Inflatable temporary structures at events

**Your duties as an event organiser**

You are responsible for ensuring that as far as reasonably practicable everyone at the event venue who could be affected by the construction and use of a temporary structure (volunteers, staff and members of the public) are not exposed to risks to their health and are kept safe from harm.

All event organisers erecting inflatables that do not require a Temporary Structure Licence in Islington’s parks must confirm they have read and will abide by the advice set out in this document and will use the checklist in Document 5 before allowing the public to use the inflatable erected as part of their event.

**Planning**

Inflatables are great fun but accidents are not uncommon. There have also been serious incidents where occupied inflatables have blown away due to being improperly secured in windy conditions.

The quality, construction, maintenance and operation of inflatable play equipment can be extremely variable. Buyers, hirers and users should make sure they know what it is they are paying for; things are generally cheap for good reason!

**Hired inflatables erected by third party contractors**

* If you are not putting the structure up yourself, any third parties hired to supply, build, manage and take down a structure for you should be [competent and adequately resourced](http://www.hse.gov.uk/event-safety/getting-started.htm#contractors).
* You should make sure you get a site-specific risk assessment from the contractor not just a generic one. You may need to provide some site information to enable this to happen.
* Plan and work with your contractors to develop safe systems of working and make sure all significant risks on the site are properly controlled, e.g. use of vehicles
* If necessary, the construction area should be cordoned off to prevent entry by unauthorised people.
* Ensure the inflatable has been built to the current British Standard (BS EN 14960). If it has there will be a label on it saying so. If there is no label you may be taking a risk with the safety of those using it (you should check this before hire).
* The British Standard label will tell you when the structure was made, how many people can use it and what is the maximum height users should be.
* Every inflatable should have at least six anchor points, though bigger ones will need more. The operator’s manual supplied with the inflatable will tell you how many there should be.
* All anchor points must be secured, preferably with metal ground stakes at least 380mm in length and 16mm in diameter with a rounded top. Anchor points on the inflatable should have a welded metal 'O' or 'D' ring fitted to the end. If ground stakes cannot be used then a system of ballast using water or sand barrels or tying down to vehicles that will give at least the same level of protection should be used. Each anchor point should have the equivalent of 163kgs to give this. Beware of tripping hazards if you secure in this way.
* Have a good look at the inflatable when it is blown up and before use. You should check:
	+ the site is suitable;
	+ all anchors are secure and in place;
	+ ancillary equipment is in position (e.g. impact-absorbing mats);
	+ there are no significant holes or rips in the fabric or seams;
	+ the correct blower is being used;
	+ the internal air pressure is sufficient to give a firm and reliable footing;
	+ there are no exposed electrical parts and no wear on cables;
	+ plugs, sockets, switches, etc. are not damaged;
	+ the connection tube and blower are firmly attached;
	+ the outer edges of the front step are in line with the centre of each of the front uprights. Under no circumstances should the width of the step be less than this. The whole unit should look symmetrical and those bits that should be upright, should be upright. If it looks misshapen or deformed there may be internal problems which may make bouncing unpredictable;
	+ if there is an electrical blower with the inflatable this must be [tested](http://www.hse.gov.uk/electricity/maintenance/safety.htm) at regular intervals. Make sure the equipment has been recently tested and ask your supplier for proof of this as the law requires electrical equipment to be maintained to prevent danger. The type and frequency of user checks, inspections and testing needed will depend on the equipment, the environment in which it is used and the results of previous checks.
* Before the contractor leaves make sure they inspect the structure. They will then issue an installation report which will incorporate their completed inspection checklist.
* You should be given written guidance regarding the procedures to be followed in the event of adverse weather. As with the use of all temporary structures this guidance should emphasise the need to be aware that weather conditions can change over the course of the day, so monitoring is essential.

**If you are erecting the inflatable yourself**

* Make sure you assess the risks involved with erecting the inflatable and minimise these risks where possible.
* Make sure there is sufficient time and resources available to build and dismantle the structure safely (see relevant points above).
* Use competent staff and brief them before you begin construction.
* The build site should be sufficiently far from services such as overhead power lines.
* Build the structure in accordance with the manufacturer’s instructions.

**Anchorage**

* Anchors are critical to the stability and safety of temporary structures.
* If the wind speed is high enough to make erecting the inflatable difficult, it should not be erected until wind speeds have subsided. If wind speeds are forecast to remain high, it should not be erected at all.
* Loose or sandy soils provide the least resistance when using pegs or stakes and may require special anchors. In these situations, pull-out tests would be expected in order to verify the anchorage resistances.
* You should be aware that underground services run through some of our parks so care needs to be taken when using pegs or stakes.
* Tree roots may be damaged by long stakes used for anchorage so structures should not be erected under tree canopies.
* Where ground penetration is not possible or the resistance provided by the soil is not sufficient to stabilise the structure, heavy ballast weights can be used to withstand uplift forces.
* You should seek specific advice from the manufacturer/supplier of the structure if using ballast weights. Safe wind speed recommendations by the supplier/manufacturer should be adhered to.
* Stakes and ropes near exits or other walking routes should be fenced off or clearly marked to prevent members of the public from walking in to or tripping over them.
* Responsibility for designating walking routes and erection of fencing lies with the event organiser unless an external contractor is involved. In this case responsibility should be established before construction begins.
* Purpose-designed stakes with defined heads and/or eyes for rope attachment are generally preferred since they do not need to project significantly above the surface. This provides sufficient anchorage as well as reducing the risk of tripping. Where necessary, consideration should be given to protecting the heads of any projecting stakes with a suitable padding.

**Change in site conditions**

* Any change in site conditions which may affect the structure’s suitability should trigger a design check for the new conditions.
* Be aware of the weather. BS EN 14960 recommends that the maximum windspeed in which inflatable play equipment should be used outdoors is 38 km/h which is Force 5 on the Beaufort Scale. This kind of force would result in small trees in leaf beginning to sway. The best way to measure this is by using an anemometer.
* Monitor and measure the local weather conditions. In adverse weather conditions, know what to do with the structure to protect its stability and when to evacuate (this should have been discussed with your contractor at sign off).

**Operating instructions (these should be supplied by the manufacturer or supplier of the inflatable but should include the following information at least):**

* Restrict the number of users on the inflatable at the same time to the limit in the manual or on the unit label. Don’t exceed the user height limit given in the manual or on the unit label and keep bigger/older users separated from those that are smaller/younger.
* Ensure users can get on and off safely and that there is safety matting at the entrance in case of falls or ejections. These mats should not be more than 2" in depth.
* Users should not wear shoes, should take their glasses off if they can, and pockets should be emptied of all sharp or dangerous items.
* Users should not eat or drink whilst playing or bouncing
* Anyone obviously intoxicated should not be allowed on; they are a danger to themselves and others.
* Don’t let things get too rough, don’t let users climb or hang onto the walls, and don’t let users try to somersault.
* Keep an eye on the weather and if conditions start to create a dangerous environment (e.g. rain making surfaces slippery) evacuate the inflatable.

Making sure that the users of the inflatable are kept safe from harm is equally important; most injuries come from misuse.

There should be constant supervision when the inflatable is blown up regardless of whether this is provided by the event organiser or the third party.

Please complete the table below when you have finished all the tasks listed and upload the completed document to EventApp at least one week before your event.

|  |  |
| --- | --- |
| TASK | DATE COMPLETED |
| I/We have read this document and all recommendations within will be undertaken |  |
| A copy of the Annual Inspection Certificate for the specific device has been uploaded to EventApp  |  |
| A Risk Assessment covering:* Emergency evacuation (deflation/weather conditions);
* Safe supervision of the inflatable;

has been uploaded to EventApp. |  |
| The HSE/NIAH (Information Sheet 49) guidance document has been read and all relevant recommendations will be undertaken |  |
| The checklists from Document 5 will be completed after erection of the inflatable and a photo of the completed document will be emailed to park.events@islington.gov.uk on the dayWE DO NOT REQUIRE PHOTOS OF YOUR INFLATABLES |  |
| The sign off document for the completed inflatable installation will be obtained from the installer and a photo of the document will be emailed to park.events@islington.gov.uk on the day |  |
| The ‘Declaration of Conformity’ form in Document 5 will be completed and signed and a photo of the completed document will be emailed to park.events@islington.gov.uk on the day |  |