A guide to Fire Extinguishers

A question we are often asked at EquiProtect is how many extinguishers do I need, where should they be located and what type should they be.

Firstly, extinguishers manufactured to current standards should be predominately red and may have a colour-coded area, sited above or within the operating instructions, denoting the type of extinguisher (see the colours below) and the classes of fire they are suitable for. Older extinguishers will have been manufactured with the body of the extinguisher painted entirely in a single colour. These older extinguishers remain acceptable until they are no longer serviceable.

How many Fire Extinguishers

Whilst there are no hard and fast rules on how many and what type you should have, these factors should be considered in the fire risk assessment for the premises. As a guide at least one water-based extinguisher should be placed to cover per 200m2 of floor space or in a small yard not exceeding 100m2 one water-based extinguisher would be suitable. If there are one or more floors, then a minimum of 2 extinguishers per floor would be required.

The siting of Extinguishers

Should be considered before purchasing, if indoors they should be located at fire exit points where they are easily located in the event of an emergency, if the location is dusty then a protective extinguisher cover should be used to prevent damage to the operating or discharge points of the extinguisher. If outdoors they should be protected from the elements either by using protective covers or purpose designed fire extinguisher boxes. Water based extinguishers will freeze in low temperatures so consult with the supplier before purchasing, (EquiProtect can supply extinguishers which have an additive mixed with the water to prevent freezing) Ensuring the extinguishes are protected from the elements will prolong their life and ensure affectability if needed. Position them at either exit points or in a prominent visual place where they can be reached easily, a travel distance not exceeding 25m is a good rule of thumb to any extinguisher. Do not place near stable doors where inquisitive horses can reach them, this is something we have seen on many occasions, the extinguishers become damaged from horses biting them.

Before purchase your extinguishers consider your risks through a fire risk assessment, risks such as electrical, fuel and high fire loading will all factor what type of extinguishers you need and how many.

Straw, bedding or hay

These fires fall under Class A fires, this is a fire involving wood, textiles, paper etc so a water extinguisher is the perfect choice for this type of risk, water extinguishers are ideal for around the stable blocks, feed barns and bedding stores.

Fires involving electricity

Will need a non-water-based extinguisher such as a Carbon Dioxide or Dry Powder, both these have safety considerations, Carbon Dioxide is very noisy and produces a large cloud of white gas similar to dry ice on activation, so discharging may spook livestock. Dry Powder is not as noisy but also discharges a large cloud of powder much like flour which can not only spook livestock but linger in the air impairing vision, dry powder is also not pleasant to breathe in, it is not harmful but will induce coughing and will also cause irritation to eyes. Dry powder is a class ABC

and Electrical so will cover a range of fires but if electrical fires are to be covered then Carbon Dioxide is by far the cleaner option.

Areas where there are fuels present

Such as petrol, diesel and oils then either a foam or dry powder extinguisher should be considered, as already mentioned dry powder has its disadvantages so foam may be the best for these risks, however if this is a workshop environment where gas cylinders such as propane are present then dry powder would be a better choice as powder is suitable for Class C fires which are Gasses, your fire risk assessment should identify your hazards and the outcome will decide the most appropriate extinguisher for the risk.

Vehicles

Should ideally carry a small extinguisher, most equestrian vehicles have a range of fire loadings so to cover all the most suitable is a Dry Powder ABC and Electrical, this will cover Class A, wood, paper, textiles, Class B fuels and Class C gasses and well as being suitable for fire involving electrics, a 2kg Dry Powder fitted in the cab is the best location but also give thought to accommodation in lorries, if there is living space and or cooking consider fitting a second in this space as well as a fire blanket.

Fire Blankets

Should be fitted in any kitchen areas on yards where cooking may take place but also do not forget they can be used if someone's clothing is on fire, STOP DROP and ROLL, the blanket can be used to damp down flames on clothing very effectively.

Maintenance

Fire Extinguishers and Fire Blankets must be maintained on an annual basis by a competent person and checked at a minimum of monthly by the responsible person. The responsible person should check the extinguisher is in the correct location, pin and tag are in place, if appropriate the pressure gauge is in the green (Carbon Dioxide do not have a gauge) and the hose or horn is in place and that they are within their service date which will be found on the service label located on the body of the extinguisher. If tags or pins are found to be missing they should be checked by a competent person likewise after any use accidental or other they must be serviced by a competent person. Water, Foam and Dry Powder all have a 5-year discharge life, so every 5 years should be either discharged and refilled or replaced. Carbon Dioxide have a 10-year life after which they must be discharged and hydrostatically tested and refilled or replaced.

Training

Only people who have received training on how to use fire extinguishers safely should attempt to tackle a fire, your Fire Risk Assessment will identify how many people and frequency of training.

Classification of fires

Class A Fires involving solid materials such as hay, straw, wood shavings, paper, cardboard or textiles.

Class B Fires involving flammable liquids such as petrol or diesel fuel oils.

Class C Fires involving gases.

Class D Fires involving metals (unlikely to be found at stables, other than in vehicle components).

Class F Fires involving cooking oils such as in kitchens with deep-fat fryers.

Electrical fires do not have a classification as such, they fall under fires involving electricity.

Colour Codes for Fire Extinguishers

Type	BS EN 3 Colour Code	Fire Class
Water	Signal Red	A
Water Mist	White and Red	A, F, (suitable for B and C, although without formal marking), electrical if dielectrically tested)
Foam	Red with a cream panel above the operating instructions	A, B, electrical if dielectrically tested
Dry Powder	Red with a blue panel above the operating instructions	A, B, C, electrical
Carbon Dioxide	Red with a black panel above the operating instructions	B, electrical
Wet Chemical	Red with a yellow panel above the operating instructions	A, F, some are also suitable for B class fires
Specialist Powder	Red with a blue panel above the operating instructions	D

Further Advise

Should you need further advice on Fire Risk Assessments, Fire Extinguisher Servicing or Sales, Signs or Fire Safety Training please feel free to contact us through our website or info@equiprotect.co.uk