm 34.18 (1) (b) and Comm 34.31 (6)]
- Passengers are to abide by posted height limitations for amusement ride carrying devices. [Comm 34.22 (6) (b)]
- The elimination of the allowance for one operator to simultaneously operate two amusement rides.

## **6. Summary of, and Comparison with, Existing or Proposed Federal Regulations**

The US Consumer Product Safety Commission under the Consumer Product Safety Act has jurisdiction over portable amusement rides. The commission has not developed any specific standard for portable amusement rides. At times the commission has issued various safety bulletins regarding operation, repair, maintenance or set-up for specific rides.

There are no existing or proposed federal regulations that regulate design, construction, maintenance or operation of amusement rides.

## **7. Comparison with Rules in Adjacent States**

Illinois, Iowa and Michigan regulate amusement rides on a state-wide basis. Similar to Wisconsin, the administrative codes of these states regulate the design, construction, assembly, maintenance, operation, permitting and inspection of amusement rides. The state codes are:

- Illinois; Administrative Code Title 56, Chapter XII, Part 6000
- Iowa; Chapter 61 Administration of Iowa Chapter 88A, Chapter 62 Safety Rules for Amusement Rides, Amusement Devices, and Concession Booths, Chapter 88A Safety Inspection of Amusement Rides
- Michigan; Carnival and Amusement Safety General Rules, R408.801 – 408.898

Minnesota's regulation of amusement rides focuses on liability insurance and inspections to be conducted by the insurance company or an independent inspection service provider.

## 8. Summary of Factual Data and Analytical Methodologies

In developing the proposed rules the department reviewed the current requirements of the chapter Comm 34. The department also reviewed the latest editions of various ASTM standards relating to the design and manufacture, testing, operation, maintenance, inspection, quality assurance, and terminology of amusement rides and devices. The ASTM standards reviewed were:

- F 698-94 Standard Specification for Physical Information to be Provided for Amusement Rides and Devices
- F 747-06 Standard Terminology Relating to Amusement Rides and Devices
- F 770-06a Standard Practice for Ownership and Operation of Amusement Rides and Devices
- F 846-92 Standard Guide for Testing Performance of Amusement Rides and Devices
- F 853-05 Standard Practice for Maintenance Procedures for Amusement Rides and Devices
- F 893-05a Standard Guide for Inspection of Amusement Rides and Devices
- F 1193-06 Standard Practice for Quality Manufacture, and Construction of Amusement Rides and Devices
- F 1305 -94 Standard Guide for Classification of Amusement Ride and Device Related Injuries and Illnesses
- F 1957-99 Standard Test Method for Composite Foam Hardness-Durometer Hardness
- F 2007-07 Standard Practice for the Classification, Design, Manufacture and Operation of Concession Go-Karts and Facilities
- F 2137-04 Standard Practice for Measuring the Dynamic Characteristics of Amusement Rides and Devices
- F 2291-06a Standard Practice for Design of Amusement Rides and Devices
- F 2374-07a Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices
- F2460 -06 Standard Practice for Special Requirements for Bumper Boats

The review of the code and the ASTM standards included input from the Amusement Ride Code Council. A responsibility of council members is to bring forth concerns their respective organizations may have with the proposed rules, including concerns regarding economic impacts. (Copies of the council meetings summaries are on file in Safety and Building Division.)

The Amusement Ride Code Council is comprised of:

William Anderson, Wisconsin Dells, Extreme World  
Larry Gonzales, Milwaukee, Iron Workers Local 8  
Robert Johnson, Winter Park, Florida, Outdoor Amusement Business Association  
Darrell Klompaker, Marshall, Little Amerricka  
David Larkee, Waupaca, Tip Top Shows  
Harry Nienaber, Marshfield, Wisconsin Association of Fairs  
Alan Ogilvie, Middleton, Capitol Insurance Companies  
Charles Waterman, Oshkosh, Calkins Midways Inc.  
Kristina Westergaard, Green Bay, Bay Beach Amusement Park

**9. Analysis and Supporting Documents used to Determine Effect on Small Business or in Preparation of Economic Impact Report and Impact on Small Business**

The Amusement ride council’s composition reflects a variety of organizations whose memberships include small businesses. The department utilizes advisory councils to gather information on potential impacts, including economic, in complying with both the technical and administrative requirements of its code.

In that most of the proposed revisions are for clarification, the department does not consider the rules to have an economic impact on small businesses. In addition the code council did not identify or convey any impacts to the department.

An economic impact report has not been required to be prepared.

**10. Agency Contact.**

James Quast, Program Manager, [jim.quast@wisconsin.gov](mailto:jim.quast@wisconsin.gov), (608) 266-9292

**11. Public Hearing Comments.**

The hearing record on this proposed rulemaking will remain open until July 9, 2008. Written comments on the proposed may be submitted to James Quast, at the Department of Commerce, P.O. Box 2689, Madison, WI 53701-2689, or Email at [jim.quast@wisconsin.gov](mailto:jim.quast@wisconsin.gov).

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SECTION 1. Comm 34.001 Note is repealed and recreated to read:

**Comm 34.001 Note:** The federal Architectural and Transportation Barriers Compliance Board (Access Board) has issued accessibility guidelines for the construction or alteration of amusement rides. Amusement ride guidelines may be found under Summaries of Accessibility Guidelines for Recreation Facilities. A copy of the publication may be obtained by calling the Access Board at 800/872-2253(v) (TTY 800/993-2822), or on the Internet at [www.access-board.gov/](http://www.access-board.gov/).

SECTION 2. Comm 34.001 Note 2 is created to read:

**Comm 34.001 Note:** The design, construction and use of tents are covered under chapters Comm 14, Fire Prevention Code, and 60 to 66, Wisconsin Commercial Building Code.

SECTION 3. Comm 34.002 (3) is created:

**Comm 34.002 (3) LOCAL ORDINANCES.** A municipality may enact and enforce additional or more restrictive standards for amusement rides, provided the standards do not conflict with this chapter.

SECTION 4. Comm 34.01 (3) is repealed and recreated to read:

**Comm 34.01 (3)** “Amusement ride” means a device or animal that carries, transports or supports passengers in unusual, entertaining or thrilling modes of motion and any vehicle providing entertainment or transportation in conjunction with an amusement ride, including, but not limited to, rider-powered and power-driven thrill rides, mild rides and ride-throughs, walk-throughs, air pillows, giant slides, and animal rides. Vehicles include parking lot trams, old fire engines, stage coaches and trains. “Amusement ride” does not include any of the following:

- (a) Aircraft under the jurisdiction of the federal aviation administration.
- (b) Railroad trains under the jurisdiction of the federal railroad administration.
- (c) Boats used on navigable waters.
- (d) Animal rides where the animal is under the control of the passenger.
- (e) Hang gliders and parachutes.
- (f) Climbing walls that do not involve a mechanical take-up or release system.

SECTION 5. Comm 34.01 (9) is amended to read:

**Comm 34.01 (9)** “Frequenter” means every person, other than an employee, who may go in or be in a ~~place of employment, public building, or amusement ride~~ under circumstances which render such person other than a trespasser.

SECTION 6. Comm 34.01 (12) is repealed.

SECTION 7. Comm 34.03 (5) created to read:

**Comm 34.03 (5)** An amusement ride initially assigned as a class 3 ride or modified ride shall be reclassified as a class 1 or class 2 ride provided the owner supplies the department with information regarding the maintenance of the ride and one of the following:

- (a) An engineering analysis regarding the structural integrity of the ride.
- (b) A nondestructive test report of load-bearing ride components and welds.

SECTION 8. Comm 34.04 (4) is repealed and recreated to read:

**Comm 34.04 (4) CLASS 3 AND MODIFIED AMUSEMENT RIDES.** Class 3 and modified amusement rides may not be opened to the public until the ride is reclassified in accordance with s. Comm 34.03 (4) and the ride has been registered with the department.

SECTION 9. Comm 34.08 (1) is repealed and recreated to read:

**Comm 34.08 (1)** (a) An amusement for which plans must be submitted for review under s. Comm 34.05 may not be opened to the public until the ride has been inspected by the department or its authorized representative.

(b) The owner shall notify the department when the construction or installation of an amusement approved under s. Comm 34.05 is complete and at least 5 business days prior to the ride being open to the public to provide for the inspection under par. (a).

SECTION 10. Comm 34.08 (2) is amended to read:

**Comm 34.08 (2)** Every amusement ride shall be subject to ~~an inspection at least once per year~~ periodic inspections conducted by the department or its authorized representative.

SECTION 11. Comm 34.15 (3) is renumbered Comm 34.15 (3) (a) and amended to read:

**Comm 34.15 (3) (a)** ~~Amusement~~ Except as provided in par. (b), amusement rides shall be inspected and their operation tested each day before use by frequenters. The inspection and operational

test shall include the operation of all control devices, speed-limiting devices, brakes and other equipment provided for safety.

SECTION 12. Comm 34.15 (3) (b) is created to read:

**Comm 34.15 (3) (b)** Coin-operated amusement rides shall be inspected and operation tested at least once a week.

SECTION 13. Comm 34.16 (2) (b) is repealed.

SECTION 14. Comm 34.16 (2) (a) is renumbered Comm 34.16 (2).

SECTION 15. Comm 34.16 (3) is repealed and recreated to read:

**Comm 34.16 (3) TEST CONDUCTOR.** The nondestructive test shall be performed by an individual who has achieved a rank of at least level II technician certified by the American Society for Nondestructive Testing or by a professional engineer.

**Note:** A level II NDT technician is an individual capable of conducting the examination and having sufficient training and experience to evaluate the results. For further explanatory information, see the American Society for Nondestructive Testing recommended practice SNT-TC-1A for nondestructive testing personnel qualification and certification.

SECTION 16. Comm 34.16 (4) is created to read:

**Comm 34.16 (4) RECORD OF TESTS.** The test method and results shall be documented by the person conducting the test. Test documentation shall be maintained and made available to the department as specified in s. Comm 34.18.

SECTION 17. Comm 34.18 (1) is renumbered Comm 34.18 (1) (a).

SECTION 18. Comm 34.18 (1) (b) is created to read:

**Comm 34.18 (1) (b)** Each amusement ride owner shall prepare an operating fact sheet for each amusement ride regarding operating policies and procedures. The fact sheet shall be made available to each ride or device operator and attendant.

SECTION 19. Comm 34.18 (2) (e) Note is repealed.

SECTION 20. Comm 34.22 (4) (b) is repealed and recreated to read:

**Comm 34.22 (4) (b)** When provided, required or recommended by the manufacturer, positive locks to stabilize passenger-carrying devices shall be utilized to load and unload passengers.

SECTION 21. Comm 34.22 (4) (c) Note is repealed.

SECTION 22. Comm 34.22 (4) (d) is created to read:

**Comm 34.22 (4) (d)** Where a stirrup allows mounting on only one side of a merry-go-round figure, the stirrup shall be located toward the center of the amusement ride platform.

SECTION 23. Comm 34.22 (5) (f) is created to read:

**Comm 34.22 (5) (f)** Where seat belts are provided for passenger-carrying devices of amusement rides, the belts shall be of a type acceptable to the manufacturer.

SECTION 24. Comm 34.22 (6) is renumbered Comm 34.22 (6) (a).

SECTION 25. Comm 34.22 (6) (b) is created to read:

**Comm 34.22 (6) (b)** Passengers shall abide by the posted height limitations required by passenger-carrying devices of amusement rides.

SECTION 26. Comm 34.23 (1) is renumbered Comm 34.23 (1) (a).

SECTION 27. Comm 34.23 (1) (b) is created to read:

**Comm 34.23 (1) (b)** The foundation for an amusement ride shall conform to the specifications of the manufacturer.

SECTION 28. Comm 34.23 (2) (b) and (c) are repealed.

SECTION 29. Comm 34.23 (2) (a) is renumbered Comm 34.23 (2).

SECTION 30. Comm 34.23 (4) is repealed and recreated to read:



**Comm 34.23 (4) ANCHORAGE.** Amusement rides shall be staked, bolted, guyed, wind braced or otherwise secured in accordance with manufacturer's specification to prevent horizontal movement, such as rotating off blocking during an emergency stop or tipping over.

SECTION 31. Comm 34.24 (3) (c) Note and (d) Note are repealed.

SECTION 32. Comm 34.24 (3) (e) and (f) are created to read:

**Comm 34.24 (3) (e)** Ropes, chains and similar devices may not be used as guardrails.

(f) Guardrails that serve stairways and ramps constructed or manufactured on or after (effective date of the rule – code editor to insert) shall be designed and constructed in such a fashion to reject a 4-inch ball at all openings, including the bottom of the guardrail and the surface upon which it rests.

SECTION 33. Comm 34.24 (6) (d) 1. is amended to read:

**Comm 34.24 (6) (d) 1.** ~~Graspable handrails~~ Handrails shall be provided on both sides of all flights of stairs that have 3 or more risers.

SECTION 34. Comm 34.24 (6) (d) 3. Note and 4. Note are repealed.

SECTION 35. Comm 34.24 (6) (d) 5. is created to read:

Comm 34.24 (6) (d) 5. Ropes, chains and similar devices may not be used as handrails.

SECTION 36. Comm 34.25 (1) is amended to read:

**Comm 34.25 (1) GENERAL.** All hazardous parts, such as but not limited to pinch points, shear points and in-going nips, of amusement rides shall be enclosed, barricaded or otherwise arranged to effectively prevent injury of the passenger in accordance with recognized safe practice.

SECTION 37. Comm 34.26 is repealed and recreated to read:

**Comm 34.26 Special controls.** When the operator of an amusement ride cannot clearly see all loading and unloading areas, special devices or special procedures shall be provided in accordance with one of the following:

(1) Class 1 amusement rides that have loading or unloading areas which cannot be clearly seen by the operator shall be equipped with a bell or similar audible warning device. The warning device shall be sounded prior to each operation.

**Note:** An example of this type of ride is a merry-go-round.

(2) Class 2 amusement rides that have loading or unloading areas which cannot be clearly seen by the operator shall be equipped with mirrors or other devices which provide the operator with full visibility of all such areas.

(3) Class 2 amusement rides that have loading or unloading areas which cannot be clearly seen by the operator shall be operated only when an authorized attendant is stationed so that all loading and unloading areas are visible to the attendant. When an attendant is required, communication with the operator shall be made when it is safe to start the amusement ride. A control interlock, such as a kill switch, shall be provided for the attendant to stop the amusement ride in case of an emergency. The attendant shall be at least 18 years old.

**Note:** Examples of this type of ride are himalaya-type rides and flying bobs.

SECTION 38. Comm 34.27 (2) (c) is repealed.

SECTION 39. Comm 34.27 (3) is renumbered Comm 34.27 (3) (a) and amended to read:

**Comm 34.27 (3) (a)** ~~Each~~ Except as provided in par. (b), each passenger-carrying device on an amusement ride shall be identified by a permanent number or manufacturer's decal, at least one inch in height and located in a conspicuous place. Permanent ink markers are not acceptable.

SECTION 40. Comm 34.27 (3) (b) is created to read:

**Comm 34.27 (3) (b)** The identification provisions under par. (a) are not required for a coin-operated single passenger amusement ride.

SECTION 41. Comm 34.28 is repealed.

SECTION 42. Comm 34.285 (1) is amended to read:

**Comm 34.285 (1) SAFETY BAR OR BELT.** Each carrier of a lift system used ~~in conjunction with~~ as an amusement ride shall be equipped with a safety bar or belt that will not open under forward pressure. The safety bar or belt shall be utilized when a passenger occupies the carrier.

SECTION 43. Comm 34.29 (2) is amended to read:

**Comm 34.29 Location. (2) ELECTRIC POWER LINES.** Amusement rides ~~and the machinery used to erect them~~ shall be located to provide at least 10 feet of clearance from any uninsulated overhead electric power line energized to more than 50 volts, but less than or equal to 50,000 volts. For lines energized to more than 50,000 volts, the minimum clearance shall be increased 0.4 inch for each 1,000 volts over 50,000.

SECTION 44. Comm 34.29 (3) (b) is renumbered Comm 34.29 (3) (b) 1. and amended to read:

**Comm 34.29 (3) (b) 1.** ~~The~~ Except as provided in subd. 2., the minimum distance between passenger carrying devices of amusement rides and fixed objects which are not part or associated with the amusement ride or fences shall be at least 4 feet.

SECTION 45. Comm 34.29 (3) (b) 2. is created to read:

**Comm 34.29 (3) (b) 2.** The separation distances under subd. 1., do not apply to bumper cars, bumper boats and go karts.

SECTION 46. Comm 34.31 (1) is repealed and recreated:

**Comm 34.31 (1) AUTHORIZED OPERATORS.** (a) The operation of an amusement ride shall be by an authorized person at least 18 years of age except for any of the following rides:

1. Passenger-operated or passenger-controlled rides.
2. Electrically-powered, coin-operated class 1 amusement rides having a maximum capacity of 6 passengers.

**Note:** See s. DWD 270.12, Wis. Adm. Code, concerning hazardous occupations prohibited to all minors.

(b) 1. Amusement ride operators shall be in the immediate vicinity of the operating controls during the operating cycle of the amusement ride.

2. The operators shall keep the controls under their direct supervision at all times during normal operation of the amusement rides.

3. The operators shall watch to prevent dangerous actions by the passengers and to detect apparent mechanical failure of the amusement rides.

(c) All control devices shall be guarded against accidental operation.

SECTION 47. Comm 34.31 (4) is amended to read:

**Comm 34.31 (4) AUTOMATIC RESTART PROHIBITED.** All amusement rides ~~with passenger-carrying devices~~ powered by electric motors shall be equipped and maintained with devices to prevent automatic restart after power failure, including, but not limited to, magnetic starters, magnetic switches and pneumatic clutches.

SECTION 48. Comm 34.31 (5) is created to read:

**Comm 34.31 (5) OPERATION.** An amusement ride may not be operated beyond the speed and capacity as specified by the manufacturer. When the manufacturer's specifications are unknown, the operation limits shall be established by owner through engineering analysis or other means approved by the department.

SECTION 49. Comm 34.31 (6) is created to read:

**Comm 34.31 (6) TRAINING.** An amusement ride owner shall provide training for ride operators and attendants. The owner shall maintain record of the training and shall make the record available to the department upon request.

SECTION 50. Comm 34.32 (2) Note is created to read:

**Comm 34.32 (2) Note:** Section 525.20(D) of the National Electrical Code adopted under ch. Comm 16 states: "Flexible cords or cables shall be continuous without splice or tap between boxes or fittings."

SECTION 51. Comm 34.32 (3) and (7) are repealed.

SECTION 52. Comm 34.32 (4) to (6) is renumbered Comm 34.32 (3) to (5).

SECTION 53. Comm 34.32 (6) is created to read:

**Comm 34.32 (6)** A disconnect or other means, capable of being locked out, shall be provided to render amusement rides inoperable during inspection, maintenance and repair.

SECTION 54. Comm 34.34 (1m) (f) and Note are repealed.

SECTION 55. Comm 34.34 (3) is repealed and recreated to read:

**Comm 34.34 (3) SURFACES NOT INTENDED FOR WALKING.** Amusement ride center platforms with moving sweeps that are adjacent to loading and unloading platforms of passenger-

carrying devices shall be guarded by a standard guardrail or a center cover designed and maintained to safely support a minimum load of 200 pounds.

SECTION 56. Comm 34.35 (2) and (3) are amended to read:

**Comm 34.35 (2) SMOKE DETECTORS.** Smoke detectors shall be provided in all dark rides, funhouses and similar structures that are not classified as public buildings or places of employment.

**(3) EMERGENCY LIGHTING.** Emergency lighting shall be provided ~~to assure safe egress from all rides operated in enclosed areas~~ in all dark rides, funhouses and similar structures that are not classified as public buildings or places of employment.

SECTION 57. Comm 34.38 (2) (e) is repealed.

SECTION 58. Comm 34.39 Note is amended to read:

**Comm 34.39 Note:** Pursuant to s. Comm 5.34 (1) and (4), no person may perform structural welding on amusement rides unless the person holds a registration issued by the department as a registered welder. A registered welder is to perform only those structural welding procedures for which the person has qualified by test with the last 4 years.

**(END)**

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**EFFECTIVE DATE**

Pursuant to s. 227.22 (2) (intro.), Stats these rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register.

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