

Oklahoma Department of Labor



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COMMISSIONER OF LABOR

Air Inflatable Amusement Ride/Device Inspection Criteria

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The following criteria are provided to augment the minimum requirements of the manufacturer's guidelines for Inflatable Amusement Rides/Devices. These criteria have been developed based on a review of manufacturer's requirements, and the American Society for Testing and Materials (ASTM) F24 (F 2374-06). Each owner, manager, or operator who provides for public use and operation of Inflatable Amusement Rides/Devices, for the purpose of providing amusement, thrills, or excitement shall abide by these criteria.

NOTE: ALL INFLATABLE AMUSEMENT RIDES/ DEVICES SHALL BE ERECTED AND OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES UNLESS IT IS DETERMINED BY THE COMMISSIONER OF LABOR THAT THE MANUFACTURER'S GUIDELINES DO NOT PROVIDE ADEQUATE SPECIFICATIONS AND PROTECTIONS FOR THE GENERAL PUBLIC, IN WHICH CASE THE COMMISSIONER OF LABOR SHALL DEVELOP SEPARATE OPERATIONAL GUIDELINES. [SEE OKLAHOMA ADMINISTRATIVE CODE (OAC) 380:55-9-2(D).]

RIDE DESIGN

1. All Inflatable Amusement Rides/Devices shall meet the requirements in ASTM F24 (F 2374-06).
2. Toy Grade Inflatable Rides/Devices **SHALL NOT** be used for rental/commercial purposes, **NO EXCEPTIONS.**
3. All Inflatable Amusement Rides/Devices purchased for rental/commercial purposes in Oklahoma after January 1, 2007 shall meet the flame resistant requirements outlined in ASTM F24 (F 2374-06) "Standard Practice for Design, Manufacture, Operation and Maintenance of Inflatable Amusement Devices (5.5.1)."

TIE DOWNS

1. All Inflatable Amusement Rides/Devices shall be anchored per manufacturer's requirements. In some cases, particularly for the unique weather challenges in the State of Oklahoma, the manufacturer's recommendations may be deemed inadequate. Inflatable Amusement Rides/Devices whose manufacturer's recommendations are deemed inadequate shall meet guidelines set by the Oklahoma Department of Labor (ODOL), examples noted below.
2. All ground stakes/anchors shall meet one of the following:
 - Inflatable Amusement Rides/Devices measuring less than or equal to 20 feet by 20 feet ($\leq 20' \times 20'$), or 400 square feet = Minimum 18 inch stake/anchor with a diameter of at least 5/8 inch and buried 16 inches underground, or
 - Inflatable Amusement Rides/Devices measuring greater than 20 feet by 20 feet ($> 20' \times 20'$), or 400 square feet = Minimum 24 inch stake/anchor with a diameter of at least 1 inch,

buried at least 22 inches underground. If longer stakes are being used no more than 2 inches from the tie off point (2 inches from the earth) should be sticking out of the ground, and should not present a tripping or fall hazard. These guidelines are a minimum. ODOL will be following the guidelines from ASTM or the manufacture whichever is most stringent. This should assist in preventing the movement of devices at the maximum allowed operational wind speed and aid in preventing injuries in the unlikely event of a microburst.

- All ground stakes shall be equipped with a restraining hook, collar, or other similar device to prevent the attached ropes from being released. All exposed portions of the stake/anchor shall be guarded to prevent tripping or fall hazards.
3. No more than one (1) tie down rope shall be attached to any one stake/anchor, **outdoors locations only**, unless the manufacturer allows otherwise.
 4. On **outdoor** locations, ALL tie downs shall be utilized, **NO EXCEPTIONS**.
 5. In lieu of tie down stakes being used outdoors, each tie down of a bounce type Inflatable Amusement Ride/Device shall be secured with a minimum of 75 pounds of weight, unless a greater weight is directed by the manufacturer, e.g. some of the larger inflatables, etc. The larger slide type inflatables, greater than 36 feet in height, shall be secured with a minimum of approximately 450 pounds of weight per tie down unless a greater amount is required by the manufacturer. The weight shall be of sufficient amount to prevent movement of the device during any unlikely wind event.
 6. On **indoor** locations, the tie downs on all corners, mid-point tie downs (when provided), and others as designated by the inspector shall be utilized, **NO EXCEPTIONS**. Each tie down shall be secured with a minimum of 75 pounds weight unless a greater weight is directed by the manufacturer or ASTM standards, e.g. some slides, rock walls.
 7. Sand bags, water barrels, or metal weights may be utilized on tie downs **outdoors and indoors**, unless prohibited by the Inflatable Amusement Ride/Device's manufacturer. *NOTE: Cinder blocks may not be utilized as tie downs at any location.*
 8. Inflatable Amusement Ride/Devices **shall not** be secured to any motor vehicle, garbage bins, trailers, etc., **NO EXCEPTIONS**.
 9. Ropes, tethers, and tie downs shall be sufficiently strong to prevent breakage. The minimum recommended size is ½ inch, solid-braided, polypropylene with a tensile strength of 3,000 or 300 lb. test rated. **Knots in the span of a tie down/strap are not permitted.**
 10. All tie down stakes, sand bags, water barrels, and metal weights shall be placed or guarded as to prevent slips, trips, or falls.
 11. ● **Tie Down/straps at low points around the base.** Tie down/straps that are frayed/worn or torn shall be immediately replaced. Tie down/straps frayed/worn or torn shall be replaced by the **manufacturer or a stitch machine** provided it is done properly. Repairs in the **center** of any strap are not permitted.
● **Tie Down/Straps at mid or high points.** Stitching is permitted to make a **loop at the end of a tie down/strap**, provided it is done properly with a stitch machine, using a box stitch pattern.
● **Seams.** Stitched seams may be repaired, provided proper material is used and sewn properly. **No glued patches** over any stitched seams are permitted.

BLOWERS

1. Each Inflatable Amusement Ride/Device shall be equipped with the proper number of blowers with the horsepower and rated air flow capacity as required by the manufacturer.
2. All such blowers shall be of the proper horsepower to properly maintain inflation of the Inflatable Amusement Ride/Device. All blowers, extension cords, and electrical boxes shall meet the requirements of the most current Edition of the National Electrical Code.
3. All Inflatable Amusement Ride/Device blowers, operated in an outdoor location, shall be connected to a GFI plug or, if a GFI plug is not available, a GFI extension cord may be utilized, **NO EXCEPTIONS**.
4. Extension cords shall be rated for outdoor use and of sufficient gauge to support the equipment

- being utilized. No daisy chaining (i.e. connecting one extension cord into another) is allowed.
5. An extension cord or blower with the ground prong broken or removed shall be removed from service, **NO EXCEPTIONS.**
 6. Blowers and inflation tubes shall be positioned so that they will not impede the ingress/egress of patrons.

STRUCTURE

1. Inflatable Amusement Rides/Devices shall not have any tears that would allow the structure to deflate.
2. Inflatable Amusement Rides/Devices shall be free of any slip or trip hazards.
3. Duct tape shall not be allowed to make any repairs to Inflatable Amusement Rides/Devices.
4. Inflatable Amusement Rides/Devices shall be of a design that prevents the rapid deflation of the device in the event of a power failure or loss of air supply.
5. Inflatable Amusement Rides/Devices which are designed and manufactured to be operated as totally enclosed structures without clear visibility of the surrounding exterior, shall provide exits that meet all local, state, and/or federal requirements applicable to Inflatable devices.
6. Seams that are torn must be re-sewn; other holes may be patched with vinyl patch repair kits.

OPERATIONS

1. The owner/operator shall **document in writing** that all Inflatable Amusement Rides/Devices have been inspected daily prior to being placed in operation. A written log shall be maintained indicating any repairs made.
2. The owner/operator shall provide a sufficient number of operators/attendants in accordance with the manufacturer's recommendations. If there are no manufacturer recommendations concerning a minimum number of operators, then owners/operators shall provide a sufficient number of operators/attendants to ensure safe operation and visibility of all portions of the Inflatable Amusement Ride/device during operation.
3. The owner/operator shall have an emergency action plan in place to cover accidents/incidents, foul weather, and guest illness. All operators shall be trained in this plan.
4. Inflatable Amusement Rides/Devices shall not be operated when weather conditions make operations unsafe, i.e. high winds, thunder storms, etc. An Inflatable Amusement Ride/Device shall not be operated in wind speeds above the manufacturer's stated guidelines, **NO EXCEPTIONS**
5. All staff shall be identifiable by uniform or tag.
6. Rider responsibility signage, as required by the Oklahoma Amusement Ride Safety Law, shall be posted at the entrance to all Inflatable Amusement Rides/Devices, or provided to the operator in the rental packet. An example is as follows:

Sample Warning Sign

- Remove shoes, eyeglasses and sharp objects before entering.
- No flips.
- No piling on or wrestling.
- Do not bounce closer than five feet from each other.
- Do not bounce against the sides or near the doorway.
- Do not enter if attendant is not present.

7. Accidents and incidents resulting in injuries and/or fatalities shall be reported to the ODOL in strict compliance with the provisions of the Oklahoma Amusement Ride Safety Law, OAC 380:55-7-1.

In addition to the above guidelines, all persons, firm, companies, and corporations engaged in the renting of Inflatable Amusement Rides/Devices shall maintain on file, and make available to the Commissioner of Labor's authorized representative upon request, the following:

1. A copy of all training that will be provided to the renter. Such training shall address, at a minimum, the proper operation of the ride/device, set-up, safety precautions, and quantity of operators, as specified by the equipment manufacturer and the Oklahoma Amusement Ride Safety Act.
2. A copy of the manufacturer's set up and operating manual.
3. A signed statement by each renter documenting s/he has received and understands all procedures for the safe operation of the ride/device.
4. The company's name shall be prominently displayed on each Inflatable Amusement Ride/Device.
5. Proof of insurance as required by the Oklahoma Amusement Ride Safety Act, OAC 380:55-11-1.

NOTE: ALL INSPECTIONS REQUIRED BY THE OKLAHOMA AMUSEMENT RIDE SAFETY ACT, MUST BE REQUESTED AT LEAST 72 HOURS (3 WORKING DAYS) IN ADVANCE OF THE REQUESTED INSPECTION DATE (OAC 380:55-9-1(c)). IN THE EVENT AN INSPECTION IS CANCELED BY AN OWNER/OPERATOR, A MINIMUM 24 HOUR NOTICE IS REQUIRED OR A FEE SHALL BE CHARGED FOR THE SCHEDULED INSPECTION, OAC 380:55-5-1(b).