

CHAPTER 462
SAFETY RULES FOR AMUSEMENT RIDES, AMUSEMENT DEVICES,
AND CONCESSION BOOTHS

[Prior to 9/24/86, Labor, Bureau of [530]]

[Prior to 10/21/98, see 347—Ch 62]

[Prior to 7/9/25, see Labor Services Division[875] Ch 62]

Chapter rescission date pursuant to Iowa Code section 17A.7: 2/26/30

481—462.1(88A) Scope. Rule 481—462.2(88A) applies to all covered equipment. The remaining rules of this chapter apply to all covered equipment, except a bungee jump covered by 481—Chapter 463.

[ARC 8828C, IAB 1/22/25, effective 2/26/25; Editorial change: IAC Supplement 7/9/25]

481—462.2(88A) Other codes.

462.2(1) Nothing in 481—Chapters 461 through 463 provides an exemption, waiver, or variance from any otherwise applicable regulation or statute.

462.2(2) State fire marshal rules set forth in 481—Chapter 280 are adopted by reference.

[ARC 8828C, IAB 1/22/25, effective 2/26/25; Editorial change: IAC Supplement 7/9/25; Editorial change: IAC Supplement 8/5/26]

481—462.3(88A) Site requirements.

462.3(1) Design. The grounds of a fair or carnival shall be designed according to the following criteria:

- a. Clearance around covered equipment will meet or exceed the manufacturer's recommendations.
- b. Clearance between covered equipment and a facility for cooking will be at least 10 feet.
- c. Walkways will be wide, unobstructed, and open at each end.
- d. Walkways through concession booth backyards and over water lines and electrical lines will be avoided.
- e. Intermingling of water lines and electrical lines will be avoided.
- f. Guy wires, braces and ropes used for support:
 - (1) Will not be placed in walkways or in the entrances or exits for covered equipment; and
 - (2) Will be clearly marked with streamers or other devices when located adjacent to walkways.
- g. Stakes will be covered.

462.3(2) Housekeeping. Adequate containers for refuse will be provided. Accumulations of trash will be removed promptly.

462.3(3) Lighting. Entrances and exits for covered equipment will be provided with at least 5 foot-candles of light measured at grade level. No less than 10 foot-candles of light will be provided at all work levels for assembly and disassembly of covered equipment.

462.3(4) Internal combustion engines. Internal combustion engines will be a minimum of 5 feet from an air-supported structure and will be guarded or fenced to prevent patron exposure or access. An internal combustion engine operated in an enclosed area will be provided with fresh-air intake and an exhaust discharge flue.

462.3(5) Flammable waste and materials. An operator will provide identified covered and labeled metal containers for flammable waste. The containers will be available to staff and attendants but will not be accessible to patrons.

462.3(6) Storage of hazardous or flammable materials. Storage of more than 50 gallons of fuel, other flammable material, or hazardous gas is not permitted in any area accessible to the public.

462.3(7) Walking surfaces. Entrances and exits for covered equipment will be adequate, unobstructed, and in accordance with the manufacturer's instructions. Hazards, such as protruding nails, splinters, holes, loose boards, debris, obstructions, and projections, are prohibited. Stairways, ramps and railings will be provided where patrons enter or exit covered equipment above or below grade.

462.3(8) Fences. Fences or other barriers will be maintained to prevent movement. Placement of fences will be consistent with the recommendations of the manufacturer. If the manufacturer's recommendation regarding fences is not available, fences will meet ASTM standards.

462.3(9) Queue line. Lines will be designed to meet or exceed manufacture specifications.

462.3(10) Setup. Operators will follow the manufacturer's instructions to ensure that covered equipment is level and stable. If the manufacturer's instructions are not available, the setup will meet ASTM standards.

[ARC 8828C, IAB 1/22/25, effective 2/26/25; Editorial change: IAC Supplement 7/9/25]

481—462.4(88A) Design and manufacture of covered equipment. This rule sets forth requirements for the design and manufacture of all covered equipment, except a bungee jump covered by 481—Chapter 463.

462.4(1) Codes adopted by reference. ASTM F2374-10 applies to all air-supported structures notwithstanding the definition and use of the phrase “inflatable amusement device” in ASTM F2374-10.

a. All covered equipment. Equipment will comply with National Electric Code, NFPA 70-2014.

b. Tramways. All tramways subject to the rules of this chapter will be designed and tested in accordance with the ANSI B77.1 standard in effect at the time of installation.

c. New covered equipment. New covered equipment and covered equipment undergoing a major modification will be designed and tested in accordance with ANSI B77.1-2011 and ANSI B77.1A-2012 and ASTM F1159-15a, F1193-14, F1957-99(2011), F2007-12, F2137-15, F2291-15, F2374-10, F2375-09, F2376-13, F2460-11, F2959-14, and F2960-15, as applicable.

d. Existing covered equipment. Covered equipment manufactured before July 1, 2016, must comply with the applicable design criteria of subrule 462.4(2) through July 1, 2021. After July 1, 2021, covered equipment, except tramways, will meet the criteria for service-proven equipment set forth in ASTM F2291-15.

462.4(2) Design criteria. Structural materials and construction of covered equipment will conform to recognized engineering practices, procedures, standards and specifications. The design, materials and construction features will incorporate a safety factor of 5 or alternative safety factors recommended by the original manufacturer or by a professional engineer with credentials and experience acceptable to the director.

462.4(3) Front openings and awnings. Front openings and awnings will be stabilized with safety latches, safety pins, or other devices.

462.4(4) Shooting galleries. A shooting gallery will use only equipment, shells, pellets, and bullets designed for shooting galleries. Means will be provided to prevent turning the weapon away from the intended target.

462.4(5) Flying objects. Where flying objects, such as darts, balls, pellets, shot, and bullets, are a potential hazard:

a. Ricocheting will be prevented by absorbent wings or panels; and

b. Absorbing walls, sandbags, or other mechanisms will be installed along the bottom, back, and sides of the booth to protect passersby.

[ARC 8828C, IAB 1/22/25, effective 2/26/25; Editorial change: IAC Supplement 7/9/25]

481—462.5(88A) Maintenance of covered equipment—requirements. An operator will conduct periodic inspections, repairs, tests, and maintenance as set forth in this rule and the manufacturer's recommendations, as applicable. An operator will make a written record of all inspections, maintenance, tests, and repairs of covered equipment, and the records will be available to the director.

462.5(1) Nondestructive testing. The operator will ensure that appropriate nondestructive testing (NDT) is conducted and that documentation is available for review. NDT will be performed at the following times:

a. At intervals recommended by the manufacturer;

b. When required by the director due to a welded repair;

c. When required by the director due to a visual indication of a potentially hazardous condition; and

d. When recommended by a bulletin prepared according to ASTM F1193-14.

462.5(2) Wood components. The operator will remove a sufficient amount of soil around piling or wood members embedded in dirt to check for deterioration. When a wood piling requires replacement, the operator will install a concrete pier. The top of the pier will be installed so that the attached wood member is not exposed to dirt or water accumulation.

[ARC 8828C, IAB 1/22/25, effective 2/26/25; Editorial change: IAC Supplement 7/9/25]

481—462.6(88A) Operations—requirements. Operations conform to ANSI B77.1 and ANSI B77.1A-2012 and ASTM F770-15, F1957-99(2011), F2007-12, F2137-15, F2374-10, F2375-09, F2376-13, F2460-11, and F2959-14, as applicable. ASTM F2374-10 applies to all air-supported structures, notwithstanding the definition and use of the phrase “inflatable amusement device” in ASTM F2374-10. The director will enforce the minimum age requirements set forth below, rather than any minimum age requirement set forth in a code adopted by reference in this rule.

462.6(1) Attendants. The operator will provide a sufficient number of attendants in accordance with manufacturer specifications who will be recognizable by their uniforms. Covered equipment shall have continuous, direct supervision while in use by a patron.

a. Each attendant of a concession booth, except a shooting gallery or dart game, will be at least 14 years of age. All other attendants will be at least 16 years of age.

b. Each attendant will be trained according to ANSI B77.1 and ANSI B77.1A-2012 and ASTM F770-15, F2007-12, F2460-11, and F2959-14, as applicable. Training documentation will be available to the director.

c. When the covered equipment is shut down, provision will be made to prevent unauthorized operation.

462.6(2) Signal systems. When an attendant does not have a clear view of the point where passengers are loaded or unloaded, signal systems will be provided and utilized for controlling, starting and stopping covered equipment.

462.6(3) Overspeeding and overloading. An attendant will not load covered equipment beyond its rated capacity nor operate the covered equipment at a speed other than that prescribed by the design engineer or manufacturer.

462.6(4) Refueling. Fuel tanks for internal combustion engines should be large enough to run without interruption during normal operating hours. Where it is impossible to provide tanks of proper capacity for a complete day’s operation, the covered equipment will be shut down and evacuated during refueling.

462.6(5) Safety stop device. After actuation of a safety stop device, the cause of the actuation will be determined and corrected before operation of covered equipment is resumed. No person will operate covered equipment if a safety stop device has been bypassed.

[ARC 8828C, IAB 1/22/25, effective 2/26/25; Editorial change: IAC Supplement 7/9/25]

481—462.7(88A) Patrons.

462.7(1) Emergency procedure. Will meet or exceed manufacturer specifications. If manufacturer specifications are not available, the emergency procedure will meet ASTM standards.

462.7(2) Medical and first aid. The operator shall make available to patrons the same medical and first-aid provisions the operator is legally obligated to provide to employees.

462.7(3) Evacuation plan. Evacuation plans shall meet or exceed manufacturer specifications. If manufacturer specifications are not available, evacuation plans shall meet ASTM standards.

[ARC 8828C, IAB 1/22/25, effective 2/26/25; Editorial change: IAC Supplement 7/9/25]

These rules are intended to implement Iowa Code chapter 88A.

[Filed 2/21/73; amended 12/20/73, 4/8/75, 6/19/75]

[Filed 3/5/76, Notice 1/29/76—published 3/22/76, effective 4/30/76]

[Filed emergency 9/5/86—published 9/24/86, effective 9/24/86]

[Filed emergency 4/17/92—published 5/13/92, effective 4/17/92]

[Filed 12/13/06, Notice 11/8/06—published 1/3/07, effective 2/7/07]

[Filed ARC 2428C (Notice ARC 2354C, IAB 1/6/16), IAB 3/2/16, effective 4/6/16]¹

[Filed ARC 5954C (Notice ARC 5674C, IAB 6/16/21), IAB 10/6/21, effective 11/10/21]

[Filed ARC 8828C (Notice ARC 8373C, IAB 11/27/24), IAB 1/22/25, effective 2/26/25]

[Editorial change: IAC Supplement 7/9/25]

[Editorial change: IAC Supplement 8/5/26]

¹ April 6, 2016, effective date of the rescission of former Chapter 62 and the adoption of new Chapter 62 herein [ARC 2428C] delayed 70 days by the Administrative Rules Review Committee at its meeting held March 4, 2016; delay lifted at the meeting held April 8, 2016.