



Risk Management Guide

Contractors

Covering Contractors All Risks, Erection All Risks and Contractors Plant

Allianz Insurance plc | Engineering

Allianz 



Contents

Risk Management

Introduction	1
Site Management	2
Fire	3
Crime	9
Mobile Plant	12-14
Water Damage	15
Other Damage	16
Special Precautions for Suspended /Mothballed Work Sites	17
Post Loss / Dangerous Occurrence / Near Miss Action	18
Contingency Measures	18
Health and Safety	19-24
Environmental Pollution	25-26
Further Information / Other Sources	27

Introduction

What do we mean by Risk Management?

Any business faces various hazards and Risk Management involves identification, evaluation and measurement together with control of hazards plus subsequent audit and review of any control measures taken.

One of your insurance policy conditions expects that you take reasonable precautions to prevent losses and comply with statutory and other regulations. We hope that by using this Guide, specific to the contractors sector, it will help you to identify some of the hazards your business faces and enable you to put in place suitable controls or take action to avoid the hazards by the most economic means.

Risk categories include Fire, Crime, Health and Safety and Environmental Pollution. Time spent working through the self-assessments and Actions Required under each risk category can help to highlight areas where some further action is needed to safeguard against particular risks. You may also find it beneficial to use this guide in assessing risks and the actions required as related to both your business as a whole and to specific contracts you undertake. Remember, controlling risks can be really beneficial to the long-term success of your business. It may even help to reduce your insurance premium over time.

Note that your Allianz Engineering Contractors All Risks policy does not cover the Employers Liability, Public Liability and Environmental Pollution aspects of the site and plant risks included within sections of this guide. These assessments have been included to provide you with as comprehensive a risk assessment as possible.

Uninsured Losses

Not all losses are insured and research shows that uninsured losses by way of time lost, loss of goodwill and work disruption can be significantly higher than the amount covered under the insurance policy. Basic Risk Management techniques can therefore be invaluable to your business.

Legislation / Codes of Practice

All construction sites are subject to the Health and Safety at Work Act, Regulations flowing from that Act and Approved Codes of Practice aimed mainly at Health and safety aspects. This includes primarily the Construction (Design and Management) Regulations 2007.

Although health and safety protection of site personnel is a priority the Regulations also set out requirements for prevention of malicious arson and by default security requirements to protect the site.

Additionally, [Allianz Engineering Contractors All Risks and Construction Project All Risks](#) policies are also subject to the Joint Code of Practices for Fire Prevention on Construction Sites (currently version 6) which is an agreement for best practice on construction sites made between the Insurance Industry and the Construction industry. Apart from re-iterating legislation it incorporates additional fire and security actions above and beyond legal requirements to help prevent fires.

This Guide

The information given in this guide should not be regarded as exhaustive or comprehensive, as it is only intended to cover the most common construction hazards and their risk control measures. By adopting a systematic, analytical approach to Risk Management, you will, perhaps identify the need to have in place many other precautions to address a wide range of hazards.

It is important to appreciate that your insurance cover may be conditional upon certain risk control measures being in place. These are frequently detailed and specific and may therefore not be fully addressed in this guide. Please ensure that you have read and understood any such conditions.

No legal responsibility is accepted by Allianz Insurance plc for any error or omission or misleading statement contained in this guide.

Site Management

Construction sites and the work undertaken at them, places both site operatives and others, for example, members of the public, particularly children, at risk from a variety of hazards.

Construction site accidents and ill health can also cost money with uninsured cost of management time, fines, construction delays etc. that may be involved following an accident.

It is well known that the construction sector presently has a particularly poor accident and ill health record and it is essential that high rates of death, serious injury and ill health are reduced.

Site Management		Action Taken		
		Yes	No	N/A
Action:	Appointment of CDM Co-ordinator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Set up, maintain and implement a full fire risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Set up, maintain and implement a full water damage avoidance assessment plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Re-assess the plans as the site / risks change, record your findings and communicate the changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Provide sufficient security to prevent access by intruders or malicious persons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Carry out formal written weekly site fire risk assessments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Carry out daily checks of the site for infringements and un-safe practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Promote good working practices and compliance with site specific requirements during inductions and tool box talks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Devise, implement and record a penalty scheme for breaches of site requirements, including temporary and permanent banning of individuals or companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Set up, maintain and implement written policies for transport movement around the site including winter working and reversing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Set up, maintain and implement written policies for plant and equipment defect reporting, re-fuelling, maintenance and cleaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Make sure that if you are using sub-contractors that: <ul style="list-style-type: none"> • They provide adequate supervision for their workers • Their workers receive site induction which is recorded and signed for • Method statements and safety precautions are agreed with them before work is started • You provide all workers with the information they require and make sure that everyone understands how work is to be done and are aware of relevant method statements 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fire

Fires on construction sites are unfortunately all too common and many could be prevented had more attention been paid to planning and adoption of safe and secure working practices.

Construction fires put workers lives at risk and often result in significant material and financial loss, frequently accompanied by complete dislocation of project schedules with completion dates not being met.

Fire		Action Taken		
		Yes	No	N/A
Action:	Full written fire risk assessment for the site (which would evolve as the site progresses). Must be available for evaluation on request. Weekly written site fire risk assessments by Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Appointment of fire marshals (per building) and fire training of designated staff and site personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Provision of the means to detect a fire (electronic systems are available), means of raising the alarm and installation and maintenance of fire fighting equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Hot work permit scheme monitored and checked by management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Fire evacuation plan and communication with the fire brigade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Effective security measures to prevent malicious arson	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Materials storage and waste control regime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Provision of safe storage facilities for flammable gasses and liquids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Weekly recorded checks of all fire fighting equipment, escape routes, fire brigade access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Carry out inductions and toolbox talks to reinforce fire and security aspects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Combustible materials/ floor coverings within the building to be covered with LPS 1207 fire protective products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Scaffolding covers to be to LPS 1207 standard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Protect against any incidents as a result of a personal or social celebration (fireworks etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Risk Specific Actions

All of the following in this section are subject to the requirements of your fire risk assessment

Passive Fire Protection

	Action Taken		
	Yes	No	N/A
Action: Install fire walls, doors, ducts and seals as early as possible during the build process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Make sure any on site guards close fire doors during site walk rounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that all temporary covering materials used (including bubble wrap) conform to the requirements of LPS (Loss Prevention Standard) 1207	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Cover any timber framed structures with plasterboard or fire protection boarding as soon as is reasonably possible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fire Points

	Action Taken		
	Yes	No	N/A
Action: Locate on each working floor adjacent fire exit routes and adjacent specific hazard areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Each fire point must include suitable maintained fire extinguishers, means of raising the alarm and exit route plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Carry out weekly checks and re-assess requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Permanent positions be provided as external walls are built up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fire Fighting Equipment

	Action Taken		
	Yes	No	N/A
Action: Ensure you have the correct equipment to deal with any type of fire; for example CO ² (Carbon Dioxide) extinguishers for electrical fires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure both you and your operatives (and those of sub-contractors) are aware of where the equipment is located and how to use it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Maintain all the fire fighting equipment regularly and carry out a weekly check to ensure continued good condition and adequate distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hot Work

		Action Taken		
		Yes	No	N/A
Action:	By permit only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Never left unattended and turned off when not in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Cover combustible materials around the job with fire proof materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Check work area one hour after ceasing work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Management to check compliance with the permit requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Permit holders to provide their own maintained fire extinguishers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Permit holders to be trained in the use of such equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Gas cylinders to be removed to a locked cage or off site at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Use of hot irons for carpet gluing controlled using non combustible surface to leave the iron on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Smoking

		Action Taken		
		Yes	No	N/A
Action:	At commencement of the work, establish a 'no smoking' policy except for designated areas and communicate this to operatives at induction training and in site rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Prohibit on the site within the area defined by the perimeter fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Large sites may need to create a designated smoking area using Herras fencing and a sand bucket to safety extinguish cigarettes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Designated smoking areas must be at least five metres away from combustible materials or flammable liquids / gases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Materials Control

		Action Taken		
		Yes	No	N/A
Action:	Store combustible building materials in the open at least five metres from any building or other fire hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	If materials need to be protected from the weather store in a metal cabin or other non-combustible enclosure away from sources of fire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Remove all non-essential combustible wrappings and packaging and dispose of daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Allow only daily use supplies within the structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	High value materials to be delivered on a just-in-time basis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Store high value items within security padlocked steel containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Fire and security risks to any off site storage of materials must be assessed to the same standards as the main site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Remote un-manned depots to be subject to a fire risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Where combustible materials are stored inside the works, the area utilised should: <ul style="list-style-type: none"> • Have controlled access • Not be used for any 'hot work' • Have suitable fire fighting equipment • Be included in weekly checks and inspection regime 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Flammable Materials

		Action Taken		
		Yes	No	N/A
Action:	Limit use on site to authorised personnel only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Must be used in a well ventilated area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Surrounding electrical equipment if live must be to flameproof standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Remove from the structure when not in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	If absolutely necessary to store within the structure they must be within an approved flammable materials lockable cupboard (subject to a maximum 50 litres within the building)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Store externally in lockable steel cages or within designated flammable liquid storage facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Gas bottles must be chained and padlocked within purpose built carriers or to the structure of the building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Refilling using flammable liquids to be subject to a written policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Bulk fuel storage is to be within double skinned tanks or bunded tanks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Fuel dispensers are to be padlocked up when not in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Waste Materials

		Action Taken		
		Yes	No	N/A
Action:	Create a formal waste control regime and communicate to all site staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Waste must be removed from within the building on a daily basis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	If necessary to temporarily store waste within the building due to adverse weather conditions the chosen area must be as far from the working area as possible within a non combustible compartment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Make sure that the requirements for certain hazardous wastes defined as being 'special wastes' are met	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	External skips to be sited at least ten metres from the structure or other combustion sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Waste external to the buildings to be cleared regularly (more frequently if site is in an urban environment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Appoint cleaners to clear up waste materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Impose fines on contractors for failure to clean up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Electrical Installations

		Action Taken		
		Yes	No	N/A
Action:	Electrical systems to be installed by qualified personnel under the direction of management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Isolate and remove any installations not required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Prohibit all temporary systems installed by contractors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Turn systems off at night (except emergency lighting) from a central padlocked switch box	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Prohibit the use of any generators within the building / structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	External generators to be turned off at night (unless required by guards)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Prohibit any decorative lighting installations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Prohibit any food cooking equipment within the structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Heating restricted to 110v powered electrically heated blown warm air units which must be turned off at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Dehumidifying equipment restricted to 110v powered units which must be turned off at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure electrically powered saws are fitted with dust collectors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure electrical equipment in use is PAT tested including contractors equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure equipment in use is in compliance with PUWER regulations including contractors' equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Heating

	Action Taken		
	Yes	No	N/A
Action: All gas fired, oil fired or waste materials fired heating is to be prohibited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: If absolutely necessary only heating systems designated as acceptable by management are to be allowed in the structure which must be confined to 110v fan assisted electric heaters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure electrical equipment in use is PAT tested including contractors equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure equipment in use is in compliance with PUWER regulations including contractors' equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: All heaters are to be kept free of combustibile materials for a space of at least two metres all round the unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Heaters are to be located on a non combustibile floor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Heating in offices and canteens is to be confined to fixed electric convector heaters or fixed heated oil convector heaters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: All heating (except as required by guards in occupied offices) is to be turned off at night	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Temporary Buildings and Accommodation

	Action Taken		
	Yes	No	N/A
Action: Provision of site accommodation to LPS 1195, including safe location, fire resistant construction and it's maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: You should locate temporary buildings in excess of six metres from the building under construction or refurbishment and other permanent buildings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Temporary accommodation within the building under construction or refurbishment must be separated from the rest of the building by walls, ceilings, doors and windows that are capable of achieving thirty minute fire resistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Heaters in temporary buildings and temporary accommodation must be: <ul style="list-style-type: none"> • Fixed, preferably above floor level • Fitted with securely fixed metal guards • Thermostatically controlled with enclosed elements • Maintained in a sound condition 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Arson

	Action Taken		
	Yes	No	N/A
Action: Make sure that buildings are suitably protected and deter both trespassers and arsonists by erecting a hoarding or fence around the perimeter of the site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Store any combustibile materials in the open, well clear of the works and perimeter hoarding or fencing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Keep all flammable liquids and gas cylinders in a separate store when not in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Consider the provision of illumination of the site during the hours of darkness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Crime

The construction industry suffers both financially and from the inconvenience of plant and material theft. Items of plant in daily use on sites are becoming increasingly more valuable and complex. Although the primary target of thieves is often plant, it is not uncommon for materials together with in-situ fixtures and fittings to be stolen.

The potential for loss due to intruders or malicious persons will vary from location to location and type of development. Remote locations, poor perimeter security, presence of high value plant and materials in the open all increase the probability of loss.

An assessment must be made of the location and possible access to the site and security installed to combat any likely methods of attack and equipment / materials likely to be stolen.

Although not normally a mandatory requirement for most risks serious consideration must be given to:

- Installation of a site wide CCTV system installed and maintained to BS8418 with Police response to incidents
- Installation of an access control system to control and monitor the authorised access of contractors and staff
- Installation of security bollards to supplement gate security measures
- Protection of offices by an alarm installed to EN50131 standard by an NSI approved company with remote signalling via a Redcare GSM system
- Plant protection using GSM / satellite tracking systems.
- Deterring unauthorised use of external scaffolding to gain access to the works and utilisation of scaffold alarms to detect possible intruder
- Insistence that all plant used on site is CESAR* registered

*See under Mobile Plant (page 14)

High value contracts, high risk structures or sustained losses may make the installation of such aspects mandatory if cover is to be provided.

General Site Security

		Action Taken		
		Yes	No	N/A
Action:	Site is to be fenced off preferably using steel palisade fencing and gates or with timber hoarding to a height of at least 2.3 metres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Gates are to be heavy duty chained and security padlocked, or fitted with a heavy duty locking bar and security padlock with protective shroud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	External personnel doors are to be secured by a mortise lock to BS3621 or by a security locking bar and padlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Storage containers are to be constructed of steel and secured by security padlocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Store all attractive work materials within on site secured cabins, not in the open	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Park equipment and locate materials where they are visible to guards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Provide site lighting for the hours of darkness (and to support CCTV systems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Site Cabins

		Action Taken		
		Yes	No	N/A
Action:	Built to LPS 1195 standard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Preferably of steel construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Windows to be protected by fixed steel mesh grilles or lockable steel shutters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Doors to be made of steel or timber with a steel facing and secured by a mortise lock to BS3621	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Fit with remotely monitored intruder alarms systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All valuable items including computer equipment to be removed at the end of the working day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Materials

		Action Taken		
		Yes	No	N/A
Action:	High value materials must be delivered on a just in time basis wherever possible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	If not installed the materials must be stored within lockable steel containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	If located at a separate holding site the storage premises must be alarmed to EN50131 standards by an NSI approved company with remote signalling via a Redcare GSM system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Remote storage site mechanical security must be commensurate with the values and attractiveness of the equipment; but generally, security padlocks, steel grilles, shutters and BS locks would be a minimum standard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Theft by Operatives

		Action Taken		
		Yes	No	N/A
Action:	Put in place a system that will record and list all operatives working on the site each day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that satisfactory references are obtained for own and sub-contractors prospective employees and these are checked thoroughly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Encourage site operatives to challenge strangers on the site and to report suspicious activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Keep adequate records of the movement of all plant and tools, for example 'booked' out and in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Do not allow site plant, tools or materials to go off site without authorisation and consider the use of 'stop and search' routines if theft is suspected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that hand tools and small items of plant are returned to tool safes or similar secure storage units when they are no longer required and at the end of the working day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Where practicable, do not allow operative's private vehicles onto the construction site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Remove as much temptation to fraud as possible and make sure your supervision procedures and systems of check are watertight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Guards

		Action Taken		
		Yes	No	N/A
Action:	All guards must be approved to NSI Gold standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Guards must have two independent means of communicating externally from the site (land line and mobile phone etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Multiple guards must communicate using two way radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Clock in points must be provided, with walk rounds every 60 mins as a maximum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Guards must not release plant to a third party unless pre authorised by management or with the direct consent of management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Guards must make a formal record of all incidents and report any occurrences to site management the next day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Control of CCTV cameras should be independent of on site security guards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mobile Plant

Theft is one of the main causes of loss of plant and equipment in the construction industry. This does not mean however that protection against fire, malicious damage and other forms of accidental damage should

be ignored. This section deals with some general Action Required points along with security specific to mobile plant, tools and equipment. General site security is dealt with under a separate section.

Management Aspects

		Action Taken		
		Yes	No	N/A
Action:	All self propelled plant must be fitted with a fire extinguisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Operators must be trained in the use of fire extinguishing appliances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Re-fuelling must be subject to and in compliance with a written fire safety plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Plant must be subject to a written daily defect check which must be signed off by management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	At the close of business equipment must be moved to the designated plant storage area with good physical security – see General Site Security (page 9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Items spaced at least five metres apart to prevent fire spread	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Plant storage area must be easily viewed by the guards or CCTV system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Traffic routing at depot (one way system) / speed limit / lighting / road markings / hazard and warning signs etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Good prepared ground conditions for Summer and Winter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Control of employees / pedestrian separation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Use of banksman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Appropriate employee policies and training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	LOLER / PUWER inspections carried out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Embodied in Site Management policy is insistence that all plant used on site is CESAR* registered (*see page 14)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specific Security for Mobile Plant, Tools and Equipment

		Action Taken		
		Yes	No	N/A
Action:	Plant to be operated by trained staff and removed to a designated storage area out of hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Area to be protected by CCTV or alarm system (if required as a condition of cover)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All keys to plant to be removed from the site by the operator or secured within a steel lockable key cabinet located within alarmed office cabins or manned guard station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Plant to be protected using Thatcham 5 Star Security Rating: <ul style="list-style-type: none"> • 17 character VIN/PIN to WMI or ISO standard • Overt and covert markings (minimum six components) • Unique driving function keys • Perimeter security (cabs, doors and windows) • Fitted with Thatcham Cat 2 immobiliser system • Physical restraints (wheel clamps, track bolts, lift locks or ram locks) • CESAR* registration (*see page 14) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All plant (owned, hired and subcontract) used on site should be CESAR* registered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Plant to be preferably fitted with Thatcham Cat 5 GSM or satellite tracking systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	No plant to leave the site unless authorised by management and signed off by on site guards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Smaller hand operated items to be locked within steel containers which are directly monitored by either guards, approved CCTV or approved alarm systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Subcontractors equipment (if insured) is to be secured within locked containers monitored by guards or CCTV etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plant Operators

		Action Taken		
		Yes	No	N/A
Action:	Checks on licences held	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Formalised operator training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Refresher courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Tool box talks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Training for unusual plant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Drug / alcohol testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Certification (CSCS/ CITB/ iPAF)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CESAR (Construction Equipment Security and Registration Scheme)

CESAR is a National Plant Register which was set up by the Plant Theft Action Group (PTAG) working in conjunction with the Police. It is managed by the Construction Equipment Association (CEA) and Datatag ID Ltd is the system provider.

PTAG is a Home Office advisory group reporting to the Government Vehicle Crime Reduction Strategy team and attempts to reduce the impact of theft that organised criminal networks have on the Construction Industry.

Each item of Plant and Machinery registered and protected by the CESAR Scheme will be permanently fitted with two unique and highly visible triangular identification plates which are tamper evident and contain a unique Datatag transponder.

In addition:

- Each CESAR system comes with a number of unique Datatag® transponders or “tags” permanently hidden within the machine but can be located and read with Datatag’s unique infrastructure of special readers.
- Each CESAR system contains hundreds of miniature Datadots® embedded with another unique number permanently concealed throughout the machine making them virtually impossible to find and remove.
- Each CESAR system also contains a unique Forensic “DNA” solution which is invisible to the naked eye and applied to the nooks and crannies of the machine. A thief would have to remove every last molecule of Datatag “DNA” to be confident of removing the true identity of the machine.
- Each machine and CESAR system is permanently registered on Datatag’s secure and accredited database which is accessible 24/7 for Police and Customer enquiries.
- All appropriate machinery and equipment i.e. self propelled will be registered on the DVLA’s Off Road Register (ORR) allowing Police instant access to the Police National Computer and registered keeper files.
- Datatag does not operate or insist upon any reward scheme or “bounty fee” for assisting to find and identify stolen equipment unlike other registration schemes.
- Leading insurance companies may provide premium discounts for plant owners and contractors when registered with CESAR.

Water Damage

Water damage to buildings under construction from internal or external sources can be devastating to the progress of the contract. Measures should be taken to formally assess the risks of water damage to the contract and provide measures to eliminate or minimise the effects of any occurrence.

The effects of an incident will vary depending on the nature of the contract, the size and height of the premises, its susceptibility to water damage etc. It is therefore essential that steps are taken to identify and deal with potential issues.

Management Aspects

		Action Taken		
		Yes	No	N/A
Action:	Appoint a responsible person with responsibility to manage any water damage risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Provide a plan detailing emergency response procedures for incidents and contact information for key personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Any incidents to be fully investigated and reported. Subsequently procedures to be put in place to make sure further incidents of this type do not occur again	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Employ qualified competent contractors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure written procedures for installation, testing and commissioning of water systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure installations are installed to relevant standards (BS, EN codes etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Provide independent checks and quality control on installed systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Maintain records of all installations and testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure site drainage is installed as early in the contract as possible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Install water management devices on the main incoming water supply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Turn water off if possible out of hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Install water management devices on header tanks etc for larger systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Install electronic water detection systems throughout the buildings with visual and audible warning within guard huts or remotely to a permanently manned alarm receiving centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Train staff and on site guards in emergency water shut off procedures and locations of water shut off valves etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other Damage

Temporary works and uncompleted permanent works are particularly vulnerable to wind and rain water damage. Damage to underground services is common and often

results in injury to operatives, damage to the works, plant and equipment and disruption of utilities or other commercial services.

Machinery and Work

		Action Taken		
		Yes	No	N/A
Action:	Compliance with PUWER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Make sure that all machinery and equipment is suitable and take into account the circumstances in which they will be used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Guards must be fitted to all parts of machinery which could cause injury (and kept in place whilst the machinery is in use)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that dangerous machinery and equipment are only used by fully trained or adequately supervised staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that work equipment, machinery, guards and other safety devices are maintained in a safe condition in accordance with manufacturers' or suppliers' instructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Procedures are needed to ensure maintenance can be carried out safely, for example isolate and lock off dangerous machinery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Lifting Plant and Equipment

		Action Taken		
		Yes	No	N/A
Action:	Carefully plan and co-ordinate lifting on site which involves the use of mobile cranes and ensure that such lifting is only carried out by trained, competent people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Make sure hoists are erected by trained and experienced people, that the hoist operator is trained and competent and that weekly checks on the hoist are completed and recorded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Lifting equipment inspections must be carried out in accordance with LOLER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Temporary Works and Incomplete Permanent Works

		Action Taken		
		Yes	No	N/A
Action:	Make sure that where the works are in an exposed position, suitable consideration has been given to prevention of damage to temporary roofs, sheeted scaffold, unsupported brick panels or other susceptible elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Always assume that underground services are present when completing groundworks until it is proved otherwise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Adopt a safe system of work for any ground work where underground services are in the area of works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Special Precautions for Suspended / Mothballed Work Sites

Important – Allianz Engineering should be notified immediately (through your broker) once it is known that work is to be suspended on a contract site as this is a material change to the risk and may affect your policy cover.

There may be times when work on a contract site is suspended. These situations create increased risks of malicious damage, malicious arson, theft and water damage.

All the risks to the site must be re-evaluated and it will be necessary to re-assess your general formal fire risk assessment and water damage avoidance assessment. This will depend on the nature and extent of the works, the type of construction and the location of the site.

Once re-assessed the responses to protect the site must be implemented. The following aspects should be considered and implemented as minimum expectations for period of suspended work.

Management Aspects		Action Taken		
		Yes	No	N/A
Action:	Site to be fully hoarded with padlocked access gates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All cabins / containers to be locked and protective window screens secured in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All utilities to the cabins and buildings under construction must be turned off at the entry point to the site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Water systems within structures to be drained down, or fitted with electronically operated water flow sensing control valves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All scaffolding is to be dismantled and removed from the site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All buildings must be weatherproofed and all windows and doors secured or the openings boarded up using at least 1/2" plywood secured by screws or rawl bolts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	All externally stored work materials are to be removed from the site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	The site is to be cleared of any waste materials and the skips removed from the site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	The site is to be protected at all times by either guards or a BS8418 CCTV systems with off site monitoring and Police response	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Guards must patrol the site (with clock in points) at least hourly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Management must visit the site daily (if site is not guarded) to check all security measures have not been compromised and for any malicious damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Any defective aspects / damage must be repaired immediately and the site re-secured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Post Loss / Dangerous Occurrence / Near Miss Action

		Action Taken		
		Yes	No	N/A
<p>Apart from being unpleasant, costly and disruptive to your business, every accident (which includes damage or interruption in production) constitutes an opportunity to correct some problem.</p> <p>For this purpose, a near miss is just as valuable as a serious injury/damage in fact possibly even more valuable as these may over a period of time draw attention to the more serious or disabling accident waiting to happen.</p>				
Action:	Make sure that there are nominated persons for accident and incident reporting and that these people are aware of statutory requirements as regards accident reporting to the enforcing authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that insurers are notified of the accident, loss or damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Complete an investigation of the accident, loss or damage at a suitable level and communicate findings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Where remedial measures are found necessary and put in place, check that they are being adopted, used or followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Contingency Measures

		Action Taken		
		Yes	No	N/A
<p>Contingency measures put in place by a contractor prior to any major interruption of works at a construction site can play a part in the recovery process for the contract.</p>				
Action:	Plan ahead to identify, evaluate and reduce the threats of interruption and to decide the course of action if and when they arise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Identify critical plant, equipment and materials and determine the availability of replacement and possible delays in delivery from manufacturers or suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Consider off-site retention of critical or essential materials until they are required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Make sure that back up data and software together with back up plans, drawings and key reports are held off site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Health and Safety

As stated earlier, construction sites and the work undertaken at them, place both site operatives and others, for example, members of the public, particularly children, are at risk from a variety of hazards. The construction

sector presently has a particularly poor accident and ill health record and it is essential that high rates of death, serious injury and ill health are reduced.

Planning and Organising

		Action Taken		
		Yes	No	N/A
Action:	Make sure the pre-tender health and safety plan required under CDM Regulations is seen and its contents taken into account before tenders are submitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that hazards involved with the works are assessed as regards the likelihood of any injury arising and decide on adequate precautions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Obtain health and safety method statements and agree safety precautions before work is started	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Decide who will supervise the work and check that they are adequately trained and experienced and that they will have sufficient time and resources to manage health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Make sure that if you are using sub-contractors that: <ul style="list-style-type: none"> • They provide adequate supervision for their workers • Their workers receive site induction which is recorded and signed for • Method statements and safety precautions are agreed with them before work is started • You provide all workers with the information they require and make sure that everyone understands how work is to be done and are aware of relevant method statements 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Working at Height

Falls from height may cause serious injury or death. People fall because access to and from the workplace was not adequate, the right equipment had not been provided and properly used or the workplace itself was not safe. Most accidents involving falls could have been prevented if the right equipment had been provided and properly used.

	Action Taken		
	Yes	No	N/A
Action: Before working at height, check that workers have a safe method of getting to and from the work area and decide what particular equipment will be suitable for the job and the conditions on site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that access equipment and/or working platforms are in good condition and make sure that whoever puts the equipment together is trained and competent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Make sure work platforms and any edges from which people (plus tools or materials) are likely to fall have guard rails and toe boards or other barriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Instruct site operatives at induction that alteration, modification or adaptation of access equipment and/or working platforms is forbidden and that any damage thereto must be reported immediately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Make sure that those who use access equipment and/or working platforms are supervised so that they use it properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Put in place the necessary inspection regime for working platforms and associated parts where it is possible for a person to fall two metres or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Remember that only when no other means of access method is practicable should a way of arresting falls, for example harness and lines or nets, be relied upon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Falling Material and Collapses

People are struck by material falling from loads being lifted and material or tools which roll or are kicked off work platforms. Others are struck or buried by falling materials when excavations collapse.

	Action Taken		
	Yes	No	N/A
Action: As far as possible, keep work platforms clear of loose material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Provide a way of preventing materials or other objects rolling or being kicked off the edges of platforms e.g. toe boards, solid barriers, brick guards or similar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that all excavations are suitably planned to take into account possible hazards and that all such work is directed and inspected as necessary by a competent person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Provide hard hats and make sure that they are worn and worn correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Electricity

Electrical equipment used on construction sites, particularly power tools and other portable equipment and their leads, are often subjected to rough use in a harsh environment.

Unlike most other hazards which can be seen, felt or heard, there is no advance warning of danger from electricity and electricity can kill. Even non-fatal shocks can cause severe and permanent injury. Shocks from faulty equipment may lead to falls from access equipment or working platforms.

		Action Taken		
		Yes	No	N/A
Action:	Ensure that all electrical equipment used on the works is suitable for site conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Where possible, eliminate or reduce risks by using cordless tools or tools which operate from a 110v supply system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	If mains voltage has to be used, ensure trip devices such as RCD's are used and checked daily by operating the test buttons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Make sure that electrical systems are checked and maintained and that an inspection and test regime for equipment and fixed wiring is in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Use a qualified electrician for electrical installation work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Machinery and Work Equipment

Machinery, tools and equipment can be dangerous if unsuitable for use and not properly maintained. Accidents involving machinery and work equipment on construction sites happen all the time – many serious, some fatal.

		Action Taken		
		Yes	No	N/A
Action:	Make sure that all machinery and equipment is suitable and take into account the circumstances in which they will be used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Guards must be fitted to all parts of machinery which could cause injury (and kept in place whilst the machinery is in use)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that dangerous machinery and equipment are only used by fully trained or adequately supervised staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Ensure that work equipment, machinery, guards and other safety devices are maintained in a safe condition in accordance with manufacturers' or suppliers' instructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action:	Procedures are needed to ensure maintenance can be carried out safely, for example isolate and lock off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Manual Handling

Manual handling is transporting or supporting loads by hand or by bodily force. Many construction workers hurt their back, arms, hands or feet each year. One bad lift can cause a lifetime of pain and disability and cumulative damage can build up over time – even with light loads.

The Manual Handling Operations Regulations 1992 require any unavoidable manual handling activities to be assessed and measures introduced to reduce risk of injury.

	Action Taken		
	Yes	No	N/A
Action: To avoid manual lifting and carrying, ensure that heavy or awkward materials and equipment are delivered as close as possible to the location they will be fitted or worked on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Assess any unavoidable manual handling operations with a view to reducing risk of injury	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Provide mechanical handling aids wherever possible to avoid manual handling injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: If loads must be manually lifted, ensure they are carried by at least two people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Train workers in safe lifting techniques and sensible handling of loads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Consider ordering bagged materials in small easily handled sizes where possible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fire Safety

Swift evacuation of workers and visitors is vital in the event of a fire.

	Action Taken		
	Yes	No	N/A
Action: Maintain clearly signed, unobstructed escape routes at all times and ensure all operatives are aware of evacuation procedures which should be reinforced by periodic drills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hazardous Substances

Hazardous Substances can include chemicals that construction operatives work with directly (for example paints, thinners and chemical cleaning fluids) and also dust, fume and bacteria which may be present on the site.

Exposure can be from breathing in fumes, vapours and dusts, by direct contact with skin or eyes or from swallowing or eating contaminated material. If exposure is not prevented or properly controlled, it can cause serious illness, including cancer, asthma, dermatitis and even death.

The Control of Substances Hazardous to Health Regulations 2002 (and 2005 Amendment) prohibits the use of hazardous substances at work unless the risks from such substances have been assessed and exposure prevented or adequately controlled.

	Action Taken		
	Yes	No	N/A
Action: List all the hazardous substances to be used on site (refer to labels on containers) and obtain safety data sheets from manufacturers or suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Decide whether exposure to the hazardous substances in the particular job about to be done is likely to harm anyone's health (both immediate and long term) by completing an assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: If harm is likely, consider doing the job(s) in a different way or consider using less hazardous substitute(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: If hazardous substance(s) have to be used, control exposure by: <ul style="list-style-type: none"> • Making sure the substances are used in accordance with the manufacturer's instructions • Reducing exposure level by good ventilation, by using as little of the substances as possible, by application/transfer methods that restrict fumes and vapours in the atmosphere and by water suppression to control dust 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that if and only if exposure cannot be adequately controlled, personal protective equipment is provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Noise

Regular exposure to high noise levels can cause hearing loss. If an operative using site equipment needs to shout to someone two metres away to be understood then there is likely to be danger to hearing.

	Action Taken		
	Yes	No	N/A
Action: If you think there may be a noise problem, you should arrange for an assessment to be carried out by a competent person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Consider elimination and control of noise at source and if this is not possible, provide operatives with ear-plugs or defenders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that site disciplines for the wearing of hearing protection are adhered to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vibration

Vibration from work with powered hand-held tools on construction sites can damage the hands and arms of users causing "hand-arm vibration syndrome" (HAVS). This is a painful, irreversible condition which includes "vibration white finger" (VWF). The effects can be impaired blood circulation, damage to nerves and muscles and loss of ability to grip properly.

Whole body vibration can happen when driving vehicles such as dumpers and lift trucks or riding in vehicles over rough terrain and can lead to back problems.

	Action Taken		
	Yes	No	N/A
Action: Provide tools designed with low vibration properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Consider doing the job another way without using high vibration tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Make sure operatives use the right tool for the job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Reduce vibration from tools through regular maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Encourage operatives to protect against vibration by: <ul style="list-style-type: none"> • Wearing gloves • Having hot food or drinks • Massaging the fingers • Not smoking (as this can cause narrowing of the blood vessels) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Asbestos

Breathing airborne dust which contains asbestos fibres can cause serious damage to the lungs and cause cancer.

There is no known cure for asbestos-related diseases.

Construction site operatives such as plumbers, electricians and heating engineers may not consider that they work with asbestos but they might regularly drill, cut and handle materials containing asbestos and need to be protected.

	Action Taken		
	Yes	No	N/A
Action: Remember that no work should be carried out which is likely to expose operatives to asbestos unless an adequate assessment of exposure has been made	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Decide what precautions need to be taken to protect operatives before carrying out work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Remember that work in which asbestos insulation or asbestos coating is removed, repaired or disturbed will normally have to be carried out by a specialist licensed contractor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Dispose of asbestos materials that have been removed in a safe manner by specialist licensed contractor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Lifting Plant and Equipment

Construction workers can be killed or seriously injured during lifting operations because of accidents such as cranes overturning, gin wheels collapsing and hoists being overloaded.

Action: Carefully plan and co-ordinate lifting on site which involves the use of mobile cranes and ensure that such lifting is only carried out by trained, competent people

Action: Make sure hoists are erected by trained and experienced people, that the hoist operator is trained and competent and that weekly checks on the hoist are completed and recorded

Action Taken
Yes No N/A

Young Employees

The law prohibits you from employing young persons (under 18 years of age) in activities which are beyond their physical and psychological capabilities.

Action: Assess any health and safety risks prior to employment of young people (taking into account their inexperience, immaturity and lack of awareness of risks to their health and safety) and make sure any such risks are adequately controlled

Action Taken
Yes No N/A

Work Affecting the Public

It is not only construction operatives who are at risk from site work. Members of the public including children are killed and seriously injured each year.

Accidents often happen when people are walking near a building being built, refurbished or demolished or walking near work in the street.

Action: Protect passers-by from falling materials with brick guards and/or netting on scaffolding and use fans or covered walkways where the risk is particularly high

Action: Make sure site visitors report to the person in charge of the site and are not allowed to wander around the site alone

Action: Where the construction site is near a school or housing estate, take steps to reduce the chance of children injuring themselves if they get onto the site

Action: Ensure that perimeter fences, and fences to excavations and barriers to protect the public are of sufficient strength and stability and are maintained in good condition

Action Taken
Yes No N/A

Environmental Pollution

Most pollution control measures required on construction sites cost very little, especially if they are included at the planning stage for the works. In contrast, the costs of

cleaning up a construction site pollution incident can be very high and may be accompanied by a prosecution for an environmental offence.

Planning and Preparation

As with other potentials for harm, planning and preparation plays an essential part in preventing and controlling pollution in respect of construction sites.

	Action Taken		
	Yes	No	N/A
Action: Ensure that an investigation is made as to past use of the site, that a survey of the site is completed and the contents of all storage tanks and pipelines known	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Identify underground services on site and clearly mark and protect these before demolition or construction works commence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Check any old storage tanks and have them safely emptied before they are moved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: If the works are in or near rivers, streams, ditches and other watercourses, specific precautions must be taken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Consider the need to notify or consult with the Environment Agency regarding pollution prevention measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Potential Pollutants, Use and Storage

Construction sites use and produce many potential pollutants of concern including silt, cement, concrete, fuel, lubricating and shutter release oils, petrol, cleaning materials, sewage and other waste materials.

	Action Taken		
	Yes	No	N/A
Action: Ensure that all fuel, oil and chemicals are sited on an impervious base within a bund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: All deliveries of fuels and hazardous materials must be supervised by a responsible person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Make sure that storage tank levels are checked before delivery to prevent overfilling and that the product is delivered to the correct tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Clearly mark storage tanks as to their contents and make sure that adequate safeguards are taken to prevent vandalism and unauthorised interference with valves and trigger guns which should be locked when not in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Do not pump silty water arising from excavations, exposed ground, stockpiles, plant and wheel washing and site roads directly to a river, stream or surface water drain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that adequate provision is made for dealing with silty water and that approval of the water utility company or Environment Agency has been obtained as regard discharges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Where possible, refuel mobile plant in a designated area preferably one that has an impermeable surface and is well away from any drains or watercourses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Provide drip trays for diesel pumps and similar equipment to collect minor spillages and make sure these are checked regularly with safe removal and disposal of accumulated oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that washings from cleaning concrete mixing plant or ready mix concrete lorries do not flow into any drain or watercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Waste Management

Environmental legislation requires waste producers to ensure that waste does not escape from their control and is passed only to an authorised person accompanied by a full written description. Adopting a waste management scheme for correct handling, storage and disposal of waste materials is vital if environmental harm and public complaint are to be avoided.

Action Taken

	Yes	No	N/A
Action: Consider the use of a waste minimisation scheme for construction works, for example reduce the volume of waste produced, reuse the material again, or recycle the material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Store all wastes in designated areas well away and isolated from surface drains and watercourses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Cover waste skips to prevent dust and litter being blown about plus rainwater accumulation and ensure that skips are frequently inspected and replaced when full	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Segregate waste and provide separate skips where possible to enable recycling and prevent cross-contamination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Ensure that the waste contractor who removes the waste is registered with the Environment Agency and a written description of the waste is provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Consider how noise and dust emissions from the site can be minimised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Make sure that the requirements for certain hazardous wastes defined as being 'special wastes' are met	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Emergencies

If it is unavoidable that oil and chemicals have to be used within close proximity of a stream, river or any other water course, then emergency procedures should be put in place.

Action Taken

	Yes	No	N/A
Action: Ensure site management are fully aware of what to do in the event of spillage and the Environment Agency's emergency hotline is known	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Action: Provide a suitable spill kit or absorbent materials in the vicinity of the oil and chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Further Information

If you wish to discuss any matters arising from this please contact your broker who will contact the local Allianz Engineering office on your behalf. Our Engineering Risk Surveyors are available if required to carry out site visits to

discuss issues and possible solutions. If you do not have a broker Allianz Engineering staff are always available to discuss any perceived issues. Our contact number is: 01428 722 407

Other Sources of Information

Fire and Crime

Publications are available from:

The Publications Department
The Fire Protection Association
Bastille Court
2 Paris Garden
London
SE1 8ND

Tel: 020 7902 5300

Fax: 020 7902 5301

Website: www.thefpa.co.uk

Health and Safety

Publications and a wide range of guidance material specific to Health and Safety in the construction sector are available from:

HSE Books
P O Box 1999
Sudbury
Suffolk
CO10 2WA

Tel: 01787 881 165

Fax: 01787 313 995

Website: www.hsebooks.co.uk

www.allianzengineering.co.uk

Allianz Insurance plc. Registered in England number 84638.
Registered Office: 57 Ladymead, Guildford, Surrey, GU1 1DB, United Kingdom.