

Fire and Life-Safety Group (FLS)

Inflatable Amusement Rides

I. INTRODUCTION

This document was prepared to list some but not all of the guidelines and recommendations for the safe setup and use of inflatable amusement rides (i.e. bouncy castles, moonwalks). Please ensure that all the guidelines and recommendations are verified and implemented.

II. POLICIES AND RECOMMENDATIONS

Procedures and guidelines for safe set-up and operation of inflatable amusement rides may vary from ride to ride or from manufacturer to manufacturer, please closely follow manufacturers' instructions and guidelines for operation and set-up. FLS recommends the following additional guidelines should be adhered to:

- Minimum number of operators on a large inflatable slide is two (2), for slides over 15 feet tall.
- Minimum number of operators on an inflatable bounce or small slide, under 15 feet, is one (1).
- Maximum recommended weight per passenger is 200 lbs; or per manufacturer's recommendation.
- DO NOT exceed manufacturer's requirements for maximum loads for individual rides.
- Follow the owner/operator's manual for site layout, inflation procedures, ropes, tethers, tie-downs, anchors, use temperature range, maximum number of riders, size of riders, electrical code, daily operation, daily inspection, washing, repair, deflation, drying, storage, and transportation.
- ALWAYS anchor rides per manufacturer's requirements and instructions.
- The on-ground anchor weight used for various inflatable rides range from 75-pounds (for bounce-type rides) to 500-pounds (for slide-type rides) for each recommended anchor position. This weight range strongly indicates that an inflatable ride's operator should follow the ride manufacturer's recommendations for proper anchoring and placement or certain type stakes.
- Place and use anchors at all of the manufacturer's required positions, at all times, for both indoor and outdoor use. These anchors can be straight stakes, screw stakes, ground weights or sandbag ground anchors. Straight stakes to be used range from 30 inches to 42 inches in length with at least 75% or more of the length in the ground (this length will be dependent on surface where set p). The end of the stakes should be covered to prevent a tripping hazard.
- Anchor ropers, tethers, or tie-downs should be attached to a secure device or permanent structure and attached so that they cannot slip off the top of their stakes during use. DO NOT attach anchors to motor vehicles.

- Ropes, tethers, and tie-downs, should be sufficiently strong to resist breakage during use. FLS recommends that the buyer use ½ inch diameter solid-braided polypropylene rope with a minimum tensile strength of 3700 lbs. tensile strength or 370 lbs. safe working load and follow manufacturer's requirements; whichever is greater.
- Identify and use the number and location of tie-downs specified by the manufacturer. DO NOT use non-load bearing positioning loops as tie-downs or anchor points.
- DO NOT use the inflatable ride above windspeeds that exceed the manufacturer's recommendation. Various manufacturers recommend maximum windspeeds from 15 to 25 mph depending on the ride. However, unload and deflate any inflatable ride when the wind speed exceeds 25 mph.
- Manufacturers and operators should consider that the inflatable ride should not collapse onto the riders if the power to the blower(s) inflating the ride should unexpectedly fail. Inflatable rides need a sealed chamber to prevent the rapid collapse of ceilings and walls onto the riders if the electric power to the blower(s) fails. Inflatable slides over 15 feet tall should not deflate and collapse, so that they dump rides to the ground.

In addition, FLS strongly recommends that rental companies provide renters with the following materials:

- A training program for renters for the proper operation of the inflatable ride.
- A copy of the operation manual (and/or videos, training manuals) for each rental period.
- A release statement signed by the renter documenting that they have received and understands the ride operating procedures.

III. LINKS TO REGULATIONS AND ADDITIONAL RECOMMENDATIONS

REGULATIONS ADOPTED AND PUBLISHED THROUGH THE NEWJERSEY REGISTER

http://www.state.nj.us/dca/divisions/codes/codreg/pdf_regs/njac_5_14A.pdf

BOUNCE HOUSE SAFETY

http://www.a-irco.org/joomla1/index2.php?option=com_content&do_pdf=1&id=324

Contributed by <http://www.cuttingedgecreations.com/>

ADMINISTRATIVE REGULATIONS OF THE ARKANSAS AMUSEMENT RIDE AND AMUSEMENT ATTRACTION SAFETY INSURANCE ACT

http://www.state.ar.us/labor/pdf/amusement_ride_regs.pdf

INFLATABLE AMUSEMENT RIDES STATE REGULATIONS

<http://www.cga.ct.gov/2006/rpt/2006-R-0778.htm>