

# **GUIDANCE** Explosives Licensing and Storage



ON 1ST OCTOBER 2014 THE MANUFACTURE AND STORAGE OF EXPLOSIVES REGULATIONS 2005 ARE REPLACED BY THE EXPLOSIVES REGULATIONS 2014. UNDER THE 2014 REGULATIONS, 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 by the symbol, 1.4G in an orange diamond, which will be marked on the outer box.

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 separation distances**). 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. If this is not available, the NEC is commonly taken to be 25% of the gross weight of fireworks/pyrotechnics.

# **TYPES OF LICENCE**

Under the 2014 Regulations there are no longer registrations but 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

This is a direct replacement for registrations but note that the amount of HT3 that may be stored is reduced from 100kg to 25kg under this licence.

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

There is no distinction between the Hazard Types providing that the relevant separation distances are adhered to. This is no change to the previous licence.

# LICENSING AUTHORITY

#### Kent County Council

Up to 2000kg explosives

#### Police

- Up to 2000kg explosives if some of the explosives are;
- smokeless powder
- percussion caps
- require an explosives certificate
- stored by a person who is a registered firearms dealer

#### Health and Safety Executive

Over 2000kg explosives

# 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 required. This is available from Kent County Council and is renewable annually at a cost of £500.

# **STORAGE IN RETAIL SALES AREAS**

The amount of fireworks that can be stored in a retail sales area is restricted by the floor size (m<sup>2</sup>). No individual display cabinet may contain more than 12.5Kg NEC.

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

- It is illegal to sell adult fireworks or sparklers to persons under 18 years
- It is illegal for anyone less than 18 years old to possess adult fireworks in a public place

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 staff need to access them to sell or stock fireworks.

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

# 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 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 be 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 50mm<sup>2</sup>. 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 numbers:-

East Kent - 03000 412020 West Kent - 03000 412000

# **SEPARATION DISTANCES**

Hazard Type 3 explosive (distance in metres)				
Quantity of explosives (kg)	Footpath or lightly used road	Minor road or railway	Major road or building	
0.1-25	0	0	0	
25-30	7	10	20	
30-40	7	11	22	
40-50	8	12	23	
50-60	8	12	25	
60-70	9	13	26	
70-80	9	14	27	
80-90	9	14	28	
90-100	10	15	29	
100-150	11	17	34	
150-200	12	19	37	
200-250	13	20	40	
250-300	14	21	43	
300-350	15	22	45	
350-400	16	23	47	
400-450	16	24	49	
450-500	17	25	50	
500-550	17	26	52	
550-600	18	27	54	
600-650	18	28	55	
650-700	19	28	56	
700-750	19	29	58	
750-800	20	29	59	
800-850	20	30	60	
850-900	20	31	61	
900-950	21	31	62	
950-1000	21	32	64	
1000-1100	22	33	66	
1100-1200	22	34	67	
1200-1300	23	35	69	
1300-1400	24	36	71	
1400-1500	24	36	73	
1500-1600	25	37	74	
1600-1700	25	38	76	
1700-1800	26	39	77	
1800-1900	26	39	79	
1900-2000	27	40	80	

Hazard Type 4 explosive (distance in metres)						
Quantity kg (NEC)	Footpath or lightly used road	Minor road or railway	Major road or building			
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	5	9			
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			
950-1000	5	8	15			
1000-1100	5	8	16			
1100-1150	6	9	17			
1150-1200	6	9	18			
1200-1300	6	10	19			
1300-1350	7	10	20			
1350-1400	7	11	21			
1400-1450	7	11	22			
1450-1550	8	12	23			
1550-1600	8	12	24			
1600-1650	8	13	25			
1650-1700	9	13	26			
1700-1800	9	14	27			
1800-1850	9	14	28			
1850-1900	10	15	29			
1900-2000	10	15	30			

