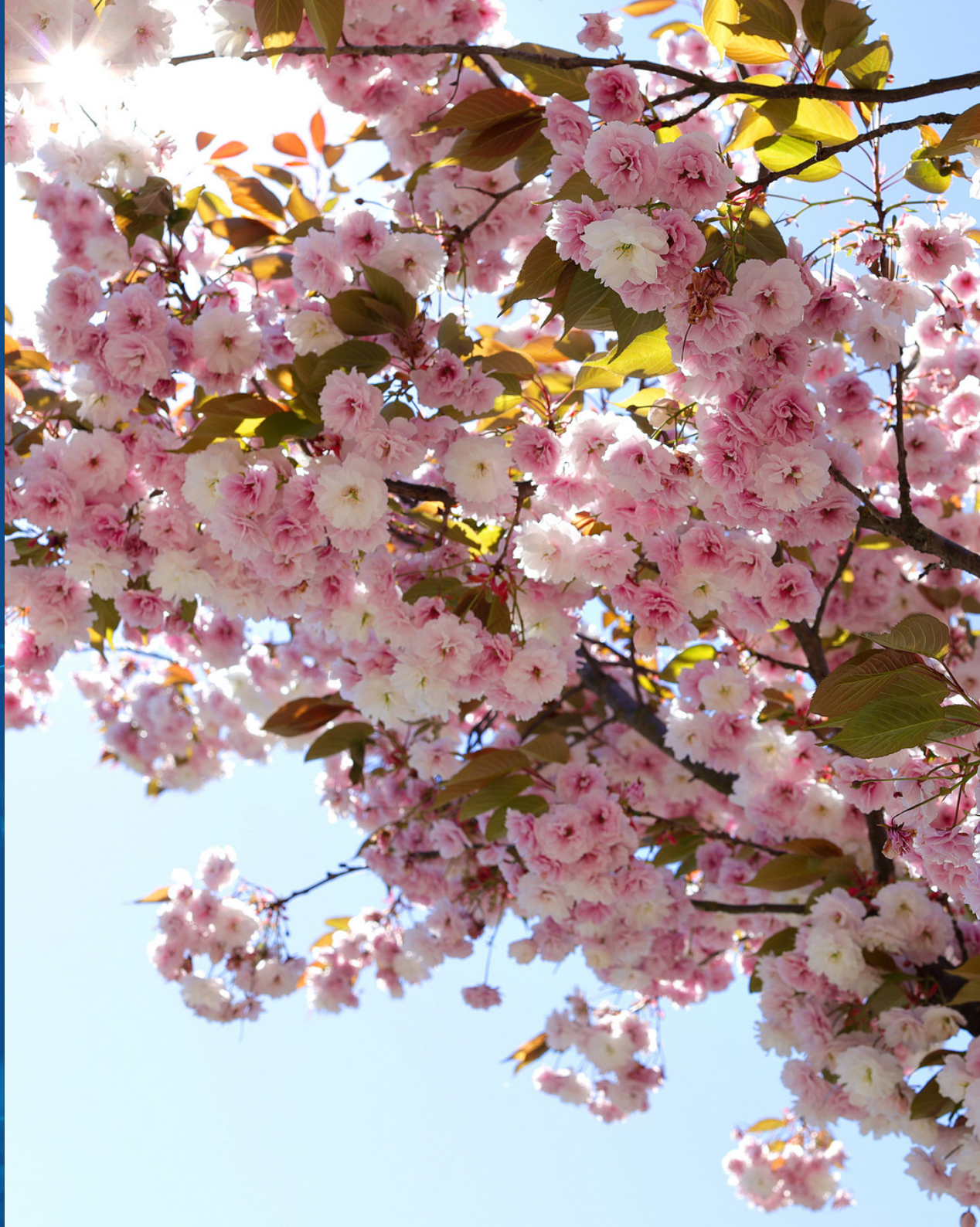




# Centor Spring Risk Guide



As we embrace lighter evenings and the advent of warmer weather, the risks that we face change.

Thinking about these, assessing the common risks that could lead to a claim, and garnering information about preventing them can be tricky.

A guide, therefore, on identifying these risks is invaluable, and in the following pages you have one.



## Working at Height

With the advent of warmer weather many businesses start to undertake general maintenance work and renovation projects. This guide provides precautionary measures that you can implement to ensure that working at height does not lead to a claim, or worse, a fatality.



## Managing Contractors

As mentioned above, many building and renovation projects are undertaken in spring, which conversely means that you may have contractors on site. How you manage their risk is your legal and moral responsibility.



## Good Housekeeping Practices

This is often overlooked as 'simple common sense'. However, it is also good business practice. This guide provides information and a tick box list to ensure that you are providing a safe working environment for your staff, your clients, visitors and contractors.



## Flood Management

Spring brings with it showers and these can become flash floods and claims for water damage to your property and business. Ensuring that you have implemented preventative measures helps reduce the severity of the claim.

If you would like more information about how to manage these risks, please do get in touch.

Wishing you a risk-free and safe spring,

**The Centor Team**





# WORKING AT HEIGHT

The Health and Safety Executive have published their figures for workplace fatalities in Great Britain, and the most common cause of fatal injury is falling from height. This has been the case for several years. It affects most industry sectors but is a particular issue in certain sectors such as the construction industry. It can occur in any premises for example during maintenance, window cleaning, loading/unloading vehicles, adventure activities and roof work.

Accidents can involve falling from ladders, stepladders or other work equipment and open edges (e.g. from mezzanines, scaffolds and mobile access towers). Frequently, falls occur during roof work from open edges, through roof lights or other fragile roofing materials.

Many falls are usually attributable to poor management control rather than being specifically related to the failure of work equipment. In many circumstances, a combination of factors contribute to the accident including inadequate risk assessment, issues with the safe system of working including the provision and use of suitable equipment, and inadequate information, instruction, training and supervision for those involved in the work.

## What should organisations be doing?

While the general requirements of the Health and Safety at Work etc. Act and the Management of Health and Safety at Work Regulations may apply, the principal duties relating to the prevention of falls are detailed in the Work at Height Regulations. Other additional requirements might also apply in some circumstances (e.g. where work equipment – such as a cherry picker – is used, the Provision and Use of Work Equipment regulations would also apply amongst others). In some industrial settings, the Workplace (Health, Safety and Welfare) Regulations will also be relevant.

## The Work at Height Regulations

These regulations set minimum safety standards to prevent falls. They cover nearly all work premises. 'Work at height' means any place at (or below ground) from which a person could fall a distance liable to cause personal injury and the duties extend to cover access to and from such a place (except by a staircase in a permanent workplace). They do not cover travel to and from a place of work.

The Regulations:

- ▶ Impose duties relating to the organising and planning of such work
- ▶ Require that persons are competent (or supervised by competent persons)
- ▶ Specify steps to be taken to avoid risk from work at height
- ▶ Impose duties relating to the selection/specification of work equipment
- ▶ Require the avoidance of risks from fragile surfaces, falling objects and danger areas
- ▶ Require the inspection of certain work equipment and of places of work at height.



### If you are the employer

If an organisation has employees, they must comply with their duties under the Health and Safety at Work etc. Act (Section 2 – General duties to employees and Section 3 – General duties to others who are not employees) and the Management of Health and Safety at Work Regulations (in particular, Regulation 3 – Risk assessment).

They also need to comply with the Work at Height Regulations, along with any other specific requirements of the Provision and Use of Work Equipment Regulations. This is in addition to any civil law duty of care owed.

On this basis, best practice considerations include the following:

- ▶ Ensuring that work is properly planned in advance, including any emergency procedures and the selection of appropriate work equipment, appropriately supervised, and carried out in a safe manner
- ▶ Ensuring that any risk assessments completed identify circumstances where work at height is involved and determine what, if anything, needs to be done to comply with applicable statutory requirements. In particular, risk assessments should clearly demonstrate that where ladders are to be used their use is justified because of the low risk, and the short duration of use, or existing features on site which cannot be altered. In most circumstances, assessments should be recorded, reviewed and updated as necessary



- ▶ In identifying the necessary precautions. First avoiding the need for work at height by, for example, completing it from ground level. Where this is not possible, determining the work equipment and/or other precautions required to prevent falls. If possible, existing places of work should be used first where these are suitable i.e. they are stable, of sufficient strength and rigidity, provide safe access. Where this is not possible, suitable equipment should be used to prevent or minimise the distance and consequences of a fall. Collective protection measures such as edge protection, scaffolds and nets should be given priority over personal protection i.e. harnesses, taking account of the specific working conditions, access/egress travel distances, potential fall distances/ consequences, duration and frequency of use, emergency evacuation and rescue requirements and loadings.
- ▶ Implementing and maintaining the precautions identified as being necessary.

The Work at Height Regulations set specific standards that need to be met for working platforms (see Schedule 3); guard-rails, toe-boards, barriers or similar collective means of protection (see Schedule 2); nets, airbags or other collective safeguards (see Schedule 4); personal fall protection systems, work positioning systems, rope access and positioning techniques, fall arrest systems and work restraint systems (see Schedule 5); and ladders (see Schedule 6).

Other precautions will include:

- ▶ Those required to prevent materials or objects likely to cause injury from falling, ensuring that they are suitably stored and will not be thrown or tipped from height; those to identify work areas and prevent unauthorised access to them where necessary; and those relating to safe access; the use of lifting equipment; the provision of adequate lighting; safety around overhead service and/or equipment and the use of personal protective equipment.

- ▶ Avoiding the need for work on or near fragile surfaces – including roof lights. Where this is not possible identifying and implementing adequate precautions to prevent falls (e.g. by providing suitable platforms, coverings, guard rails, roof ladders, crawling boards and warning signs)
- ▶ Ensuring that no work at height is carried out during adverse weather conditions
- ▶ Ensuring that work (including any organisation, planning and supervision) is only carried out by persons who are competent or, if being trained, are supervised by someone who is. The level and detail of competence required should be identified by a risk assessment.
- ▶ Recording and keeping details of any training and information provided to employees. Training records should contain such detail relating to the persons who were trained; when they were trained and by whom; an overview of the training that was provided; details relating to any certification provided or other test to verify understanding, along with trainees signing to state that they have received and understood it.
- ▶ Ensuring that the workforce is appropriately consulted on the required precautions.
- ▶ Recording the arrangements and responsibilities for managing work at height as part of the health and safety policy (or supporting documentation) where one is needed to comply with health and safety law and reviewing these where necessary. This should include arrangements to ensure that the specified inspections (as detailed in the Work at Height Regulations) are carried out by a competent person; the control of contractors involved in such work and the steps to be taken where it is not possible to follow the required system of working.







## If you are NOT the employer

If an organisation has control of any work at height completed by others, they will need to comply with the Work at Height Regulations – but only to the extent of their control.

Similarly, if they control work equipment; a person at work who uses, supervises, or manages the use of work equipment; or the way in which work equipment is used at work must comply with the Provision and Use of Work Equipment Regulations. Again, they only need to comply with the requirements to the extent of their control. 'Work equipment' means any machinery, appliance, apparatus, tool or installation for use at work (whether exclusively or not) and would include access equipment.

In addition to these specific requirements, organisations that do not have employees will still need to meet duties under the Health and Safety at Work etc. Act 1974. This is where they control non-domestic premises made available to others as 'a place of work' or where they may use 'plant or substances provided for their use there' (Section 4). In these circumstances and for work at height, they must make sure that the premises and plant (e.g. any access equipment) provided for use by others are safe.

A similar civil duty to that of employers is also owed.

## Further topic resources

Further information is available as follows:

**The Work at Height Regulations**, SI 2005/No. 735, available at [www.legislation.gov.uk/uksi/2005/735/made](http://www.legislation.gov.uk/uksi/2005/735/made)

**General information** is available at [www.hse.gov.uk/work-at-height/index.htm](http://www.hse.gov.uk/work-at-height/index.htm)

**Working at Height, A brief guide**, INDG 401, HSE, available at [www.hse.gov.uk/pubns/indg401.pdf](http://www.hse.gov.uk/pubns/indg401.pdf)

**Safe use of ladders and stepladders, A brief guide**, INDG 455, HSE, available at [www.hse.gov.uk/pubns/indg455.htm](http://www.hse.gov.uk/pubns/indg455.htm)





# MANAGING CONTRACTORS

A recent Crown Court ruling which fined a warehouse owner after a contractor's employee fell 30 feet through a skylight at their premises highlights the importance of due diligence checks on contractors.

From a health and safety point of view, contractors will usually be unfamiliar with host premises and any specific hazards there. Because of this, they may be more at risk of injury. They may also carry out work which could potentially damage premises or injure others.

## How to Manage Contractors

Contractors can perform a wide range of tasks in varying working environments and employing diverse working methods, equipment and substances. For example, contract work can include the construction, extension, repair or maintenance of premises; the installation, maintenance and repair of work equipment; the provision of specialist services (e.g. the transport of goods or waste); the provision of other services (e.g. catering, security etc.) and so on.

Essentially, contractors are third parties who undertake a contract to provide materials or labour to perform a service or complete a job. Their employees are not under the direct control of their host (i.e. those that procure their services). As such, they differ from agency staff who are usually under the direct control of the host and (for health and safety purposes) are treated similarly to their own employees.



Sometimes, an organisation may have more than one contractor doing the work at a time. This can potentially increase or add to the risk. In other cases, the contractor may further sub-contract the work to others. All of this, may affect the precautions taken to ensure the safety of others.

In this context and depending on the work to be done, proportionate steps must be taken to ensure adequate health and safety standards are maintained. This is a delicate balancing act between wanting to control every aspect of their work and letting them just get on with the job. In many cases the contractors will be specialists, and the host will not understand their work (or the risks associated with it) sufficiently to manage them closely. The key to getting this right is understanding the legal position; good communication and co-operation between the parties; and adopting suitable precautions.

## **What are your responsibilities?**

### **If an organisation is an employer**

If an organisation has employees, they have to comply with their duties under the Health and Safety at Work etc. Act. This requires employers to ensure the health and safety of their own employees and others who could be affected by their work. As such, both host employers and contractors are required to comply with these duties whilst any contract work is being completed.

Further duties relating to the management of contractors are contained in the Management of Health and Safety at Work Regulations. Of particular note, are the specific requirements relating to risk assessments; emergency procedures; co-operation between employers sharing workplaces; and persons working in host employers' premises.

Broadly, the responsibility for making sure that the contractor's employees are safe lies with the contractor. They need to ensure that their staff are properly trained, equipped, supervised, and work safely. They also have a duty to make sure that their employees will be safe when working on other employers' premises. Similarly, the host employer needs to ensure that their employees will not be harmed by the contractor's activities and that their operations will not injure the contractor's employees working on site.

It is generally not necessary or desirable for the host to become involved in the detailed management of the contractor's work. However, for some contract work the host may have a greater influence over how the work is to be completed. For example, this could occur in safety critical environments where they have a greater knowledge of specific hazards or are required to coordinate the activities of several contractors working in close proximity to each other.







Here, hosts may need to provide instruction on the way work is to be done and what precautions are to be taken. It is also important to remember that both the host and the contractor have a duty to ensure the health and safety of others who may be affected by the work (e.g. members of the public, visitors, customers etc.). This may require additional cooperation, and coordination to ensure that appropriate precautions are taken.

On this basis, best practice considerations include the following:

- ▶ Reviewing the circumstances where contractors are used and the type of work undertaken. This will assist in identifying what needs to be done to manage health and safety whilst such work is completed.
- ▶ Ensuring that any risk assessments completed to meet the requirements of the Management of Health and Safety at Work Regulations identify circumstances where contractors' employees might be affected and determine what (if anything) needs to be done to comply with statutory requirements. In some circumstances, it might be necessary to review these to ensure that the precautions implemented to protect employees, the contractor and others will remain effective whilst the work is undertaken.
- ▶ Determining if there are any specific health and safety conditions (including those relating to emergency procedures) that need to be met by the contractor and identify any specific health and safety information that might be relevant to them in pricing for and completing the work, providing this to them where necessary.
- ▶ Assessing the competency of any contractors to be engaged in the context of the work to be completed. Factors which may be considered include their experience and training; professional registrations; health and safety management arrangements; insurance cover, references etc. It may also be worth considering whether the contractor will subcontract and, if so, how they will ensure that appropriate health and safety standards will be maintained.
- ▶ Where necessary, obtaining and reviewing (in general terms) any specific method statement for the work to be carried out before the contractor comes onto site. The purpose of this is to establish that it is relevant to the particular circumstances of the work, accounting for any specific constraints or peculiarities of the premises or operations there. It is not necessary to complete a detailed review, or to 'approve' it before work starts.
- ▶ Implementing and maintaining any necessary precautions (e.g. segregation; isolation; provision of access; the use of permits to work; provision of site rules; site induction training; signing in and out etc.)
- ▶ Where the level of risk or the duration of the work requires it, monitoring compliance by the contractor with any restrictions or rules that have been set.
- ▶ Where the risks are likely to change as the work progresses, identifying ways to manage these changes and communicate with the contractor to ensure that precautions remain adequate.
- ▶ Implementing procedures to prevent further work by the contractor where there are concerns about the way the work is being carried out until such time as these are resolved.





- Once work has been completed, checking the work and the work area, signing off any permits in place before returning to normal operations.
- Providing any necessary information or training for those employees involved in the management of contractors. Training records in particular should contain such detail relating to the persons who were trained; when they were trained and by whom; an overview of the training that was provided; details relating to any certification provided or other test to verify understanding etc. The training record should contain detail of what has been provided, when this was done and by whom along with trainees signing to state that they have received and understood it.

- Recording the arrangements and responsibilities for managing contractors as part of the health and safety policy (or supporting documentation) where one is needed to comply with health and safety law and reviewing these where necessary.

## What are your responsibilities?

### For organisations who are not employers

Organisations that don't have any employees will still need to meet duties under the Health and Safety at Work etc. Act 1974. This is where they control non-domestic premises made available to others as 'a place of work' or where they may use 'plant or substances provided for their use there' (Section 4).

In these circumstances, they must make sure that any work carried out by a contractor is done safely.

## Duties where construction work is carried out

Under the Construction (Design and Management) Regulations, those organisations who have construction work carried out will have to meet specific duties where they are a 'client'.

More information is available at [www.hse.gov.uk/construction/cdm/2015/index](http://www.hse.gov.uk/construction/cdm/2015/index)

## Further Information

General information is available at [www.hse.gov.uk/toolbox/workers/contractors](http://www.hse.gov.uk/toolbox/workers/contractors)





# GOOD HOUSEKEEPING PRACTICES



**Proactive action now  
is better than  
reactive action  
when it's too late**

Good housekeeping practices can have a positive effect on the working environment, employee morale and productivity. A clean, tidy working environment can also reduce the risk of fire and injury to your employees and visitors.

Fire, explosion and/or serious injury can have a catastrophic effect on a business with subsequent interruption to the business and possible loss of customers or reputation. The potential for long term damage to the business should not be underestimated.

Most of the practices and precautions provided in this section are little more than common sense and good business practice.

## **Good Practices and Precautions**

The owner/occupier of every workplace has a legal responsibility (under the Regulatory Reform (Fire Safety) Order 2005 or Fire (Scotland) Act 2005) to undertake a Fire Risk Assessment and where the potential for explosion exists a risk assessment is required under The Dangerous Substances and Explosive Atmosphere Regulations (DSEAR). Housekeeping and all points noted below should always be considered as part of these assessments as well as any assessment of slips, trips and falls or other specific features.



- ▶ Ensure that you have arranged a safe method for the removal, handling and collection of trade waste materials as frequently as is necessary.
- ▶ Ensure waste materials are not allowed to accumulate on the floor or around workspaces beyond the end of each working day and clear fire escape routes, aisles and walkways are maintained at all times.
- ▶ Employees should be accountable for cleaning their workspace.
- ▶ Ensure proper waste receptacles are provided for the storage of waste awaiting disposal and removed from the premises at least weekly.
- ▶ Ensure designated orderly storage areas are made for waste, goods and materials in course of production. There should be a minimum gap of 500mm between light fittings and goods.
- ▶ Ensure heating units are kept clear of combustibles by one metre, ideally with a barrier or hatched lines of demarcation.
- ▶ Ensure electrical cupboards are kept clear of combustibles and switchgear/ intake panels have a clear space of one metre surrounding them.
- ▶ Ensure where automatic waste extraction systems are provided; these are regularly inspected and maintained in accordance with manufacturers' recommendations.



- ▶ Trailing cables and leads represent an increased risk of injury. Ensure cables and leads are tied away and if necessary re-routed.
- ▶ Ensure rags or wipes impregnated with oil, lubricants and other flammable solvents are stored in suitable metal lidded bins until they can be safely disposed of or until removed for cleaning. In view of the potential for fire (from spontaneous combustion) storage of such materials in open bins, cardboard, wooden boxes, sacks or bags etc is to be avoided.
- ▶ Ensure where oil or lubricant leaks/spills occur around machinery, plant and work areas, mineral based absorbent materials are used (in place of sawdust) to soak-up spillages. These are to be swept up and placed in a lidded metal bin until they can be safely disposed of.

- ▶ Smoking is now illegal in most workplaces within the UK and is to be prohibited. Check that:
  - Suitable signage is provided at entrances to the premises.
  - Smoking shelters provided are sufficiently open-sided that they are legal and are located away from buildings and hazardous areas with suitable receptacles provided for the safe disposal of smoking materials.
  - Where regulations permit – if a room is not “smoke-free” e.g. a limited number of guest bedrooms in a hotel, ensure suitable ashtrays are provided and emptied daily as part of the housekeeping regime, into a suitable lidded metal container (not mixed with other waste) and removed from the premises.



- ▶ Electrical fork lift truck battery charging units where lead/acid batteries are being recharged can be a cause of fire and explosion, particularly when a battery is overcharged or left to charge unattended. Ignition sources and ventilation, in areas where battery charging is carried out require appropriate control. Furthermore the following 'best practice' is also to be adhered to:
  - Whenever possible avoid charging batteries when the premises are unattended.
  - Keep combustible materials at least 1 metre away from charger units.
- ▶ Ensure the burning of waste materials at the premises is prohibited.
- ▶ The correct use and storage of flammable and highly flammable liquids at the premises is also vital and 'best practice' guidelines are detailed within the Risk Management Guide for Highly Flammable Liquids and Gases.
- ▶ A regularly used commercial kitchen, particularly if deep fat frying is undertaken, can present a significant fire risk. Good housekeeping and cleaning regimes are vital and 'best practice' guidelines are detailed within the Risk Management Guide for Commercial Kitchens.
- ▶ Ensure routine housekeeping inspections of the premises are undertaken with the above points used as a checklist to monitor housekeeping standards.

### Further guidance

#### Government Fire Safety Guidance

[www.communities.gov.uk/fire/firesafety/firesafetylaw](http://www.communities.gov.uk/fire/firesafety/firesafetylaw)  
(England & Wales)

Health & Safety Executive [www.hse.gov.uk](http://www.hse.gov.uk)







# FLOOD CONTINUITY MANAGEMENT

## FLOOD RESPONSE PLAN

The frequency of flooding appears to be increasing, calling into question long held views about 'return rates'. Historical data such as a 1:100 year event unfortunately can no longer be relied upon when it can be shown similar flood events every 20 or 30 years is actually more common.

Consider this against the fact that we continue to knowingly build in known flood zones – indeed approx. 10% of existing industrial facilities are located in designated flood zones where around 80% of flood losses historically occur. Knowledge, awareness, understanding, preparedness and resilience of flood prevention will become increasingly important. For premises located in a known flood zone it is not a case of if it will flood, but when.

Research has shown the average cost to businesses unprepared for a flood event is approx. £2.1m; compared with £600,000 for those that plan and take action in advance to prevent the extent of flooding and prepare an effective response and recovery plan. As with planning for other business interruption events, fully understanding whether your premises is at risk of flooding is fundamental to preparedness.

Avoiding designated flood zones is the ideal, however this is often impossible.

**So what can be done?**





**Environment Agency Floodline**  
**0345 988 1188**

**Environment Agency Flood Check**  
**[www.gov.uk/flood](https://www.gov.uk/flood)**

## Develop a Flood Response Plan

The majority of flood is predictable using a variety of tools from localised on site assessments looking at the topography of the land, proximity to watercourses, suitability of drainage systems; to the vulnerability of the building, machinery, plant and stock to damage from contaminated water. Sophisticated modelling tools can also be employed to provide predictions of the extent of flooding whether it be from nearby rivers, culverts, etc or from surface water flood incidents.

Flood losses are preventable. When planning flood prevention you should keep in focus two main strategies:

- ▶ How to make the building more resilient in order to prevent flood waters penetrating key buildings and affecting critical machinery, plant and stock; and
- ▶ How to limit the damage flood waters can do if they enter the premises.

Preparing a Flood Response as part of your Business Continuity Management Plan will help identify the risk of flooding, ensure measures are adopted to make your business as resilient as possible to the risk of flooding and identify the measures needed to assist the recovery of the business as seamless as possible if a flood event occurs.

Centor can help with this process by conducting a site visit and using available local knowledge together with flood prediction tools can help design a plan to avoid or at least limit the exposure to flooding.





## The Plan should include...

- ▶ Identify if you are at risk of flooding and update findings at least annually.
- ▶ If you are in an area at risk of flood understand how the business activities could be affected. Complete a detailed Flood Assessment which should include all vulnerable apertures into the premises such as doors, windows, air bricks, service ducts, boiler vents and cable entry points.
- ▶ Time is critical when a flood is predicted; therefore key personnel should be fully aware of their roles and responsibilities during such an event. As with any Business Continuity Planning, regularly rehearsing and stress testing the Flood Plan is essential.
- ▶ Ensure you have adequate resources on hand to deal with the consequences of flooding.
- ▶ Identify essential contacts for the emergency services, HSE, water authorities / EA, clean up contractors, key staff, chemical suppliers whose products are on site etc and your insurance broker/provider.
- ▶ Obtain a site drainage plan which should locate and identify drainage arrangements, water supplies, chemical tank storage and location of spill kits, drain blockers, etc.
- ▶ Complete an up to date inventory of chemical substances on site including quantities, data sheets, storage vessels, production areas etc; together with details of the emergency procedures for dealing with spillages, leaking containers, water run-off from firefighting etc.
- ▶ Detailed written and communicated safe evacuation procedures for staff and visitors.

The Plan should be kept up to date and reviewed at least every 2-4 years.



## Actions to Consider when a Flood is Predicted

When your premises are at imminent threat of flooding consider the following measures:

- ▶ Where possible relocate vulnerable plant, equipment, materials to a safe area. Special consideration should be given to high valued items and/or those critical to the continued operation of the business such as electronic equipment and records; paper archives; tooling/patterns; stock, materials and work in progress particularly susceptible to damage such as paper, card, and soft furnishings. Vehicles needed to help recover following flood such as forklifts, plant trucks; tractor trailers and the like should also be considered.
- ▶ If a sump pump system is present, perform an operational check.
- ▶ Securely anchor any internal or external equipment likely to be displaced by high velocity, fast flowing flood waters. Moving or fixing such equipment will reduce the risk of further damage from floating debris.
- ▶ Safely shut down and isolate services and utilities within the premises including electricity and gas supplies, pumps, compressors, generators, fuel supply lines and tanks.
- ▶ Cover essential machinery and plant with large plastic sheets. Consider corrosion/rust preventative compounds and inhibitors.

Have available filled sandbags and other flood remediation measures around the premises to deploy at possible entry points and around essential plant and machinery.





## Actions Required after a Flood

Within a timely fashion and as soon as it is safe to do so, the emergency response team and other personnel should begin damage evaluation and salvage response procedures which can help limit the extent of interruption to the business. Notify your insurance broker/provider immediately following the flood as they will be able to provide further guidance and help in the clean-up of the premises and the selection of drying and dehumidification equipment suitable for areas of critical importance.

- ▶ Maintain existing fire and security protections at the premises and also consider whether additional short-term measures are needed to ensure the premises remains adequately protected against fire
- ▶ Contact utility companies to perform safety checks on essential services
- ▶ Notify key suppliers and customers
- ▶ Where contractors are appointed to assist with the salvage, clean-up and restoration operation ensure activities are completed in a safe manner and in compliance with standard Risk Assessment/Method Statement (RAMS) and Permit to Work (PTW), particularly in respect of the use of any Hot Work

During the restoration process consider the future risk of further flooding affecting the premises and interrupting business and take decisions to reduce this risk. For example:

- ▶ Avoid basement/below ground storage and production areas. If this is not possible, install appropriate, battery back-up automatic pump/sump systems.



- ▶ Replace conventional 'air bricks' with smart (self-closing) air bricks or at least deploy suitable air brick covers.
- ▶ Specifically designed plugs can protect ducts/service openings.

- ▶ Rebuild above predicted flood levels using structurally strong, non-porous materials in the building construction such as glass, ceramics, bricks and cement. Lightweight, composite panel construction buildings are often more susceptible to damage either from the insulation material becoming sodden and collapsing or from torrents of fast-flowing flood waters.
- ▶ Install approved non-return valves to drains, toilets, sinks, wastes and overflows; and bolt down sewer and drainage manhole covers.
- ▶ Avoid storing essential plant/equipment/materials below predicted flood levels.
- ▶ Re-position essential services such as electrical supplies, electronic controls and process equipment above the predicted flood level.
- ▶ Consider installing a Flood Alarm system.
- ▶ Use approved flood abatement measures such as flood barriers, boards and doors to keep water from penetrating the building. Ensure products satisfy the requirements of BS1188:2014 or BS EN13564.
- ▶ Flood/water proof the exterior envelope of the building at least to the level of predicted flood levels using suitable water repellent coatings and apply waterproofing treatments to the inner faces of the walls and floors (known as 'tanking').
- ▶ Consider constructing permanent landscaping such as earth bunds/mounds, curbs, ramps, etc. around the premises or at least critical buildings to redirect flood waters.
- ▶ Finally, update your Flood Response Plan.



If you would like to learn more about managing your risk, please speak to your broker, visit us at **[www.centor.co.uk](http://www.centor.co.uk)** or call **020 7256 7300** for assistance.

This document contains general information and guidance only and may be superseded and/or subject to amendment without further notice. The document may not cover every risk, exposure or hazard that may arise.



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