# Bouncy castles and other play inflatables: safety advice

Serious incidents have occurred where inflatables have collapsed or blown away in windy conditions.

These simple precautions can help you avoid serious incidents, whether you supply or buy bouncy castles and inflatables, are hiring one for an event, or operate them.

Health and safety law applies to the supply, hire and use of inflatables for commercial purposes. It does not apply to private, domestic buyers and users.

This guidance applies to inflatables devices used both outside and inside.

#### 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 compliance (DoC)

HSE supports two industry inspection schemes for inflatables run by PIPA link to external website and ADiPs link to external website.

You can use their websites to check safety tests have been carried out and to find out what to do if the equipment has no PIPA tag or ADiPs DoC (you may be risking people's safety if the inflatable doesn't have one of these).

# Setting up safely

When setting up, carry out the following safety checks in line with the inflatable's operator manual:

- No inflatable should be used in winds above **24 mph (38 kmph)**, 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, use an anemometer 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

- When using the inflatable outside, all the anchor points must be used, with metal ground stakes at least 380 mm long and 16 mm wide, with a rounded top. They should have a welded metal 'O' or 'D' ring fitted to the end
- 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
- The ropes used to secure the inflatable should be in good condition and not stretched, frayed or rotten. Never use improvised tow ropes, eg bungee cord
- If ground stakes cannot be used because of the surface (eg tarmac) then use ballast weighing at least 163 kg with suitable fixings to attach the guy ropes. 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
- All other associated equipment must be safe, including the blower

#### Before anyone uses it

Have a good look at the inflatable when it is blown up and before use. You should check:

- the correct blower is being used (the blower specification, including output, will be given in the operating manual)
- there are no obvious signs of over-tension or sagging of the structure. Also check if the anchor points have been pulled out during inflation
- the connection tube and blower are firmly attached to each other
- impact-absorbing mats are in position
- there are no holes or rips in the fabric or seams
- it looks symmetrical if it looks misshapen or deformed there could be internal problems that make bouncing unpredictable and it should therefore not be used

# Safe use, supervision and monitoring

There should be constant supervision by at least one suitably trained person.

Operating instructions must be supplied and should include the following:

- Restrict the number of users on the inflatable at the same time to the limit in the operator manual or on the unit label. Don't exceed the user height limit and keep bigger users separated from smaller ones
- Make sure users can get on and off safely, with safety matting at the entrance that is no more than 2 inches deep
- People should not wear shoes or glasses, and should empty their pockets of all sharp or dangerous items
- Anyone obviously intoxicated should not be allowed on
- Don't allow users to climb or hang on the walls
- Regularly check that anchor points are still secure

• When operating the inflatable outside, use an anemometer to measure wind conditions at regular intervals, and visually check for changes in wind direction (such as looking at how the trees are swaying). Make sure you take readings in the direction of the wind.

### **Tests and inspections**

As an owner or the person making it available for use, you are responsible for making sure the following tests are carried out.

#### **Initial test**

A new inflatable should have an 'initial test' to confirm it complies with BS EN 14960.

# **Annual inspection**

Make sure an annual inspection is carried out by a competent person. They should identify the inflatable and blower by their serial numbers and look at any previous inspection reports and certificates. They should also inspect any part of the inflatable and its equipment that may affect its safe operation.

Owners can find out how to get their equipment tested from PIPA link to external website or ADIPS link to external website.

#### Find out more

British Standard BS EN 14960: 2013 Inflatable play equipment. Safety requirements and test methods link to external website