



GUIDANCE

Explosives Licensing and Storage



**TRADING
STANDARDS**

EXPLOSIVES REGULATIONS 2014

KENT COUNTY COUNCIL IS RESPONSIBLE FOR THE LICENSING OF PERSONS WHO STORE UP TO 2000KG OF EXPLOSIVES AT PREMISES WITHIN THE COUNTY.

HAZARD TYPES



Explosives are classified into Hazard Types. Most fireworks and small arms ammunition are Hazard Type 4 and can be identified as the outer boxes will be marked with the symbol 1.4G in an orange diamond:

Some larger fireworks are classed as Hazard Type 3 and are marked 1.3G. **Storage of Hazard Type 3 fireworks may reduce the total quantity that is permitted to be stored depending on the licence type and separation distances available on site (see below).** If in doubt about the classification of your fireworks, please consult your supplier.

QUANTITIES

The quantities of explosives that may be stored are referred to as net explosive content (NEC). This is the weight of the actual explosive contained within an article, not including any casings and packaging etc. These quantities are usually marked on the outer packaging, and for fireworks should be marked on each product.

TYPES OF LICENCE

Under the 2014 Regulations there are two storage licences. The licence that you require relates to separation distances and the amount that you store. A separation distance is the minimum distance between the location where the explosives are stored, and other specified places where people may be present (see separation distance tables).

A licence where no separation distances apply permits storage of up to:

- 250kg of Hazard Type 4 (HT4) explosives; or
- 25kg of Hazard Type 3 (HT3) explosives; or
- 25kg of a combination of HT3 and HT4 explosives

A licence where separation distances apply is for storing quantities up to 2 tonnes.

Tables 1-11 in schedule 5 to the Regulations provide all relevant separation distances.

For storage of more than **2000 kg** of explosives the Health and Safety Executive are the licensing authority.

For storage of up to 2000kg of explosives, if some of the explosives are either smokeless powder or percussion caps, or require an explosives certificate, or the explosives are stored by a person who is a registered firearms dealer, the Police are the licensing authority.

SEPERATION DISTANCES

| Hazard Type 3 explosive (distance in metres) | | | |
|--|---------------------------------------|---------------------------|--|
| Quantity of explosives (kg) | Footpath, lightly used road, waterway | Minor road, railway line* | Major road, place of public resort, buildings† |
| 0.1 – 25 | 0 | 0 | 0 |
| 25 – 50 | 8 | 12 | 23 |
| 50 – 75 | 8 | 13 | 25 |
| 75 – 100 | 10 | 15 | 29 |
| 100 – 150 | 11 | 17 | 33 |
| 150 – 200 | 12 | 19 | 37 |
| 200 – 300 | 14 | 21 | 42 |
| 300 – 400 | 16 | 24 | 47 |
| 400 – 450 | 16 | 24 | 47 |
| 450 – 500 | 17 | 25 | 50 |
| 500 – 600 | 17 | 26 | 51 |
| 600 – 700 | 18 | 27 | 53 |
| 700 – 800 | 18 | 27 | 54 |
| 800 – 900 | 18 | 28 | 55 |
| 900 – 1000 | 21 | 32 | 63 |
| 1000 – 1100 | 23 | 35 | 70 |
| 1100 – 1200 | 24 | 36 | 71 |
| 1200 – 1300 | 24 | 36 | 72 |
| 1300 – 1400 | 24 | 37 | 73 |
| 1400 – 1500 | 25 | 37 | 74 |
| 1500 – 1600 | 25 | 38 | 75 |
| 1600 – 1700 | 25 | 38 | 76 |
| 1700 – 1800 | 26 | 39 | 78 |
| 1800 – 1900 | 26 | 40 | 79 |
| 1900 – 2000 | 27 | 40 | 80 |

| Hazard Type 4 explosive (distance in metres) | | | |
|--|---------------------------------------|---------------------------|--|
| Quantity of explosives (kg) | Footpath, lightly used road, waterway | Minor road, railway line* | Major road, place of public resort, buildings† |
| 0.1 - 250 | 0 | 0 | 0 |
| 250 – 300 | 1 | 1 | 1 |
| 300 – 340 | 1 | 1 | 2 |
| 340 – 370 | 1 | 2 | 3 |
| 370 – 400 | 1 | 2 | 4 |
| 400 – 450 | 2 | 3 | 5 |
| 450 – 500 | 2 | 3 | 6 |
| 500 – 550 | 2 | 4 | 7 |
| 550 – 650 | 3 | 4 | 8 |
| 650 – 700 | 3 | 5 | 10 |
| 700 – 750 | 4 | 6 | 11 |
| 750 – 800 | 4 | 6 | 12 |
| 800 – 900 | 4 | 7 | 13 |
| 900 – 950 | 5 | 7 | 14 |
| 950 – 1 000 | 5 | 8 | 15 |
| 1 000 – 1 100 | 5 | 8 | 16 |
| 1 100 – 1 150 | 6 | 9 | 17 |
| 1 150 – 1 200 | 6 | 9 | 18 |
| 1 200 – 1 300 | 6 | 10 | 19 |
| 1 300 – 1 350 | 7 | 10 | 20 |
| 1 350 – 1 400 | 7 | 11 | 21 |
| 1 400 – 1 450 | 7 | 11 | 22 |
| 1 500 – 1 550 | 8 | 12 | 23 |
| 1 550 – 1 600 | 8 | 12 | 24 |
| 1 600 – 1 650 | 8 | 13 | 25 |
| 1 650 – 1 700 | 9 | 13 | 26 |
| 1 700 – 1 800 | 9 | 14 | 27 |
| 1 800 – 1 850 | 9 | 14 | 28 |
| 1 850 – 1 900 | 10 | 15 | 29 |
| 1 900 – 2 000 | 10 | 15 | 30 |

FIREWORKS SUPPLIED OUTSIDE CERTAIN FESTIVAL PERIODS

The Fireworks Regulations 2004 only permit sales of fireworks during the following periods:

- 15 October to 10 November
- 26 December to 31 December
- On the first day of Chinese New Year and the 3 days immediately preceding
- On the day of Diwali and the 3 days immediately preceding

If you wish to sell fireworks outside these periods, an all-year sales fireworks licence is also required. This is available from Kent County Council and is renewable annually at a cost of £500. This is an addition to the storage license.

STORAGE IN RETAIL SALES AREAS

The amount of fireworks that can be stored in a retail sales area is restricted by the floor size (m²). No individual display cabinet may contain more than 12.5Kg NEC.

Warning notices must be displayed (A3 size) stating:-

- It is illegal to sell category F2 fireworks or category F3 fireworks to anyone under the age of 18; and it is illegal for anyone under the age of 18 to possess category F2 fireworks or category F3 fireworks in a public place.

Fireworks Regulations 2004 and Pyrotechnic Articles (Safety) Regulations 2015

No smoking signs must be displayed in prominent positions at entrances to the premises and internally.

All display cabinets must be kept closed and locked except when storing or removing fireworks by staff.

Suitable fire extinguishers should be available near to the fireworks storage area, but not inside.

Only HT4 fireworks can be displayed in shop floor cabinets. Dummy products must be used to display HT3 fireworks.

MAXIMUM QUANTITIES IN SHOP FLOOR AREAS

| Total sales floor area (square metres) | Maximum quantity of fireworks that may be kept under a licence requiring no separation distance(Kg NEC) | Maximum quantity of fireworks that may be kept under a licence requiring a separation distance of more than 0m (Kg NEC) |
|--|---|---|
| Up to 20 | 12.5 | 20 |
| Up to 40 | 15 | 25 |
| Up to 60 | 20 | 35 |
| Up to 80 | 25 | 50 |
| Up to 100 | 30 | 60 |
| Up to 150 | 35 | 70 |
| Up to 200 | 40 | 80 |
| Up to 250 | 45 | 90 |
| Up to 300 | 50 | 100 |
| Up to 350 | 55 | 110 |
| Up to 400 | 60 | 120 |
| Up to 450 | 65 | 130 |
| Up to 500 | 70 | 140 |
| 500 and over | 75 | 150 |

STORAGE ADJOINING OR IN THE SAME BUILDING AS DOMESTIC/SLEEPING ACCOMMODATION

If more than 75kg of HT4 fireworks are to be kept in a store within or adjoining a building containing domestic/sleeping accommodation, suitable steps must be taken to protect residents of those premises in the event of a fire.

The following precautions **must** be taken:

- a) A fire detection system must be installed in the shop with either a linked alarm installed in the domestic accommodation, or an effective sprinkler system fitted in the fireworks store;
- b) The domestic parts of the building must have access/exit routes that are fire- separated from those used for the pyrotechnic store;

- c) There must be suitable fire separation between the pyrotechnic store and the domestic accommodation; and
- d) The store must be closed off and secured from the domestic part of the property in order to prevent unauthorised access and to help prevent accidental introduction of sources of ignition.

As separation distances apply, no more than 25kg of HT3 fireworks (or a mixture of HT3 and HT4) may be stored in a building adjoining domestic sleeping accommodation.

OTHER STORAGE AREAS

Where explosives are kept in a warehouse (or similar room/building) that holds significant quantities of other combustible materials, the storage should be in either:

- e) An ISO transport container (or similar fully enclosed metal structure)
- f) Storage cupboards or cabinets
- g) A building or room with a structural partition
- h) A wire mesh screen or cage

Fireworks should normally be kept in their closed transit cartons and, as far as possible, not emptied into cupboards or other storage containers. The transit cartons are designed to offer a degree of fire protection to the fireworks, and can prevent other damage from occurring in storage. Any cupboards or other storage provided should be of sufficient size to take closed firework cartons.

Some larger fireworks are now packaged within a wire mesh known as “pyromesh”. This packaging is designed to reduce the hazard type of the fireworks inside to 1.4G/HT4 when **kept in that manner**. It is very important that any such items are kept in the closed mesh and closed cartons, otherwise they revert to the higher 1.3G/HT3 hazard type.

STORAGE IN ISO CONTAINERS

Steel ISO containers are a suitable means of storing fireworks, subject to meeting certain safety requirements.

Generally these containers should be wood-lined, and cartons stored in them must be kept at least 150mm from the side walls.

The store must also fitted with suitable lightning protection to an approved standard **unless** the store is temporary or it contains no more than 75Kg NEC of HT4 fireworks

The panels and doors of the container should be electrically-bonded with straps of at least 50mm². The container should have two earthing points connected to earth rods at opposite corners.

Ideally a permanent container store should be

- Bolted down for security
- Fitted with heavily-shrouded locks
- Have a suitable low voltage alarm fitted.

Containers should never be stocked to a level where there is limited space for access inside. This would increase the risk of a mass explosion in case of fire.

In most cases the usual 1.4G hazard logo must be displayed, unless it is assessed to be an unacceptable risk of theft in so doing. In this case the licensee should notify the Fire and Rescue Service of the location of the container and the types and quantity of explosives being stored.

RISK ASSESSMENT AND CONTROL MEASURES

It is a legal requirement for anyone storing explosives to conduct and record a risk assessment for the storage under relevant legislation.

This should examine and deal with all reasonably foreseeable hazards and risks associated with having explosives on the premises, how they are kept and handled, and the likelihood of persons being affected by them in case of fire or explosion.

HSE provides a template document for this purpose for retail premises, which can be downloaded from the HSE website.

Further advice and guidance for specific premises can be obtained by **contacting Kent Trading Standards** on the following telephone number:

03000 412020