



Safety Note 15

Bonfire and Firework Code

1 Introduction

This advice is intended for displays held at University premises on or around the officially recognised dates within the UK. The Fireworks Act 2003 and the Fireworks Regulations 2004 require greater levels of control than previously on the use of fireworks. This reflects the large increase in complaints from the public relating to noise, neighbourhood safety and general nuisance from fireworks.

For large displays, a competent display operator should be engaged. They should have sufficient knowledge, training and experience to set up the display, operate correctly and clear up after the event. Advice is available in 'Working together on firework displays' (HS(G)123) available from the Health & Safety Services (extension 8888). A further guide 'Giving your own Firework Display' (HS(G)124) is available from the Health and Safety Executive website (www.hse.gov.uk).

The restrictions imposed under the regulations will enable managers to control the unofficial use of fireworks including any individual wishing to store items on University premises. The University Fire Safety Adviser (extension 8282) should be consulted where displays/use of fireworks is being considered.

2 Key points from the Fireworks Regulations

The 2004 FireWorks Regulations make it an offence to:

- Possess adult fireworks (all fireworks except party poppers and sparklers, etc.) in a public place by anyone under the age of 18
- Possess category 4 fireworks (professional display fireworks) by anyone other than fireworks professional. (It is the intention to introduce mandatory training for professionals at a later date)

The Regulations also introduce the following:

- Supplies must be purchased from licensed suppliers apart from during the following traditional periods:
 - November 5 (3 weeks before and 5 days after)
 - New Year's Eve (December 26 to 1 January)
 - Chinese New Year (3 days before, including the day of Chinese New Year)
 - Diwali (3 days before, including Diwali)
- Creation of a curfew on firework use – fireworks must not be let off between 11pm and 7am, with the exception of the following, when the time at which the curfew starts is the later time stated:
 - November 5th - 12 midnight
 - New Year's Eve - 1am
 - Chinese New Year - 1am
 - Diwali night – 1 am

- There is a restriction upon the noise levels of category 3 fireworks - noise levels of 120 decibels must not be exceeded.
- It is a criminal offence to set off fireworks in the street, or be caught in possession of fireworks if under the age of 18.

Further restrictions are imposed under the Fireworks (Safety) Regulations 1997 concerning the type of fireworks that may not be supplied to the general public, for example:

- Aerial shells, aerial maroons, shells-in-mortar, bangers, mini-rockets and fireworks of erratic flight (squibs, jumping crackers, helicopters)

Fireworks sold to the public must comply with the following standards: Fireworks (Safety) Regulations 1997 (as amended), Fireworks Regulations 2004 and the British Standard BS 7114.

4 Fireworks on campus

Approval to hold an event involving fireworks must sought from the following and in compliance with Safety Guide 33 (Event Management):

- Head of School/Department/Hall/Directorate
- event.approval@reading.ac.uk.

Organisers should refer to the diagram shown below for the recommended site plan. There are additional key points that should be taken into account.

- Displays should be conducted downwind of the spectators
- Once set up the firing area must not be left unattended
- The site must be free of dry, cut and uncut grass and other readily combustible materials
- Avoid overhead obstructions, for example, overhead trees, adjoining buildings and overhead power cables
- Notify neighbours of the event, especially where animals or institutions are likely to be affected.

4.1 Storage of fireworks

The restrictions imposed by the Fireworks Regulations 2004 outline the need for suppliers to be licensed for storage. University premises must not be used to store fireworks, other than caps, cracker snaps and party poppers (which can be supplied to persons 16 and over) without checking the legal requirements for storage and obtaining the approval of the University Fire Safety Adviser. Where an event is being organised and approval has been obtained, then external separate storage may be required. All fireworks must be stored in secure, metal or wooden containers.

Suppliers will notify licensing authorities about transactions of fireworks in excess of 50kg explosive content. This limit must not be exceeded and timescales of storage should comply with any legislative requirement.

4.2 Site facilities

Appropriate fire fighting equipment should be immediately available on site. Advice on the number and type of extinguisher to be provided can be obtained from the Fire Safety Adviser, extension 8282. The number of stewards/attendants on site should be in accordance with Safety Guide 33, and they should all be familiar with the emergency procedures and be competent to use the fire fighting equipment provided. An emergency services route should be provided that must be kept clear and readily accessible. A public address system or loud speaker should be considered to ensure that instructions are clearly heard.

At least one first aid point with a qualified first aider should be provided on site. This should be clearly indicated and accessible to the emergency services.

Routes of access into and exits from the site should be clearly indicated. At least two exit routes should be provided that offer alternative routes of escape. The direction of the wind will need to be considered and layout of the site adjusted to take account of any changes.

4.3 Setting up and firing

The Fireworks Regulations 2004 are specific in the categories of firework that can be used at a private party. The more hazardous type, Category 4, should only be used by a 'fireworks professional'. It is therefore essential that any fireworks purchased are obtained through a licensed supplier.

Substantial outdoor clothing should be worn that has flame retardant abilities, example wool, approved flame retardant material i.e. 'Nomex'. Footwear should be either strong leather boots or shoes.

Every precaution must be taken to ensure that fireworks do not discharge into the spectators. Operating instructions supplied with the fireworks issued by the manufacturers should be complied with. Any items that appear damaged or packaging suspect must not be used.

Instructions should contain advice upon fireworks that have failed to ignite, as a minimum they should be left for 30 minutes and then immersed in a bucket of water.

4.4 Clearing up after the display

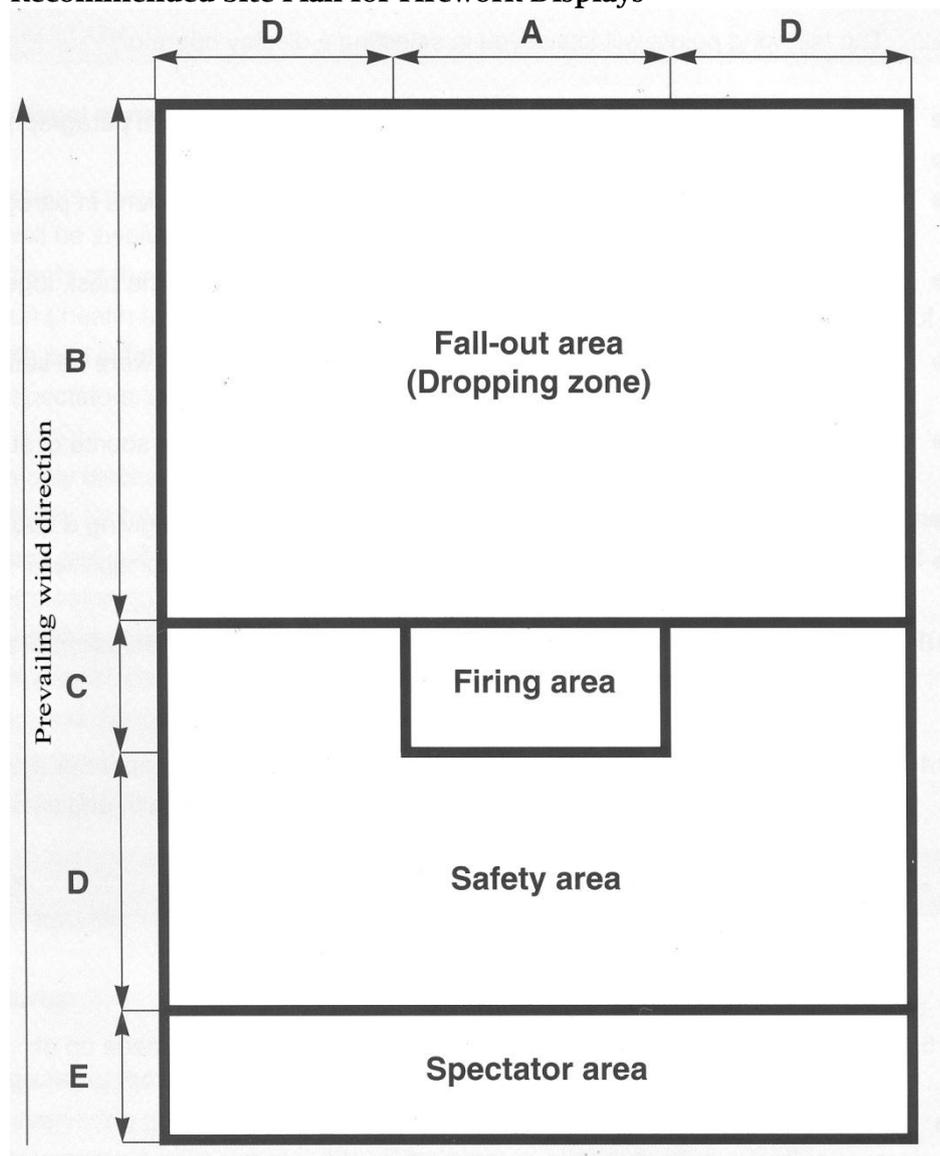
The firing area and fall out areas should be kept free of spectators until the display operator has cleared, located and retrieved any fireworks that have misfired. A careful check should be carried out for partially spent fireworks and ensure the bonfire has been extinguished before leaving the site. Arrangements should be made with Security Services to monitor the general area during the night to ensure further small fires do not break out.

A further check by the organisers of the event for spent fireworks and that the bonfire is extinguished should be made first thing the following day.

This advice is intended for displays held on or around 5th November, or when fireworks are used at larger outdoor events. Detailed advice is available in "Working together on firework displays" (HS(G)123) - copy held in Health and Safety Services (extension 8888). Further advice is available from the University Fire Safety Adviser (extension 8282).

For large displays, it is preferable to employ an external competent display operator with sufficient knowledge, training and experience to set up the display, ignite the fireworks, and clear up afterwards. Safety Guide 33 (Event Management) should be consulted. All contractors must be prepared to comply with the above HSE guidance. However, if a small number of fireworks and/or minor bonfire are set up for a private party then the following simple rules should be followed.

Recommended Site Plan for Firework Displays



	A	B	C	D	E
Maximum distance (metres)	50 approx	100 *	25	50 *	As required to prevent overcrowding

* The distances in columns B and D may have to be modified for certain types and sizes of firework.

3 Bonfires on campus

Permission to have a bonfire on campus as part of an event must be obtained via the event notification procedure from event.approval@reading.ac.uk. One person should be responsible for setting up the bonfire including liaison with Grounds (who will be notified through the above email) and any individual organising fireworks for the same event. Substantial outdoor clothing should be worn that has flame retardant abilities, for example wool, approved flame retardant material i.e. 'Nomex'. Footwear should be either strong leather boots or shoes. The responsible person should have a first aid facility immediately available together with a fire blanket. A risk assessment for each of the individual activities must be completed and forwarded to Health & Safety Services for approval.

A bonfire should be located at least 15 metres from other buildings, roads and public rights of way and 50 metres minimum from flammable/dangerous materials. This would include dangerous substances stores, petrol/fuel/liquefied petroleum gas (LPG) overhead power lines and access points to underground services.

Before the bonfire is ignited precautions should be taken to ensure no stray sparks or embers could ignite adjacent fireworks. A thorough examination of the bonfire should be made prior to ignition to ensure children/animals/vagrants are not inside the fire stack. The method of lighting the bonfire should not involve the use of accelerants i.e. petrol/paraffin or solvents. Lit papers or fire lighters distributed around the fire stack will ensure an even burn.

It is essential that account is taken of the wind direction and the bonfire located down wind of the spectators.

Fire extinguishers should be immediately available together with a signed first aid point. Access routes for the emergency services should be considered and maintained in the planning stage of the event.

Health & Safety Services
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