

INFLATABLE PLAY EQUIPMENT



Safety guidance for event organisers

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Introduction

Bouncy castles and other inflatable play equipment are very popular additions to events large and small. They provide entertainment for all ages. However, they do require to be managed safely to prevent accidents and serious injuries.

Since 2011, there have been more than 20 incidents across the UK involving bouncy castles where people have been injured – and killed – when inflatable play equipment were not properly managed or controlled.

The responsibility for ensuring the safety of users of inflatable play equipment rests with everyone involved. The owner of the equipment has a duty to ensure that it is certified by a competent inspection body, maintained in a safe condition, installed and operated in accordance with safety standards.

Event organisers must ensure that anyone supplying inflatable play equipment is competent, appropriately trained and insured. They must also ensure that the equipment itself is safety-certified and is operated by a competent person.

Before you buy or hire

If you're buying or hiring an inflatable for private or public use you should make sure it has either a numbered PIPA tag or an ADIPs declaration of compliance (DoC).

It should also have:

- written documentation from a competent inspection body to show it complies with British Standard BS EN 14960
- instructions on how to operate it safely



Tag or declaration of conformance

Each item of equipment that has been certified will have a certificate and be tagged with a unique reference number. Certificates must be renewed annually.

HSE supports two industry inspection schemes for inflatables run by:

- PIPA (www.pipa.org.uk)
- ADIPS (www.adips.co.uk)

PIPA is solely for inflatables; ADIPs covers any fairground equipment.

Certificates can be checked online at the PIPA or ADIPS websites using their unique number.

Anchoring and ballast

When using the inflatable outside, all the anchor points must be used. These have a welded metal 'O' or 'D' ring fitted. Anchor points must be secured by metal ground stakes at least 380 mm long and 16 mm diameter, with a rounded top.

All inflatables must have at least 6 anchor points. The operator manual will tell you how many there should be, and you should check to ensure

they are all still in place and have not been removed.

Straps and D-rings at each anchor point must be in good condition and not damaged or missing.

Never use improvised attachments, such as rope, to ground anchors. Never tie off an inflatable to anything other than the proper ground anchors.

If ground stakes cannot be used because of the surface (e.g. tarmac) then use ballast weighing at least 163 kg with suitable fixings to attach each anchor point. The inflatable should be tightly secured to the ground so that the wind cannot get under it and lift it up.

If an inflatable is being used indoors, refer to the operator's manual which will provide instruction on what anchorage is necessary to maintain the shape of the device and prevent overturn.

Wind management

No inflatable should be used in winds above 24 mph (38 km/hr), which is Force 5 on the Beaufort Scale (small trees in leaf begin to sway).

Certain inflatables may have a lower maximum wind speed for operation. **Always** check the manufacturer's operating manual to confirm the maximum wind speed for the safe operation of the inflatable.

When the inflatable is being operated outside, an anemometer **must be used** to measure the wind speed at regular intervals. If one of these is not available, the inflatable should not be operated outside.

Do not use smartphone weather applications to measure wind speed as they do not take localised wind conditions into account.

Before and during use

An inspection of the inflatable must be carried out prior to use to ensure that there are no signs of sagging, damage to the fabric or over-tension of the inflatable. It is also essential to check that all anchor points and ground stakes remain secure and have not come loose during inflation.

A manometer (pressure tester) **must** be used at regular intervals to check the pressure inside the inflatable remains within the operational range.

The blower **must** meet the inflatable's manufacturer's specification and be firmly attached to the inflatable device.

All electrical connections **must** be suitably IP-rated and connected via a residual current device (RCD).

The inflatable **must** only be operated by a suitably-trained and competent person.

The operating instructions supplied with the inflatable should cover the following matters:

- The number of users on the inflatable at the same time
- The provision of suitable safety matting at the entrance to the device
- That users should not wear shoes or glasses and empty their pockets of all sharp items
- That users are not drunk
- That users are not allowed to climb or hang on the walls
- That regular checks are undertaken that anchor points are still secure.

Contact Environmental Health

For more advice and information, or to report any concerns about inflatable play equipment:

- Email: envhealth@argyll-bute.gov.uk
- Telephone: 01546 605519

This guidance is not intended as a statement of the law and must be read alongside the HSE guidance at www.hse.gov.uk/entertainment/fairgrounds/inflatables.htm.

Owners and operators of any amusement device must follow HSG175 *Fairgrounds and amusement parks – Guidance on safe practice*, available for free download from www.hse.gov.uk/pubns/books/hsg175.htm.

Industry guidance is available at www.tipe.co.uk/info49.pdf.