

Bedfordshire Fire and Rescue Service: Arson Prevention Advice for Businesses

The nature of arsons in businesses

The majority of arsons on business premises occur out of hours when the site is unoccupied. Many of the arsons are 'opportunistic' in nature as offenders who commit arson offences rarely bring anything with them that could be used to commit the offence other than a source of ignition (usually a lighter or box of matches). They thus require other items to be readily available on site to provide them with the opportunity to commit the offence. To commit an offence of arson they will need access to combustible materials to provide fuel for the fire and will also make use of any items they can use to carry the combustible materials around the site to vulnerable parts of the site where they can start a fire. They will also need opportunities to gain access to the site and/or access to the buildings on the site.

Reduce the opportunity for an offender to start a fire

Combustible waste management

Effective management of the combustible waste on site can reduce the opportunity for an intruder to utilise combustible waste in an arson attack. Skips, waste bins and wheelie bins are a ready source of combustible material. If these are not kept secure out of hours the combustible waste can be removed and used as fuel for a fire. It is often the case that insecure wheelie bins are moved around the site by intruders to use as climbing aids to gain access to roof areas or to transport larger quantities of combustible waste to vulnerable parts of the site in order to set a fire.

Ideally the skips and wheelie bins should be kept in a secure compound at least eight meters away from the buildings on site. If it is not possible to have a secure compound then consideration should be given to chaining the wheelie bins to each other and to a secure fixture such as a wall or floor mounted anchor point to prevent intruders moving them around the site. If it is not possible to install a secure anchor point then even just chaining the wheelie bins to each other will make it more difficult for intruders to move them around the site.

If the skips or wheelie bins are kept near to the buildings on site any fire set in those skips or wheelie bins could spread to the nearby buildings. If they cannot be kept away from the buildings they should be kept adjacent to a part of the buildings that is of brick construction without any vulnerabilities such as doors, windows, low roofs etc. that could catch fire if the contents of the skips or wheelie bins were set alight.

Ideally the wheelie bins should be made of metal as they are better able to withstand the temperatures generated if their contents are set on fire and should be able to contain all but the most intense of fires. If the contents of a plastic wheelie bin are set on fire the bin itself is likely to catch fire once the temperatures inside exceed the ignition threshold of the plastic. Once this occurs the plastic will burn fiercely, thus increasing the risk of the fire

spreading. The burning plastic will also give off toxic fumes that may cause harm to anyone who inhales those fumes.

Ideally the skips and wheelie bins will have lockable metal lids that should be locked out of hours. This will make it harder for intruders to open the skips and wheelie bins in order to remove any combustible waste to use as fuel for a fire or simply set the contents of the skips or wheelie bins on fire. Even if a metal lid is forced open and the contents of the skip or wheelie bin set on fire the metal lid will not melt and provide further fuel to the fire. Once the plastic lids catch fire they do tend to burn fiercely and increase the risk of the fire spreading.

Ideally the skips and wheelie bins will be emptied regularly and all combustible waste removed from site. The skips and wheelie bins, especially those containing the recycling materials such as paper and cardboard, should not be allowed to become so full that they cannot be closed and locked as this makes them particularly attractive and vulnerable to an arsonist.

Similarly any bulky combustible waste such as wooden pallets, dismantled wooden sheds, fences and furniture etc. that cannot fit into the skips or wheelie bins should be kept somewhere secure out of hours and removed from the site as soon as possible.

Ideally any external waste bins on the site should also be made of metal, emptied regularly and fixed in situ to prevent them being moved around the site by intruders to use as climbing aids to gain access to roof areas or to transport combustible waste to vulnerable parts of the site in order to set a fire.

If it is not possible to have the external waste bins fixed in situ then consideration should be given to collecting them up and chaining them to each other and to a secure fixture such a wall or floor mounted anchor point out of hours.

Combustible external fixtures and fittings

Poorly maintained combustible external fixtures and fittings can provide intruders with access to combustible materials. Examples include broken fence panels, deteriorating wooden sheds and outbuildings, insecure wooden trellises, insecure plastic guttering and drainpipes etc. Such items provide a ready source of combustible material to intruders to use as fuel for a fire.

Mobile offices/storerooms can be particularly vulnerable to an arson attack due to their combustible nature. Mobile offices/storerooms often have slated skirting underneath which does provide intruders with the opportunity to push combustible materials through the gaps which they can then set on fire. These vulnerabilities can be reduced by ensuring that the mobile offices/storerooms are maintained in good condition and fitted with solid sheet skirting that will prevent the area underneath them being used as storage space and reduce the potential for combustible rubbish and other items to accumulate. This will also prevent intruders from placing combustible materials underneath them in order to set a fire.

Letter box and vented external doors

The conventional letter box presents an easy opportunity for an arsonist to introduce lighted combustible materials into a building. Ideally the business will have an arrangement with the Post Office that only has mail delivered during working hours. This arrangement ensures that any mail deliveries are given direct to the business reception and in effect negates the need for a letter box. If that is not possible then an external letter box should be installed and the conventional letter box sealed to eliminate the opportunity for an arsonist to introduce lighted combustible materials into a building via a conventional letter box. If that is not possible a metal container or a specially designed arson proof letter box or bag should be fitted on the inside of the letter box to prevent any lighted combustible materials that are pushed through the letter box setting a fire in the building.

External vented doors such as those fitted on boiler rooms also present an easy opportunity for an arsonist to introduce lighted combustible materials into a building. Ideally a fine wire mesh grill should be fitted over the vents on the inside of the door. This will prevent combustible waste being introduced into the room via the vents without interfering with the function of the vents which is to provide ventilation for the equipment inside the room.

Management of external ancillary materials

Effective management of external ancillary items can reduce the opportunities for intruders to utilise those items in an arson attack. Furniture such as benches, chairs and tables and other items that are left outside out of hours could be transported around the site by intruders to use as climbing aids to gain access to the roof areas or to be used as fuel for a fire. Consideration should be given to putting these items away or at least securing them in situ out of hours to prevent them being used as described above. Ideally they will be locked away in a secure store but if this is not possible then chaining them to a secure external floor or wall mounted anchor point or even to each other will make it much harder for intruders to move them around the site.

Flammable materials

All flammable materials such as solvent based paint, petrol, flammable chemicals etc. should be locked away in a secure store out of hours to prevent intruders using them as fuel for a fire.

If the business heating system uses oil, gas or liquid petroleum gas that is stored on site the containers for the fuel should be robust and secure to prevent unauthorised access to the contents. Ideally the containers will also be kept in a secure compound and the vulnerable parts of the system such as external meters and pipes should be protected to prevent them being vandalised and used as a ready supply of fuel for a fire.

If the business does have external liquid fuel containers they should ideally be surrounded by a 'bund' wall with a suitable 'bund' lining that is resistant and impermeable to the liquid fuel being stored to contain any leakages from the containers.

