

# KEEP YOUR BUSINESS IN BUSINESS

INTRODUCTION TO KYBIB

YOUR FIRE RISK ASSESSMENT

GUIDE FOR YOUR INITIAL  
FIRE RISK ASSESSMENT

GUIDE FOR FIRE RISK  
ASSESSMENT REVIEWS

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MAINTENANCE & TESTING/  
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**BUSINESS BEST PRACTICE**  
FIRE REDUCTION • CRIME REDUCTION

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CONTINGENCY PLANNING  
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VERSION 4: 1/2007

## LEGAL

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The information contained in this Handbook is for general guidance on matters of fire safety only. The application and impact of laws can vary widely based on the specific facts involved and you are advised to seek further specialist advice if you are at all uncertain as to their application in relation to your business. Given the changing nature of laws, rules and regulations, and the inherent hazards of electronic communication, there may be delays, omissions or inaccuracies in the information contained in this Handbook.

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# BUSINESS BEST PRACTICE – FIRE REDUCTION

## GOOD PRACTICE

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By fulfilling some or all of these categories your workplace will be a safe place to work. It will also be more likely to remain in business as a place of work.

### i. Fire Routines

- ▶ Are Fire Routine notices clearly displayed throughout the workplace detailing what to do in fire?
- ▶ Do you have an adequate emergency/evacuation plan and have you carried out a fire drill?
- ▶ Fire Wardens should monitor fire safety arrangements and prevent fires occurring.

### ii. Emergency Exits and Routes

- ▶ In the event of a fire can everyone turn their back on the fire and evacuate to a place of safety?
- ▶ Are door fastenings on exit routes and final exits easily openable?
- ▶ Are all fire resisting structures being maintained i.e. staircase, doors, etc?
- ▶ Are all the self closing mechanisms on fire resisting doors working correctly?
- ▶ Are all exit routes and exits adequately signed, illuminated and unobstructed?
- ▶ Has the emergency lighting system been tested?

### iii. Firefighting Equipment

- ▶ Are there sufficient extinguishers and hose reels and have they been tested/serviced and can they be easily seen?
- ▶ Have sufficient staff been trained in the use of firefighting equipment?

### iv. Fire Detection / Fire Alarm Equipment

- ▶ Does the fire alarm work and has it been tested?
- ▶ Is the fire alarm system maintained regularly by a competent person?
- ▶ Does everyone know how to operate the fire alarm and the action they should take upon hearing it?

### v. Fire Evacuation

Fire warning systems in the 'workplace' range from electrically operated automatic fire alarm systems, incorporating the latest technology, to hand gongs, or even the human voice. However, even the most advanced fire warning system is useless if the occupants of the building fail to respond when it actuates.



**A clear policy on fire evacuation for your premises should already be in place...check that all of the following points have been considered. If you haven't formulated such a strategy yet, start today..... before it's too late!**

# BUSINESS BEST PRACTICE – FIRE REDUCTION

## STAFF TRAINING

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Irrespective of whichever system is employed, there is a legal obligation placed on employers by the responsible person by the Regulatory Reform (Fire Safety) Order 2005 (FSO) to ensure that their staff receive adequate training in what action is to be taken, if they discover a fire, or the fire alarm sounds indicating that fire has broken out. Special provisions may be necessary, where disabled people work or resort. For example, visual indicators may need to be incorporated into the alarm system if any employees have hearing impairments.

This training should include pre-planned evacuation of staff to a place of safety in the event of fire. Members of the public who resort to your premises should also be taken into account when planning for evacuation.

A fire drill should be carried out at least once in every period of 12 months (six months for hotels and boarding houses), or more frequently if you have a significant turnover of staff. All staff should receive training; don't forget night workers, early morning cleaners, security staff, etc.

If casualties are to be avoided in a fire situation, it is essential that staff know what to do...where to go...and how to get there. All too often, when the fire alarm sounds, it is ignored by occupants who assume it is a 'false alarm' and an inconvenience.

### **If your alarm sounds...ACT ON IT!**

**When formulating your fire routine/evacuation procedure, take into account the following advice...**

- i) Fire Evacuation Assembly Points should not be used for Bomb Alerts. Fire Evacuation Assembly Points will usually be closer to the building than one would wish to be if an explosion was to occur.
- ii) Bomb Alert Evacuation Assembly Points need to consider shielding from blast and blast debris.

### **Identifying an Assembly Point**

One or more assembly areas should be identified for use by staff and visitors, in the event of a fire situation.

Using assembly points will ensure:

- ▶ The safety of 'evacuees'.
- ▶ That a roll call or head count can be undertaken to establish whether all persons are accounted for.
- ▶ That easy access to the premises is maintained for on-coming fire engines.
- ▶ That a point of contact is maintained between the Fire Service and fire marshals, should information be required for rescue or firefighting purposes.
- ▶ Information in respect of the current situation can be relayed to all those affected.

### Organisation at the Staff Assembly Point



Consider the location of assembly points carefully, for example:-

- ▶ Too near the Building....falling glass, roof tiles, or other debris may injure those evacuated....smoke may become a major hazard ...'evacuees' may obstruct firefighting operations....
- ▶ Too far from the Building....busy roads may need to be crossed, exposing 'evacuees' to dangers from traffic....dialogue between the Fire Service and building occupants will be difficult....delays may ensue in reporting 'missing persons' to the Senior Fire Officer.

Bear in mind that those evacuated may not be allowed to re-enter the premises for some time, depending on the severity of the fire. Think about the weather.... gale force winds? baking sun? torrential rain? heavy snow? It may be prudent to explore the possibility of making reciprocal arrangements for temporary shelter or accommodation of staff with neighbouring businesses, in the event of an evacuation during adverse weather conditions.

A 'Fire Marshal' (and at least one deputy), should be nominated for each assembly point. Where more than one assembly area has been designated, a 'Senior Fire Marshal' should be nominated to take overall responsibility.

The 'Fire Marshal's' duties may include:-

- ▶ Ensuring a head count or roll call is undertaken of assembled staff.
- ▶ Informing the Fire Service when all persons are accounted for, or persons are reported 'missing'.
- ▶ Feedback information from the Fire Service to those at the assembly point.
- ▶ Ensure staff and visitors evacuated from the premises remain at the assembly point until permission to re-enter the building has been given by the Senior Fire Officer present.
- ▶ Monitor the safety of those assembled, (especially with regard to traffic) and take action if necessary.
- ▶ Identifying if a fire alarm actuation is the result of a fire

# BUSINESS BEST PRACTICE – FIRE REDUCTION

## ORGANISATION

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For ease of identification, 'Fire Marshals' should wear distinctive clothing, a high visibility jerkin for instance. Alternatively, 'lollipop' type marker boards may be utilised to pinpoint their location. For communication purposes, it may be necessary to provide additional equipment for 'Marshals', e.g. loudhailers, portable radios, torches, clipboards, etc. The use of whistles should be avoided, as this may cause confusion amongst firefighters, who use them to convey a warning of dangerous conditions on the 'fireground'.

### Action to be Taken in the Event of a Fire

- ▶ Any person discovering a fire should raise the alarm immediately, by whatever means are employed. In many cases, this will mean operating the nearest break glass call point of an electrical fire alarm system. However, in smaller workplaces, the means for giving warning of fire may be by word of mouth, gong, airhorn, etc.
- ▶ Only tackle the fire with a suitable fire extinguisher or hose reel, if you consider it safe to do so, are confident in the use of firefighting equipment and have received adequate training in its use. Only tackle fires which are of a minor nature. **DO NOT TAKE RISKS!** Remember....always raise the alarm before tackling a fire! (Take into account the fire risk assessment for the premises...it may identify areas or materials, which are considered to be high risk if involved in fire. In such circumstances, it may be prudent to leave the firefighting to trained professionals).
- ▶ A responsible person, e.g. receptionist, gate security officer, etc. should be nominated to call the Fire Service using the '999' system in the event of fire, or a confirmed fire as a result of the fire alarm actuating. However, we would rather receive multiple calls to a fire than none at all. Some premises may have an automatic fire alarm system, linked to the Fire Service via a permanently staffed call centre. This will ensure the Fire Service are called automatically if the fire alarm operates in the premises. However, it will do no harm to back up this facility with a '999' call in the event of a fire.
- ▶ In the event of an electrical fire alarm system actuating, the sounders should not be silenced, (or the system re-set), until confirmation is received that all persons have left the building and permission has been given to 'clear' the system by the Senior Fire Officer or 'Responsible Person' present.
- ▶ The Fire Service should be called to every outbreak of fire, no matter how small (irrespective of whether or not the fire has been extinguished). The '999' system should always be used, even if the fire appears to have self-extinguished.

# BUSINESS BEST PRACTICE – FIRE REDUCTION EVACUATION PROCEDURE

## Evacuation Procedure on Hearing the Fire Alarm

- ▶ All persons should leave the building immediately by the nearest available exit and proceed to the designated assembly area, without stopping to collect personal belongings, but closing doors\* behind them\*\*.
- ▶ Fire Marshals or Section Heads should ensure that people in their zone or area leave the building promptly. If safe to do so, each floor or level, should be 'swept' by Marshals as they leave the premises, checking the toilets on their way out. Special provisions may be necessary for any disabled members of staff or visitors present at the time of alarm.
- ▶ As lift shafts can become smoke logged in a fire, it is important that you do not use lifts to make your escape. Using a lift could leave you stranded in a life-threatening environment if there is an electrical power failure due to fire damage. (See also 'Evacuation of People with Disabilities').
- ▶ A roll call or head count should be carried out at the assembly area to establish whether all persons are accounted for. If any people are reported 'missing', this information should be passed to a Fire Service Officer without delay.
- ▶ In no circumstances should search parties be organised to search the premises for missing persons. This task, if necessary, will be carried out by Fire Service personnel wearing breathing apparatus.
- ▶ The Senior Fire Officer or 'Responsible Person' will indicate when it is safe to re-occupy the premises. No-one should re-enter the building until this person's express permission has been given.

\*Closing doors on the way out will help to;

- ▶ Keep escape routes free from smoke, to ensure safe egress for building occupants
- ▶ Limit the spread of smoke, heat and flame throughout other parts of the building, thereby keeping fire damage to a minimum
- ▶ Restrict fire growth by limiting the supply of fresh air (oxygen)
- ▶ Assist firefighters when locating the seat of fire

\*\* Please Note: Certain types of premises have agreed a 'phased' evacuation policy with the Fire Service, due to the impracticality of assembling occupants outdoors, e.g; nursing homes, hospitals, care homes, etc. In these cases, additional and /or enhanced fire precautions and staff training are provided to ensure the safety of those within the building. In ALL other cases, assembly points should be outdoors. Where phased evacuations are implemented, the pre-planned routine should be strictly adhered to.



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## EVACUATION PROCEDURE

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### Evacuation of People with Disabilities

Think carefully how you can assist disabled persons to a place of safety should the need for evacuation arise. A sufficient number of volunteer helpers should be trained in the use of specialised equipment for this purpose, e.g. 'evacuation chairs', or how to carry people down the stairs safely. Remember their safe evacuation from your premises is your responsibility, not the fire brigade's.

Purpose designed evacuation lifts are suitable for use by disabled persons in the event of fire, providing the design of such a lift meets the criteria described in BS5588: Fire Precautions in the design and construction of buildings: Part 8: Code of Practice for Means of Escape for Disabled People. However, where a lift does not meet this criteria, disabled persons should be assisted from upper floors to a place of safety outside by trained personnel, via the protected stairways. It is not acceptable to 'abandon' disabled people in protected stairways, or lobbies on upper floors, to await rescue by the Fire Service.

However, it is normal practice where disabled people work on upper floors of buildings, to provide a safe 'refuge' within a fire-protected area. Such areas should be clearly marked and allow sufficient space for wheelchair users to await assistance, whilst maintaining unhindered egress for the able-bodied. In order to avoid congestion on the staircase, disabled persons should be assisted or guided out of the premises by their helpers after the main 'body' of occupants has passed.

In the event of fire, others who may experience difficulty in evacuating the premises unaided could include; women in the late stages of pregnancy, people with temporary impairments such as legs in plaster, people with sensory impairments, or those with a hearing disability.

Without exception, disabled members of staff should take part in fire drills. Not only will this ensure they are familiar with the fire routine, any problems with evacuation can also be identified and addressed.



# BUSINESS BEST PRACTICE – FIRE REDUCTION EVACUATION PROCEDURE

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## Additional Information

If the alarm is actuated by a smoke detector and no visible signs of smoke are present, no attempt should be made to prevent the attendance of the Fire Service, if mobilised automatically. The Senior Fire Officer will be responsible for establishing whether or not a fire is in progress. Past experience has shown that following an actuation of the fire alarm system by automatic smoke detection, people normally assume a false alarm of fire has been given if there are no other indications of a fire in progress. In some instances however, fire may have broken out in ceiling voids or ducting. Electrical wiring or fittings have been known to overheat, producing non-visible smoke, detectable only by a smoke sensor.

If it is intended to incorporate the stopping of certain factory processes as part of your evacuation procedure, prior consultation should take place between yourselves and the Health and Safety Executive, to ensure other safety matters are not compromised.

It will not be necessary to evacuate the premises each time the fire alarm is tested. Staff should be pre-warned before testing the fire alarm, or, the alarm should be tested at the same time each week, for example, every Monday morning at 09.30 hours. However, staff should be advised that if the fire alarm sounds for longer than the normal test duration, e.g. 30 seconds, they should treat the alarm as a genuine fire.

Caution should be exercised when testing the fire alarm system, or undertaking fire evacuation drills, to ensure the Fire Service are not called out unnecessarily.

Remember to record in the appropriate log book:

- ▶ Staff training and fire drills
- ▶ **ALL** actuations of the fire alarm system, including; tests, system faults, malicious or accidental operation and genuine fires.
- ▶ Time and date when system faults rectified.

Where it is established that a fire is in progress and a fire officer has ordered the evacuation of a premises, any person refusing to leave the building is committing an offence (obstructing a fire officer in the course of his duty), contrary to the Fire and Rescue Services Act 2004.

# BUSINESS BEST PRACTICE – FIRE REDUCTION

## DUCTING

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### Introduction

Ducting fires in industrial premises can often be catastrophic, raising massive buildings to the ground in a surprisingly short space of time, consider your ducting procedures as part of your Fire Risk Assessment.

***Many of these fires are started accidentally and are preventable.***

The focus of this section is on fires starting in or being spread by ductwork, which accounts for a very high percentage of accidental fires in industrial premises.

Armed with the information contained, you can significantly reduce the risk to your building and your business from the devastating effects of an accidental fire, started in or spread by ductwork.

### Background

Ductwork in industrial premises is used in applications such as air conditioning systems, fume extraction, as a conduit for electrical cables, pressurisation or ventilation of compartments, plus many others. The main application of ductwork in industrial premises is as part of a system known as **'Local Exhaust Ventilation' (LEV)**. This is employed in the main to control the release of airborne substances (some of which may be hazardous), from the process being carried out, into the workplace environment. The objective of such a system is to collect the procedure residue from the seat of operations and deliver it either to open air or a special waste collection unit.

These products may include dust, fumes, smoke, gasses, vapours, mists and other materials.

### The Problem

There are two distinct hazards associated with ductwork, namely fire and explosion.

#### Fires

Fires in ductwork may start at the operations end, perhaps from a spark igniting flammable vapours, or in the ducting itself, usually by a stray spark igniting a build up of flammable residue. Either can be equally as devastating of course but steps can be taken to avoid both. These are detailed later.

#### Explosions

Explosions in ductwork are usually as a result of combustible dusts being ignited. This also is dealt with in more detail later on.

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## DUCTING

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### Legislation

It is difficult to legislate against fires starting accidentally, but legislation in place to control the release of hazardous substances into the workplace atmosphere has been influential in reducing the number and severity of fires and explosions where LEV systems are employed.

The Control of Substances Hazardous to Health Regulations 1999 (COSHH) requires *“employers to prevent, or where this is not reasonably practicable, to adequately control the exposure to their employees to substances hazardous to their health.”* The measures thus introduced by the employer are required to be maintained in effective working order and thoroughly tested at regular intervals. In the case of LEV systems, this frequency of testing is every 14 months.

In addition to the COSHH regulations, there is British Standard 5588 part 9: 1999, which is a general code of practice for ventilation and air conditioning ductwork.

**It is recommended in the general code of practice, that all systems are visually inspected weekly**, that these inspections are recorded along with any defects found and action taken to rectify them. The intention is that these tests should be carried out by the workforce who uses the machinery to encourage ownership of the responsibility for all issues relating to safety.

### General

Even if your ducting only carries conditioned air for the offices, or cables for the electrical services to your building, a fire anywhere in your premises could find the voids and channels a useful ally to spreading fire and smoke throughout the building. Measures need to be taken to;

- (a) prevent the products of combustion (smoke) entering or leaving the ductwork,
- (b) prevent these products being spread throughout the building via the ductwork, and
- (c) Prevent a breach of integrity, where ductwork penetrates fire-resisting elements of structure, which would allow fire to pass from one compartment to the next.

### Design

To be effective, LEV systems must be well designed and constructed, properly used and maintained in good condition.

The design of a LEV system will vary, dependant upon the process being carried out, but in essence should include;

# BUSINESS BEST PRACTICE – FIRE REDUCTION

## DUCTING

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- A hood to capture and contain the residue. This should be designed so that as much as possible of the source of emission is enclosed
- Ductwork to transport the residue away from the source
- An air cleaning device to remove any contaminants
- A fan or other air mover to promote adequate airflow and ensure that the air velocity at the source of emission is sufficient to capture the airborne residue
- Ductwork to transport the product to outside.

The use to which the ductwork is to be put will usually dictate the materials from which it is manufactured. Many operations including “cold working” (and to a lesser extent some “hot works”) will employ within their process, ductwork manufactured from a plastics material. There are many such “plastics” materials from which ducting is manufactured, a couple of which are Polypropylene and CPVC.

Other materials, particularly aluminium alloy and steel are used in ductwork manufacturing. Aluminium alloy is of course cheaper to produce than the plastics materials and because of its light weight can be made in larger diameter sections where necessary and suspended from the underside of roofs without placing an excessive load on the roof supports.

It goes without saying that where steel is employed in the manufacture of ductwork, considerably higher temperatures from the process being carried out may be catered for.

Specialist advice should be sought for the installation, use, testing and maintenance of ductwork employing fans when used in a flammable or explosive atmosphere to ensure it's intrinsic safety.

**Is your ductwork constructed from a material suitable for the process being undertaken?**

### Fire

#### General

A simple and logical layout of equipment throughout the workshop will prove more effective than one where little thought has been given to logistics. Poor workshop layout leads to excessive pipe lengths and numerous bends. This decreases the efficiency of the system and may lead to increased noise levels at some workstations. This may also have adverse implications for cleaning and maintenance operations. Ad hoc extensions to extraction systems should be avoided. No additional extraction points should be added unless the system is known to have the necessary extra capacity.

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## DUCTING

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### Fire Dampers

Modern building construction techniques dictate that many buildings are now separated into fire compartments, which may or may not be more than one room. Where ductwork travels through a compartment wall, it is important to ensure that there is an effective barrier to fire to prevent it spreading to otherwise unaffected parts of the building. This may be achieved with some form of fire damper. There are various models available on the market and they are usually of the “mobile closure” or “intumescent” type, but the important thing is that in the event of a fire in the ductwork, it forms an effective barrier to the flames spreading between compartments.

The code of practice for ventilation and air conditioning ductwork - British standard 5588 part 9: 1999, **recommends that a competent person should test all fire dampers after they have been installed and at periods not exceeding two years.** Spring operated fire dampers should be tested annually and fire dampers situated in dusty atmospheres should be tested much more frequently, at intervals suited to the conditions, very much dependent upon the nature and amount of contaminants involved.

**Filters and associated equipment should also be cleaned or replaced regularly to prevent the build up of flammable residue.**

If a smoke detection system is used to operate the dampers, it is also necessary to ensure that they will operate at the relevant smoke density level and the smoke detector itself is adequately maintained.

Care should be taken to ensure that a build up of waste products or poor siting does not compromise the effectiveness of fusible links where they are used to operate fire dampers.

### Housekeeping

Good housekeeping is essential, especially where “hot working” is being carried out, as un-insulated metal ducting could carry sufficient heat to ignite any combustibles in close proximity. A separation of at least 500 mm should be maintained between any such ductwork and combustible materials, packaging, etc and adequate signage or marking employed to indicate clear lines of the zone to be kept free from clutter.

Ductwork frequently utilises a fan to encourage the residue to draw through the trunking. Layers of the exhaust product, built up over time and stuck to or near the fan motor is a common contributor to the spread of fires as it ignites when sufficiently heated.

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Very much the same thing is happening in paint spray booths with increasing frequency. Layers of over-sprayed paint builds up over time and on many occasions, severe fires have been started in this type of premises by spontaneous combustion of the layered paint.

In both cases, regular cleaning will eradicate this problem and this should be incorporated into the maintenance schedule.

### Dust Explosions

Where combustible dusts are being extracted, there is a whole range of dangers. The greatest danger is from explosion. This occurs when sufficient quantities of finely divided combustible solids suspended in air, are ignited. If the particles are not of the correct size, or the conditions not favourable, the explosion will be either inhibited altogether or it will occur comparatively slowly. A dust cloud containing the correct proportions of a combustible solid of the right particle size and air is very capable of totally destroying the building in which it is housed.

At the other end of the scale, where dust particles are tightly packed together, the main danger is from slow burning or smouldering fires. These usually occur in ducting at sharp corners where dust can settle.

- **Does your ductwork have such corners?** If so,
- **Is there an easily openable inspection hatch,** close enough and large enough to allow easy cleaning and
- **Is there a maintenance schedule in place** to prompt this to happen at regular intervals? If not,
- **What are you going to do about it?**

Another cause of dust explosions is the accidental introduction of foreign bodies into the dust, causing a spark. Regular cleaning and maintenance of filters and other equipment should ensure that these occurrences are rare.

Even when dust is not suspended in air, but lying on surfaces, it still poses a danger of fire spread with exceptional speed. This particularly applies to fires in ductwork and trunking. Again, good housekeeping will prevent this phenomenon.

To prevent explosions from occurring, **good housekeeping is an essential pre-requisite.** Efficient dust extractors are important, as is the necessity for regular cleaning and maintenance.

To minimise the risk of a dust explosion, it is important to remove dust efficiently. Some questions you should ask when assessing the efficiency of your system are;

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- Are all moving parts of the machinery enclosed as far as possible, in order to minimise stray air currents that would reduce the efficiency of the extraction system and allow the formation of dust clouds?
- Are hoods and their associated connections positioned so that they take advantage of, rather than work against, the natural air movement created by the machine?
- Are all filters clean in order that they do not restrict the flow of air and reduce the efficiency of the system?
- Are inspection hatches easily openable, and correctly positioned?
- Is any flexible ducting free from leaks, partial connection and damage?

To minimise the effects of an explosion should one occur, **adequate ventilation** and **pressure relief** should be employed. Look for these things during the course of your risk assessment!

Look at the routing of LEV ductwork and the siting of exit points. Do they create a hazard for other people? For example, is the exit point from the LEV system located close to air intakes for the building, or underneath windows? Where the assessment highlights that the risk is not acceptable, steps must be taken to reduce those risks to an acceptable level. It is also essential that all staff receive adequate training and instruction to enable safe working practices to be maintained. Details of any hazard must be recorded and a time set in the future for its rectification, along with the name of the person responsible for implementation of the work.

Where the operation taking place is grinding or polishing, the residue that needs to be ventilated is a dust consisting of metallic particles or a textile material.

Depending upon the type, quantity and concentration of the dust, there is a risk of these particles posing a fire or explosion hazard. The finer the dust, the more readily it will form a cloud in the air and the greater the explosion hazard will be.

The risk of fire or explosion may be reduced by proper control of the dust and by removing any potential sources of ignition.

The grinding of some metals, for example aluminium, produces a dust that represents a high explosive hazard. This is also prevalent when finishing or “scurfing” with an abrasive sheet. Mechanical polishing or “buffing” of metals with power driven textile mops usually present a high fire hazard as the polishing mops have normally been treated with tallow or wax.

As a safety precaution, local exhaust ventilation and collection systems should be employed, so as to effectively intercept the dust particles and prevent them from escaping.

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**Grinding, linishing and scratch brushing operations should not be served by the same dust collection system as the polishing operation. Bringing together the two types of dust, one presenting an explosion hazard and the other a fire hazard, would considerably increase the risks involved.**

### **Are your different types of dust separated?**

There should be adequate fire extinguishing equipment for the risk and sufficient numbers of staff trained in its use, should the occasion arise. Staff should be trained to use LEV systems safely and effectively. Fires should be quickly detected if they occur and dampers operated immediately, to prevent fire spread throughout the building. It is best if these operations are instigated automatically to avoid any human error.

Where Automatic Fire detection is installed inside the ductwork, it should be connected to an alarm system to raise the alarm of fire, and if possible, give an indication of its location at a control panel, remote from the work area.

Fire service override controls for any dampers should be sited so as to be easily identifiable and a plan of the ventilation system, detailing the location of dampers should be at hand in the event of fire.

Any hot work can of course pose a serious fire hazard if it is conducted in the vicinity of flammable substances. For this reason, it is essential that safe systems of work are adhered to.

### **Is a written permit to work produced for all hot works, either by employees or contractors?**

The guidance if followed correctly should be sufficient to keep your ductwork in good condition, well maintained and efficient in its operation. There are areas however that may require more detailed reading and there are many books and leaflets available on just about every section covered. Further guidance may be found in the following British Standards web site <http://www.bsi-global.com/en/Standards-and-Publications/Industry-Sectors/Fire/Fire-Products/BS-5588-91999/>

# BUSINESS BEST PRACTICE – FIRE REDUCTION

## BEWARE OF ARSON!

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### **Don't let the arsonist close you down!**

**Arson is now recognised by our Government as one of the major crimes in our society and a serious impediment to the continuing development of Business and Communities as a whole!**

Each year the Fire Service attends hundreds of serious fires within all types of businesses.

#### **Arson -The Effect**

- ▶ Loss of business during the close-down.
- ▶ Loss of regular customers to competitors (for good!).
- ▶ Loss of employees to competitors.
- ▶ Loss of documents such as records, invoices, plans.
- ▶ Difficulty in obtaining replacement specialised equipment, etc.

#### **Arson - Why?**

Some of the Motives...

- ▶ Vandalism - the opportunist, for pleasure! Perhaps the most common!
- ▶ To hide evidence of another crime such as theft.
- ▶ Jealous competitor?
- ▶ An employee or even customer with a grievance.
- ▶ An employee or visitor who has pleasure receiving praise for discovering a fire and extinguishing it.

### **Be aware of the potential for Arson - RISK ASSESS!!**

Make Arson a clear management issue. Allocate a specific budget each year for crime prevention measures.

#### **Assess - Is My/Our Business...**

- ▶ In a high risk area?
- ▶ Open to attack on the external perimeter or by direct break in?
- ▶ Are there any easy access routes via drainpipes, flat roofs etc?
- ▶ Is there a ready supply of fuel for the opportunist arsonist?

#### **Act on your assessment - Don't make it easy for the Arsonist!**

- ▶ Make Arson/crime reduction a clear management issue.
- ▶ Train management to be prepared for arson attacks (be aware!)
- ▶ Address perimeter fencing and gates if possible. Most burglars break into buildings from the rear, consider the most appropriate fencing and consider the view of your neighbours, can they or the Police see in!
- ▶ Secure access into premises and consider external or internal shutters to external windows and doors. To ensure best protection use padlocks and alarm the shutters.

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## BEWARE OF ARSON!

- ▶ Consider active measures such as CCTV, intruder alarms and external lighting systems (please see CCTV section).
- ▶ Never store combustible materials such as pallets, vehicles against the external walls you offer arsonist fuel plus an easier way in try to maintain a fuel free 8 meter gap around external walls! You only need to push a lit match through to start a fire! Keep external storage to a minimum.
- ▶ Ensure skips etc are stored as far as possible away from your premises (8 meters if possible), and well away from fire exits. When full arrange speedy skip removal. Where possible, provide a marked out/ allocated area to locate skips safely
- ▶ Don't allow bushes, trees etc to grow to close to your premises; a dry period will soon turn vegetation into a good source of fuel and is great to hide by when you are up to no good!
- ▶ Beware of children gaining access to your site, particularly in school holidays.
- ▶ External doors and frames should be a high quality and a good state of repair and should be fitted with locks conforming to British Standards 3621 or has at least five levers.
- ▶ Use good quality window locks to external windows consider laminated, toughened glass or double glazing with internal or secured beading.
- ▶ Identify your property particularly computers and electrical equipment, if the Police can't identify it you reduce the chances of getting it back
- ▶ Locking internal doors can often deter a burglar. Control devices like coded locks and swipe card systems may be appropriate.
- ▶ Don't leave spare keys around or make them easily accessible as it will undermine your security measures.
- ▶ Consider security guards or contract guarding companies.
- ▶ Circulate the 'CRIMESTOPPERS' phone number to your employees and visitors (they may not tell **you** everything they know).
- ▶ Keep records of incidents (Appendix I, II and III). This will allow you to analyse the past to risk assess for the future. To ensure accuracy please complete any details of suspects on the Suspect Description Form and details of any vehicle used on the Vehicle Identification Form which will aid any investigation.
- ▶ If you can not carry out all the required work immediately consider a three year plan and deal with your highest risk first i.e. ground floor windows and doors.
- ▶ Carry out all repairs to your property quickly to discourage further damage and other vandalism.
- ▶ Allow visitors to access only via a clear staffed reception facility; ensure visitors register in and out. Consider the use of visitor badges and escorts whilst visitors are on your premises. Encourage staff to question strangers.
- ▶ Please see the Safe & Secure section for more detailed crime prevention information.




# BUSINESS BEST PRACTICE – FIRE REDUCTION

## APPENDIX I

<b>INCIDENT REPORT</b>		
COMPANY NAME:		
DATE OF INCIDENT:	DATE:	TIME:
DEPART. & ADDRESS PREMISES	DEPART:	
	NO:	STREET:
	TOWN/CITY:	
	COUNTY:	
	POSTCODE:	
MAIN COMPANY CONTACT:		
REPORTED TO:		DATE:
NAME OF POLICE OFFICER:		TIME:
		COLLAR NO:
		TEL:
CRIME REF. NO: / POLICE LOG NO:		
F.S. LOG NO:		
TITLE OF INCIDENT:		
<b>BRIEF DETAILS OF INCIDENT: COMPLETE ALL DOCUMENTATION FULLY AND HONESTLY</b>		
SECURITY RISK IDENTIFIED:		
RECOMMENDATIONS:		
DECISION TO REDUCE RISK:		
PERSON REPORTING: SIGNATURE:		DATE:

# BUSINESS BEST PRACTICE – FIRE REDUCTION

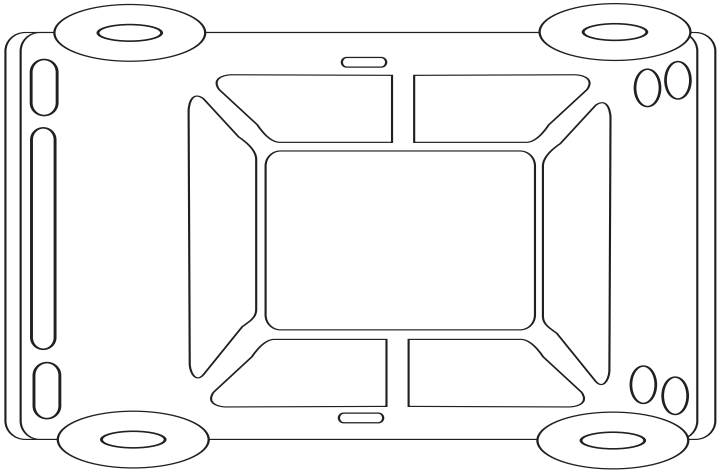
## APPENDIX II

SUSPECT DESCRIPTION FORM		
OFFENDER NO: _____ of _____ (i.e. 1 of 3)		POLICE CRIME REF:
Sex	Age	Ethnicity
Height	Build	Weight
Cleanliness	Odour	Accent
<b>Head</b>		
Shape	Hat	Forehead
Hair	Facial Hair	Eye Shape
Eye colour	Eye brows	Nose shape
Ears	Lips	Teeth
Chin	Scars	Tattoos
Piercings	Make up	Complexion
Pock marks	Spots	Bad breath
Freckles	Jewellery	
<b>Neck</b>		
Size	Jewellery	Tattoos
<b>Hands</b>		
Size	Cleanliness	Fingers
Fingernails	Nail varnish	Tattoos
Gloves	Jewellery	
<b>Clothing (include colour, style, any brand names known and how it was worn)</b>		
Clothing – Top		
Clothing – Bottom		
Footwear		
Outerwear		
Accessories		
Weapons		
Additional remarks – note any peculiarities - smoker/mannerisms/habits Add any additional comments on a separate sheet of paper.		
Signature _____		
Witnessed by _____ (if under 18)		
Time _____	Date _____	

**Note: One Suspect Description Form per suspect.**

# BUSINESS BEST PRACTICE – FIRE REDUCTION

## APPENDIX III

<b>MOTOR VEHICLE IDENTIFICATION REPORT</b>		
OFFENDER NO: _____ of _____ (i.e. 1 of 3)		
DATE OF INCIDENT:	DATE:	TIME:
CAR	REGISTRATION NUMBER:	
	COLOUR:	
	MAKE:	
	MODEL:	
	TYPE:	
NAME OF POLICE OFFICER: _____ COLLAR NO: _____ TEL: _____		
CRIME REF. NO. / POLICE LOG NO: _____		
F.S. LOG NO: _____		
TITLE OF INCIDENT: _____		
<b>BRIEF DETAILS OF INCIDENT: COMPLETE ALL DOCUMENTATION FULLY AND HONESTLY</b>		
<p>Please mark vehicle with circles to show distinctive marks and write a clear description.</p> <div style="text-align: center; margin: 20px 0;">  </div>		
Signature _____	Witnessed by (if under 18) _____	Add any additional comments on a separate sheet of paper.
Time _____	Date _____	

**Note: One Motor Vehicle Identification Report per vehicle.**