



PROPOSED RESIDENTIAL
DEVELOPMENT

**Pottery Gardens – Ayr Road, Cheadle
Phase 2**

**Construction Environmental
Management Plan**

**October 2021
REV -**

Introduction

This Construction Environmental Management Plan (CEMP) has been prepared by Persimmon Homes North West.

The management of construction activities that can have significant environmental impacts is required as part of the proposed development. The CEMP provides a framework for planning and implementing demolition and construction activities in a way which prevents, minimises or controls their potential environmental impacts.

The document also highlights responsibility and accountability for the management of the Plan.

Objectives of this CEMP

This CEMP provides the details of the measures that will be implemented to minimise and mitigate the construction impacts on the environment at the development site and the surrounding area. The primary objective of the CEMP is to ensure that the relevant provisions set out by Staffordshire Moorlands District Council.

Persimmon Homes North West are committed to ensuring measures are in place to minimise and mitigate any potential impacts on the environment during the construction phase of development.

The CEMP has been developed considering the overall environmental objectives of Persimmon Homes North West set out in existing company Environmental Policies and Corporate Social Responsibility documents and will comply with all relevant legislation.

Health and Safety Management

Persimmon Homes North West are committed to promoting a positive safety culture. The enforcing authority for health and safety on construction sites is the Health and Safety Executive who will be notified of all construction works prior to their commencement on site.

The Main Contractor will maintain a register of accidents, incidents, near misses and complaints. Contractors failing to maintain the required safety standards may be excluded from the approved tender list for future work.

All works will be legally compliant and all Codes of Practice and site rules relating to the works will be observed.

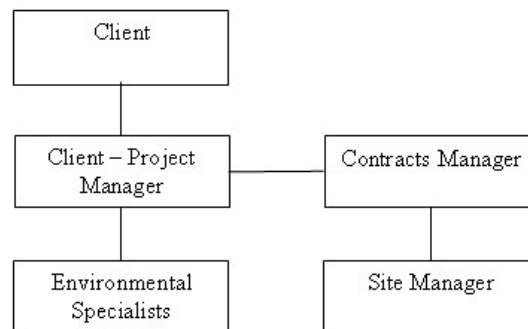
Persimmon Homes are committed to the protection and enhancement of the environment. It recognises the responsibility for the effects its operations have on the environment and is committed to minimising environmental impact. As far as is reasonably practicable this is achieved by:

- Monitoring legislative developments and ensuring all operations are carried out in compliance with applicable legal requirements, Regulations, Codes of Practices and Standards.
 - Adopting auditing and monitoring regimes to ensure compliance is achieved and opportunities for improvement identified.
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- Identifying environmental aspects of each business, for the purpose of establishing Targets and Objectives, with the aim of attaining continual improvement in all areas of our business.
- Provision of training and education to ensure staff, operatives and others working on behalf of the Company have an adequate understanding of our Policy and standards, relevant legislation and the environmental aspects of the Group Company's activities.
- Early involvement with statutory authorities, customers and others affected by our activities to achieve acceptable practices
- Planning, assessing and executing works in order to prevent pollution and minimise the environmental impact for those affected by our operations.

Project Organisation & Responsibilities

The image below details the management chain with descriptions of each team member being provided in the following sections.



Client Project Manager

The Client Project Manager would have overall responsibility for monitoring the performance of the project against statutory requirements and the agreed objectives and targets. The duties associated with this role include:

- Review and approve the Contractor's CEMP together with any specialist procedures and identify the need for any improvements;
- Identify the competence of all contractors to be employed for the works;
- Review construction method statements with regard to environmental aspects and advise of suggested improvements prior to works commencing, and
- Provide main contact between contractor and Client's project team on environmental & construction issues.

Contracts Manager

The Contracts Manager will have responsibility for co-ordinating and managing all the environmental activities during the construction works. The duties associated with this role include:

- Develop and review the CEMP, construction method statements, work instructions and other specialist procedures;
- Identify competence requirements for all staff and ensure delivery of training to the project team;
- Review and improve method statements for environmental aspects prior to works starting;
- Monitor construction activities to ensure that identified appropriate control measures are effective and ensure compliance with the CEMP;

- Act as main point of contact between the regulatory authorities and the project on all issues;
- Provision of advice and liaison with subcontractors to ensure that risks are identified and appropriate controls developed which are identified within method statements;
- Assist with the development and undertaking of training for site staff;
- Liaison with the Client Project Manager

Site Manager

The Site Manager will be responsible for the following:

- Assist the contract manager in developing and maintaining the CEMP together with other documentation;
- Monitor construction works to ensure any necessary control measures are in place and meet the requirements of the CEMP.
- Carry out weekly site inspections and complete inspection report identifying any actions required;
- Maintain training register and provide training where necessary;
- Assist in responding to complaints;
- In the event of an environmental incident ensure correct procedures are adhered to.
- Provide information on waste management/reduction procedures to relevant staff
- Implementation and operation of environmental controls on site;
- Respond to any environmental incidents such as spills

Environmental Specialists

A team of experts would be available on an “as and when required” basis to support the project team. Their role would include the undertaking of any necessary watching briefs.

Project Communication & Co-ordination

Periodic meetings will be held between the team members to discuss performance to date, the need for improvements (if any), results of inspections and any complaints received. Upcoming work operations will be reviewed in order to plan any necessary actions to mitigate risks and to disseminate information on best practice. If necessary, representatives of the Statutory Authorities may also be invited to attend such meetings, as and when required.

Training

A training plan will be developed and included in the CEMP which identifies competency requirements for all staff with responsibilities and details the training needs to ensure that such requirements are met. Records of competence and training will be maintained and all site staff will be inducted on the environmental issues related to the project and the CEMP. Toolbox talks covering specific environmental aspects will also be undertaken as and when necessary.

Operational Control

Site works will be checked against the CEMP requirements. Any mitigation measures that have been agreed with the Statutory Authorities, or are part of planning conditions, will be put into place prior to the undertaking of the works for which they are required and all relevant staff will be briefed accordingly.

Method statements that are prepared for the works will be reviewed / approved by the Client Project Manager and where necessary the relevant Environmental Specialist.

Checking & Corrective Action

Daily inspections of the site and the works will be undertaken to minimise the risk of environmental damage and to ensure compliance with the CEMP. Any environmental incidents are to be reported immediately to the Site Manager. The Contracts Manager will undertake monthly inspections and complete an assessment of the projects performance with regard to the relevant standards/legislation and the contents of the CEMP. Following these inspections the Manager will produce a report detailing the findings which will be provided to the Client Project Manager and reviewed at the monthly project meeting.

Environmental Control Measures

Specific procedures to manage the key environment aspects of the project will be developed by the Contractor prior to work commencing which will include the following.

Construction Phase Traffic

In order to mitigate the impact of construction traffic during network peak hours, a Traffic Management Plan will be developed and implemented by the Contracts Manager. This plan will focus on the:

- Co-ordination of car parking construction personnel;
- Implementation 'just in time' contract plant hire
- Restriction of unnecessary vehicle movements during the day; and
- Co-ordination of deliveries to arrive outside of peak times where appropriate

Traffic Management Plan

To be held in site office.

Working Hours

Construction working hours will be restricted to:

- Monday – Friday 08:00 – 18:00
- Saturday 08:00 – 13:00
- No working will be permitted Sundays or Bank Holidays

Although it is not anticipated, exceptions to this may arise due to abnormal loads or to conduct specialist services. In the event that exceptions to the standard working hours are required, Council approval will be sought and residents will be notified via letterdrop.

In order to avoid disruption to local traffic, contractors are expected to be on site by 07:30. Parking must be in a designated area only and this must be sufficient to hold all necessary vehicles. If vehicles need to park off-site then it must be done only in a proper and suitable place.

Air Quality

Impacts during the construction of the proposed development, such as dust generation and plant vehicle emissions, are predicted to be of short duration and only relevant during the construction phase.

An air quality report has been carried out as part of the planning process to protect constructed properties from dust. This document will be read in conjunction with the Construction

Management plan.

The required mitigation measures from the Air Quality Report are below:

- Damping down surfaces during dry weather.
- Provision of appropriate hoarding and/or fencing to reduce dust dispersion and restrict public access.
- Sheeting of buildings, chutes, skips and vehicles removing wastes with the potential for dust generation.
- Appropriate handling and storage of materials, especially stockpiled materials.
- Restriction of drop heights onto lorries and other equipment.
- Fitting all equipment with dust control measures such as water sprays wherever possible,
- Use of gas powered generators rather than diesel if possible (there are also quieter) and ensuring that all plant and vehicles are well maintained so that exhaust emissions do not breach statutory emission limits.
- Switching off all plant when not in use.
- No fires would be allowed on site.
- Ensuring that a road sweeper is available to clean mud and debris from hardstanding roads and footpaths.

Noise and Vibration

Modern plant is supplied with manufacturers' data on noise levels at the operator position, as well as maximum sound pressure levels external of the machine. These are also indicated on the machine. Providing the level inside the cab is below 80dB(A) and the machine has been properly maintained with all windows, doors and acoustic hoods in place, then no further action is needed at this time.

Small items of plant can be particularly noisy, but in general are only used for short periods of time. Whenever possible, quiet plant should always be selected and as manufacturers do more work, on noise reduction, a larger selection is available. Small plant that generally exceeds levels of 85dB(A) include:-

Typical levels

Abrasive Wheel/Disc cutting machines	Up to 100dB(A)
Hammer drills	up to 100dB(A)
High-speed portable saws	90dB(A)
'Quiet' generators	<85dB(A)
Other generators	>90dB(A)
Bench saws	Up to 100dB(A)

The manufacturer or supplier should indicate on the piece of equipment if noise levels are likely to be excessive and hearing protection is required.

The Company or its contractors should consider the following when planning the works to try to minimise both occupational noise and environmental nuisance noise.

Large Plant

- Select quiet plant. If possible use electrical operated plant rather than diesel.
- Check operator noise levels from manufacturers or suppliers data.
- Check condition of doors, windows, acoustic covers etc on the plant and ensure they are in

good order.

- Turn off plant and equipment when not required. Minimise environmental noise.
- Position fixed or semi fixed items away from occupied properties.

Small Plant and Equipment

- Select quiet plant
- If the equipment carries a warning sign, then hearing protection should be used by the operative and those working close by.
- Remove non-essential personnel from the area.
- Hearing protection should be used whenever abrasive disc machines and pneumatic breakers are used, irrespective of the exposure time.
- The company's safety adviser will advise on the type of hearing protection to be provided. They can also carry out spot checks on the actual noise levels on site if required.

The assessment of construction noise has shown that the adopted criterion is unlikely to be exceeded at the nearby noise-sensitive receptors. The predicted increase in the ambient noise climate would lead to a minor, barely perceptible, impact at all locations assessed. Several safeguards exist to minimise the effects of construction noise and these will apply during the construction of the proposed development infrastructure. The safeguards include:

- The various EC Directives and UK Statutory Instruments that limit noise emissions of a variety of construction plant;
- Guidance set out in BS5228:Part 1:1997, that covers noise control on construction sites; and
- The powers that exist for local authorities under Sections 60 and 61 of the Control of Pollution Act 1974 to control environmental noise and pollution on construction sites.

In addition the following measures will be considered, where appropriate:

- Any compressors brought on to site should be silenced or sound reduced models
- All pneumatic tools should be fitted with silencers or mufflers;
- Deliveries should be programmed to arrive during daytime hours only. Care should be taken when unloading vehicles to minimise disturbance to local residents. Delivery vehicles should be prohibited from waiting within the site with their engines running;
- All plant items should be properly maintained and operated according to the manufacturers' recommendations in such a manner as to avoid causing excessive noise. All plant should be sited so that the noise impact at nearby noise-sensitive properties is minimised;
- Problems concerning noise from construction works can sometimes be avoided by taking a considerate and neighbourly approach to relations with local residents. Works should not be undertaken outside the hours agreed with the local authority.

Experience from other sites has shown that by implementing these measures, typical noise levels from construction works can be reduced by 5dB(A) or more. As construction works are temporary and noise levels have been calculated for a worst-case situation no further mitigation measures are considered necessary.

Construction Vibration

Vibration during construction operations is unlikely to be perceptible at any of the nearby vibration-sensitive receptors due to their distance from the site. It is however recommended that construction vibration levels are subject to a watching brief with vibration measurements taken as

necessary

Water Management and Pollution

Precautions will be taken prior to and during construction to ensure the protection of watercourses and groundwater against pollution. The measures would be informed by the site investigation works discussed above and also by CIRIA Report 532 'Control of Water Pollution from Construction Sites' and Environment Agency Pollution Prevention Guidelines, principally PPG6 – 'Working at Construction and Demolition Sites'. Waste waters from the canteen and welfare facilities must be discharged to a normal main sewer system or to a storage tank for removal by septic tank service.

Ground water that forms in excavations could be classed as contaminated. The contamination could be due to substances leaching out of the surrounding materials or it could merely be due to high suspended solids content of the water. If this type of water was to be discharged into an open watercourse, it could result in fish losses and damage to that water course ecology.

Site Manager's should take this into consideration when pumping out excavations, sump pits etc and generally planning the site.

All discharges of water into watercourses shall be subject to Environment Agency Local Drainage Boards or Local Authority Approvals. These approvals may have conditions relating to suspended solids and rate of discharge to avoid bank erosion and scouring.

Wheel Wash

Site vehicles will have wheels washed down prior to leaving the site using the jetwash and bowser facilities provided (location shown on Construction Management Plan), so as to reduce unwanted debris spreading onto the highway during earth works. During earthwork a road sweep will be carried out to the existing highway at the end of each day and as required. During all other construction the road sweep will be carried out on a weekly basis.

Storage of Materials

Construction materials such as cement, oils and fuels for site plant etc have the potential to cause pollution. All fuel, oil and chemical storage must be sited on an impervious base within a secured bund of adequate storage capacity. The risk of fuel spillage is greatest during refuelling of plant. Mobile plant would be refuelled either off site or within a designated area on hard standing. All pumps, hoses etc would be checked regularly.

Complaints Procedure

It is important that member of the public or interested parties are able to make valid complaints about the construction works. Such complaints can provide a valuable feedback mechanism to which helps to reduce potential impacts on sensitive features and will also allow the construction techniques to be refined and improved.

Details of the Contracts Manager and Site Manager will be available at the site entrance.

Closure

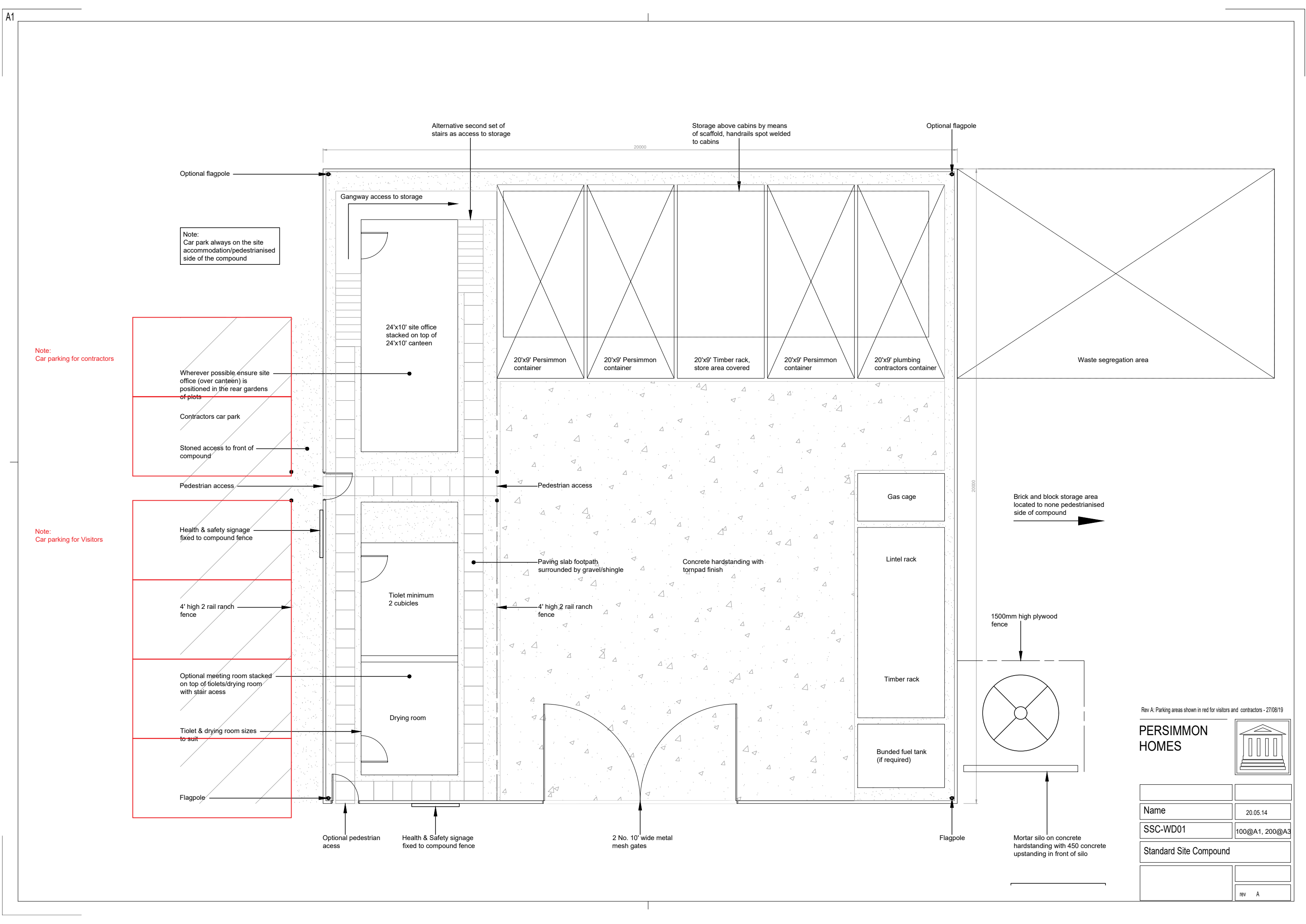
This report had been prepared with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported

herein is based on the interpretation of data collected and have been accepted in good faith as being accurate and valid.

Schedule Of Revisions			
Rev	Revision Date	Prepared By	Details
0	October 2021	RH	Original Issue

Distribution Details: This document is subject to immediate revision throughout the duration of the Construction phase. Previous revisions will be retained for archive as per standard Company procedures.

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Pre-Construction Information

Introduction

CDM 2015 states that the Client has the main duty for ensuring the provision of pre-construction information. This must be provided as soon as practicable to each designer and contractor who is bidding for work on the project or has already been appointed.

The Principal Designer is required to play a major part in this process and help the Client bring the pre-construction information together and provide it to the other designers and contractors involved.

When pre-construction information is complete, it must include proportionate information about:

- The project, including a “Client’s Brief” and key dates of the construction phase.
- The resources and time being allocated to each stage of the project.
- The arrangements to ensure that there is co-operation between duty holders and that the work is co-ordinated
- The health and safety hazards of the site, including design and construction hazards and how they will be addressed;
- Any relevant information in an existing health and safety file (generally not applicable to Persimmon unless relating to existing on-site buildings requiring refurbishment or demolition/dismantling).

Clients Brief

CDM 2015 guidance states that arrangements detailed in the Clients Brief should focus on the needs of the particular project and be proportionate to the size of the project/risks involved. Pre-construction information and in turn the Clients Brief should be compiled and added to as the design process progresses and reflect all new/generic information about project health & safety risks and how they should be managed.

1. Details of the project team.

Details of individuals and organisations forming the project team can be listed in the “Client’s Brief”.

2. Confirmation of the roles, functions and responsibilities of internal and external members of the project team are clear.

General roles and responsibilities for internal management and staff are detailed in the Group H & S Policy whilst specific roles, functions and responsibilities can be identified in the Directors and Site Responsibility Charts. Details of the roles, functions and responsibilities of supply chain support e.g. structural & civil engineers, architects etc. should be detailed in contracts.

3. Ensuring sufficient resources and time are allocated for each stage of the project – from concept to completion;
4. Ensuring effective mechanisms are in place for members of the project team to communicate and cooperate with each other and coordinate their activities;
5. Reasonable steps to ensure the Principal Designer and Principal Contractor are complying with their separate duties. This could take place at project progress meetings or via written updates.
6. Setting out the means to ensure that the health and safety performance of designers and contractors is maintained throughout;

Minutes of internal pre-start meetings as well as pre-start meetings with designers and contractors and Pre-Development Plans etc. can also clearly demonstrate that these duties are being complied with.

7. Ensuring that workers are provided with suitable welfare facilities for the duration of construction work.

Initial assessment of site welfare facilities should be undertaken as part of the pre-construction phase and reviewed on a regular basis throughout the duration of the construction phase.

Site Hazard Register

Duty holders must demonstrate that they have applied the general principles of prevention to identify the measures they have taken to control the risks to health and safety on a specific project CDM 2015 identifies (in Part 4 of the regulations) a number of hazardous work activities that this duty applies to.

In addition Operating Businesses shall also apply the general principles to other regulations including Work at Height, Lifting Operations, Use of Telehandlers, Manual Handling and COSHH (the list is not exhaustive).

Director/s leading the Client, Principal Designer duty holder functions are therefore required to produce the initial Site Hazard Register for inclusion in the Clients Brief (and Construction Phase Plan) to ensure so far as is reasonably practicable the project is carried out without risk to health and safety.

It is intended that the Director leading the Principal Designer duty holder function will put systems in place to ensure that columns 1 to 6 are completed and all relevant pre-construction information is provided to the internal or external Principal Contractor.

As well as identifying site hazards, the aim of the register is to generate a project team approach that will enable individuals and organisations to better communicate, cooperate and coordinate with each other.

The Site Hazard Register should be used in conjunction with the Temporary Works Register.

An up to date copy of the Site Hazard Register should be held in both the Operating Business Head Office and Site Office files.

Pre-Start Meeting Activity

Due in part to the fact that the projects undertaken by Operating Businesses are diverse and progress at different speeds there is not a prescriptive pre-start meeting solution for the planning, managing and monitoring of the pre-construction phase. Neither is there a need to produce a pre-construction information pack.

Any pre-start meeting regime should focus on confirming that:

Pre-Start 1 – The Clients Brief has been prepared in line with the above and the F10 notification has been carried out - (Chaired by the Senior Manager leading the Client duty holder function).

Pre-Start 2 - The Site Hazard Register is up to date and that sufficient information is available to pass to the Principal Contractor in order to allow them time to prepare for the commencement on site - (Chaired by the Senior Manager leading the Principal Designer duty holder function).

Evidence of this can be demonstrated in site plans, property drawings, contractual agreements, contractor method statements, internal documents i.e. work at height, traffic management, public protection/site security and welfare assessments, trade specifications etc.

Pre Start 3 – Confirmation and sign-off by the Client or Principal Designer that the Principal Contractor has produced a suitable Construction Phase Plan and suitably developed Site Hazard Register prior to the site commencing - (Chaired by the Senior Manager leading the Principal Contractor duty holder function).

This process should also be used when employing External Principal Contractors for example if demolition or extensive infrastructure work is to be carried out.

Operating Businesses should, as a minimum standard, utilise the process detailed above however this is not restrictive and management are free to include other site based agenda items.

Supply Chain Pre-Start Meetings

- Prior to the site commencing and equally, as the site progresses, a pre-start meeting must be held with each supply chain organisation that is appointed to undertake work on specific projects. This meeting is intended

to allow the Principal Designer and Principal Contractor to outline pre-construction and construction phase health and safety requirements.

- It will be down to each Operating Business to establish the Agenda for these meetings however Minutes and associated documentation shall be produced and issued for inclusion in the Red Box Filing System.

Designers/Engineers

- The Director leading the internal Principal Designer function shall put systems in place that ensure documented meetings are held with design/engineering organisations to establish roles and responsibilities, timescales for delivery of information etc. during the pre-construction phase.
- The meetings should establish points of contact within both the Operating Business and design/engineering organisations and a communication process that will demonstrate the project is being planned, managed and monitored.
- Minutes and associated documentation shall be produced and issued for inclusion in the pre-construction information.

Contractors

- The Director's leading the internal Client/Principal Contractor duty holder functions shall ensure that a system is in place for the undertaking of documented pre-start meetings with contractor's prior to these organisations commencing on site.
- This meeting is intended to allow the Client (in the case of an External Principal Contractor) or Principal Contractor (in the case of sub-contractors) to outline site health and safety requirements, including roles, responsibilities, management & supervisory levels, site rules etc. as well as being an opportunity to discuss issues relating to production and quality.
- Minutes and associated documentation shall be produced and issued for inclusion in the Red Box Filing System.

Meetings with Self-Employed/Labour-Only personnel

The Director responsible for leading the internal Principal Contractor function shall put systems in place that will ensure that all self-employed/ labour-only personnel receive suitable and sufficient information, instruction and training prior to commencing on site.

This shall include contracts of employment, trade specifications, trade packs (risk assessments) and more specifically, they must receive documented and detailed site induction training that outlines the following:

- Senior management commitment to health and safety – Group/Divisional H & S Policy
- Outline of the project including both general and site specific rules etc. – CITB “Setting Out” DVD, Flip Chart
- Management of the project – Extent of Site Manager supervisory responsibilities
- First-aid arrangements
- Accident and incident reporting arrangements
- Arrangements for briefing workers on an ongoing basis - toolbox talks
- The arrangements for worker engagement and consultation on health and safety matters – comments sheets, site H & S Meetings etc.
- Worker's responsibility for health and safety – Health & Safety at Work act Section 7 responsibilities

Note: A record of all site inductions must be maintained on site in the Red Box Filing system.

Consortium Developments

CDM 2015 does allow for more than one Client on a project but does not allow for more than one Principal Contractor. It does however recognise that house builders may well utilise an infrastructure Principal Contractor on Consortium Sites where they undertake Principal Contractor duties on adjacent parcels of land.

The HBF Guidance “Safety, Health and environmental Consortium Agreement” Guidance is attached and should be applied if we are either Lead or Participating Consortium Member. The document is self-explanatory and should be utilised throughout the planning process.

Changes to the Clients Brief & Site Hazard Register

Any significant and fundamental changes to the Clients Brief that requires additional pre-construction information and amendments to the Site Hazard Register must be documented and actions commenced to ensure the changes are planned, managed and monitored. The table below

Change in road layouts/build direction		Major additional work relating to:	
Previously undiscovered asbestos		• demolition	
Relocation of services		• piling	
Changes to drainage/sewer connections		• excavations	
Remix of house types		• drainage and sewage	
Significant issues affecting residents		** The list is not exhaustive	

Where major changes to the Clients Brief cannot be evidenced via existing internal processes then Operating Businesses should use the “Notification of Changes to the Clients Brief” to detail these requirements.

Where Operating Businesses, that are able to, should utilise their existing internal management systems and/or meeting minutes to document the major change’s to the Clients Brief. The documented details should reflect the requirements of the “Notification of Changes to the Clients Brief” form.

Any changes to the Clients Brief or Site Hazard Register must be communicated to all relevant parties in order that Pre-Construction Information, Site Hazard Register and Construction Phase Plan can be updated to ensure, so far as is reasonably practicable, the project is carried out without risk to health and safety.

Note: It is expected and accepted that all other changes to the Clients Brief and Site Hazard Register, including accelerated build programmes, internal house type design changes, relocation of compound or minor service routes alterations are planned, managed, monitored and co-ordinated using the site based assessment processes.

Ongoing Monitoring and Review of the Clients Brief and Hazard Register

Operating Businesses

Operating Businesses shall make arrangements to maintain the Client Brief/Site Hazard Register on a regular basis to ensure at all times that it reflects the work activities being planned or undertaken on site. This can be achieved by identifying the Register as an item for discussion on internal management meeting agenda’s.

Group H & S Department

Operating Businesses are required to provide Group H & S Advisors with updated Head Office copies of the Site Hazard Registers in order that they can be compared with Site Office copies to ensure that these documents are being managed, monitored and maintained effectively.

TYPICAL CONTROL MEASURES FOR DUST SUPPRESSION



For all concrete and stone cutting operations a wet cutting system will be adopted. The devices (pictured left) significantly reduce the amounts of dust generated as depicted on the photographs below.



Mortar will be of the Silo type and will be mixed in enclosed mixing devices, thus reducing the dust associated with conventional mixing methods. A bowser, similar to the type above will be available for damping down roads and haul routes.

Safety Training

Safety training is regarded as a vital ingredient of an effective health and safety programme. It is essential that every worker in the organisation is trained to perform his or her job safely

Procedure

Induction Training for Persimmon Homes Management and Staff

Many of the incidents that occur on site can be prevented if a little time is spent explaining the site/office set up and safety rules to individuals when they first arrive. This training is a legal requirement of an employer under the Health and Safety at Work Act 1974, to provide information, instruction and training.

The following must be undertaken:

- ✓ All directly employed persons who arrive to work on site or in offices, must be given induction training with an explanation of the general rules together with any site/office specific rules before they start work. It is important that health, safety and welfare matters are explained to them.
- ✓ To enable management to instruct new starters, they must refer to the information held within the Site, Sales or Office Safety Manuals/Rule Books.
- ✓ Once the employee has been issued with these instructions and notified of any site/office specific rules, they, along with the training provider must sign the necessary section within the booklet. This section must be detached and filed accordingly within the employee's records.
- ✓ Relevant information i.e. manuals, rule books, or their location, must be provided to employees for their reference.

Ongoing Safety Training for Operational Management and Staff

The Group will agree and ensure that suitable training via seminars, presentations etc. are provided for PLC & Divisional management.

Operating Business MD's and Heads of Department must ensure that their employees are trained in safe working practices and management systems detailed in this policy and other safety manuals that relate to their work activities (including emergency procedures).

Details of specific Department/Job related training requirements, i.e. SMSTS, CDM-C etc. and the training provider can be found in the training schedule attached.

Training needs for Operating Business employees must be reviewed regularly and/or planned annually against pre-determined targets.

Senior Management responsible for ensuring the necessary training is maintained shall be detailed in the Directors Responsibility Chart.

Records of all training must be maintained on Safety Training Matrices by the relevant management.

Contractor, Self - Employed, Labour – Only Training

Prior to starting on site Sub-Contractor Senior Management must ensure that they confirm their supervisors and workers are competent and have the skills, knowledge and experience to undertake relevant work activities on our sites.

Confirmation must be received from sub-contractors that they have made their employees aware of the content and details of their organisations method statements/risk assessments.

Sub-Contractor Senior Management must ensure they provide details of their nominated supervisors at the pre-start meetings prior to commencing work on site.

Self- Employed and Labour-Only operatives must be provided with the relevant trade packs including specific generic risk assessments associated with their work activities.

All High Risk Work activities covered by this procedure shall be detailed in the Project Health and Safety Risk Registers.

Induction Training

Site Management:

Contracts Managers must ensure that, on the first day of employment, a preliminary induction is completed which confirms that the newly appointed Site Manager/s are aware of their roles and responsibilities regarding site safety and, in particular, the following Group policy and procedures:

- Confirmation of new Site Manager's qualifications (SMSTS, FAAW, Scaffold Inspection, Management of Lifting Operations, relevant experience etc).
- Traffic Management
- Welfare
- Working at Height issues including control measures for fall prevention and protection.
- General Site rules and responsibilities
- First-aid arrangements
- Accident and incident reporting arrangements
- Induction procedures
- Statutory and Group required documentation.
- Familiarisation of the redbox system

This preliminary induction should be recorded using form PHG/HS/:009b.

This does not replace the requirement for the site manager to attend the TCHS001 induction delivered by the safety department. This must be completed within 4 weeks from start date.

Site Operatives:

The Site Manager will ensure that all Sub Contractor employees, Self-Employed and Labour-Only, as well as directly employed personnel are inducted, using form PHG/HS/:009. In keeping with the requirements of CDM 2015 the induction shall confirm the following:

- Senior management commitment to health and safety – Group/Divisional H & S Policy
- Outline of the project including both general and site specific rules etc. – CITB “Setting Out” DVD, Flip Chart
- Management of the project – Extent of Site Manager supervisory responsibilities
- First-aid arrangements
- Accident and incident reporting arrangements
- Arrangements for briefing workers on an ongoing basis - toolbox talks
- The arrangements for worker engagement and consultation on health and safety matters – comments sheets, site H & S Meetings etc.
- Worker's responsibility for health and safety – Health & Safety at Work act Section 7 responsibilities

As part of this process Site Management must confirm on site that they hold a current and trade related CSCS Card and that they understand the contents of either their Sub-Contractor employers Method Statements and Risk Assessments or, if Self-Employed/Labour-Only, the Persimmon Generic/COSHH risk assessments (included in Trade Specifications) associated with their work activities.

A record of all site inductions must be maintained on site in the Red Box Filing system.

Tool Box Talks

As part of the Operating Business Training Plan, management and site toolbox talks will be agreed and undertaken at regular intervals determined by the Director responsible.

The Group Health and Safety Department will deliver regular tool box talks on pre-determined topics detailed in the Group Objectives and Targets.

Further toolbox talks should be provided by both Site Management and Sub-Contractor Supervisors to relevant internal and external personnel on an ad-hoc basis dependent on the following;

1. Recent accidents
2. Near misses
3. Safety Advisor findings
4. Construction Management monitoring

Internal toolbox talks must be undertaken and documented on the Form PHG/HS/:020 and Site Management should ensure that records are maintained of this training. The form is self explanatory however for clarity the Employee Category section should be completed as follows;

Sub-Contract Employee: - Working for a clearly defined employer other than Persimmon/Charles Church

Self Employed/Labour Only: - Working for Persimmon/Charles Church and weekly paid

Direct Employee: - Persimmon weekly pay roll

Copies of the details of attendees of all toolbox talks delivered by Sub-Contractor management at the request of Site Management shall be provided and maintained in the Red Box Filing System.

Construction Departments shall provide details of Tool Box Talks attendees to Group Health & Safety Advisors on a Bi-Monthly basis.

Plant Operators

Site Management must ensure that they complete and issue a copy of the Passport to Safety for Authorised Drivers of Mobile Plant to all Plant Operatives.

Monitoring

Senior Management within Persimmon Homes Operating Divisions will undertake monitoring of training requirements. They will liaise with the Group Health and Safety Department to ensure all employees achieve their necessary training schedule.

The Group Health and Safety department will audit the effectiveness of the management of training needs and report to relevant management where deficiencies are found.

Review

A review of Group Training needs will be undertaken annually, taking new legislation and organisational changes into consideration, and where necessary courses will be added to or deleted from the Training Schedule.



HOME BUILDERS FEDERATION - HEALTH & SAFETY COMMITTEE

STANDARD FOR CONTRACTOR SUPERVISION

The agreed standards expected to be met or exceeded by all those with supervisory responsibilities whilst engaged on HBF charter signatory organisation home build activities.

STANDARD FOR CONTRACTOR SUPERVISION

KEY OUTPUTS

- Enhance the level of health & safety knowledge and understanding for those engaged in a supervisory capacity.
- Ensure the supervisor has the appropriate authority to undertake the role.
- Define the ratio of trade contractor managers and supervisors to operatives.
- Clarify the importance of the supervisor in the context of appropriately setting people to work.
- Formally acknowledge/appoint the supervisor and easily identify them, through the wearing of a black coloured hard hat.

PURPOSE AND CONTEXT

To support the HBF commitment to attain a fully qualified workforce and as part of the continuous improvement strategy in the home building sector, the members of the Home Builders Health & Safety Committee (HBH&SC) have developed this “Standard for Contractor Supervision”. This document outlines the agreed standards expected to be met or exceeded by all those with supervisory responsibilities whilst engaged/employed on charter signatory HBF organisation home building activities ²

The main objective of this Standard is to enhance the levels of health and safety knowledge and understanding within the home building sector and in doing so, ensuring that the workforce is effectively and appropriately set to work and supervised by a supervisor who has the appropriate **Skills, Knowledge, Attitude, Training and Experience** necessary to meet this criteria.

Embrace and adoption of this Standard offers the opportunity to invest in improving health and safety standards and in so doing, assist HBF members' site staff in the overall management and supervision of the workforce on site.

HBH&SC members are committed to developing consistent standards across the sector and provide our supply chain with guidance for standards expected on our developments. HBH&SC members consider that a key element of our improvement strategy is to engage with our supply chains and to enhance the competency of those persons supervising work activities.

The industry has an on-going commitment to attaining a fully qualified workforce, which in some cases is demonstrated by workers being accredited to the Construction Skills Certification Scheme (CSCS) or affiliated/amalgamated schemes such as CPCS, CISRS etc.

This will constitute the minimum acceptable level of competency for all workers, but in terms of those supervising work activities, it is considered that a further level of **SKATE** is required, with SSSTS and/or SMTS accreditation, appropriate both to the task and trade being supervised and the number of the workforce being supervised.

SCOPE

For this purpose, supervisors are defined as those persons responsible for setting people to work and directly supervising the on-going work activities. They are the front line supervisors (ie Supervisor, Ganger, Foreman, Charge-hand etc) with direct responsibility for putting people to work, who will typically brief their workers on how to carry out their work and ensure that they are carrying out their work safely.

APPROACH

To ensure that an appropriate supervisor is appointed, there are typically three specific stages to be followed:-

Stage 1 - Pre-selection/pre-tender stage:-

Contractors must be requested to provide details of the nominated supervisor prior to work being appointed/commencing, and for some trades it is recognised that the supervisor may operate on a visiting basis. In this case, the supervisor will still need to meet the training requirements detailed in this guidance. Any nominated supervisor must have the appropriate level of authority to be the supervisor, confirmation and evidence of this must be provided/obtained along with evidence of the supervisors skills, knowledge, attitude, training and experience (**SKATE**) and typically this will take the form of a role specific CV.

As HBH&SC charter signatory organisation we must agree to the appointment of the supervisor having satisfied ourselves that the appropriate criteria has been met. This must be done prior to work commencing.

HBH&SC charter signatory members have evaluated the typical work activities carried out on home building developments and have identified the following particular trades/work activities where due to the controls required, on site supervision that have completed the required health and safety training will be required: -

Ratio Of HBH&SC Trade Contractor Managers and Supervisors To Operatives						
Trade Type	Specified Trades	Up to 4	5 to 15	16 to 30	31 to 60	Each 30 thereafter
1	Ceramic Tiling Cleaning Fencing Fire Protection Insulation Kitchen and Bathrooms Mastic Painting and Decoration Soft Flooring Soft Landscaping Other similar low risk trades	1 x Visiting SSSTS	1 x SSSTS	2 x SSSTS	2 x SSSTS and 1 x SMSTS	2 x SSSTS
2	Balconies Brickwork Dry Lining Electrical Enabling Façade Finishes (cladding, etc.) Carpentry Hard Flooring Hard Landscaping Hoarding Lift Installation Logistics Mechanical PCC Beams Plastering Plumbing Roof Finishes (tile, asphalt, membranes, etc.) Windows Other similar medium risk trades	1 x SSSTS	1 x SSSTS and 1 visiting SMSTS	1 x SSSTS and 1 x SMSTS	2 x SSSTS and 2 x SMSTS	1 x SSSTS and 1 x SMSTS
3	Civil Engineering Ground Remediation Groundwork PCC Floors Piling Roof Carpentry Steel Erection Timber Frame erection Asbestos Services Other similar high risk trades	1 x SSSTS and 1 visiting SMSTS	1 x SMSTS	2 x SSSTS and 1 x SMSTS	3 x SSSTS and 2 x SMSTS	2 x SSSTS and 1 x SMSTS
4	Principal Contractor RC Frame Scaffolding Demolition	1 x SMSTS	1 x SMSTS	2 x SSSTS and 1 x SMSTS	3 x SSSTS and 2 x SMSTS	2 x SSSTS and 1 x SMSTS

The above schedule is indicative of typical home building activities, however this does not mean that other trades/work activities will not require supervision, and this will be considered as part of the overall risk evaluation process on each home build development.

The ratio of supervisors to workers and/or working/non-working supervisors on a site will be determined on the basis of risk assessment of the work in progress and in conjunction with local site management.

HBH&SC members will develop their own management systems and will engage with their supply chain so that this supervisory standard can be met. It may be the case that some will have systems which may go beyond this standard.

Stage 2 – Supervisor Appointment

Having met the requisite supervisory standard criteria and satisfied ourselves that the nominated supervisor meets these expectations, as HBH&SC member we must now effectively welcome the supervisor, to the relevant home building development.

The supervisor requires being formally acknowledged/appointed, as it is imperative that the supervisor becomes an integral part of the site team and in so doing, will help us to deliver our projects safely. Appointment can be done at the end of a specific supervisor induction or separately via another means as determined by individual HBH&SC member and/or site management. Additionally, appointed supervisors will be easily identifiable through the wearing of a black coloured hard hat.

Stage 3 - Supervisor Engagement

HBH&SC aim is to deliver health and safety best practice in excess of both industry and legal requirements consistently on our entire home build. The Supervisor plays an integral part of the success of this. The supervisor is someone who is able to control, organise, direct and set people to work in the most safe and efficient manner.

A supervisor is expected to “lead by example” in everything that they do, they are an important and valued member of the site team and will be treated as such.

As part of the appointment process there must be an open discussion and shared agreement on the expectations of the role – both in terms of us as HBH&SC member and of the supervisor.

Suggested key points to be discussed include: -

Expectation that supervisor will: -

- Organise, manage and plan their work in line with programme requirements.
- Be approachable and responsive with the ability to communicate clearly and effectively.
- Have the confidence to stop any unsafe work they witness by their people and all others.

- Be motivated and be able to motivate others to work safely.
- Share their knowledge, experience and positive attitude towards achieving safe standards.
- Understand risk management, especially in relation to the tasks being undertaken.
- Hold a Supervisor CSCS card and the CITB 5-Day SMSTS/2-Day SSSTS qualifications or industry recognised acceptable equivalent, as per above schedule.
- Brief their employees on safe systems of work such that those undertaking understand and adhere to the specified control measures.
- Recognise that health and safety is everybody's responsibility and that they, and all line managers, lead by example.
- Fulfil their legal responsibilities as a supervisor.
- Contribute proactively at HSE co-ordination and progress meetings.
- Etc.....

Additionally, as HBH&SC member organisation we would expect that appointed supervisor understands their legal duties on behalf of themselves, those for whom they supervise and anyone else likely to be affected by their acts or omissions - in the areas for which they have been made responsible.

The supervisor MUST ensure that: -

- All work is effectively planned.
- The workforce is set to work in safe areas.
- Suitable and sufficient RAMS are in place for the activity.
- All involved are appropriately trained and competent.
- All plant/equipment is certified and safe.
- All workforce are instructed on safe systems and controls.
- Breaches of rules and legal requirements will be immediately addressed.
- Unsafe acts and conditions will be reacted to.

In return, the supervisor can expect the following from the HBH&SF member organisation: -

- HBH&SC member organisation **will** ensure integrity at all times and will not walk past what is wrong or unsafe.
- HBH&SC member organisation **will** work together with supervisor promoting teamwork as together, we are effective.
- HBH&SC member organisation **will** strive towards excellence and will not compromise on safety or quality.
- HBH&SC member organisation **will** treat all with respect

As an HBH&SC member organisation we are committed to a planned and structured approach to ensuring our sites are well run always. To enable our appointed supervisor to share in this success we need their co-operation, commitment and support in working with us to achieve these values.

HBH&SC member organisation the supervisor needs to have the confidence that they can rely on us to: -

- Support them in any safety initiatives and promotions.
- Encourage them to express their views on health and safety issues.
- Respect them as a competent person.
- Listen to them on all suggestions – promoting the thinking that there is no such thing as a bad idea.
- Provide them with the support they need from the home build team to help them deliver against these objectives.
- Regard them as a highly valued member of the site team.
- Support them on any safety related issue.

SUPPORTING LITERATURE/MATERIALS

As a chartered signatory of the HBH&SC it is expected that any appointed supervisor is provided with adequate resource/means to be able to undertake their role to the best of their ability.

In terms of aligning with the “Standards for Contractors” once appointed, a supervisor working with us will be given a separate Supervisor Induction. On completion of the Induction, the Supervisor will also be given a booklet/give away reminding him or her on the shared expectations and commitments than have been agreed to.

Confirmation of receipt of this material by the supervisor could be utilised to formally appoint or by other means as detailed elsewhere in this document.

Currently available HBF templates: -

- HBF Supervisors Induction
- HBF Supervisors Induction Booklet.

SKATE + THE HEALTH AND SAFETY TRAINING STANDARD

All supervisors must have sufficient SKATE skills, knowledge attitude, training and experience. In terms of formal training in health and safety gained at a construction specific course of at least two days duration. Approved training courses are as follows:

- Construction Skills Site Safety Supervisors Training Scheme (SSSTS)
- Construction Skills Site Management Safety Training Scheme (SMSTS)
- Institution of Occupational Safety & Health (IOSH) 'Managing Safely in Construction'
- Construction Industry Scaffolders Record Scheme (CISRS) 'Scaffolding Supervisor'
- Certificate of Competence for Demolition Operatives (CCDO) 'Demolition Supervisor'
- Federation of Piling Specialists (FPS) Supervisors 2 day Health, Safety and Environmental Awareness Course
- CPCS A62 Crane Supervisor
- Construction Health and Safety Group (CHSG) 'Health & Safety Site Management Cert' (Modules 1-3)
- NEBOSH National Certificate in Construction Health & Safety

Therefore, all formal training provided to supervisors must be approved/accredited by one of the above schemes.

REVIEW

This will be reviewed at least every three years by the HBH&SC, and this may result in amendments to the approved training schemes and/or trades/work activities where suitably trained on-site supervision is required.

Home Builders Federation, Health and Safety Committee 25th October 2019

Health and Safety Training for Contractors Supervision

Purpose

As part of the continuous improvement strategy in the home building sector, the members of the Home Builders Health and Safety Forum ('Forum') have developed an outline standard on the health and safety training for an individual employed by a contractor with supervisory responsibilities.

The main objective of this initiative is to enhance the levels of health and safety knowledge within the workforce. There is an opportunity to invest in improving health and safety standards and assist Forum members site staff in the overall management and supervision of the workforce on site.

Forum Members are committed to developing consistent standards across the sector and provide our supply chain with guidance for standards expected on our developments. Forum members consider that a key element of our improvement strategy is to engage with our supply chains and to enhance the competency of those persons supervising work activities.

The industry has previously committed to having a fully qualified workforce which in some cases is demonstrated by workers being accredited to the Construction Skills Certification Scheme (CSCS) or affiliated/amalgamated schemes such as CPCS, CISRS etc. This will constitute the minimum acceptable level of competency for all workers but in terms of those supervising work activities, it is considered that a further level of training is required.

Scope

For this purpose supervisors are defined as those persons directly supervising work activities. They are the front line supervisors (i.e. Supervisor, Ganger, Foreman, Charge-hand etc.) with direct responsibility for putting people to work and who will typically brief their workers on how to carry out their work and ensure that they are carrying out their work safely.

Contractors should provide details of the nominated competent supervisor prior to work commencing and for some trades it is recognised that the supervisor may operate on a visiting basis. In this case, the supervisor will still need to meet the training requirements detailed in this guidance.

Forum members have evaluated the work activities carried out on home building developments and have identified the following particular trades/work activities where due to the controls required, on site supervision who have completed the required health and safety training will be required;

- *Groundwork*
- *Demolition*
- *Pre-Cast Concrete Floor Installation*
- *Reinforced Concrete Frame Construction*
- *Steel Erection/Lift Installation*
- *Asbestos Removal*
- *Erection or dismantling of Hoists*
- *Piling*
- *Erection or dismantling of Tower Cranes*

Health and Safety Training for Contractors Supervision

The above does not mean that other trades/work activities will not require supervision and this will be considered as part of the overall risk evaluation process on each development. The ratio of supervisors to workers on a site will be determined on the basis of risk assessment of the work in progress and in conjunction with local site management.

Forum members will develop their own management systems and will engage with their supply chain so that this training standard can be met. It may be the case that some will have systems which may go beyond this standard.

The Health and Safety Training Standard

All supervisors should have sufficient knowledge of health and safety gained at a construction specific course of at least two days duration, in addition to any requirement to being accredited to CSCS or other affiliated schemes. Approved training courses are as follows;

- Construction Skills Site Safety Supervisors Training Scheme (SSSTS)
- Construction Skills Site Management Safety Training Scheme (SMSTS)
- Institution of Occupational Safety & Health (IOSH) 'Managing Safely in Construction'
- Construction Industry Scaffolders Record Scheme (CISRS) 'Scaffolding Supervisor'
- Certificate of Competence for Demolition Operatives(CCDO) 'Demolition Supervisor'
- Federation of Piling Specialists (FPS) Supervisors 2 day Health, Safety and Environmental Awareness Course
- CPCS A62 Crane Supervisor
- Construction Health and Safety Group (CHSG) 'Health & Safety Site Management cert' (Modules 1-3)
- NEBOSH National Certificate in Construction Health & Safety

It is appreciated that some employers may have already provided in-house training that is not accredited to the above schemes but the content may be considered equal to them. Members have agreed that in-house training will be acceptable as long as it can be demonstrated that the course content/duration is at least equal to the SSSTS and this will only be accepted until 31st December 2014.

All new training provided to supervisors from the 1st August 2013 should be approved/accredited by one of the above schemes.

Review

This will be reviewed annually by the forum and this may result in amendments to the approved training schemes and/or trades/work activities where suitably trained on-site supervision is required.

Traffic Management

Introduction

The effective management of transport operations can prevent construction vehicle accidents. The majority of these accidents result from inadequate planning and control. This failure results in:

- Vehicles and their loads striking people, particularly when reversing;
- Vehicles striking services and obstructions;
- Manufacturers' instructions for safe use being disregarded;
- Inadequate training of drivers and signallers; and
- Unsafe loading and transportation of materials on vehicles.

The successful management of construction vehicle activities is based upon the provision and maintenance of safe workplaces, safe vehicles, safe drivers and safe work practices and is a requirement of CDM 2015.

Procedure

As with all aspects of health and safety management, risk assessment is an essential element. To us establish controls at the design stage and throughout the construction phase, the Traffic Management Assessment **PHG/HS/015** must be completed by trained management and included in the Part 5 - Site Wide Elements Section of the Health and Safety Plan. The measures required to prevent transport accidents are not the sole responsibility of the construction departments and must be considered at Pre-Start Meetings however all assessments must be signed-off by nominated management. To complete the form the following must be undertaken:

- Identify ongoing hazards
- Decide who may be harmed e.g. workers, visitors, purchasers etc. and how.
- Evaluate the risk arising from the hazards and implement effective control measures for significant risks;
- Record the findings on PHG/HS/015 and.
- Produce a pictorial diagram i.e. a site Traffic Plan (TP) of the site (or part of) highlighting the controls agreed in the Traffic Management Assessment.

Monitoring

Ongoing monitoring of construction site traffic management is the primary responsibility of the Operating Business and documented checks on the effectiveness of the traffic plan shall be undertaken regularly by all concerned in a construction project. The Group Health and Safety Department will audit and inspect traffic management arrangements on a regular basis.

Review

Ongoing review of traffic Management controls must be carried out when necessary as the site develops by completing further copies of PHG/HS/015 and updating the pictorial plan as required.

Further reference can be found in HSG144 – Safe Use of Vehicles on Construction Sites and section 5.32 of the Group H & S Policy “Construction Health and Safety Manual”.

Health & Safety

Tool Box Talk File

SITE SAFETY AWARENESS TRAINING

INDEX OF TOOLBOX TALKS

1. ADVICE TO SUPERVISORS
2. LEGAL DUTIES – WHAT THEY MEAN TO YOU
3. THE HEALTH & SAFETY AT WORK ACT 1974
4. CDM REGULATIONS
5. “COMPANY HEALTH & SAFETY POLICIES – WHAT THEY MEAN TO YOU”
6. PERSONAL COMPETENCE
7. RISK ASSESSMENTS & METHOD STATEMENTS
8. YOUNG PEOPLE ON SITE
9. WORKER ENGAGEMENT
10. FAIRNESS, INCLUSION & RESPECT
11. INSPECTIONS AND CHECKS
12. ACCIDENT & INCIDENT REPORTING
13. NEAR MISSES
14. BEING A GOOD NEIGHBOUR
15. CONSTRUCTION SITE BASIC SAFETY CHECKLIST - DESIGNED FOR SUPERVISORS
16. GENERAL HEALTH AND WELLBEING
17. MENTAL HEALTH & STRESS
18. FIRST AID
19. WELFARE FACILITIES AND PERSONAL HYGIENE
20. NOISE AT WORK
21. WEARING AND CARING FOR PPE
22. USE OF RESPIRATORS AND BREATHING MASKS
23. SUBSTANCES HAZARDOUS TO HEALTH
24. PROTECT YOUR HANDS
25. HAND-ARM VIBRATION SYNDROME
26. EYE PROTECTION
27. HEARING PROTECTION
28. SKIN PROTECTION
29. LEPTOSPIROSIS (WEILS DISEASE)
30. WORKING OUTDOORS
31. DRUGS AND ALCOHOL

32. MANUAL HANDLING OF LOADS AT WORK
33. THE “KNOW HOW” OF CARRYING
34. SITE SET UP AND SECURITY
35. GOOD HOUSEKEEPING
36. MATERIAL STORAGE
37. SAFETY SIGNS AND NOTICES
38. FIRE PREVENTION ON SITE
39. FIRE ON SITE
40. COMPRESSED GAS CYLINDERS
41. PETROL, DIESEL & LPG
42. WORKING WITH HAND HELD AND ELECTRICAL TOOLS
43. ABRASIVE WHEELS
44. CARTRIDGE OPERATED TOOLS & WOOD WORKING MACHINES
45. WORKING WITH COMPRESSED AIR TOOLS
46. WELDING AND BURNING
47. TEMPORARY WORKS
48. WORKING AT HEIGHT & STAIRWELL WORKING
49. WORKING AT HEIGHTS – LADDERS
50. WORKING AT HEIGHTS - STEP LADDER
51. WORKING AT HEIGHTS - TOWER SCAFFOLD
52. WORKING AT HEIGHTS – SCAFFOLDING
53. LOW LEVEL ACCESS EQUIPMENT
54. MOBILE ELEVATING WORK PLATFORMS
55. MOBILE ACCESS TOWERS AND ACCESS EQUIPMENT
56. PERSONAL FALL PROTECTION EQUIPMENT
57. WORKING OVER SAFETY NETS OR SOFT LANDING SYSTEMS
58. WORKING ON ROOFS
59. SITE TRANSPORT AND PEDESTRIAN SEGREGATION
60. PLANT & EQUIPMENT
61. LIFTING OPERATIONS
62. LIFTING EQUIPMENT
63. SLINGS
64. CHAINS
65. SHACKLES
66. HOOK AND EYE BOLTS
67. BANKSMEN/SLINGERS
68. PERMIT TO WORK SYSTEMS
69. WORKING IN EXCAVATIONS

- 70. UNDERGROUND SERVICES**
- 71. OVERHEAD SERVICES**
- 72. WORKING WITH ELECTRICITY**
- 73. WORKING IN CONFINED SPACES**
- 74. ROAD & STREET WORKS**
- 75. PILING**
- 76. ENVIRONMENTAL NUISANCE**
- 77. EMERGENCY SPILL CONTROL**
- 78. PUMPING, OVER PUMPING AND WASHING DOWN PLANT**
- 79. FUEL AND OIL**
- 80. WASTE**
- 81. CEMENT, CONCRETE AND PLASTER**
- 82. MODERN SLAVERY IN CONSTRUCTION**

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 1

ADVICE TO SUPERVISORS

Every year approximately 100 people are killed during construction work (2 a week). The cost of accidents can be measured in both financial and human terms. The second of these may easily be the greater loss and have the longest and farthest-reaching effect. A few minutes spent learning how to avoid accidents represents time well spent.

These address the most basic points concerning topics, activities and locations. They are designed to be fleshed out into short talks of 10 to 15 minutes' duration without requiring specialist knowledge on the part of the speaker. The talks should be concise and punchy, in order to get the message across. A pattern of weekly talks is suggested.

Every employer has a legal obligation to inform, instruct and train operatives about the risks they face in their work. Safety Awareness Talks can play a part in this and will promote the discussion of Safety Procedures. They should be repeated at intervals. A record must be kept of who has received this training. On the back of each Talk Sheet there is an attendance form which should be completed and returned to the person in charge of safety in your company. Proof of training may be required at a later date.

Advice on Presentation

The purpose of this collection of talks is to assist supervisory staff, who have some knowledge of the subjects, to be able to give sufficient advice and instructions to employees so as to enable to prevent accidents and injuries at work.

To do this it is important to bear in mind the following points:-

1. Although detailed specialist knowledge is not required to do the talk, experience of the activities is necessary together with an adequate appreciation of safety matters.
2. Choose the right time to do the talk. First thing in the morning, when there is time and when people are more likely to devote attention, is generally thought to be a good choice. End of day talks fail to hold the attention of operatives eager to get home.
3. Choose the right place. Avoid locations where distractions are likely. Make sure you can be heard and you will not be interrupted. Make sure phone calls and visitors are intercepted by someone else so that you and your listeners can concentrate on the talk.
4. Speak clearly and loudly enough to get the message across.
5. Use your experience, mention any examples you know of or any stories you may have heard to liven up the presentation.

ADVICE TO SUPERVISORS (Cont'd)

6. Use the points on the sheets as a basis for the talk. Fill out the talk with any general information, for example:-
 - i Differences in types/makes of equipment (when doing talks about types of equipment).
 - ii Examples of when certain activities may be required.

iii Mention specific examples of any of the activities or pieces of equipment that feature in the talk which you may know exist on your site.

iv Explain the reasons behind any of the points made in the talks.

7. Allow time for questions. Be prepared for a few questions, some of which may have to be referred to a Safety Advisor or senior management. Also be prepared for silence - try to “break the ice”, if necessary, ask your listeners a question to provoke discussion. If someone asks a question, make sure every body else hears the question before you answer it and answer it to the whole group, not just the questioner.
8. Try to have a clock or watch where you can see it so that you can pace your talk without obviously doing so. Glancing at your wrist periodically to check the time makes your listeners restless.
9. The talks are not intended to be given without any preparation at all by the presenter. Each one should be regarded as suggestions only and the presenter should plan before hand what he will actually say. Some of the talks deliberately contain more material than may be needed, especially if there is considerable local input relevant to a particular job. The excess material allows the topic to be covered again after an interval without it becoming repetitious and boring. If so wished, the material could be made into 2 talks. The one on *Handtools* could well be curtailed to make one talk or expanded to make 2, dependant on what tools are actually in use on site.
10. If there is a plan and a pattern to the talks, they are much more likely to be remembered than a jumble of facts. The following is a suggested plan for a talk, lasting about 15 minutes. If you have more time, obviously the middle section and the questions can be expanded. If you have less time try to cut down on each section equally, Probably 10 minutes is the least time which can be allowed and still retain some usefulness.

- Statement of today’s talk i.e. Title 0.5 minutes
- Why this topic is important in our work situation. Consequences of ignoring problems 1.0 minutes
- Analysis of problem. Mention any defined Legislation etc. bearing on the situation. Up to 3.0 minutes
- Advise on “Good Practice” to avoid problems/confirm to standards/legal requirements etc. 5.0 minutes
- Any questions - if faced with silence, ask a check question to see if they have taken in above. Have questions ready in advance. 3.0 minutes
- Summarise main points. Invite anyone with a problem regarding today’s topic to see you/ Safety Adviser later. Announce VERY briefly next week’s topic. 2.0 minutes

Following recent National disasters, the far-reaching effects of Public Enquiries are increasingly more clear to individuals.

Since the introduction of the Health & Safety at Work etc. Act 1974, it has been possible for an individual to be prosecuted for his acts or omissions at work, if proved they jeopardised the Health & Safety or himself for others.

Further, it is a fundamental duty under Section 2 of the Health & Safety at Work etc. Act 1974 for an employer or self-employed person to provide such information, training, safety equipment and instruction as may be required to ensure the Health & Safety at Work of all his employees, irrespective of operation.

1993 saw the introduction of the following new legislation made under the Health & Safety at Work etc. Act.

ADVICE TO SUPERVISORS (Cont'd)

Management of Health & Safety at Work Regulations 1999	Personal Protective Equipment at Work Regulations 1992
What are they? This is the U.K. law that implements the E.C.'s so-called framework directive. This broad directive aims to improve Health & Safety in the workplace. Some parts of the U.K. law are already covered in the Health & Safety at Work Act 1974 but under the new regulations employers must carry out certain detailed procedures, assess risks, implement necessary safety measures and communicate safety issues to staff. Main Points Employers must: ♦ Assess Health & Safety risks to both employers and the public ♦ Implement, monitor and review protective and preventive measures ♦ Appoint someone responsible for the above ♦ Set up emergency procedures ♦ Inform and train staff ♦ Co-operate with other employers who share the same workplace Employees must: ♦ Only use equipment in accordance with the training they have received ♦ Report dangerous situations and, if any, shortcomings which they see in their employer's Health & Safety arrangements.	What are they? These implement the E.C.'s Personal Protective Equipment Directive. The regulations replace part of more than 20 old pieces of law but do not replace recent pieces of law which mention protective equipment, such as the Noise at Work Regulations. They aim to ensure suitable equipment is provided for workers, such as head protection, safety harnesses, life jackets and high visibility clothing. Employers must: ♦ Ensure the equipment being issued is appropriate for the job ♦ Maintain, clean and replace equipment ♦ Provide storage for it when not being used ♦ Ensure it is properly used ♦ Give information and training to employees about it

ADVICE TO SUPERVISORS (Cont'd)

Workplace (Health & Safety & Welfare) Regulations 1992 What are they? These implement the minimum Health & Safety requirements for the workplace directive. The regulations aim to tie up 38 pieces of older law, providing clearer regulations on the working environment an employer should provide for workers, such as good lighting or clean toilets. Employers must: ♦ Be responsible for a good working environment including temperature, ventilation, lighting ♦ Be responsible for safety of the environment, including safe openings and glass in windows, unobstructed passageways ♦ Be responsible for facilities such as eating areas and toilets ♦ Be responsible for maintenance and cleanliness of workplace	Manual Handling Operations Regulations 1992 What are they? These implement the E.C.'s manual handling directive. The regulations aim to reduce the high level of injury and ill health associated with the manual handling of loads in the workplace. They aim to do this by getting employers to avoid hazardous manual handling, assess what cannot be avoided and remove or reduce risk of injury, within what is "reasonably practicable". Main points Employers must: ♦ As far as is "reasonably practicable" avoid the need to undertake manual handling which carries a risk of injury. ♦ Make an assessment of manual handling which cannot be avoided. This assessment can be delegated or contracted out but the employer is responsible for it ♦ Take steps to reduce the risk of injury through looking at the working environment, for example, mechanical help, making loads lighter and individual capability. ♦ Provide information to employer ♦ If any employer's staff work on another employer's premises, the employers should seek close liaison with each other. Employers must: ♦ Play a positive part in the assessment, highlighting difficulties such as size or shape of loads or frequency of carrying. ♦ Take reasonable care for their own Health & Safety ♦ Make use of the equipment provided for them
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ADVICE TO SUPERVISORS (Cont'd)

Provision and Use of Work Equipment Regulations 1998 (1992) What are they? This law implements the use of work	Health & Safety (Display Screen Equipment) Regulations 1992 What are they? This law implements the E.C.'s so-called
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equipment directive. It aims to pull together many old laws governing equipment used at work. It aims to give employers responsibility for safe use of equipment from starting and stopping, to transporting and also maintaining it. Equipment could be anything from machines of all kinds to a complete oil refinery. Employers must: ♦ Take into account the working conditions and risks when selecting equipment ♦ Provide appropriate lighting and warnings and markings for using the equipment ♦ Make sure equipment is suitable for the use ♦ Give adequate information and training ♦ Provide protection from dangerous parts of machinery Implementation : 1st January 1993	VDU directive which specifies minimum Health & Safety requirements for work with display screen equipment. It is meant to protect staff, with a few exceptions, who habitually use computers as a significant part of their work. It is aimed to help prevent damage of upper limbs, musculoskeletal disorders, eye strain, fatigue and stress. It requires employers to assess risks and reduce them by providing the right equipment and environment. This might mean a range of things from buying new chairs, making sure a computer with screen brightness and contrast is used or providing an employee with the right glasses Main points Employers must: ♦ Assess and reduce risks ♦ Ensure work stations meet minimum requirements ♦ Plan work to include breaks or changes of activity ♦ Arrange eye tests and provide glasses ♦ Inform and train users Last minute additions: Employers are responsible for self-employed staff when they are on the employers premises and equipment ♦ Eye tests will not have to be given once every 10 years, originally anticipated. Instead the intervals between eye tests will be at the discretion of the optician appointed by the employer.
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ADVICE TO SUPERVISORS (Cont'd)

	Implementation : 1st January 1993 for all new workstations. 31st December 1996 for all existing workstations. However, if a new computer is put on an existing workstation, the whole workstation is immediately liable under the new regulations.
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1. Study all your units Health & Safety Policy, which lays down the organisation and arrangements for the Health & Safety of persons in your care.
2. As a Supervisor you are the link between senior management and operative and you have a direct responsibility for ensuring that the Company's Safety Policy is implemented by yourself and personnel under your control.
3. When giving instructions to operatives, ensure that:-
 - (a) There is a safe means of access to his workplace.
 - (b) The workplace is safe.
 - (c) There is a safe system of work
 - (d) Any plant and equipment required to do the work is safe and suitable
 - (e) The operative has received adequate information, training and/or instruction to carry out the work.
4. When protective clothing or equipment is needed by the operative, ensure that it is available, issued and used correctly. You should ensure that appropriate training is also given/provided.
5. In nearly all accidents unsafe conditions and/or unsafe acts of play a prominent part.

ADVICE TO SUPERVISORS (Cont'd)

UNSAFE CONDITIONS INCLUDE:

Equipment improperly guarded
Defective equipment
Unsafe clothing, footwear, eye protection
Improper ventilation
Unsafe design or construction
Improper storage or Liquefied Petroleum Gases (LPG)
Improper shoring
Defective electrical installations
Incorrectly installed scaffolds/mobile towers

UNSAFE ACTS INCLUDE:

Operating plant and equipment without authority
Operating at an unsafe speed
Making safety devices inoperative
Using unsafe equipment or equipment unsafely
Loading or placing unsafely
Being in an unsafe position
Working on moving or dangerous equipment

Horseplay

Not using personal protective equipment

You have a responsibility to ALL personnel, including sub-contractors, to ensure that they recognise and avoid any unsafe acts and conditions.

6. Dangerous occurrences, whether reported to you or not, must be immediately investigated and remedial action taken where necessary.
7. Every injury, no matter how slight it may appear, should be immediately reported to you. Ensure that prompt first aid treatment is given by the person nominated to administer first-aid and that an entry is made in the Accident Book BI.510 and persimmon Homes Personal Injury Report Form.
8. You have a responsibility to ensure that all reasonable precautions are taken to effect the safety of the general public, particularly children, at ALL times, whether they are or are not authorised to be on site.
9. Ensure that appropriate Site Safety information sheets are issued to employees under your control and are retained, used and replaced as necessary. You should also note any comments made to you as a result of your presentation and take appropriate remedial action as is necessary.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 2

LEGAL DUTIES – WHAT THEY MEAN TO YOU

You should be aware of your legal duties. You cannot comply with the law if you are not aware of what it says.

This talk explains the legal duties of employees under the Health and Safety at Work Act 1974 and secondary legislation in the form of regulations.

FRAMEWORK OF HEALTH AND SAFETY LAW

1. The Health & Safety at Work Act 1974 is the primary piece of legislation covering occupational health and safety. It gives underlying principles of how work activities should be carried out safely.
2. More detailed secondary legislation is provided through the issue of regulations, which also carry the full force of the law.
3. The Health & Safety at work Act related regulations are enforced by the Health & Safety Executive (HSE) and local authorities.

YOUR LEGAL DUTIES UNDER THE HEALTH AND SAFETY AT WORK ACT

1. You must safeguard your own health and safety and that of others (such as other workers and members of public) who may be affected by your actions or omissions.
2. You must co-operate with your employer to help them comply with their legal duties.
3. You must not interfere with anything provided for safety.

YOUR LEGAL DUTIES UNDER THE REGULATIONS

1. General safety – to follow the training and instructions provided when using machinery, equipment, dangerous substances, transport equipment or safety devices.
2. Information, instruction and training – attend a site induction before starting work on a new site, when requested by your employer or principal contractor or when site hazards change.
3. PPE – you must use PPE in accordance with training and instructions given. Report loss or damaged PPE.
4. Control of substances hazardous to health – you must make use of any control measures provided to enable you to work safely with hazardous substances.
5. Noise – you must wear hearing protection and take other actions that your employer may decide are necessary to protect your hearing.
6. Manual handling – you must make use of any system of work provided by your employer may decide are necessary to protect your hearing.
7. Electricity – you must co-operate with your employer and follow instructions with regard to working safely.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 3

THE HEALTH & SAFETY AT WORK ACT 1974

A What is the Health & Safety at Work Act?

It's the law that protects people at work and the general public.

Under the Act, everyone has a legal duty to uphold certain standards of Health, Safety & Welfare.

This includes: -

- Employers, employees, the self-employed, suppliers and imports, those who control premises.

B Why Should I Know About the Act

Because you can help make the difference between a safe work environment and a hazardous one.

C The Purpose of the Act

It to improve Health & Safety at Work. Specifically, the Act aims to: -

- i. Secure the Health, Safety and Welfare of persons at work.
- ii. Protect the general public against risks.
- iii. Control the possession, storage and use of dangerous substances, such as highly flammable substances, toxic chemicals and explosives.

D Control the Discharge of Certain Substances into the Air

This includes anything that is: -

- i. A danger to health
 - ii. A danger to the environment
 - iii. A nuisance
- i.e. pollutants, gases, vapours, particles and noise

E Employees Duties Under the Act

- i. To take reasonable care for the Health & Safety of yourself and others while working. This means that you are responsible for:-

WHAT YOU DO
WHAT YOU DON'T DO

YOUR ACTIONS
YOUR OMISSIONS

F Always Follow these Basic Safety Rules

- i. Store materials, equipment and tools properly.
- ii. Never fool around (horseplay).
- iii. Never try to perform work you aren't qualified to do.
- iv. Be aware of potential Health & Safety hazards.
- v. Report Health or Safety problems/hazards promptly.

G Co-operate with Your Employer

To promote Health & Safety as part of your duties, under the Act, you must:-

- i. Follow the Health & Safety Policies
- ii. Practice safe working habits and obey all safety rules. Never take shortcuts or chances.
- iii. Use protective equipment and clothing properly.
- iv. Know emergency procedures, including fire, evacuation and follow them.

H Inspectors can Prosecute

It is a criminal offence for anyone not to meet the requirements of the Act. Offenders may be tried before: -

- i The Magistrates Court (If Convicted)
- ii The Crown Court (If Convicted)
- iii So if you keep to the rules and safe working procedures you are helping to provide a safe working environment for your workmates and yourself.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 4

“CDM REGULATIONS”

The CDM Regulations 2015 are the most important regulations for construction workers and apply to all construction projects. If you know what both you and your employer should do, you should be safe at work.

This talk covers some main topics in the day to day running of a safe site.

EMPLOYERS DUTIES

1. Plan the work, develop safe systems of work and explain how the work should be undertaken safely.
2. Provide suitable welfare and security facilities for the site.
3. Ensure hazards have been removed by ensuring they have been designed out and selecting suitable methods of work. If the hazards cannot be removed, control measures must be put in place to reduce any risk of injury or ill health to as low as is reasonably practicable.
4. Provide the right information, to the right people, at the right time, for example provide a site induction and brief workers on relevant parts of the construction phase plan.
5. Ensure the workers have the necessary skills, knowledge, training and experience to carry out their roles.
6. Provide supervision as required, based on the findings of the risk assessment.
7. Work activities must be programmed to minimise the risk of something going wrong.
8. Consult and engage with their workers.
9. Provide and explain relevant paperwork (method statements and risk assessments) to supervisors and workers.

GENERAL CONSTRUCTION SITE REQUIREMENTS

1. Provide suitable and sufficient site access and egress (entrance/exits).
2. Provide safe pedestrian and traffic routes on site, ideally keeping pedestrian routes and vehicle routes separate.
3. Plan any construction, demolition, refurbishment or dismantling work.
4. Workplaces, excavations, scaffolds, ladders, mobile elevating work platforms, and so on, must be confirmed as suitable for the task and checked before use.
5. Store and transport any hazardous substances or explosives securely and use them safely.
6. Ensure the site is adequately lit at all times.
7. Take steps to prevent injury from contact with overhead and underground services.

8. Ensure vehicles are used, towed and loaded safely, and use a vehicle marshal where appropriate.

YOUR DUTIES

1. Follow instructions from your Supervisor and make sure that you work safely.
2. Report anything that you think is unsafe. Stop work if you are not sure and ask for advice.
3. Know and follow the site rules, including what to do in an emergency and the location of fire fighting or other emergency equipment.
4. Report any signs of trespass and unauthorised access.
5. Look after your tools, PPE, and, most importantly, yourself and your workmates.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 5

“COMPANY HEALTH & SAFETY POLICIES – WHAT THEY MEAN TO YOU”

Everyone at work must be aware of their company health & safety policy. We all need to understand our duties to protect our wellbeing and safety.

This talk covers some important aspects of both the employers and your duties.

COMPANY HEALTH & SAFETY POLICY

1. A company health and safety policy is a written statement of how your employer intends to manage health and safety, and it is required by law.
2. Everyone has duties and is provided with protection by following the guidance set out in their health and safety policy.
3. The health and safety policy for a larger organisation may consist of many different elements.
4. Areas such as employee consultation will be covered in your employers health and safety policy.

HEALTH & SAFETY POLICY CONTENT

1. The health and safety policy contains information on how a company will manage its legal duties to comply with the law.
2. A statement of intent at the beginning of the policy sets out the intentions of the company and how it will manage its business in order to comply with legal requirements.
3. This is followed by details of the organisations structure (such as the identification of health and safety advisors) and the arrangements for policy implementation (such as risk assessment approach).
4. Also included are the duties of each individual duty holder (such as first aiders and fire wardens).

WHAT IT MEANS FOR YOU

1. You should have access to a copy of your employers health and safety policy, understand its contents and follow the guidance set out in it.
2. The policy is a set of procedures to protect workers and others.
3. Many construction workers are killed every year due to accidents. By following your health and safety policy, you can help reduce accidents and incidents at work.
4. If you have a doubt or concern, you have a legal duty to ask for an explanation.
5. We are all our own safety supervisors – take care of yourself and others!

CONSULTATION

1. Consultation is more than people just giving you information – it is about employers listening and taking account of what you say, before they make decisions that will affect your health and safety.

2. Employers can carry out consultation by:

- Talking to and listening to trade-union safety reps or other appointed reps.
- Having regular health and safety committees or forums.
- Using inductions, daily briefings and toolbox talks to explain what is happening, and to listen to and act upon your comments.
- Talking to you directly during informal visits or walkabouts.
- Setting up a system that lets you report problems or suggest safer ways of doing your work.

The measures should make construction work safer so that you can return to your family at the end of each day.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 6

“PERSONAL COMPETENCE”

The competence of people is important for the safety of everyone at work. It is important that everyone knows the limits of their personal competence.

This talk explains what is meant by competence of both the employer and individuals.

EMPLOYER COMPETENCE

1. Employer competence is sometimes known as corporate competence.
2. It is the ability of the company to manage health and safety efficiently and effectively through its policies and procedures (setting targets).
3. Employer competence helps provide you with a safe place of work, with safe access and egress, method statements and risk assessments, along with the correct tools needed to do your job.
4. The company expects you to have a questioning attitude and think proactively, before taking any action, to ensure the action is appropriate and safe.

PERSONAL COMPETENCE

1. Your competence is the key to a successful and safe business.
2. Personal competence is a blend of skills, knowledge, attitude, training and experience.
3. Using your personal competence can ensure not only your safety but also that of others.
4. It provides the route for successful project. A project that is well planned, well carried out, completed safely and meets all of the necessary targets.

BENEFITS OF PERSONAL COMPETENCE

1. You can achieve job satisfaction and respect for the quality of the work that you produce.
2. Your employer relies on you for your expertise and you may have the potential for promotion.
3. A competent worker is a safe worker. Competence cards (such as CSCS) provide proof that you have the required training, qualifications and experience.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 7

“RISK ASSESSMENTS & METHOD STATEMENTS”

Work must be planned and carried out in a safe manner. The construction industry continues to have an unacceptable accident record.

This talk covers what risk assessments and method statements mean to you.

RISK ASSESSMENTS

1. All employers have a legal duty to prepare risk assessments for work activities that could foreseeably result in injury or ill health to any person or damage to equipment.
2. Risk assessments identify the ways in which the job activities, environment or the materials used could result in injury, ill health or damage and the control measures that must be put in place to ensure that the chance of anything going wrong is eliminated or reduced to an acceptable level.
3. Employers with five or more employees must have written risk assessments.
4. If there are fewer than five employees, the risk assessments must still be carried out, although there is no legal duty to write them down.
5. Employers have a legal duty to communicate the significant findings of risk assessments to workers who may be affected. It is important that you understand.
6. There is no specified way for laying out a risk assessment so you must familiarise yourself with the way your employers present theirs.
7. In many cases, the risk assessment will form the basis for a method statement.

METHOD STATEMENTS

1. A method statement is a written list of operations, to be carried out in a logical, specified sequence, in order to complete a work activity in a safe manner.
2. Everyone involved in a job for which a method statement has been written, should read it (or have it explained to them) and sign it, having understood its contents.
3. A well written method statement addresses all the hazards present and plans the work so that the risk of accident is eliminated or reduced to an acceptable level.
4. Method statements should be site and task specific.
5. It is important that you understand all aspects of your method statement fully.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 8

“YOUNG PEOPLE ON SITE”

Construction sites are hazardous places, even for competent and experienced adults who should be aware of the dangers. Young people, with their lack of safety awareness, are particularly at risk of work related injury or ill health.

This talk covers why young people are vulnerable and what everyone should be doing to safeguard their health and safety on site.

WHO IS A YOUNG PERSON?

1. Health & safety law defines a young person as anyone under 18.
2. The law does not prohibit the employment of young people on construction sites.

WHAT ARE THE PROBLEMS?

1. Young people may not have the same level of safety awareness as a more experienced person.
2. For some young people, a construction site will be their first experience of a workplace.
3. Young people may not appreciate their own limitations and will require a greater level of supervision than an adult, the level depending on the job, site conditions and their experience.
4. Young people may unwittingly create dangerous situations because of an eagerness to please.
5. Young people may be more likely to arrive at work whilst unfit, due to several factors.

PROTECTION OF YOUNG PEOPLE

1. Risk assessments must take account of young people on site and jobs that they are required to do.
2. Ensure that young people attend the site induction, even if they are only going to be on site for a short time.
3. Be aware of their lack of safety awareness, their physical and psychological immaturity and their inexperience.
4. Only give jobs to young people that they can cope with, both physically and mentally.
5. Do not allow young people to carry out particularly dangerous jobs.
6. Whatever the job, you must ensure that the level of supervision is adequate.
7. If young people are working near to you, you should be ready to stop them if they carry out any activity that is clearly unsafe.
8. Encourage young people to speak out if they do not feel safe with what they have been asked to do; if may only be a case of reassurance or maybe more supervision is required.

9. Do not tolerate horse play, or other unsafe actions.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 9

“WORKER ENGAGEMENT”

Involving workers in management decisions can help improve health and safety performance. Workers like you are an important part of every business and engaging with workers is a key element to success.

This talk covers the key principles required in the relationship between the employer and you.

INVOLVING WORKERS

1. All employers have a legal duty to involve you in decisions made with regard to health and safety matters.
2. People doing the job have a more accurate idea of how to improve not only the health and safety but also performance.
3. Communication, co-operation and establishing trust are important elements in worker engagement.

ENGAGING WITH YOU

1. You should be encouraged to stop work and seek advice when you feel unsafe.
2. If you have any concerns, or think you can make your work or workplace safer, then tell your supervisor.
3. Treat others in the same way as you would your workmates.
4. Be prepared to be asked your opinion and contribute if you can.
5. Procedures can be changed, nothing is set in stone. If you have an idea, speak to your supervisor or manager.

BENEFITS FOR EVERYONE

1. By having an open, blame-free culture, work will be carried out more safely and efficiently.
2. Mistakes and near misses can be quickly identified and control measures put into place to prevent reoccurrence.
3. Open communication, where good and bad things are freely discussed, has benefits for health and safety, and production.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 10

“FAIRNESS, INCLUSION & RESPECT”

Employers and employees need to be aware of their rights and responsibilities. Workplaces are more productive and healthy in an environment free from bullying and harassment.

This talk covers legal and contractual rights and responsibilities covering dignity in the workplace, and will raise awareness of the issues that can affect good working relationships.

WHAT THE LAW SAYS

1. Everyone in the construction industry has legal duties under the Equality Act.
2. Companies will have rules of behaviour within their own terms and conditions, some of which may extend beyond the protection afforded within the Equality Act.
3. Everyone in the construction industry is protected by the Act and their company rules of behaviour.
4. The Act supports and protects any worker challenging behaviours, even when not directed at them.
5. The Act puts responsibilities on managers to act swiftly to challenge behaviours.
6. The Act gives you the right not to be harassed by third parties and makes the employer potentially liable for harassment of their employees, by people such as customers or clients.

PROVISIONS OF THE ACT CONCERNING HARASSMENT

1. Under the Act your employer has a legal duty to provide a workplace free from bullying and harassing behaviour. They should;
 - make it clear in their terms and conditions, training, or policies and procedures that such behaviour will not be tolerated.
 - take any complaint seriously
 - challenge your behaviour to safeguard others who may be affected by your actions and behaviours
 - ensure breaches in behaviour are investigated and treated in line with disciplinary procedures
2. Under the Act you, as an employee, have a legal duty to ensure you treat co-workers, clients and the public with dignity and respect.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 11

“INSPECTIONS AND CHECKS”

Inspections, checks and record keeping are an important part of site safety. Construction site equipment can be exposed to harsh working conditions, but inspections and checks help to ensure it is safe to use or can highlight a fault that requires fixing.

This talk covers the types of inspections and checks that should be carried out.

WHAT THE LAW SAYS

1. Regulations place duties on employers to carry out formal statutory inspections on a regular basis and for the findings to be recorded.
2. Scaffold, plant and tool tags are often used as a visible sign that equipment and work areas have been inspected, but a written record must be completed and retained to comply with the law.
3. Inspections should only be carried out by trained and competent people and they must also complete a record of their findings.
4. Everyone on site has a duty to carry out their own workplace and work tool pre use checks.

FREQUENCY OF CHECKS AND INSPECTIONS

1. Small tools and equipment should be checked daily by the user and defects reported.
2. Checklists should be provided with larger plant and equipment- ensure both the daily and weekly checks are carried out as required.
3. It is recommended that on site plant (such as electrical equipment and RCDs) should be portable appliance tested in line with company policy.
4. Lifting equipment and accessories (such as cranes and slings) require daily checks and weekly inspections.
5. Access equipment (such as scaffolds and ladders, hop ups and podiums) should be visually inspected every time they are used.
6. Excavations should be inspected at the start of every shift and weekly records retained.

STATUTORY EXAMINATIONS

1. Lifting equipment (such as MEWPS), lifting accessories (such as chains and slings) and safety nets, as well as cranes used for lifting people, must be thoroughly examined as a minimum every six months.
2. Virtually everything else should be thoroughly examined as a minimum every 12 months, including fire fighting appliances, site office electrical systems and equipment.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 12

“ACCIDENT & INCIDENT REPORTING”

Prompt accident reporting and accurate accident investigation are important. Establishing why accidents occur and examining the causes can help prevent them from being repeated.

This talk covers reporting and recording procedures.

ACCIDENT REPORTING

1. Health & safety law (specifically RIDDOR 2013) requires that the following types of accidents are reported to the HSE:
 - fatalities and specified injuries
 - injuries resulting in more than a 7 day absence
 - occupational diseases
 - dangerous occurrences
2. Unsafe conditions and near misses should always be reported to your supervisor or manager.
3. By receiving such accident reports the HSE and your company can establish accident trends, highlight areas of weakness and effectively target preventative measures.
4. Everyone on site must ensure that all accidents, no matter how minor, are recorded in the site accident book.
5. Accidents to members of the public arising out of site activities must be reported.
6. If accurate records are made, the affected parties can refer back to them at a later date, if there is a need.
7. Completed accident reports are confidential.

ACCIDENT INVESTIGATION

1. Your employer has a duty to investigate all accidents to establish the cause and prevent recurrence.
2. The HSE and the police will also investigate fatalities and other serious accidents.
3. If you are involved in an investigation:
 - listen carefully to the questions and remain calm
 - state honestly what you saw or heard
 - do not be afraid to say when you do not know the answer
4. Remember that the reason for the investigation is to prevent the accident happening again, not to apportion blame.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 13

“NEAR MISS”

Is by definition an accident and should be regarded as a warning that a problem exists and that some action is required.

1. It is your duty to report any near-miss incidents.
2. Any near-miss incident should be reported to your Supervisor and Safety Officer.
3. Opportunities to report or discuss a near-miss will be given at Toolbox Talks.
4. The problem will be investigated in order to establish why a near-miss situation occurred and actions will then be implemented to ensure that this type of situation does not occur again.

The next time could be a serious accident

5. All employees will be informed of the actual near-miss situation and the actions will be taken to prevent a repetition.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 14

BEING A GOOD NEIGHBOUR

Many local communities regard construction work as a nuisance. If you understand peoples concerns you can help to minimise the impact of your work.

BEING A GOOD NEIGHBOUR

1. It is possible that local residents may have objected to the site work starting, and so they may feel annoyed that it is now happening.
2. Everyone has responsibilities to work with the community and ensure good relations by minimise disruption and being considerate.
3. As workers you can have a positive influence on the local community, including residents, businesses and schools, and respect them by being a good neighbour, while at the same time avoiding complaints and possible prosecution.

CONTROL MEASURES

1. Always be polite and considerate. Take notice of any complaint aimed at you or the site and report it to your supervisor.
2. Keep disruption from the site to a minimum by minimising dust, noise and vibration.
3. Arrange for deliveries when traffic flow is likely to be low and avoid school arrival and departure times.
4. Talk to the local community and tell them what is happening. Ask if they have any concerns.
5. Maintain good housekeeping by keeping the roads and pathways clean, and minimising waste piles and overloaded skips that may present a fire or contamination risk.
6. Provide newsletters to keep residents informed of any planned disruptions.

PRECUATIONS

1. Do not park vehicles so they may obstruct driveways, footpaths or roads.
2. Do not trespass on neighbouring land.
3. Do not cause excessive noise by leaving engines running, shouting or playing radios too loudly.
4. Do not harass passers by or be inappropriately dressed.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 15

CONSTRUCTION SITE BASIC CHECKLIST

These procedures are designed to assist Site Agents, General Foremen, Charge hands and other supervisory personnel to make sites safer places of work. The checklist is basic and should be modified to suit local needs.

1. Is It Safe	Pinpoint unsafe situations or practices and take steps to correct them before anyone gets hurt.
2. Safe Access	Are roads, gangways, passageways, hoists, and staircases and scaffolds properly lit and free from obstruction? Are openings properly guarded?
3. Ladders	Are ladders in good condition and properly angled and secured with adequate handholds at place of landing.
4. Tubular Scaffold	Is the scaffolding completely erected with toeboards and guard-rails fitted? Do not overload and ensure that loads are evenly distributed. Has it been inspected within the last 7 days and the results recorded?
5. Roof Work	Are crawling boards provided and being used? Is there sufficient protection at openings and roof edges to prevent falls? Check for fragile roof covering and for men working underneath.
6. Excavation	Is adequate support material provided and properly fitted? Are barriers and vehicle stops in place? Have all excavations been inspected today?
7. Plant and Transport	Vehicles and plant must be maintained in good repair, driven safely and be properly loaded. Emphasise and safeguard against the dangers of tipping vehicles. Do not allow unauthorised persons to operate plant and machinery.
8. Machinery	Are all dangerous moving parts securely guarded, especially the hidden ones like projecting shaft ends?
9. Goods Hoist	Is the hoist fully enclosed within the scaffold landing? Are gates kept shut? Has it been inspected within the last 7 days and results recorded?
10. Cranes and Lifting Appliances	Is the crane regularly maintained and, has it been inspected within the last 7 days and results recorded? Is it sited on a hard level base and is it clearly marked with safe working loads? Are the driver and the slinger/banksman fully trained? Are SWL indicators working?
11. Electricity	Are apparatus, wires, cables and connections all sound? Check for overhead electric lines or underground cables, and take appropriate action. Make maximum use of reduced voltage equipment.
12. Manual Handling	Ensure that loads are handled and lifted correctly and that gloves are used wherever possible. Check if suitable and sufficient risk assessments have been carried out.
13. Trespass	Is the site secure against children? Have all ladders been removed or rungs boarded and plant immobilised? Are all other potential hazards safeguarded?
14. Health Risks	Identify harmful materials and substitute if possible. Specify precautions and ensure that suitable equipment is provided and properly used. Check atmosphere in confined workplaces and provide suitable respirators if necessary. Check safety file to assess whether a C.O.S.H.H. assessment has been carried out.
15. Protective Clothing/Equipment	Is protective clothing or equipment provided at least to the minimum standard required by law, and is it being properly used?
16. Fire Risks	Are there adequate fire extinguishers, and are proper precautions taken for storing and handling highly flammable liquids, compressed gasses

	and welding equipment, and other combustible materials?
17. Cartridge Operated Tools	Has the operator been properly trained? Is he following the instructions and wearing goggles? Are the tools and cartridges kept in a secure place when not in use?
18. Noise	Is ear protection supplied and worn in noisy surroundings? Are breakers fitted with muffs and noise from other machinery minimised?
19. False Work/ Form Work	Have the design and supports been checked; are props: • plumb, • properly set out , • firmly based and • fitted with correct pins Are the conditions of any timber forms or supports regularly checked?
20. Welfare	Are the lavatories, washbasins and mess hut clean? Can wet clothes be dried? Is there a supply of drinking water? Are there appropriate first aid facilities?
21. General	Are all personnel who are required to operate tools, plant or machinery adequately trained and/or instructed in the correct techniques and procedures?

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 16

GENERAL HEALTH AND WELLBEING

It is a legal requirement that employers ensure your general health and wellbeing. There is a high risk of ill health and injury in the construction industry.

This talk covers some of the causes and preventative measures that can be put in place.

GENERAL HEALTH AND WELLBEING

1. General ill health is a broad term covering anything from stress, to a bad back or respiratory diseases.
2. Poor working practices are one of the main causes of ill health.
3. Over 2 million working days are lost in the construction sector every year as a result of work related ill health.
4. People with health problems have to be treated fairly, with consideration by their employer and fellow workers.
5. Your general health is important for the quality of your later life; an injury today can cause many years of suffering, discomfort and sometimes disability.

CONTROL MEASURES

1. Your employer has a duty to ensure that your general health and wellbeing is provided for in the workplace.
2. Use the correct methods of work and ensure you use the correct protective measures (such as dust suppression, PPE, and so on) so that exposure is reduced.
3. Suitable welfare facilities (for example, washing, eating, drinking and changing facilities) should be provided to minimise the risk of ill health. This is a legal requirement and should be provided for you. Welfare facilities should be hygienic and well maintained.
4. If you take medication or have an existing health problem you must tell your employer so that your wellbeing can be assured.
5. Follow instructions from your supervisor, have a question in mind and when in doubt, ask.

PRECAUTIONS

1. If you believe you may be suffering from ill health (such as early onset of noise-induced hearing loss, showing signs of hand-arm vibration syndrome, bad back, dermatitis, respiratory problems or signs and symptoms of stress) bring these to the attention of your supervisor, health and safety advisor, occupational health advisor or someone in a position of responsibility.
2. Ensure that the respiratory protective equipment you have been given is the right type for the job and you have been face fit tested.
3. If you discover a problem, don't just ignore – report it.

4. If you think you need help with a task, ask – don't try cope on your own.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 17

MENTAL HEALTH & STRESS

Male construction site workers are 3x more likely to commit suicide than the average UK worker.

This talk covers some of the various mental health issues people may experience while at work.

ANXIETY

1. Anxiety and panic disorders are not uncommon but, if left untreated, can cause distress to the individual.
2. At work an individual suffering from anxiety may lose interest, lack of concentration, display low morale and be irritable.
3. Anxiety can often be controlled with medication, and psychological and self help therapies.

DEPRESSION

1. Individuals with depression can often feel helpless, experience low moods and morale and lose interest in activities they previously enjoyed.
2. Depression can be mild, moderate or severe.
3. When depression is not managed it can have serious health and safety implications for sufferers and co workers.
4. Antidepressant medication can cause drowsiness, which may affect the individuals ability to drive or operate plant and machinery. An assessment should be carried out to ensure the type of work being undertaken is suitable with the treatment being received.

BIPOLAR DISORDER

1. Bipolar disorder is a mental health problem that mainly effects mood – it is sometimes referred to as manic depression.
2. Sufferers are likely to have times where they experience disparate mood swings (feeling high/low).

MANAGEMENT OF MENTAL HEALTH ISSUES

1. Managers should be aware of the signs of mental ill health and put steps in place to support their employees.
2. Management should actively work to support individuals and create an environment where those with mental health conditions are able to talk to someone or seek guidance from other sources.
3. Management should work to remove the stigma around mental health issues and the unhealthy idea of construction being a “tough man” environment where seeking help is seen as a weakness.
4. Team leaders should be trained to spot the signs of mental health conditions and be able to identify sufferers and guide them to support.

WORK RELATED STRESS

Stress is the adverse reaction people can have to too much pressure or others demands placed upon them. It is not an illness in itself, but can lead to individuals not being able to perform at work and have an impact on their health and wellbeing.

This talk covers the signs and symptoms of stress and how it can be effectively managed.

STRESS

1. Anyone can suffer from stress, in any role and at any level of an organisation. If stress is not addressed it can lead to some common mental health conditions such as anxiety and depression.
2. Work related stress and common mental health conditions are closely linked, with similar signs and symptoms. For people with mental health conditions, work related stress can also trigger or worsen an existing mental health condition.
3. The biggest barrier to obtaining support is the stigma associated with the condition.
4. People who work alone or who may have particular responsibilities that set them apart from their work colleagues can be particularly vulnerable.
5. Work related stress accounts for around 35% of all work related ill health cases.
6. Suicide is the biggest cause of death in men ages 20-45 in the UK.

DEALING WITH STRESS

If an individual feels that they may have symptoms of stress, they can do a number of things in order to address the challenges that are facing them.

1. Talk to someone they trust, with whom they can share issues and challenges.
2. Talk to their line manager about modifying their role, task or hours of work and any training or development required for an early resolution.
3. Practise relaxation techniques.
4. Improve diet –avoid foods high in sugar and cut down alcohol, smoking and caffeine.
5. Avoid long, irregular working hours if possible.
6. Take regular breaks from the workplace and incorporate frequent moving and stretching exercises.
7. Seek additional support and guidance such as HR or occupational health if work is impacting your health.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 18

FIRST AID

Every site should have procedures in place for first aid. If you know first aid you could save a life.

This talk explains what you should know, basic first aid and when it is required.

BEFORE FIRST AID IS REQUIRED

1. Ensure you know where the first aid kit is kept.
2. Know who the first aider, emergency first aiders and appointed persons are.
3. Have a small, travelling first aid kit if you are working in a small group away from the main site or if you use potentially dangerous tools or machinery.
4. Familiarise yourself with the procedure for contacting the emergency services.

DISCOVERING A CASUALTY

1. If you are with someone else, send them to call the emergency services and to fetch additional help.
2. Assess the situation and ensure your own safety as you approach the casualty.
3. Remove any hazards from around the casualty, if it is safe to do so.
4. Go to the casualty and find out what is wrong. Don't move the casualty, unless they are in immediate danger.
5. If you are alone, call for help – if no-one comes, explain to the casualty that you are going to go and find help and call the emergency services.
6. Return and stay with the casualty until help arrives.
7. Don't give food or drinks to the casualty. Only moisten their lips and don't allow them to smoke.

EMPLOYERS RESPONSIBILITIES

1. Complete a first aid needs assessment.
2. Ensure that there is either an appointed person to take charge of first aid arrangements, or that there are appropriate numbers of suitably trained first aiders or emergency first aiders.
3. Ensure that there are adequate facilities and suitably stocked first aid kits.
4. Appoint somebody to check and restock first aid kits.
5. Ensure the first aid equipment provided is appropriate for the nature of the work environment and the number of workers.
6. Ensure that first aid cover includes, for example, shift work and holiday cover.

7. Ensure first aiders are easy to identify – usually by a sticker on their safety helmet.
8. Provide you with information about the first aid arrangements, emergency contact numbers and local hospital details.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 19

WELFARE FACILITIES AND PERSONAL HYGIENE

Adequate welfare facilities are a legal requirement and should be provided on all sites. Adequate toilets, washbasins, drying rooms and rest areas are essential for the wellbeing of everyone on site.

This talk covers the factors that will determine whether site welfare facilities are adequate.

GENERAL WELFARE

1. There must be an adequate number of toilets, washbasins, drying spaces and rest areas provided, in relation to the number of people on site. Showers may have to be provided on some sites.
2. Toilets and washbasins must be properly maintained and kept clean. Hot (or warm) and cold running water must be provided.
3. Soap and a way of drying your hands must be provided.
4. An adequate supply of wholesome drinking water must be provided at readily accessible places.
5. If you need to change out of clothes, a changing area must be provided with storage for your clothes.
6. Rest areas should be maintained at an appropriate temperature and include seats with back support.
7. Suitable areas should be provided for you to store clothing not worn during site hours and for drying wet clothes.
8. Plant, equipment, tools or materials should not be stored in designated welfare areas.

EMPLOYEES RESPONSIBILITIES

1. Welfare facilities should not be dirty, vandalised or covered in graffiti – leave them as you wish to find them.
2. Tell your supervisor if you are aware that welfare facilities are being deliberately damaged or misused.

FOOD SAFETY

1. Larger sites may provide hot or cold food as part of their welfare arrangements.
2. All food must be stored, handled and prepared in hygienic conditions.
3. Anyone preparing food for others must be trained and observe good standards of hygiene.
4. You should only consume food in authorised areas.
5. Dispose of waste properly in the designated areas to avoid attracting rats or other vermin.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 20

NOISE AT WORK

Building site plant and operations are often very noisy. Exposure to excessive noise can, over a period of time, lead to permanent hearing loss. In addition, noise is very wearing on the nerves and can cause irritability and loss of concentration, leading to mistakes and accidents.

The delicate mechanism in our ears wears out gradually as we get older. Loud noise wears it out more quickly, leading to premature deafness. There is no cure. Prevention is required by *The Noise at Work Regulations*.

WHAT TO DO ABOUT NOISE

1. Stand 2M away from your mate and try talking. If you cannot hear each other without shouting, action is required by the Regulations.
2. *Action Level 1.* Noise measurements with a special instrument must be taken. This reads in decibels, dB(A) 85f dB(A) is the maximum you are allowed to hear all day.
3. The owner of the noisy plant must take steps to reduce the reading to below 85 dB(A). This could be by changing to a quieter machine, moving it further away, having it properly serviced, placing it inside an acoustic enclosure etc.
4. If, after doing all that is reasonably practical, the noise is still above 85 dB(A) you can ask for hearing protection (earplugs, muffs etc.) so that the noise you actually hear is below 85 dB(A).
5. *Action Level 2.* If the noise is still above 90 dB(A) the hearing protection must be provided and you must wear it.
6. Hearing protection must be suitable and a good fit. Ear defenders to BS 6444 will usually be adequate.
7. Ear plugs should be used once only and then discarded. Cotton Wool is totally ineffective as a noise protector.
8. Wash hands before touching and inserting ear plugs and do not use if you have an ear infection - tell your Supervisor. KEEP EAR DEFENDERS CLEAN.
9. Owners of noisy plant may declare immediate surroundings to be an EAR PROTECTION ZONE AND erect warning signs. Ear protection must be worn continually in this zone. If you need to communicate with your mate more than by hand signals, step outside the zone first.
10. Remember your duty to “comply and co-operate” and also take care of PPE.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 21

WEARING AND CARING FOR PPE

Personal Protective Equipment is intended to protect you from risks which cannot be eliminated or guarded against by other more effective means.

Your employer must assess the work you do and take all reasonable steps to eliminate or reduce risks (PPE Regulations). If he decides that some risk still remains he must provide you with PPE. Some risks are deemed to be always present on building sites, hence, separate Regulations require “hard hats” to be worn in “hard hat areas” at all times.

1. You have a duty to wear PPE provided by your employer and he has a duty to see that you do.
2. You must wear and use the PPE in the way it was intended, therefore, it must fit you. If it doesn't - report it.
3. PPE must be suitable for the risk and the job in hand. If it's not - report it.
4. PPE must not itself create a new risk. If it does, report it.
5. You have a duty to take care of PPE and not to abuse it.
6. You have no right to take the PPE off site unless your employer says you can. Otherwise you must return it to the appropriate storage place after use.
7. If you are unsure about how to use PPE (e.g. breathing apparatus) ask for training first). You must be adequately trained.
8. If there is anything wrong with the PPE provided e.g. worn out, broken, missing, in need of maintenance or cleaning etc. you must report it.
9. The Health & Safety Executive provide free advice leaflets on PPE for construction workers. Phone up and ask for them 0742-892-346.
10. Remember, the law does not expect your boss to be psychic, if you know of a problem regarding PPE or risk that needs guarding against TELL HIM ABOUT IT!.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 22

USE OF RESPIRATORS AND BREATHING MASKS

Inhalation of harmful dusts and fumes cause health and respiratory problems that can lead to long term suffering.

This talk covers matters that require consideration when protecting against respiratory risks.

SOME FACTS

1. Approximately 3000 construction workers per year suffer from breathing and lung problems which are caused, or made worse by, their work.
2. It is estimated that around 4000 construction workers die each year as a result of breathing in dust and fumes at work.
3. More than 2 million working days a year are lost to work related ill health in the construction industry.
4. At any one time there are far more people off work through occupational ill health than through work related accidents.
5. There are two circumstances in which respiratory equipment may have to be used:-

Dusty Places
Confined Spaces

(Working in *Confined Spaces* will be dealt with in a later talk).

Dusty Places can be divided into two types: -

- (i) Nuisance Dust
- (ii) Hazardous Dust

Nuisance Dust makes breathing uncomfortable and is irritating to the nose and throat. It may also get in the eyes and makes work less safe than it would be without it.

Hazardous Dust is a dust which, if inhaled, can cause injury to health e.g. Asthma, Cancer etc.

6. The Health & Safety at Work Act requires that we have a Safe Place of Work at all times, therefore, action must be taken to control nuisance dust.
7. If the dust is also a health hazard the control measures must satisfy the COSHH Regulations. Only if control measures cannot remove the risk is reliance on respiratory equipment allowed (also see PPE Regulations).
8. Can the dust be eliminated altogether by: -
 - a) Doing the job in a different way?
 - b) Using different equipment?
 - c) Using different material to do the job?
9. If elimination is not possible, control may be by: -

- a) Extract ventilation with a fan and suitable ducting.
- b) A tent around the dust source to contain it.
- c) Damping down and subsequent cleaning up.

10. If control measures are impracticable or inadequate, respiratory equipment will need to be provided.

USE OF RESPIRATORS AND BREATHING MASKS (Cont'd)

- 1. If the dust is harmful, then overalls, gloves, boots etc. will be covered in it and will need washing/disposing of in a controlled way.
- 2. Coarse dust, occurring for a short time only e.g. during sweeping, may be controlled by wearing face piece dust masks to BS 6061.
- 3. If wearing any form of respiratory equipment causes discomfort or breathing difficulties, go immediately out of the dusty area and take it off. Do not wait until you are gasping for breath or take it off in the dusty area.
- 4. Tell your Supervisor immediately of any problem with respiratory equipment. Also if you have Asthma or allergies to dust.
- 5. For longer periods of protection full face respirators may be necessary. These must be suitable for the dust involved and must fit you properly.
- 6. You must be properly trained in using any respiratory equipment provided.
- 7. You must play your part by following the training given and by taking reasonable care of the equipment.

REMEMBER – RESPIRATORY EQUIPMENT SHOULD ONLY BE A “LAST RESORT” CONTROL MEASURE AGAINST DUST.

DUST AND FUMES

Exposure to respiratory hazards such as dusts, vapours or fumes can lead to immediate and long term health problems such as breathing difficulties, asthma and cancer.

SOME SOURCES OF HARMFUL DUST AND FUMES

- 1. Cutting, sanding and grinding of construction materials will create harmful dust.
- 2. Welding and gas cutting of metals generate harmful fumes.
- 3. Work with old lead can expose you to lead oxide dust which is also harmful.
- 4. Burning off lead based paints or heating lead creates harmful fumes.
- 5. Stripping out or other work involving fibrous materials (such as asbestos or fibreglass insulation) will release harmful dust in the air.

HEALTH RISKS FROM BREATHING IN DUST OR FUMES

1. Silica dust from cutting or scabbling concrete or cutting bricks or stone can cause lung disease (silicosis).
2. Dust from cutting or sanding hardwood (and some softwood) can cause cancer.
3. Asbestos dust can cause cancer.
4. Welding fumes can result in metal fume fever, which has flu like symptoms.
5. Breathing in the fumes from solvents and paint can lead to nausea, drowsiness, headaches and eventually, unconsciousness and death in extreme cases.

PRECAUTIONS

1. Work should be planned to avoid the need for on site cutting or other dust producing activities (for example ordering pre cut paving slabs).
2. If elimination is not possible, harmful dust and fumes must be controlled so they are not breathed in.
3. Dust control techniques should be used, such as using plant and equipment with dust extraction devices, or using water suppression.
4. Where possible substances should be selected that do not give off harmful fumes and vapours (for example “low solvent” or “solvent free” paints).
5. If your employer has provided portable extraction equipment, use it.
6. Respiratory protective equipment will often be necessary, even when other dust control techniques are being used. Make sure that you have the correct RPE for the activity and substance, and that you know how to use it.
7. If you are issued with RPE, you will need a face fit test.

SILICA DUST

Breathing in crystalline silica dust can lead to chronic lung disease, and is responsible for the deaths of hundreds of construction workers in the UK each year. Inhalation of dust containing crystalline silica must be prevented or controlled.

WHAT IS SILICA?

1. Crystalline silica is a basic component of soil, clay, sand, shale, granite and many other minerals including components used to make concrete and mortar.
2. Quartz is the most common form.
3. Many materials in the construction industry contain silica including bricks, tiles, concrete blocks and slabs.
4. When workers chip, cut, drill, grind, or tunnel through objects containing silica, the particles can become small enough to breathe in. These particles are called respirable crystalline silica and cause damage to the lungs.

5. The use of power tools can lead to high exposure if exhaust systems or wet cutting processes are not used or maintained.

HEALTH HAZARDS FROM BREATHING IN SILICA

1. Breathing in silica can cause silicosis, which is disabling and can be fatal.
2. When silica enters the lungs it causes scarring, which reduces the ability of the lungs to transfer oxygen to the blood.
3. Symptoms of silicosis may begin many years after the exposure has stopped.
4. There is no cure for silicosis and it also weakens the body's defence against other infections.
5. Silica is classified as a carcinogen and may be responsible for causing lung cancer.

PREVENTATIVE AND PROTECTIVE MEASURES

1. Your employer should plan your work to avoid dust generation (for example, plan paving to avoid the need to cut slabs).
2. Where dust generation is unavoidable, your employer should reduce the dust with engineering controls such as wet cutting, dust collection or the use of local exhaust ventilation.
3. Filtering RPE used for protection against silica should be FFP3 rated.
4. Consider those around the work area who may not be wearing RPE.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 23

SUBSTANCES HAZARDOUS TO HEALTH

Hazardous substances can be used in, or created by, construction processes. Using hazardous substances without proper controls in place can damage your health.

This talk covers risk assessment, hazards, control measures and safe use of substances.

1. Building operations involve the use of many materials which could harm our health unless precautions are taken. Common situations such as cement, plaster, adhesives, solvents, cleaning materials etc. all pose a risk.
2. The Control of Substances Hazardous to Health Regulations (COSHH for short), place duties on employers and employees. They set out a sensible step by step approach for the control of hazardous substances and for protecting people exposed to them.

COSHH in Operation

1. Substances have to be assessed: categories include very toxic, harmful, irritant, corrosive, flammable, non hazardous.
2. Manufacturers and suppliers must provide information, when asked, to enable assessments to be done.
3. Employers (and self-employed) have to introduce control measures appropriate to the assessment.
4. Best control measure is - use something else instead which is less hazardous.
5. Last resort control measure is - provide PPE i.e. gloves, goggles, overalls etc.
6. Employers must inform and instruct employees about the risks and provide training on the precautions to be taken. The assessment must be to hand during use i.e. in site hut, not at Head Office.
7. Employers must monitor the use of the substance and check that controls are adequate and, if necessary, arrange medical checks for workers.
8. Employers must: -
 - use any control measures provided
 - use any PPE provided, in the way it was intended
 - Use any washing, changing, eating accommodation provided, in the way it was intended.

SUBSTANCES HAZARDOUS TO HEALTH (Cont'd)

1. Take reasonable care of your own Health and Safety of others. Read labels on packaging and follow the instruction carefully.
2. Tell your Supervisor immediately if you are unsure about a substance or if you have a health problem.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 24

PROTECT YOUR HANDS

Your hands are the most important tools you will ever own. They tell you the difference between:-

Hot and Cold
Wet and Dry
Rough and Smooth

You use them to thread a needle, lift objects, button a shirt, cut a steak, dial a telephone, write a letter and for many, many more operations.

How do you treat your hands, do you protect them or abuse them?

The sad facts are that 7% of disabling injuries involve hands (about 150,000 disabling injuries each year) AND MOST OF THESE COULD HAVE BEEN PREVENTED.

Forms of Protection

1. **Gloves**

There's a glove to fit every job, be sure they fit.

Too large – unsure handling and tendency to catch on obstructions.

Too small – excessive wear and can lead to hand fatigue.

2. **Develop the Right Safety Attitudes**

It's surprising to note how many injuries are caused through: -

Overconfidence
Carelessness
Showing off
Bad temper
Cynicism
Ignorance
Pre-occupation
Forgetfulness

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 25

HAND-ARM VIBRATION SYNDROME

What is Hand-arm Vibration Syndrome (HAVS)?

A disorder which affects the blood vessels, nerves, muscles and joints of the hand, wrist and arm. It can become severely disabling if ignored and it's best known form is Vibration White Finger (VWF), which can be triggered by cold or wet weather and can cause severe pain in the affected fingers.

What are the Signs to Look Out for?

- Tingling and numbness in the fingers.
- In cold and wet conditions, fingers go white, then blue, then red and are painful.
- You can't feel things with your fingers (you'll have difficulty picking up small objects such as screws or nails).
- Pain tingling or numbness in your hands, wrists and arms which may stop you sleeping.
- Loss of strength in hands (you may be unable to pick up or hold heavy objects).
- Symptoms will probably get worse if you continue to use high-vibration tools a lot.

Who is at Risk?

- You are at risk if you regularly use hand-held powered tools such as concrete breakers, chipping hammers, jigger picks, vibrating pokers, sanders, angle grinders, vibration compactors, hammer drills, jigsaws, scramblers and needle guns.

How Can I Prevent It?

- It is your employer's responsibility to protect you against HAVS, but you can ask your employer if your job could be done in a different way without using vibrating tools.
- Use low-vibration tool, always use the right tool for the job.
- Check tools before using them to make sure they have been properly maintained and repaired to avoid vibration caused by faults and general wear.
- Make sure cutting tools are kept sharp.
- Reduce the amount of time you use the tool in one go by doing jobs in between.
- Avoid gripping or forcing the tools more than you have to.
- Store tools correctly so that they do not have very cold handles when next used.
- Encourage good blood circulation by:-

Keeping warm and dry (wear gloves, hats, waterproofs and use proprietary heating pads if available).

Giving up or cutting down on smoking as smoking reduces blood flow.

Massaging and exercising your fingers during work breaks.

What Else Can I do?

- Learn to recognise the signs of vibration injury.
- Report any symptoms promptly to your employer.
- Tell your Doctor about any symptoms.
- Ask your Health & Safety Representative for advice.
- Use control measures your employer has put in place to reduce the risk of vibration injury.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 26

EYE PROTECTION

On average 1,000 injuries to peoples eyes occur every day: 75% by impact, 10% by ingress of foreign bodies (dust) and 15% by burns or chemicals. The majority of these injuries could have been prevented if eye protection had been worn.

This talk covers the hazards and the reasons for wearing eye protection.

1. A tiny fragment in your eye can cause disaster.
2. First Aid Room for all eye injuries – not your mates handkerchief.
3. Wear the eye protection provided for your safety – a little discomfort is better than blindness. You have a legal obligation to use any eye protection provided.
4. Wear goggles when turning cast-iron and non-ferrous metals.
5. Wear welding goggles when cutting with Oxy-Acetylene apparatus.
6. Do not watch welders at work unless your eyes are properly protected – glare is dangerous.
7. Always wear eye protection when using hammers, chisels, power tools or cartridge operated tools.
8. Ask your employer for eye protection if dust or fragments arise in your job.
9. Make sure your goggles are a good fit and keep them clean.
10. The place for goggles is over your eyes – **not on your head**
11. Protect your eyes when handling dangerous liquids.
12. Wear goggles when using an abrasive wheel.
13. Refer to your risk assessment or ask your supervisor for details on the type and grade of eye protection to be worn for the task.

REMEMBER, GOGGLES ARE REPLACEABLE, YOUR EYES ARE NOT

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 27

HEARING PROTECTION

Noise induced hearing loss is a common occupational health hazard. There is no satisfactory treatment for noise induced hearing loss. When you're deaf, you stay deaf.

The Noise at Work Regulation 1989 came into force on the 1st January 1990.

These regulations impose legal requirements on both the employer and employee.

Three 'Action Levels' of noise are specified in the regulations: -

1. A first action level of 85 dB (A).
2. A second action level of 90 dB (A).
3. A peak action level of 140 dB (A) (200 pascal's).

Where employees are likely to be exposed to noise between the first action level 85 dB (A) and the second action level 90 dB (A), employers must provide suitable and efficient ear protectors to employees who ask for them.

Where exposure reaches the second peak action levels, employees must be provided with ear protection and the area in question must be designated an 'Ear Protection Zone'. As far as is reasonably practicable these zones must be marked with signs and employers must ensure that anyone who enters these zones wears ear protection.

The operatives most at risk are those using portable grinding machines. Equally at risk are operatives assisting the user or working in close proximity to the grinding operation.

DON'T TAKE RISKS

DON'T DAMAGE YOUR HEARING

WEAR EAR PROTECTION AT ALL TIMES.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 28

SKIN PROTECTION

Dermatitis is a skin condition caused by contact with something that irritates the skin or causes an allergic reaction. Some types of dermatitis are so severe that sufferers have to give up work or change their trade.

This talk covers hazards to the skin and precautions to protect your skin.

CONTACT HAZARDS TO SKIN

1. Mineral oils, including fuel oils and mould oils, can give you bad skin conditions, oil acne or even cancer.
2. Prolonged skin contact with oily rags in overall pockets can cause testicular cancer.
3. Chemicals, including alkalis, acids and chromates, can penetrate the skin, causing ulcers and dermatitis.
4. Cement can cause chronic dermatitis. Wet cement can cause serious burns, which could lead to the amputation of a limb.
5. Solvents and degreasers (such as thinners) dissolve natural oils in skin leaving it open to infection.
6. Tar, pitch and bitumen products cause blisters and oil acne. They can also cause tar warts, leading to cancer.
7. Epoxy – resins, glass fibre and some hardwoods irritate the skin and can lead to dermatitis.
8. Dermatitis symptoms can include redness, itching, dryness and cracking or blistering of the skin.
9. Extremes of sunshine, temperature and humidity make the skin more susceptible to dermatitis and other skin problems.

PRECAUTIONS TO PROTECT YOUR SKIN

1. Comply with your employers safe systems of work.
2. Avoid skin contact with hazardous substances and wear the correct PPE.
3. Keep your skin clean and use after wash skin cream.
4. Keep your workplace clean.
5. Get first aid for cuts and grazes and keep them covered.
6. Don't use abrasives or solvents to clean your skin.
7. If you experience skin contact with hazardous substances, periodically examine the affected part of your skin for signs of damage.
8. Never wear oil contaminated clothes next to your skin.

9. Seek professional medical advice if necessary.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 29

LEPTOSPIROSIS (WEILS DISEASE)

Actions must be taken to avoid the presence of rats on site. Leptospirosis can be fatal. Don't become a statistic.

This talk covers the effects and symptoms of leptospirosis, the measures you should take to avoid it and who could be at risk.

WHAT IS LEPTOSPIROSIS

1. Leptospirosis, which is also known as Weils disease, is an infection that can be passed from animals to humans.
2. The disease enters the body through breaks in the skin and through the lining of the mouth and nose.
3. It is caused by contact with rat urine or water contaminated by the urine of rats and other small mammals.
4. It starts as a mild illness and it can be easily cured if treated early enough.
5. If left untreated it becomes more serious and can cause jaundice and liver and kidney damage. In extreme cases it can be fatal.
6. The initial symptoms are very similar to flu, such as headaches, chills and muscle pains, and so it is possible that you could ignore the symptoms or be treated for the wrong illness.

WHO IS AT RISK?

1. Workers in areas that show evidence of rat infestation are classed as being at high risk. In general, all workers should be aware of the dangers of leptospirosis, and take assed precautions on refurbishment and demolition projects.
2. Also at risk are operatives who work regularly in or near water, such as those engaged in worker on sewers and other drainage systems.

WHAT CAN YOU DO ABOUT IT?

1. Don't encourage the presence of vermin. Carefully dispose of waste food.
2. Do not handle the carcasses of dead rats or other small mammals.
3. Cover all cuts and abrasions with a waterproof dressing and wear appropriate protective clothing.
4. If you frequently work near water, carry a card or tag saying that you may be at risk of catching the disease.
5. Exercise good hygiene by washing hands before preparing food.
6. Be aware that you can catch the disease if you get water in your mouth and nose after falling into a water course.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 30

WORKING OUTDOORS

1. Some people are attracted to construction work because the outdoor life is preferred to the factory or office environment. However, extremes of weather can take the gilding off unless we know how to cope.
2. The Health & Safety at Work Act requires employees to take reasonable care for themselves and others. This includes coping with the weather. The PPE Regulations also refer to “exposure” and this also implies the weather.

WORKING IN COLD WET WEATHER

1. Rheumatism can be brought on or aggravated by allowing joints and limbs to be cold and wet for long periods. Treatment is difficult so prevention is best. Waterproof clothing which is big enough to allow adequate warm garments to be worn underneath should be worn (especially applies to boots).
2. Bronchitis is a development of a cold brought on by exposure to cold or damp. Once affected, it is easily caught again and can get worse until you are virtually disabled. Smoking makes the chance of catching it even greater.
3. If working in water e.g. in a trench or other place where wading is necessary, even good boots and socks can eventually allow the feet to be blue and numb. Do not stand in water for too long and if possible, change socks for a dry warm pair at intervals.

WORK IN COLD DRY WEATHER

1. Working in intense cold can slow you down physically and mentally. Reactions are slower and decision making over even simple things becomes harder. Hence, accidents are more likely.
2. In extreme weather conditions, if possible, arrange a work rota system so that regular periods are spent out of the cold and wind.
3. Hypothermia usually occurs when you can no longer maintain your body temperature at about 37°C. Shivering is usually the first sign, but some people do not seem to shiver. If you begin to feel cold “deep inside”, refer to your Supervisor and take a short break in a warm place. Have a warm drink and a snack during your breaks!

WORKING OUTDOORS (Cont'd)

1. Chill factor is the added effect of wind on the body which makes it seem colder than the thermometer actually reads. At 0°C and 10mph wind, the chill factor may make it seem like -10°C, so extra protection is called for.
2. Chilblains, Frostbite and skin damage are not confined to Arctic explorers. They are extremely painful and disabling, so prevention is better than cure. Warm gloves and socks are essential but if you can feel your extremities getting too cold, change to a warm dry pair. Protective creams are available for face and wrists etc. to replace the natural oils dried up by the cold and prevent cracking and peeling.

3. Where necessary, temporary shelter should be constructed. This will almost certainly pay for itself by improving productivity. Sheeting over scaffolding, tents, or even working in the lee of the side hut are possibilities. Somewhere warm and dry to take refreshments and dry clothes is required by the Construction (Health & Welfare) Regulations.

WORK IN HOT WEATHER AND CONDITIONS

1. Sunburn is very common, very painful, but easily avoided. Glare from an overcast sky can also cause burns on sensitive skins. Stripping off too hastily is unwise, especially for fair skinned people and near midday. Ultra violet light causes premature ageing (wrinkling) of skin and increases chances of skin cancer. Thinning of ozone layer in upper atmosphere is allowing more ultra violet through. Sun Blocking Lotion is recommended but take account of how long you will be in the sun, a high protective index is probably required.
2. Prickly Heat is brought on by working in hot conditions. It causes groups of small itchy spots on the skin. Frequent washing to remove sweat, wearing loose cotton clothes and if possible, periods of work out of the hot location are advised.
3. Heat Exhaustion is the combination of high temperature, exertion and loss of fluid and salt through sweating. It can be dangerous if not recognised. Fainting, cramp and nausea can overcome the unwary. Frequent rests and plenty of cool, but not iced, drinks are necessary.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 31

DRUGS AND ALCOHOL

Statistics show that alcohol and drug use are increasing on site. This can lead to accidents so we need to make sure it doesn't happen on this site.

This talk covers the effects of alcohol and drugs on your safety and that of others.

ALCOHOL

1. In a high risk industry like ours, alcohol and work do not mix well.
2. Alcohol is a drug that has negative impacts on parts of the brain function, causing blurred vision, slower reaction times and impaired memory. When working on site you need to be fully focussed on the task at hand.
3. If you are found intoxicated with drink, you won't be allowed on site and you may end up losing your job.
4. Don't get drunk the night before and expect to work safely on site the next day. You could still be over the limit when you drive to work, as alcohol may take more time than you think to work out of your system.
5. Many drivers who are killed in road accidents are over the legal limit.
6. It takes around one hour for your liver to process one unit of alcohol and for the alcohol to leave your body.
7. Many fatal workplace accidents have been alcohol related.

DRUGS

1. All drugs, including those described as legal highs can affect your ability to work safely.
2. Some effects of drugs are slow reaction times, clumsiness, poor decision making and distorted vision.
3. Even drugs prescribed by your doctor could make you unfit for work.
4. If you know someone is under the influence of drugs, don't think that it isn't your problem. Tell your supervisor and help resolve the problem before someone gets hurt.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 32

MANUAL HANDLING OF LOADS AT WORK

Every year, a significant proportion of all injuries at work are caused by manual handling. If you get it wrong today you will suffer the consequences tomorrow.

WHAT IS MANUAL HANDLING?

1. A Manual Handling Operation is any transporting or supporting of a load, including lifting lowering, putting down, pushing, pulling, carrying or moving, by hand or by bodily force. Picking up and carrying a toolbox or a step ladder or even picking up a screwdriver or hammer, or a set of stocks, is manual handling, just as unloading and positioning a boiler might be. Anything from the extremely light to something requiring your maximum strength is included.
2. Manual Handling accounts for a large number of accidents each year and many millions of “days off” are due to back and other injuries. Once someone’s back has been weakened by injury it is often a reoccurring problem for the rest of that person’s life.
3. All Manual Handling Operations are governed by the Manual Handling Operations Regulations. Employees have a duty to make full and proper use of anything provided by an employer in connection with manual handling. This includes following any advice and training given on lifting etc.
4. An employers duties can be summarised as - avoid the need for manual handling whenever possible. Assess the risk. Reduce the need by providing mechanical aids. Train staff in good Manual Handling Techniques.

Basic Rules for Safe Manual Handling

1. Think before lifting! Is it heavy (above 16 kg), is it large or awkward, where is the centre of gravity, can you manage it alone?
2. Use the strong muscles and bones of your legs, not the complex and vulnerable ones in your back.
3. Make sure you have a firm grip of the load and that you can sustain the grip for the duration of the lift. Wear industrial gloves to improve grip and protect hands from sharp edges.
4. Make sure you know where you are going to put the load and that the way is clear of obstacles and not slippery. The load must not impede your forward view.
5. If in doubt, get help! There is nothing macho about a slipped disc!

Lifting Technique

1. Tuck chin in. This keeps back as straight as possible and therefore least vulnerable.
2. Feet as close to load as possible, about hip width apart, one foot slightly in front.
3. Bend the knees and crouch down.
4. Take a full grip, using palms, not fingertips.

5. With elbows tucked in, straighten the legs, lifting smoothly.
6. Carry the load forward at waist height.
7. Change direction by turning on your feet, not by twisting trunk.
8. Put down in the same careful way and continue being careful as you straighten up.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 33

THE “KNOW HOW” OF CARRYING

1. Keep the load close to your body.
2. Always have clear vision.
3. Avoid twisting your body.
4. Do not change your grip.
5. Face the spot your load has to rest on.

DO NOT BE A WRESTLER – if the object is too big or awkward – GET HELP.

IT’S UP TO YOU – only you can judge how much you should move, and know of any physical condition which might prevent you from moving objects.

AND

It you: -

- Are overweight or underweight
- Have deformities of the spine
- Are arthritic
- Have had previous injuries to joints
- Have special problems of any kind (weak heart, high blood pressure, lung disease etc.)

BE EXTRA CAREFUL – moving heavy objects can be especially dangerous to you.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 34

SITE SET UP & SECURITY

Site set up and security is essential for the protection of people and materials and is a legal requirement under CDM 2015. Unauthorised persons will probably not be aware of the hazards associated with the construction sites.

WHAT THE LAW SAYS

1. Under the law trespassers (particularly children) have a right not to be put at risk if they enter a construction site.
2. CDM places a specific duty on the principal contractor to ensure that unauthorised persons do not gain access to the site.

RISKS

1. Children find construction sites exciting places to play. You must ensure they cannot gain access during or after normal working hours.
2. Plant, equipment and power tools can be very tempting to use or steal if accessible. When operated by inexperienced persons they can cause serious injury. Remove keys and disable plant, and lock away smaller items in containers.
3. Electrical supplies should be isolated and made secure from tampering.
4. Hazardous substances that you may be familiar with and use daily may cause serious injury to unauthorised persons; lock them away when not in use.
5. Ensure that bottled gas compounds are kept securely locked.
6. Ensure that all site accommodation is locked out of working hours.

REMOVE TEMPTATION

1. Remove all ladders from scaffolds or securely board up the lower rungs at the end of each working day to prevent access.
2. Excavations, holes, voids need to be secured with suitable barriers or covers.
3. Remove keys from plant and equipment when not in use.
4. Remove from view and secure any tools, equipment and materials that might tempt thieves onto site after normal hours.
5. Regularly check the perimeter fencing to ensure its intact and secure.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 35

GOOD HOUSEKEEPING

Every year, many injuries occur through slips, trips and falls. Most of these injuries are easily preventable with a little care.

The following points are presented to assist Supervisors when giving Safety talks. The particular points made here are in the interests of good housekeeping throughout work areas, in out of work hours, whether at home, visiting friends or at places of amusement, we expect our surroundings to be comfortable, neat and tidy. When at work, the same applies.

1. We should regard good housekeeping at work with the same importance as “at home”. Do not always rely on others to clear things up, it’s just as easy to put tools away tidily as it is to leave them lying around benches, on the floor, on scaffolding, resting on pipes or other positions, where they can create a tripping hazard, fall onto a person or be damaged in a fall. A place for anything and everything in its place.
2. If dismantling anything, stack parts away neatly and tidily. Do not leave materials in gangways, they could cut off someone’s escape route or cause a tripping hazard. If dismantling anything constructed of wood, make sure nails are removed. If this is not possible, hammer nails flat, making sure that no parts are left protruding that could cause injury to fellow employees. Damaged lengths or parts of wood should be guarded as these also present hazards.
3. All rubbish should be placed in tidy bins or skips to be removed. In this way, should a fire occur, it can be confined to small areas and dealt with quickly and efficiently, thus preventing the fire spreading, especially in high winds.
4. If tools get damaged, get them repaired or replaced. Do not leave them lying around to cause hazards. Report any defects, no matter how small, to your Supervisor. This is also an important aspect of our Q.A. control procedures.
5. When finishing work, put overalls and other gear in mess cabins provided. Don’t just leave things lying around hoping they’ll be there when you return.
6. If you notice rubbish piling up which you cannot remove, bring this to the attention of your Supervisor who will make arrangements to have it removed.
7. Should you be working at height and notice loose objects on boards or walkways, put them somewhere where they cannot be dislodged. They could fall and injure someone.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 36

MATERIAL STORAGE

Unsafe stacking can lead to collapse and life changing injuries.

STACKING

1. When stacking materials, wear work gloves and safety boots.
2. Only stack or store material in authorised areas, never near doorways or on fire escape routes.
3. Where possible, stack on level, firm surfaces and place on pallets or timbers.
4. Never make stacks higher than three times the minimum base width.
5. Where possible, stack materials close to the working area to reduce the amount of handling.
6. Keep your hands clear of the load if materials are being moved by machinery.

BRICKS, BLOCKS & PALLETED MATERIAL

1. Ensure the base of the stack is level. Only stack two packs high.
2. Ensure the upper pack is loaded squarely on to the lower one.
3. If banding is damaged or materials are displaced in the pack, do not stack other materials on top.

TIMBER

1. Racks are the best method of storing small sized timbers.
2. Joists, trusses and larger timbers should be placed on bearers.
3. Do not stack vertically, leaning against other structures.

LARGE PREFABRICATED PANELS

1. Stack flat or store secured in designed racks (stillages) and ensure items are secured with banding. Sheets of glass need to be stored individually.
2. Don't lean against parts of semi constructed buildings or temporary structures.
3. Don't store upright in an area where panels could be affected by wind.
4. Secure if stored at height or in other exposed areas, especially lighter materials (such as insulation).

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 37

SAFETY SIGNS AND NOTICES

Safety signs are important for making workers, visitors and others aware of hazards, information and emergency procedures on site. Safety signs are colour coded and should be displayed as a reminder of important information.

1. Persons in charge of sites, plant etc. frequently have a need to warn or advise others about hazards or risks. If we don't understand the signs and notices they put up we could be in danger.
2. All safety signs have to conform to the Safety Signs Regulations. If we are familiar with the principles of the regulations we will be able to spot instantly:-

Prohibition Signs

Mandatory Signs

Warning Signs

Safe Condition Signs

Fire Fighting Equipment Signs

3. **Prohibition Signs** - These have a red circle with a cross bar on white ground. Any lettering is black.

Examples: STOP NO ENTRY NO SMOKING

Meaning: DO NOT. YOU MUST NOT. STOP IT IF YOU ARE.

Mandatory Signs - These have a solid blue circle with a white symbol and/or lettering.

Examples: HARD HATS MUST BE WORN. KEEP LOCKED SHUT

Meaning: YOU MUST DO. OBEY

Warning Signs – These have a solid yellow triangle (point up) with a black border. Any symbol or lettering is also black on yellow.

Examples: DANGER HIGH VOLTAGE GUARD DOGS LOOSE

Meaning: YOU HAVE BEEN WARNED, THEREFORE, TAKE CARE

Safe Condition Signs – These have a solid green square with white symbols and/or lettering.

Examples: FIRE EXIT FIRST AID

Meaning: FOLLOW THIS SIGN TO REACH SAFETY

Fire Equipment Signs – These have a solid red rectangle with white symbols and/or lettering.

Examples: FIRE ALARM HYDRANT EXTINGUISHER

Meaning: HERE IS THE FIRE EQUIPMENT

REMEMBER

1. Safety signs are only effective if you understand what they mean; if you do not understand a sign you should speak to your supervisor.
2. Safety signs must be visible. Do not place materials in the way or obstruct visibility. If you need to cover a sign, even temporarily, you should speak with your supervisor.
3. Check for safety signs when entering the site and at the start of every shift. New hazards may have been introduced to the area or the location of emergency equipment or the fire assembly point may have changed.
4. Ensure you wear all PPE identified on the mandatory signs on site.
5. You should comply with safety signs as failure to do so could put you or others at risk and you might also face disciplinary action.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 38

FIRE PREVENTION ON SITES

Fire kills on average 260 people in Britain every year and injures thousands more. Knowing how to prevent fire can save lives.

Fires on building sites regularly cause much damage and because of the unfinished nature of the building, danger to life of both workers and fire-fighters.

The presence of flammable waste materials, solvents, hot work processed, incomplete electrical systems, vandalism and malicious acts make fire prevention a prime objective.

PRECAUTIONS TO REDUCE THE RISK OF FIRE

1. Clear away rubbish and waste regularly to the designated areas. If fire breaks out there, it is more readily confined and dealt with.
2. Never attempt to dispose of rubbish by burning it. Site “bonfires” are illegal.
3. Electrical systems, including temporary supplies, must only be installed by a competent electrician and must be regularly maintained.
4. Site huts are vulnerable to fire because of temporary heaters, smoking, intermittent occupation, clothes drying, waste packaging, old newspapers etc. Extra vigilance is therefore called for. Last man out - have a quick look around etc.
5. Temporary heaters must be properly installed in a safe position and have guards fixed.
6. High intensity lights should not be covered or placed near combustible material. They must be securely fixed to prevent them falling over. Treat them as though they were heaters!
7. Smoking is only permitted in specified “smoking” areas. Dispose of matches and cigarette ends carefully.

HOT WORK

1. Hot work is best controlled by a Permit to Work System to ensure all risks are adequately controlled.
2. Ensure surrounding area is free of combustible material. Non removable items must be covered with heat proof blankets. Don't underestimate how far radiant heat and sparks can travel. Remember to check floor ducts etc. close to the work area.
3. Have suitable fire extinguishers readily to hand. Where circumstances make it necessary, one man should be on “fire watch”.
4. Cease “hot work” well before knocking off time and check the area at 30 minute intervals to make sure nothing is smouldering. Have a last look round before leaving site.
5. Ensure you know your part in the site fire safety plan. Know where extinguishers are and make sure you know how to use them. Make sure you know the evacuation procedure and where your escape route is!

SITE SAFETY TOOL BOX MEETING

SAFETY AT WORK BOX NO. 39

FIRE ON SITE

This talk could be called “What to do if you discover a fire” but there are certain things you need to do and know before you discover a fire.

1. A well organised site will have a Fire Safety Plan and appointed Fire Wardens. Make sure you know your part in this plan. Site huts require a special “Fire Certificate”.
2. Reading newspapers will soon show that fires are happening all the time, so get into the frame of mind that fire is an ever present risk and be prepared in case your site is the next news report.
3. If you know what to do, you are unlikely to panic. Panic makes people do stupid things, sometimes the complete opposite of what they would do if calm. Panic is contagious so stay calm even if others are not.
4. Preservation of life is more important than protection of property. Staying calm and leading others to safety is better than trying to fight the fire and being overcome by smoke.
5. Always know your escape route, especially if you are working in an unfamiliar place. Familiarise yourself with the route.

Know the types of fire extinguisher and what they are suitable for:-

<i>Red</i>	<i>Water Based</i>	<i>for wood, paper, rubbish fires NOT ELECTRICAL FIRES</i>
<i>Hose Reels</i>	<i>Water</i>	<i>as above</i>
<i>Black</i>	<i>Carbon Dioxide</i>	<i>electrical fires - liquids</i>
<i>Blue</i>	<i>Dry powder</i>	<i>Liquids and low voltage</i>
<i>Cream</i>	<i>Foam</i>	<i>Liquids - not electrical fires</i>

Notes - Carbon Dioxide works by displacing Oxygen so excavate to the open air as quickly as possible.

- Dry powder and foam leave residue which may be hard to clear up.

- Colours are to BS5423 which is not mandatory, beware of foreign imports all coloured RED.

FIRE ON SITE (Cont'd)

If you discover a fire: -

1. Shout FIRE as loud as you can and repeatedly. This alerts others and summons help.
2. If there is a fire alarm system e.g. break glass points, operate it or send someone to dial 999.

3. Make sure no one is trapped.
4. Decide quickly whether to tackle the fire or excavate, but always obey instructions given by a Fire Warden.

In the Absence of a Fire Warden: -

1. If fighting the fire seems possible, be prepared to change your mind in an instant if things begin to get worse.
2. Always keep your back to the escape route as you fight, to ensure you are not cut off.
3. Beware of smoke billowing round you. More people are killed by smoke than by heat. Be ready to evacuate if the smoke begins to get bad. Crawling or slithering on the floor may enable you to get past the smoke. This is when knowing the route pays off.
4. If using an appliance - aim at the base of the flames. "knock the fire down" is a good strategy.
5. If evacuation is the only way, closing doors behind you may contain the fire and smoke until the brigade arrives.
6. When the brigade arrives, leave things to them unless they specifically ask. They have the training, the gear, the experience, so keep out of their way until they say it's O.K. to go back in.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 40

COMPRESSED GAS CYLINDERS

Compressed gases, if used safely, are convenient and useful sources of energy. If you know how to use them safely you can prevent serious accidents and injury.

1. Treat every cylinder as “full” and handle carefully.
2. Always use a bottle truck and secure the cylinder into it.
3. Always secure Acetylene cylinders in an upright position both in use and in storage.
4. Store ALL cylinders so that they cannot fall e.g. chain back to wall or stanchion.
5. Keep them away from sun, artificial heat, flammable materials, corrosive chemicals and fumes.
6. Avoid damage to valves and fittings. Do not use them for lifting or carrying.
7. Keep valves and fittings of Oxygen cylinders free from oil and grease.
8. See that gloves (if worn) are free from oil and grease.
9. Open cylinder valves slowly and close sufficiently to shut off gas - never use force.
10. Always lift cylinders from trucks - do not drop or slide them.
11. Keep hose lines clear of traffic lanes.
12. Remember - handling cylinders is a two-man job.
13. If involved in fire report to Fire Brigade and Supplier.

REPORT ANY DAMAGE OR DEFECTS IMMEDIATELY

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 41

PETROL, DIESEL & LPG

Many sites store and use large quantities of fuel, which creates hazards. By being aware of the risk and taking appropriate mitigation action, the chance of an accident can be reduced or eliminated.

PETROL

1. Usually, only small plant (such as cut off saws and chainsaws) run on petrol.
2. Petrol fumes are highly flammable – only refuel plant in designated, well ventilated areas.
3. Do not store excessive quantities of petrol.
4. Petrol must only be stored in purpose designed containers – 10 litres maximum (5 litres in a plastic container).
5. No smoking or other sources of ignition are allowed in areas where petrol is stored or decanted.

DIESEL

1. Diesel should only be stored at a designated refuelling point.
2. Protection gloves should be worn when handling diesel oil because contact with your skin can cause irritation.
3. Spilt diesel will cause a slip hazard on hard surfaces.
4. Diesel oil should be stored in bowsers, tanks, metal drums or cans in a secure bunded area.

LIQUEFIED PETROLEUM GAS (LPG)

1. LPG is used mainly as fuel for small plant vehicles (dumpers and forklifts).
2. Cylinders are of special construction and designed to be mounted on their side.
3. Cylinder connectors and other unions have a left hand thread.
4. Use the correct size spanner for tightening connections; hand tight connections will leak.
5. LPG vapour is highly flammable and must be kept away from sources of ignition, such as naked flames and sparks.
6. LPG vapour is heavier than air; leaked gas will accumulate at floor level or in drains if not allowed to disperse.
7. If there is a fire on site and gas cylinders are in the area, inform the emergency services so that they can react accordingly.

FUEL STORAGE

1. Ensure spill kits are available and fuel should be stored away from drains and watercourses.

2. Storage areas must be secure, bunded where required, well ventilated and away from sources of ignition.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 42

WORKING WITH HAND HELD AND ELECTRICAL TOOLS

1. Use the right size spanner to fit the unit.
2. See that every file has a handle.
3. Avoid chisels and punches with mushroom heads.
4. Keep hammerheads tightly wedged on their shafts.
5. Renew wooden handles that are split.
6. Keep the edges of cutting tools sharp and –
7. Hands behind the cutting edges when working.
8. Don't use screwdrivers on work held in the hand.
9. Keep tools in boxes or racks when not in use.
10. Protect sharp edges or tools that are to be stored or carried.
11. Scrap tools that are worn or damaged beyond repair.
12. Always use the correct tool for the job.
13. Report any defects to your supervisor.

HANDHELD ELECTRICAL TOOLS

Electrical tools face harsh conditions on site and when misused they get damaged and become dangerous. Incorrectly used and poorly maintained tools can cause electric shock.

PRE-USE CHECKS

1. Make sure the casing isn't damaged. If it is, don't use it and report the damage to your supervisor.
2. Make sure that all cable, plugs, or connectors are sound and not damaged.
3. Check that any guards fitted can be adjusted properly.
4. Use tools on the correct power supply. Generally only battery powered or 110v tools are permitted on site.
5. Check to ensure the equipment has had a portable appliance test.

SAFE USE

1. Portable electrical tools should only be used for their intended purpose.

2. Ensure switches are working correctly before connecting to the power supply.
3. Wear suitable eye protection if there is risk to your eyes.
4. Disconnect tools when not in use or when making adjustments.
5. Electrical tools should be regularly inspected and maintained by a competent person.
6. If using the tool creates dust, you should wear respiratory protective equipment to protect against dust inhalation.
7. You should be face fit tested for your type of RPE.

HAZARDS

1. If possible, keep power cables off the floor. They may get damaged, cause someone to trip or trail through water.
2. Electrical tools often present a noise and vibration hazard. Wear hearing protection if necessary and follow guidance on trigger times to avoid hand arm vibration.
3. Keep equipment clean and dry.
4. Portable electric tools that have become wet should be allowed to dry and then be checked by a competent person for electrical safety before being used again.
5. Some hand held tools can cause hand arm vibration. Refer to your risk assessment and the manufacturer or hire company information sheets.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 43

ABRASIVE WHEELS

Many accidents involving abrasive wheels are caused by wheels being fitted incorrectly, using the wrong type of wheel on the material being cut and operators not being appropriately trained. Without the correct knowledge, accidents will continue to happen.

N.B. only those persons issued with a Certificate may change an abrasive wheel.

GENERAL SAFETY PRECAUTIONS

1. Wear goggles when using an abrasive wheel.
2. Adjust the guard to expose the minimum wheel surface necessary for the operation.
3. Keep the glass screen in the safety position.
4. Adjust the tool rest as close as possible to the face of the wheel.
5. Keep your fingers below the tool rest level.
6. Take care work does not slip off the rest.
7. Use the correct grade of wheel for the work in hand.
8. Keep the face of the wheel evenly dressed.
9. Never use the side of the wheel.
10. Do not exert heavy pressure on the wheel.
11. Run a replacement wheel for a full minute after fitting before attempting to use it. Stand clear during test.
12. Stop the wheel when not in use.

PROTECT YOUR EYES FROM FLYING FRAGMENTS

SAFE USE OF BENCH MOUNTED ABRASIVE WHEELS

1. Adjust the tool rest to be as close as possible to the face of the wheel and keep the protective screen in the safety position.
2. Keep your fingers below the tool rest level.
3. Use the correct grade of wheel for the material and task.
4. Keep the face of the wheel evenly dressed and don't use the side of the wheel.

5. After fitting, run a replacement wheel for a full minute before attempting to use it. Stand clear during the test.
6. Allow the wheel to stop before leaving machine unattended.
7. It is likely that dust extraction and RPE will be needed alongside other items of PPE.
8. Do not wear loose clothing that could become entangled in the rotating wheel.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 44

CARTRIDGE OPERATED TOOLS & WOOD WORKING MACHINES

Cartridge operated tools must be used in a safe manner. If cartridge operated tools are used recklessly or by untrained operators they can be lethal.

BEFORE USE

1. You must be trained, over 18, and authorised to use cartridge operated tools.
2. Read and understand the manufacturers instructions carefully before using any tool.
3. Load the tool with the barrel pointing away from you and others.
4. Never walk around with a loaded tool. Load it just before use.

HAZARDS

1. Using a cartridge that is too powerful for the task.
2. Firing into voids or materials that are too thin.
3. Firing into the hole of a previously attempted fixing.
4. Trying to fix into excessively hard material.
5. Not holding the tool square to the surface, or fixing is too near the edge of the material.
6. Placing parts of the body such as hands behind the surface being fixed into.

SAFE USE

1. Always wear the correct PPE whilst in use.
2. Hold the tool at right angles to the job when firing.
3. Check the material into which the fixing is to be fired. Carry out a test fire first. Check that no one is behind or to the side of the target.
4. Allow at least 75mm from edges of concrete or brickwork.
5. Never place your hands over the end of the barrel.
6. In the event of a misfire, wait a minute, do not withdraw the tool, then refire it. If nothing happens, wait a further minute before reloading.

AFTER USE

1. Keep the tool clean and well lubricated.
2. Never leave the tool loaded when not in use.

3. Cartridges must be kept locked away in a safe place.
4. Do not discard new or used caps onto the floor within the work area.

WOODWORKING MACHINES

Woodworking machines can be particularly dangerous if they are not used properly. In order to function, at least part of the blade must be exposed during use.

TYPES OF WOODWORKING MACHINE

1. Woodworking machines include fixed and portable machines.
2. Examples include circular saws, bandsaws, routers and planers.

GENERAL PRECAUTIONS

1. Most woodworking machines are electrically powered, so ensure that the electrical cable is in good condition and out of harms way.
2. Consider the risks to other people who are nearby when operating woodworking machines.
3. Do not operate any woodworking machine unless you have been trained to do so.
4. Ensure all fixed guards are in position.
5. Ensure all pivoting guards are free to move and properly positioned during use.
6. Ensure that you have the correct PPE before starting work. This will usually include suitable hearing, eye and respiratory protection.
7. Ensure you are not wearing any loose clothing.
8. Promptly clean offcuts from the floor to prevent trips.
9. Ensure that the supply is isolated and securely locked off during maintenance work.

HANDHELD CIRCULAR SAWS

1. Reduce the chance of fatal electric shock by using battery operated or 110v tools. Where 240 v equipment is permitted, ensure that a residual current device is used.
2. Ensure the power lead is disconnected from the supply before adjusting the saw.
3. Adjust the depth and angle of the cut and the position of the fence before use.
4. Ensure dust extraction adaptors and bags are fitted and used.
5. Ensure the blade is securely fixed, sharp and not cracked.

FLOORMOUNTED MACHINES

1. Check that the start and stop controls can be operated easily without danger.

2. Ensure that the cutter or blade is guarded to the greatest practical extent.
3. Check that there is sufficient working space around each machine.
4. Ensure that the level and direction of lighting is satisfactory for safe working.
5. Use the dust and chip extraction system, where fitted.
6. Check that the machines are level and securely fixed down for stability.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 45

WORKING WITH COMPRESSED AIR TOOLS

1. See that the hose is clear of dirt or moisture before starting work.
2. Ensure that tools are regularly maintained and serviced and matching connections are used.
3. See that, where applicable, the proper protective guard is correctly fitted before use.
4. Always use attachments which are correct for the speed of the tool.
5. When using paving breakers, clay spades, grinders etc. always check your hose connections before starting work.
6. Wear protective footwear when using paving breakers and stand with feet apart.
7. Operators of air cutting, drilling or impact tools must wear eye protectors and use ear protectors also.
8. Before disconnecting any air tool, turn off the compressed air supply on the main air pipe to which your air hose is connected. The air should be exhausted in the line at the tool end.
9. The air tool control lever should be released before moving the tool to another piece of work.
10. The changing of points (Jack Hammer) should be undertaken with the tool in a horizontal position. Do not use blunt points.
11. Ensure that points (Jack Hammer) are securely seated before operating tool.
12. In the case of air operated cutting wheels and discs, only operators in possession of a certificate of training are permitted to change an abrasive wheel or disc (in accordance with the requirements of the Abrasive Wheels Regulations)
13. Report all defects immediately.
14. Keep away all persons not directly involved in the activity, particularly children and general public.
15. Never use compressed air tools with other sources of energy, for example O₂ (Oxygen) cylinders.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 46

WELDING AND BURNING

1. Always check permits to work before starting work.
2. Clear and screen the area to prevent ignition of combustibles, protect process equipment, passers by and others working in the vicinity.
3. Make sure fire extinguisher is in close proximity.
4. Use of correct eye protection and clothing.
5. Ensure gas cylinders are up right and secured in bottle trolley. When not in use or empty all gas bottles should be stored in bottle rack.
6. Hoses and welding leads as short as possible and maintained in good condition.
7. Do not obstruct access or egress routes with hoses or cables.
8. Regular inspection of hoses and cables. Do not use damaged equipment. Jubilee clips are prohibited.
9. Ensure adequate ventilation; use appropriate ventilation equipment to remove fumes if in confined spaces.
10. Leave cylinder keys with cylinders.
11. Ensure equipment is properly earthed and welding return lead is clamped as close as possible to the work piece.
12. Cylinders fitted with flash back arrestors and regulator must be in good condition.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 47

TEMPORARY WORKS

Temporary works, such as hoardings, access roads, excavations, propping and building supports are important elements of most projects. Despite not being part of the final structure, most temporary works have the potential to cause serious injury or delay to the project if they are not properly planned.

WHAT ARE TEMPORARY WORKS?

1. Temporary works are works that are provided to enable the permanent works to be built. They may be anything from hoardings to site cabins, access roads, excavation support, formwork, falsework, propping or building supports.
2. The works might or might not stay in place when the project is complete. If they stay they will be incorporated into the permanent works, for example haul road foundations and crane platforms.
3. The same attention must be given to temporary works as is given to permanent works. They are not less important just because they are only in place for a short time.
4. If temp works are not designed or managed properly they can place people at risk of injury.
5. If there are temp works on site, it is industry good practice to appoint a designated temp works co-ordinator. The legal requirement is that the organisation in control must ensure that work is allocated and carried out in a manner that does not create unacceptable risks which could harm workers or members of public.
6. A TWC may not be appointed on projects that need simple temp works. However, your employer must still make sure that temp works are properly managed to ensure your safety.

WORKING ON OR NEAR TEMPORARY WORKS

1. Do not use temporary works, or carry out any work activity on or near them, unless it is clearly permitted or you have been instructed by an authorised person and have the skills to do so.
2. You should not accept any instructions to alter the temporary works or attempt any action to try to make the temporary works safe if you do not have the required skill.
3. Know who the TWC (or equivalent person) is on your site and whether a temporary works supervisor has been appointed.
4. A supervisor is not necessarily the same as a temporary works supervisor. Only carry out instructions relating to temporary works that have come from the person who has been given responsibility for the works.
5. Report any safety concerns about the temporary works to the appropriate person immediately.
6. Certain types of temp works need to be inspected. These include working platforms which require inspection by a competent person before use, after any significant event that may have disturbed the platform and at not greater than 7 day intervals.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 48

WORKING AT HEIGHT & STAIRWELL WORKING

All work at height must be properly planned. Around half of all fatalities on construction sites are as a result of falls from height.

HAZARDS

1. The incorrect selection or use of access equipment for the task is one of the biggest causes of falls from height. Never use the wrong piece of equipment just because it is all you have available.
2. Adverse weather conditions must be anticipated and suitable precautions taken – beware of wet, windy or icy weather.
3. Too much material on a working platform can make access difficult or make the platform unstable.
4. Don't allow rubbish to accumulate. Use a chute or lower materials properly.

BEFORE WORKING AT HEIGHT

1. All work at height must be avoided where possible. If work at height cannot be avoided then a collective system to prevent falling (such as scaffolding, a mewp or mobile tower) should be used.
2. All working at height must be carried out in accordance with a safe system of work provided.
3. The consequences of any fall should be minimised by using an appropriate soft landing system, net or last resort, a safety harness.
4. The correct work equipment must be provided that is suitable for the task.
5. All equipment provided must be inspected and maintained.
6. Ensure you receive the correct information, instruction and training on the safe use of access equipment.
7. Ensure you have the right skills, knowledge, training and experience for the job.
8. Ladders and step ladders should only be used for light work of a short duration and where there is a low risk of falling.
9. Fall protection (such as edge protection systems, barriers and perimeter scaffolds) should be installed to prevent the risk of materials or persons falling.
10. Access ladders must extend at least 1m above the stepping off point, be secured, and rest at the correct angle (1 in 4).

WORKING IN STAIRWELLS

1. Suitable stairwell working platforms are to be installed during plastering, dry lining, joinery and painting operations.

2. The stairwell working platform must be suitable for the design of the stair opening. THE USE OF SINGLE BOARDS AND LADDERS AS SUPPORT IS NOT PERMISSIBLE.
3. Before assembly of such platforms, ensure that manufactures guidelines are read and understood.
4. Check all components are available and are functioning correctly.
5. Beware of any excessive horizontal forces that could force the system to move or over turn.
6. Never overload the platform beyond its SWL.
7. Prior to use, stand back and examine the platform. Ensure it is erected properly, is stable, and suitable for the task at hand.
8. IF IN DOUBT, CONSULT YOUR LINE MANAGER.

WORKING AROUND OPEN STAIRWELLS

1. Stairwells and landings to be fitted with suitable edge protection and the method of fixing must be adequate to prevent a person or persons falling through them if they are fallen against.
2. Guardrails to be fitted and maintained by competent persons at a height of 950mm.
3. DO NOT alter or modify handrails provided.
4. IF IN DOUBT, CONSULT YOUR LINE MANAGER.

SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 49

WORKING AT HEIGHTS - LADDERS

Ladders are probably the most used and misused pieces of access equipment. Using ladders safely will help to prevent accidents.

Much of our work involves equipment deliberately put out of reach. We therefore need to use access equipment (steps, ladders, towers, scaffolding) to get at it.

More accidents occur involving ladders than any other piece of work equipment. This is because there are so many of them, not because they are particularly dangerous.

LADDER RULES

1. Only use ladders for work of short duration and which can safely be done from a ladder e.g. work requiring only one hand and within easy reaching distance.
2. Ladders must be of sound material, strong enough for the purpose and properly maintained (no splits, warping, decay, damage etc.). A missing or defective rung condemns a ladder automatically. Wooden ladders must not be painted.
3. Ladders must have a firm footing for each site and if more than 3M long be secured at the upper end i.e. be lashed. Where such lashing is not possible, securing at or near the base is necessary. Where securing at neither the top nor bottom is possible, a person must “foot” the ladder.
4. Maximum height to be reached by ladder is 9M unless a resting place can be provided. (Greater heights require a scaffold to ensure “Safe Place of Work”.)
5. Ladders used for access to higher level must extend at least 1.06M above the landing place, unless Regulation height hand hold is provided.
6. Ladders must be placed at a safe angle of approximately 75°. This means; distance from base of ladder to the wall should be $\frac{1}{4}$ height reached by the ladder.
7. Only one person should stand on a ladder at one time, except when a second person is standing on the bottom rung to “foot” the ladder.
8. When climbing or descending ladders, both hands are needed, so carry tools etc. in a shoulder bag or such like (or hoist them up afterwards).
9. Do not use metal ladders near electrical equipment.
10. Do not use a ladder in a driveway or passageway unless protected by barriers or an assistant is constantly in attendance.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 50

WORKING AT HEIGHTS - STEP LADDERS

Folding step ladders are an extremely convenient way of accessing work which is out of reach, but familiarity can lead to carelessness. Falling off a step ladder is no less serious than off an ordinary ladder so equal care is called for. (The floor is just as hard).

Step ladders are covered by the same Regulations as ordinary ladders regarding construction and materials and this is even more critical because of the extra parts required to make them foldable. Work Equipment Regulations.

Establishing a habit of checking off a mental list each time a pair of steps is used will lead to safe working. Steps are probably the most “borrowed” item of all site equipment and although this may be frowned upon, it is unlikely that it can be stopped. Always check “borrowed” steps doubly well as it is still your responsibility to ensure your own safety.

STEP LADDER RULES

1. Steps must be suitable. “Domestic” weight steps are not normally up to “trade” use.
2. Check anti-spread device (cords, clips, brackets etc.). Remember, if it’s defective it’s defective it’s illegal!
3. Check folding mechanism (hinges, pin, rivet etc.)

Remember.....

4. Always spread the ladder to it’s fullest extent so that it can’t suddenly jerk while you are on it.
5. Ensure that all 4 stiles are on firm, level ground.
6. You must always have a secure handhold not less than 1.06M above the highest level reached by your feet. Clearly this means you cannot stand on the top steps unless there is some other handhold e.g. an extension.
7. Place the ladder at right angles to the work so that twisting the body is not necessary. Try to visualise where the centre of gravity of you, any tools or materials and the ladder lies so that it stays within the base area of the ladder.
8. An assistant standing on the bottom step lowers the centre of gravity very effectively, but make sure they understand and so do not step off suddenly.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 51

WORKING AT HEIGHTS - TOWER SCAFFOLDS

Tower scaffolds represent the safest way of getting access to equipment above ground level.

Towers built of scaffold tubes and fittings must comply with all the scaffold parts of Work Equipment Regulations and only be erected (and dismantled) by competent scaffolders properly supervised.

Proprietary towers made up of fit together sections are covered by an HSE Guidance Note and the Manufacturer's Association Code of Practice. They may be erected by non-scaffolders but the makers instructions must be to hand and must be followed exactly.

TOWER SCAFFOLD RULES

1. Towers must only be erected on a firm level base.
2. The maximum height (of platform) is 3 x min base measurement if outdoors and 3.5 x if indoors. Outriggers are permitted to increase base dimension so that greater height can be achieved.
3. Minimum platform size recommended is 1.219M x 1.219M. The area must be fully boarded and have toe boards and hand rails if above 1.980M high.
4. Access must be by fixed ladder. Best is internal diagonal type. (Keeps C.G. inside base and braces tower). An alternative may be part of end frame of tower with rungs not more than 300mm apart. Shinning up the tower tubes is not permitted.

Where ladder is internal, platform must have a trap door, not an open hole (fully boarded rule).

5. Where the tower is mobile (on wheels) each wheel must be fixed to the tower (not held in place by the weight of the tower) and be fitted with a brake. The brakes must all be "on" whilst the tower is in use.
6. The above rule means that men and materials must not be on the platform whilst the tower is being moved.
7. Move by pushing horizontally near the base. Make sure the route is clear, both at ground level and up to the height of the tower, before starting to push.
8. Extra care is essential if outriggers are in use. The height/side ratio may be affected if the outriggers have to be removed for moving. Only raise the outriggers by the minimum amount possible. If in doubt about stability, get helpers to steady all 4 concerns whilst moving.
9. Ladders must be leant against towers, or stood on the platform to gain height. The risk of overturning the tower is too great!
10. When working on a tower, pushing and pulling actions need to be undertaken with due thought as to where you are, to avoid the risk of overturning.

SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 52

WORKING AT HEIGHTS – SCAFFOLDING

All work at height must be properly planned. Around half of all fatalities on construction sites are as a result of falls from height. If you don't follow the guidance you may end up as a statistic, or at best, in hospital.

Fortunately, falls from scaffolds or scaffold collapses are fairly rare, but when they occur they tend to be spectacular and also sometimes catastrophic.

A few basic rules are worth memorising for your own safety. Scaffolding is covered in detail by the Work Equipment Regulations (which is why scaffolding is generally safe).

SCAFFOLD RULES

1. Scaffold must be provided where work cannot be safely done from the ground, a permanent structure or appropriate ladders.
2. Erection, dismantling and alteration of scaffolds must only be done by competent persons. You must not do it unless you have a certificate!
3. A completion certificate must be signed by a competent person before a scaffold is put to use.
4. A scaffold must be inspected by a competent person at least every 7 days (more often in bad weather) and a Record Book signed to that effect.
5. Sub-contractors using a main contractors scaffold must satisfy themselves that it is safe (inspection of the record book mentioned above).
6. Unsafe or un-inspected scaffold must be barriered off and notices erected to prevent use.
7. No plank may extend more than 4 x its thickness beyond its point of support unless it is secured against tipping.
8. Don't overload scaffolding. Position loads adjacent to the standards as they are the load bearing members, not in the centre of bays.
9. When stacking materials, always leave a passageway at least 2 boards wide for other people to pass.
10. Ensure materials are stacked correctly, safely and cant fall.
11. Guardrails, toeboards and brick guards must be fitted to places where people and work equipment are liable to fall.
12. Don't remove or interfere with ties, guard rails, bracing, and ladders. Alterations must only be made by competent persons.
13. Don't throw or tip materials from height.
14. Never walk along a single plank. The minimum width for a walkway is 440mm (Rule of Thumb 2 x 9" planks). For access and working 640mm (3 planks). For access, working and materials (4 planks or more).

- 15.** Use of ladders or stairways provided. Never climb up scaffold poles. Make sure that the ladder is at the correct angle (1 unit out to 4/75 degrees). Also make sure that the ladder is free from defects.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 53

LOW LEVEL ACCESS EQUIPMENT

Low level access equipment is often misused, which can result in accidents. Being aware of the rules and following them can help prevent a fall.

FOLDING AND ADJUSTABLE TRESTLES

1. If a risk assessment shows that they are suitable, they should only be used for light work and work of a short duration.
2. Guard rails cannot generally be fitted to folding and adjustable trestles and so these should be avoided if possible. The risk assessment must detail why a trestle without guardrails is being used.

MODERN TRESTLE SYSTEMS

1. Modern trestle systems should be safe and stable to use, with safe ladder access, guardrails and toeboards fitted. Brickguards should be fitted where there is a risk of materials or tools falling and striking someone below. This is not the case for older systems, which do not have many of the required safety features.
2. They are similar in usage and appearance to a low level scaffold platform.
3. A tied, secured ladder must be available for access to and from the trestle.
4. Be aware of any weight restrictions before loading the trestle with materials.
5. Ensure that the boards are supported at the distances identified in the manufacturers instruction or information manual.

PODIUMS AND STEP UPS

1. Podium steps are commonly accepted as the replacement for step ladders; they provide a safe place to work and can be moved easily.
2. Training is important to understand their limitations, particularly about over reaching, locking wheels and the use of stabilisers if fitted.
3. Hop ups are small, flat platforms, which provide extra height (up to 600mm).
4. If hop ups are going to be used, a risk assessment will need to show that there is no other way to carry out the work safely.
5. Where hop ups are used, great care must be taken to ensure that the ground surface is firm and stable and that a suitable risk assessment is in place.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 54

MOBILE ELEVATING WORK PLATFORMS

Mobile elevating work platforms (MEWPS) are used extensively to gain access on construction sites. When used responsibly and safely, a MEWP can significantly reduce the risk of injuries from falling from height. They are useful items of plant, but can be dangerous if not used in a safe manner.

HAZARDS

1. Operatives falling from height due to unsafe work.
2. Overturning of the machine due to poor operating technique or poor ground conditions.
3. Collision with other vehicles.
4. Entrapment of the operator between the basket and adjacent structure.
5. Involuntary operation of the controls.
6. Leaning over the platform guardrails or control panel.
7. Poor lighting.
8. Tools and materials falling.
9. Contact with high level, live electrical cables.
10. Prolonged exposure with diesel fumes which can cause cancer.
11. High wind speeds and other adverse weather.

PRECAUTIONS

1. The use of MEWPs should take place in line with a documented safe system of work (lift plan). In addition, a rescue plan must be in place to enable the prompt recovery of injured workers.
2. All operators of MEWPs must be trained in their use.
3. The MEWP should be checked by the operator in line with the manufactures instructions, prior to each period of use.
4. Operators should only operate the types of MEWP for which they have been trained.
5. Always check that the machine is stable before use.
6. Generally, for all MEWPs, except scissor lifts, users should use a restraint lanyard clipped to the correct anchorage point on the machine. There should be no connection to an adjacent structure.
7. For scissor lifts, the need to use the safety harness or lanyard will depend on the risk assessment.
8. Ensure ground conditions are suitable for the type of machine; voids and drain covers can collapse.

- 9.** Do not overloaded – check SWL.
- 10.** If your work involves removing equipment or materials from a structure, allow for the extra loading.
- 11.** When manoeuvring in a confined area or where members of the public are at risk, always use a marshall.
- 12.** Be prepared to stop work and return to ground level if the wind speed or weather conditions worsen.
- 13.** Anti – entrapment devices can prevent operatives from being crushed. They are not yet available in all MEWPs, but they should be specified and used where possible.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 55

MOBILE ACCESS TOWERS AND ACCESS EQUIPMENT

Mobile access towers must be erected in accordance with the manufactures instructions and only by suitably trained and competent individuals. If you do not use a mobile access tower correctly you could find yourself seriously injured. You may also compromise the safety of those working with you or around you.

BEFORE ERECTING THE TOWER

1. Ensure you are competent to erect the tower.
2. Choose a safe method of work as recommended by the Prefabricated Access Suppliers and Manufacturers Association (PASMA).
3. Check all components are in good condition (such as outriggers, brakes and locking devices).
4. You should have access to the hire company or instruction manual.
5. Ensure that the area is clear, clean and free from obstructions such as overhead lines.
6. You should work in accordance with your employers safe system of work.
7. Before using the tower, you should ensure that it has been inspected within the past 7 days.

BEFORE USE

1. Ensure the tower is vertical and square.
2. The wheels must be locked when the tower is not being moved.
3. Check the outriggers are set correctly and secured if needed.
4. Ensure the platform is fully boarded out and guard rails and toe boards are fitted.
5. Be aware of weather conditions if the tower is outdoors.

SAFE USE

1. Always use the built in stairway or ladder. If the ladder is vertical, always climb it on the inside of the tower.
2. Follow the manufactures instructions on base to height ratio.
3. Guardrails should be installed at the specified heights.
4. Tie the tower to a permanent structure or install outriggers where required.
5. Don't move the tower if people or material are still on the platform. Also, don't pull the tower along while standing on it.
6. Don't exceed the safe working load.

- 7.** Ensure the platform hatch is closed when you are working.
- 8.** Never add any item to a scaffold platform to get extra height.
- 9.** Towers must only be used on firm, level surfaces. Provide support on soft ground.
- 10.** Do not remove components such as guard rails, even if they are stopping you from doing your job.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 56

PERSONAL FALL PROTECTION EQUIPMENT

Serious injuries on site caused by falls are preventable. Using fall protection equipment can save lives.

BEFORE USE

1. The use of fall protection equipment should be considered as a last resort. Other, more suitable equipment should be used where possible. Factors to consider include the type of work, its location, how long it will take and how often it takes place. The risk assessment produced for the task should identify the type of equipment to be used.
2. You should be trained in the use if you are required to use, for example, fall restraint, work positioning, rope access or fall arrest.
3. The equipment should be inspected to ensure that it is serviceable, suitable and fit for the task.
4. You should be trained on how to carry out a pre use check and the sort of faults you should be aware of.
5. You should be briefed on the task to be carried out, including details about the designated anchor points you can use and limitations.

SAFE USE

1. You must not misuse any equipment that is provided for your safety.
2. You must report any defects immediately so the equipment can be withdrawn from use.
3. You must only use designated anchor points that you have been instructed to use.
4. The safe system of work must include a detailed rescue plan and first aid arrangements.
5. Fall protection equipment must be formally inspected by a competent person every 6 months; every 3 months for arduous conditions; as per manufactures guidelines.

AFTER USE

1. All equipment is to be inspected for damage and must be clean and dry before putting away.
2. Any defects with the equipment are to be reported promptly and correctly.
3. Adequate records of the condition and usage of the equipment should be maintained.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 57

WORKING OVER SAFETY NETS OR SOFT LANDING SYSTEMS

Using safety nets and soft landing systems safely can save lives or minimise injury in the event of a fall.

SAFE USE

1. These systems are known as collective fall protection measures and are preferred to the use of safety harnesses and lanyards as they offer protection to more than one person.
2. There are many different types of safety nets and soft landing systems that can be selected to suit particular circumstances. They are not designed to prevent falls, but to minimise the risk of injury after a fall, of either people or materials.
3. Safety nets should only be installed by a competent net installer who holds a recognised qualification, such as the FASET Safety net rigger qualification.
4. Safety nets should be fitted as high as possible beneath the work area to minimise the distance of a fall. Clearance below the net should be in accordance with the manufacturers information sheet.
5. A safety net must be tight enough to minimise sag when loaded.
6. In addition to pre use and handover inspections, safety nets should be inspected and recorded on a weekly basis by a competent person to ensure they are still in a safe condition.
7. Safety net anchors must not be fixed to recently constructed walls or into blockwork walls.
8. Soft landing systems are usually large bags that are filled with air via a pump, or a group of smaller, pre packed bags with polystyrene chippings, clipped together by plastic clips.
9. If soft landing systems are to be used on upper floors, ensure stairwells are covered and windows are guarded to prevent someone who falls from being projected elsewhere.
10. Ensure floors are clear of debris before soft landing systems are installed.

MEANS OF RESCUE

1. A rescue plan should be in place for all work above safety nets and soft landing systems.
2. When safety nets and soft landing systems are used, consider how someone will get out of the net if they fall.
3. If a person falls and it not injured they will often be able to climb out of the area but if they are injured they may need to be rescued.
4. When using airbags it is possible to slowly reduce the air pressure to gain access without disturbing a casualty too much.

INSPECTION

1. Safety nets are individually tagged and have to be inspected weekly (as well as daily pre use checks). The results of the inspection should be recorded.

2. Soft landing systems should be subjected to daily pre use checks.
3. Any safety net or landing system that has been subjected to a load may have been deformed or displaced and should be inspected before use.
4. Sharp objects are also likely to cause cuts, which would weaken a net or deflate an airbag.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 58

WORKING ON ROOFS

On average, seven people are killed each year after falling through a fragile roof or roof light. Many others suffer permanent disabling injury. Fragile roof incidents are not inevitable. They can be prevented by careful planning, using trained and experienced workers with suitable equipment, and employing a high level of supervision.

Air handling units, extractor fans and cooling equipment are frequently installed on roof so as to be out of everybody's way, but we need to get access to them for both installation and maintenance purposes. This means we are exposed to the risk of falling off or falling through the roof.

The Health & Safety at Work Act requires a safe place at work at all times and this includes safe access and egress to and from the place of work i.e. the roof. The Construction Regulations are precise in that no one shall pass across or work on a "fragile" roof.

Fragile roofs must, by law, have a warning notice conspicuous to any person likely to go on them, but do not assume because there is no notice that it is O.K. It may have blown away.

ROOFWORK RULES

1. Always identify the type of roof construction and covering before starting work, in case it is fragile.
2. On flat roofs, always stay on the marked walkways, if any.
3. Edge protection (guard rails and toe boards) are required if the drop is more than 1.98M.
4. Access must be by staircase or "secured" ladders. Makeshift access e.g. climbing out of a window, jumping over a gap, balancing on a ledge or parapet etc. is not "safe access".
5. In windy weather, listen to weather forecasts and plan ahead. Ring Met Office, if necessary, for advice.
6. When a safety harness or other safety equipment is provided you have a duty to use it.
7. On sloping roofs (10° pitch for walkways, 30° pitch if work place) suitable roof ladders or crawling boards must be provided or other suitable hand hold and foothold.
8. On fragile roofs, suitable roof ladders or crawling boards must be provided, properly secured. Ordinary scaffold boards are not "suitable".
9. Think about tools and materials needed on the roof and ensure they are secure, both whilst being taken up and whilst being used.
10. Think about others under the roof or below the roof edge. Barrier the area off and put up warning signs in case anything does accidentally drop.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 59

SITE TRANSPORT AND PEDESTRIAN SEGREGATION

Every year people are killed or seriously injured by moving plant and vehicles. The movement of plant, vehicles and pedestrians should be properly planned.

GENERAL PRECAUTIONS

1. Never be tempted to operate site transport unless you have been properly trained. It is recommended that you hold an appropriate skills card (for example a CPCS card) and, if necessary, an appropriate class of driving licence, and you should be authorised to operate the equipment.
2. Drivers of site transport should carry out daily pre use checks of their vehicles and report any defects found.
3. People can be injured or killed by site transport that is reversing when the operator does not have clear all round view or is without the assistance of a vehicle marshal.
4. Pedestrians should be segregated from vehicle and plant routes by physical barriers wherever possible.
5. Drivers should obey speed limits and one way systems.
6. When parking, ensure the parking brake is on and the wheels are chocked if necessary. Accidents have been caused by items of runaway site transport.
7. If site transport is left after working hours, ensure it is immobilised and in a safe state, especially where children may congregate.
8. Use stop blocks where provided to prevent over running into excavations.
9. Sites are constantly changing – report anything you feel is compromising site transport safety.

SITE TRANSPORT FOR CARRYING MATERIALS

1. Before starting your shift or operating site transport check that routes have not changed.
2. Site vehicles used for carrying materials must not be overloaded and operators must know the rated capacity (safe working load).
3. All loads must be adequately secured.
4. Do not reverse unnecessarily. Sites will be organised so that the need to reverse is kept to a minimum.
5. If you are involved in, or working near, tipping operations, keep well clear while materials are being tipped.
6. Stay well clear of the unpropped bodies of tipper lorries and trucks.
7. Site transport intended for carrying materials must not carry passengers unless it is designed to do so.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 60

PLANT & EQUIPMENT

The misuse of plant and work equipment or lack of maintenance can lead to injuries to the user and others. Operators of power operated plant and equipment must be trained in its use and authorised.

DEFINITION

1. Plant and equipment can be mobile or static.
2. Examples include dumper trucks, cement mixers, cut off saws and welding sets.

GENERAL PRECAUTIONS

1. Plant and equipment should only be used by people who have been trained and authorised to do so.
2. Consider the risks to other people who are nearby when operating plant and equipment.
3. Exclusion zones should be set up where required. These should be identified with safety signage.
4. Always carry out pre start checks to ensure the plant and equipment have no obvious looking defects; bring defects to your supervisors attention.
5. Only use plant and equipment for its intended purpose.

MOBILE PLANT AND EQUIPMENT

1. Don't carry passengers unless the plant is designed to do so and wear seat belts where fitted.
2. Observe site speed limits and one way systems and if required, obtain assistance when reversing.
3. Carry out daily checks (brakes, oil, tyres).
4. Be aware of and avoid crush zones on rear wheel steer and centre pivoting plant.
5. Get off the dumper during loading operations and stand in a safe place.

STATIC PLANT & EQUIPMENT

1. If fitted with wheels, ensure brakes are on or wheels are securely chocked.
2. If engine driven, ensure exhaust gasses cannot accumulate.
3. If electrically powered, ensure supply cables and plugs cannot be damaged.
4. Ensure all guards are in position.
5. Consider the need for barriers around the equipment to protect others.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 61

LIFTING OPERATIONS

Accidents during lifting operations are most often caused by misuse of equipment - not defective equipment. The potential for serious injury, if something heavy slips or drops during lifting is all too obvious.

All lifting operations on site are covered by the Lifting Operations 1998. All work equipment (including lifting gear) used anywhere comes under the Work Equipment Regulations.

BASIC RULES FOR SAFE LIFTING

1. Lifting operations must be supervised by a person competent to operate the particular equipment being used.
2. Persons giving signals (Banksmen) must also be competent. No person under 18 is allowed to operate equipment or to act as a Banksman unless supervised by a competent person.
3. All lifting equipment is marked with its safe working load (SWL) and is supplied with a Test Certificate. Check that the load is within its capacity and where necessary the equipment has the appropriate certificates.
4. Hired equipment is still the responsibility of the user who must ensure it is suitable for the lift (notwithstanding anything told to you by the hirer).
5. Proper planning of all major lifts is essential involving delivery to site, the site occupier, the crane or other driver, sufficient manpower, site security etc.
6. All persons not involved are to be kept clear of the danger area by barriers and signs (this is where liaison with the site occupier comes in).
7. Know exactly where the load is to be put down and that the space and the route to it is clear (height and width). Measure up the load and space first, not when it is suspended in mid air.
8. It is forbidden for persons to ride on the load.
9. Lift and lower slowly, without jerking the load and keep your mind and eye on what's going on. Do not allow any distraction until the load is safely down.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 62

LIFTING EQUIPMENT

- A As lifting equipment is used intermittently, it can easily be neglected. However, careful checking and maintenance is vital since failure could be extremely dangerous.
- B Certain items are subject to statutory controls. The Lifting Operations 1998 apply to “every lifting appliance” as do the Lifting Equipment Regulations 1998.
- C Lifting Equipment Rules
1. Every lifting appliance must be properly made and strong enough for the work intended. If doubt exists, don't use it.
 2. It is illegal to use home made or improvised gear which has not been examined and tested.
 3. All lifting gear must be regularly inspected by a competent person and the results recorded in a properly organised system.
 4. The properly organised system should include any maintenance or repair procedures laid down by the manufacturers.
 5. Pulley blocks or gin wheels must be properly secured to the pole or beam, not just hooked on. The pole or beam must be strong enough for the load and not itself able to move under load.
 6. Where eye bolts have to be fitted to loads, make sure the eye bolts have the right thread. Five different threads are known to be in use. Do not use a mismatched thread. Tighten the eye bolt firmly down. If this gives a poor lead to the sling, use the washers under the shank to give a good lead, but not thicker than half a thread.
 7. Slings, wire ropes and chains should be treated with care and never knotted or hammered. Careful handling (wearing industrial gloves) will prevent kinks developing.
 8. Fibre ropes should only be knotted with recognised knots which do not slip or jam so that undoing is impossible. Remember a knot may reduce the strength by 50%.
 9. Use rags or timber slats over sharp edges to prevent chafing of ropes and slings.

SITE SAFETY TOOL BOX MEETING

SAFETY AT WORK BOX NO. 63

SLINGS

1. Use the right kind of sling for the job.
2. Do not use fibre rope or wire slings for hot loads.
3. Check the safe working load marked on the sling.
4. Check the safe working load against the load to be lifted.
5. See that the sling is in good condition - splices, rings, thimbles.
6. See that there are no broken ends in wires and no chafe on fibre ropes.
7. Be sure that the chains have been annealed and examined.
8. Do not stand under loads.
9. See the sling properly adjusted on the load.
10. Safeguard your fellow-workers, use proper signals.
11. Return the sling to store after use.

ALWAYS WORK SAFELY

SITE SAFETY TOOL BOX MEETING

SAFETY AT WORK BOX NO. 64

CHAINS

1. Select the right chain for the job. If in doubt - ask.
2. Check all chains before using. Report immediately any chain with deformed, corroded, cracked or cut links.
3. Make sure that the chain is marked with it's safe working load.
4. Make sure that the chain is not kinked or twisted.
5. Immediately after use, return chains to store where they should be properly racked.
6. Use packing for chain slings when lifting anything with sharp edges.

DO NOT

1. Shorten a chain by knotting it.
2. Lengthen a chain by joining pieces together.
3. Lubricate chains slings, nor hoist chains if the lubricant is liable to pick up sand or grit.
4. Drop chains on hard surface.
5. Leave chains where they can be run over or otherwise ill-treated.
6. Expose chains to acids or other corrosive substances.

REMEMBER - A CHAIN IS ONLY AS STRONG AS IT'S WEAKEST LINK

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 65

SHACKLES

1. Use the right type of shackle for the job in hand.
2. Check the safe working load of the shackle before use.
3. Don't use any shackle which is not marked with safe working load.
4. Examine bow and pin for damage or distortion. Destroy if doubtful.
5. Check bow and pin for excessive wear. Destroy when wear is 1/10th or more of original diameter.
6. Make sure pin is free, but not loose, in tapped hole.
7. Threads should be undamaged and without flats or appreciable wear.
8. Check alignment of holes. The untapped hole should not be too large or worn.
9. When using a shackle with "nut and bolt" pin, the pin should be free to rotate when nut is tight.
10. Sound shackles should have a clear ring. To test, suspend and tap lightly with a hammer.
11. To prevent pins unscrewing, secure with a split pin, if possible. Alternatively, mouse with spun yarn.
12. Don't use a shackle where the pin can unscrew by "rolling" under the load.

NEVER USE HOME-MADE SHACKLES

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 66

HOOK AND EYE BOLTS

Hooks

1. Check for distortion. If in doubt, check dimensions against standard tables or drawing.
2. If a hook has opened by more than 1/5th of original dimension, destroy it.
3. Examine carefully for cracks, cuts, dents and corrosion pits.
4. Swivel hooks should rotate freely. Nut securing hook to trunnion should be split-pinned or otherwise secured.
5. If swivel hook is welded in trunnion, check shank for excessive wear and the weld for deterioration.
6. Always mouse hooks unless fitted with safety catch. Make sure the catch operates freely.

Eye Bolts

1. Examine for damaged threads. If in doubt, check with thread gauge.
2. Check thread in standard tapped hole. Fit is most important.
3. Shoulder or collar should be flat, free from damage and at right angles to threaded portion.
4. Check that centre line of eye is central with threaded portion.
5. Examine for cracks, cuts, dents and corrosion pits.
6. Check eye for wear, if 1/10th or more of original diameter, destroy it.

NEVER USE HOME-MADE HOOKS FOR EYE BOLTS

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 67

BANKSMEN/SLINGERS

Incorrect slinging, lifting or moving of materials can result in injuries or damage. Loads must be slung correctly to ensure that they do not endanger people on site. Signallers and slingers must be trained and competent to sling and signal correctly.

1. All banksmen/slingers should be trained and authorised.
2. Check lifting gear daily and examine all wire ropes at frequent intervals for kinks, frays and projecting needles.
3. No lifting gear must be used unless its safe working load is marked. The combined weight of load to be lifted and lifting gear must never exceed the safe working load of the crane.
4. Use only slings and lifting gear provided by your employer. Never use improvised slings or a single leg of a multiple sling.
5. Loads should be landed on to suitable bearers to avoid damage to lifting gear and to facilitate it's removal.
6. Never tie knots in chains to shorten them - get shorter slings.
7. Make sure the right pin is used in all shackles and that the pin is properly screwed home.
8. All hooks must either be an approved 'C' type or fitted with an effect safety catch to prevent displacement of the lifting gear.
9. Protect wire ropes and slings with soft wood or other suitable packing from the sharp edges of the load.
10. Always see that the crane hook is centrally placed over the load to prevent swinging when the load is being raised.
11. Take your hands away from chains and ropes before the crane takes the load and stand clear.
12. When signalling, stand where you can see the load clearly and where the operator can see you. Whenever possible face the operator.
13. Ensure that the load is fitted off the ground to see that it is free and correctly slung before hoisting.
14. Wear a safety helmet and high visibility clothing.
15. Make your signals clearly and distinctly and always use the approved Code Signals.
16. When the crane is operating, do not leave the area unless you have been relieved by a trained deputy.
17. When the crane is travelling, ensure that you signal to the operator to warn him of obstructions on the route of awkward corners.
18. Riding on loads is strictly prohibited.

- 19.** Backsling hooks when no load is carried.
- 20.** Do not allow lifting gear to be used for other purposes e.g. towing.
- 21.** When not in use, store your gear tidily off the ground.
- 22.** Keep all persons not involved in the lifting operations away from the immediate vicinity, particularly children and the general public.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 68

PERMIT TO WORK SYSTEMS

A The system of issuing *Permits to Work* was first introduced in high risk industries like mining and petrochemicals. The improvement in safety was so marked that the practice has been extended to all industries where a task involving a special risk is to be undertaken. Examples of circumstances where a Permit to Work System may beneficially be operated are: -

- (a) Electrical Work
- (b) Roof Work
- (c) Trench Work
- (d) Hot Work
- (e) Confined Space Work
- (f) Work Near or Above Deep Water
- (g) Work in Radiation “Controlled Areas”

B No special legislation requires Permits to Work, they are just a way of ensuring a strictly controlled Safe Place of Work and a Safe System of Work in difficult circumstances. They also allow Supervisors to keep a check on what is happening by limiting the issue of Permits to what can actually be supervised. A Permit to Work will often be accompanied by a Method Statement stating how the job is to be done.

C A Permit to Work Ensures That:-

1. The task to be done is clearly stated.
2. All potential hazards have been considered and the risks assessed.
3. The measures appropriate to eliminate or control the risks have been put in place.
4. The person(s) to do the work are clear about it and the safety precautions to be observed.
5. The person authorising them to do it is satisfied about the safety of the task and method of working.
6. The date and time when the work is to be done is agreed and also when work will stop (finished or otherwise).
7. The person authorising the work is told, when the work stops, what stage the job has reached e.g. 100% finished - 50% finished etc.

PERMIT TO WORK SYSTEMS (Cont'd)

8. The person acknowledges that he has been told what state the plant is in e.g. ready to run; further work needed etc.

What to do Upon Receipt of a Permit to Work

1. Check that all sections have been completed i.e. all hazards have been considered.

2. Check the date and times when the permit starts and expires. *Note, Permits are issued to individuals, therefore, should only be valid for one shift. Circumstances can change while you are away, so a new Permit is necessary for the next shift.*
3. Check the work location to ensure that no problems have been overlooked. Check that persons not included on the Permit are excluded from the area (barriers, notices etc.).
4. When you are sure everything is in order, sign for acceptance of the Permit and commence work.

During the Work

1. Ensure that everybody involved observes all the conditions of the Permit. Do not relax any of the stipulated precautions.
2. Make sure any safety devices like padlock keys or fuse links are safely in your possession.
3. If things go wrong or the situation changes, notify the authorised person at once. The Permit may need to be cancelled and a new one issued to cover the new situation.
4. If time runs out, stop work and notify the authorised person at once. He can decide to issue a new Permit or to extend the time.

On Completion

1. Return the Permit to the authorised person and both of you sign it to show that the work is complete and the responsibility is passed back to him.

SITE SAFETY TOOL BOX MEETING

SAFETY AT WORK BOX NO. 69

WORKING IN EXCAVATIONS

Deaths and injuries occur every year due to collapsing excavations, or workers being overcome by poisonous gasses or striking live services.

1. Most building works involve excavations so you are likely to be working close to this type of work, even if not actually involved. Sometimes services are installed in trenches and then special care is called for on your part.
2. Excavations, even shallow ones, are like electricity and fire - they can kill very quickly and with very little warning. They need to be treated with similar respect. The Health, Safety & Welfare Reg. 1996 deal with excavations in detail. The Health & Safety at Work act requires a “safe place of work” at all times.

EXCAVATION RULES

1. All excavations should be supervised by a competent person. The law requires all excavations to be inspected at least once a day by a competent person. If more than 2M deep, then once a shift. Every 7 days a “thorough” inspection and written record is necessary.
2. Assessments must be undertaken to determine whether supports are required.
3. Ladders must be used for access and egress. Do not jump into or climb in or out on the timbering supports. Do not jump across excavations.
4. Warning signs and barriers should be placed round all excavations and are compulsory if deeper than 2M.
5. Never dig mechanically or by hand until a careful investigation using detection equipment has been made for buried services. When services are known to be close, careful hand digging (no picks) is necessary until the precise position of the service is revealed.
6. Keep spoil heaps and other materials well away from the edge of an excavation and ensure that vehicle wheels cannot approach the edge. Place stop blocks as a guide to tipper devices.
7. Safety helmets and safety footwear must always be worn during work in excavations
8. Do not alter or remove any supporting member unless you are competent on shoring, or are under supervision.
9. Watch out for weather forecast. Conditions in a trench can change drastically if it comes on to rain.
10. Remember, 1 cubic metre of earth weighs at least 1 tonne, more if wet. In the event of a collapse it could take a strong man an hour to dig you out.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 70

UNDERGROUND SERVICES

Every year, many people are injured and some are killed due to contact with underground services. It is vital that any excavation work, no matter how shallow, is properly planned.

GENERAL PRECUATIONS

1. Before digging, check plans provided by the electricity, gas and other utility providers.
2. Before digging, use a cable locating device that is in good working order. Ensure you are trained to use it.
3. Assume all cables are live, unless your supervisor tells you they are dead.
4. Hand dig trial holes to expose cables and look for marker tape or tiles above the cables. Continue using the cable locator to establish exact locations.
5. Don't assume that a buried cable will run in a straight line between two known points.
6. When exposed, protect the cable from damage and support it.
7. If a cable is accidentally damaged, keep everyone clear until the owner has been told and inspected it.
8. During back-filling, ensure marker tapes or tiles are replaced.
9. Have emergency contact numbers for all the utilities to hand to enable quick communication if underground services are damaged.

GAS

1. Dig carefully by hand to establish the location of pipes and mark the route of all known pipes.
2. Remember gas is flammable and explosive.
3. At the slightest hint of gas escape, leave the area and do not smoke. Call the gas company and emergency services. The national grid emergency services number is 0800 111 999.
4. Modern, smaller diameter house mains are often plastic. Don't confuse them with electric cables.
5. Follow the gas company specifications for back filling.

WATER MAINS

1. Trace the line of the main by trial pits and mark the route of all known pipes.
2. Burst pipes can fill an excavation quickly. If pipes become damaged, call the water company.
3. Remember, water high pressure could be dangerous.

SEWERS

1. There is a severe health risk if a foul sewer is fractured – leave the excavation and report it.
2. Wear PPE due to the risk of contamination from sewage. Wash your hands before eating.
3. If you break a stormwater sewer and rain is falling, vacate the excavation as it may flood.

ELECTRICITY

1. Most cables are in trenches 450mm to 1m deep but cables can be found at shallower depths and some high voltage cables may be deeper.
2. A cable can only be positively identified when it has been safely exposed.
3. If an unexpected cable is identified, contact the regional distribution network or other relevant body, such as the Highways Agency or National Grid.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 71

OVERHEAD SERVICES

Unseen and unheard electricity can cause death or serious injury without warning. Your body is an extremely good conductor of electricity – don't find out the hard way.

GENERAL PRECAUTIONS

1. Every year, people are killed or seriously injured at work when they come into contact with live overhead services. These incidents often involve the examples below.
Machinery: cranes, lorry loader cranes and tipping trailers.
Equipment: scaffold tubes and ladders.
Work activities: loading, unloading, lifting, spraying and stacking.
2. Work may be carried out near to overhead services if there is no alternative and where risks are acceptable and can be properly controlled.
3. A risk assessment must be undertaken. Your employer should consult with the electricity supply company, as it will be able to give advice on suitable control measures.

OVERHEAD POWER LINES

1. Until it has been proved otherwise, all overhead lines should be treated as live and dangerous.
2. Ensure you know the minimum clearance distances specified by the electricity supply company.
3. Never enter a safety zone without prior authorisation.
4. Do not bypass goalposts, barriers or other warnings.
5. Check your route is clear of overhead power lines before moving any tall object that could conduct electricity (such as scaffold towers or metal ladders).
6. If signalling, always keep power lines in view. Guide plant under power lines only where goalposts have been erected.
7. Ensure you observe any special precautions laid down by the electricity company before working near to or passing underneath overhead lines.
8. If erecting scaffolding adjacent to power lines, ensure the poles are handled a safe distance away, in line with your employers safe system of work.
9. Don't stack materials or operate tippers under power lines as it will reduce the safe clearance and can result in arcing.
10. Ensure stock piles of excavated earth do not reduce clearance between overhead power lines and ground.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 72

WORKING WITH ELECTRICITY

- A Electricity is a killer, make no mistake about that! Not only can it kill but it can cause fires.
- B The Electricity at Work Regulations are the main law covering electricity but BS 7671 for installations is also significant (Former IEE Regs.). Working with electricity involves two distinct areas.

1. Doing electrical work i.e. installations or repairs to an electrical system.
2. Using electrical appliances to lighten or speed up other types of work.

- C Understanding how electrical equipment is designed to be safe, helps us to spot when things are wrong and therefore dangerous.

1. All metal parts designed to carry current (conductors) need to be properly insulated.
2. If the insulation is vulnerable it has to be additionally protected - sheathing, conduit, trunking, armoured cable etc. may be used.

If you can see defective insulation or sheathing, the system is not as safe as it should be and should be isolated and immediate steps taken to get it repaired by a competent person. For example, a flex pulling out of a plug top or cable frayed or split showing the colours inside.

NOTE, sometimes conductors are made safe by “placing out of reach”. This is O.K. until unusual circumstances (perhaps maintenance or decorating work) makes them not “out of reach” any more. Take special care in such cases.

3. Earthing all metal parts not intended to carry current will prevent them becoming live in a fault situation. Earth wires and connectors are just as important as the circuit wires and any damage or looseness must be repaired urgently by a competent person.
4. Earthing works in conjunction with the fuse or circuit breaker to protect the circuit in the event of excessive current. If a wrong size fuse is fitted, or a circuit breaker tampered with, the protection may not be adequate and danger could arise.
5. To protect people, either the voltage has to be reduced to a safe level by a transformer or, if using 240V, the fault current should be limited by a Residual Current Device (RCD). When using 110V transformers the maximum voltage to earth is only 55V. An RCD limits the fault current to only 30mA and trips in less than half a second.

NOTE, these devices do not prevent electric shock, only that the shock is unlikely to be fatal. In damp or sweaty conditions the shock could still be severe so do not be lulled into a false sense of security.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 73

WORKING IN CONFINED SPACES

A confined space can be a hazardous environment. Workers can become trapped or overcome by fumes, vapours, or explosive or poisonous gases; this can lead to people dying.

1. Any work place from which it is not possible to simply walk away in an emergency must be a confined space, but more usually, closed tanks and vessels, roof void, undercrofts, large ducts and pipes, inspection chambers etc. are examples of confined spaces which spring to mind.
2. Any work mishap such as a bumped head, cut finger etc. is more serious in a confined space because of the added difficulty of getting to first aid.
3. The Health & Safety at Work Act is clear in that a Safe Place of Work with safe access and egress is required. In addition a safe system of work and safe work equipment have to be provided. No relaxation of these is allowed for confined spaces.

ENSURING A SAFE SYSTEM OF WORK

1. No one who suffers from claustrophobia should be expected to work in a confined space. They are a risk to themselves and others.
2. A Permit to Work System should be set up to examine all possible hazards and to state the precautions to be taken against each one.
3. A Permit to Work is only a piece of paper. To be effective it has to be read and understood by everyone involved in the job. Make sure you do, before the job starts. Once inside it may be too late to ask questions.
4. Make sure the lighting provision is adequate and safe i.e. flameproof if fumes, solvents or paint etc. are to be used. Have “back up” torches ready in case of lighting failure (also flameproof). Excavate if lighting fails.
5. Never enter a confined space alone or if no one knows you are in there. Some Permits to Work will insist on a “2nd man” stationed at the entrance to communicate with you, if the hazards warrant it.
6. Check your communications system before entering and regularly whilst working, even if the system consists only of shouting. Radios or intercoms need to be flameproof too (as lighting, above). Excavate if communications fail.
7. If access involves crawling or scrambling, rehearse getting out again as soon as you go in case you need to do so in a hurry later i.e. find out if feet first or head first is quickest.
8. If breathing apparatus is not deemed necessary ensure space is well ventilated by a blower fan before entering and throughout period of work. Oxygen deficiency can occur due to sludge left in tank or even just by a tank rusting. Excavate if ventilation fails.
9. Excavate immediately if breathing difficulty occurs. Collapse (and death) can occur in a very short time. Delay can put rescuers at risk too, so don't mess about.

- 10.** Excavate immediately if any conditions or precautions stated in the Permit to Work cease to be as laid down (that's why you memorised it first!)

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 74

ROAD & STREET WORKS

Over 1,000 road accidents occur at road works each year. In many cases, advance warning and protection of the works were inadequate.

CONSIDER ROAD USERS

1. Ensure that appropriate warning signs are displayed and correctly positioned.
2. Cone off a tapered, lead in zone to ease traffic movement past the works.
3. Erect barriers around all excavations and position lighting for safety at night.
4. Allow sufficient footway width for pedestrian to pass, or barrier off a temporary footway in the road.
5. Install appropriate and efficient traffic control measures.
6. Keep disruption to a minimum by reducing dust, noise and vibration so that road traffic and pedestrians are not adversely affected.
7. Position plant and equipment so that no part of it encroaches into the safety zone.
8. Do not store tools, materials, equipment or plant in the safety zone.
9. Site traffic entering or leaving the works must not endanger other road users.
10. Take precautions to prevent mud or other debris being deposited on roads or footpaths, whether within the work area or not.

PERSONAL SAFETY

1. Ensure that a coned off safety zone exists around the works.
2. Wear appropriate high vis clothing, safety helmet and safety footwear at all times.
3. Wear other PPE that is required for the task as identified in your risk assessment.
4. Do not enter the safety zone in the normal course of your work.
5. Wash hazardous substances off exposed skin immediately.
6. UV radiation from the sun is a major cause of skin cancer and cases have doubled in the last 20 years. Around 8000 construction workers are diagnosed with skin cancer every year.
7. Take the correct precautions when working in excavations.
8. Take the correct precautions when underground services are to be uncovered.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 75

PILING

Unless there is attention to health and safety, work on piling sites can be particularly dangerous. Piling work can involve several hazardous activities – even if not directly involved. You must take care.

HAZARDS

1. Always follow your safe system of work and ask your supervisor if you have any questions.
2. Manual handling is a common feature of piling activities; many people in the industry have time off work due to resulting back injuries.
3. At times, piling activities will require operatives to work at height. Be safe if you have to work at height and, even if not directly involved, be aware of what is going on above you.
4. Ejected and falling spoil can be a hazard so ensure that you wear PPE as necessary; a safety helmet, safety boots and eye protection should always be worn.
5. Piling activities can present trip hazards from pulsing, trailing hoses and low level projecting pile reinforcement. The presence of these may not be obvious to the untrained eye. They should also have protective end caps fitted.
6. Piling can be a noisy work activity. Even if not directly involved, you may have to protect your hearing and make sure you observe hearing protection signs.
7. Most piling operations will involve lifting using a crane or the piling rig itself. Keep clear if you are not directly involved.

PRECAUTIONS

1. If involved in manual handling, use appropriate equipment or get assistance if necessary.
2. Unless guard rails are fitted, use an appropriate safety harness and lanyard, which should be clipped to a designated point when working at height.
3. Be aware of, and avoid, features that may cause you to slip, trip or fall; they may not be obvious at first sight. Keep the site tidy to avoid these hazards.
4. Do not attempt to operate the piling rig or other equipment unless you are trained and authorised to do so.
5. Only people who have been trained and are competent should sling loads or signal the crane operator.
6. Never attempt to ride on any load that is being lifted, lowered or moved.
7. Read and understand the Control of Substances Hazardous to Health assessments for any hazardous substances before you use them.
8. Promptly clean off any hazardous substances that get onto exposed skin

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 76

ENVIRONMENTAL NUISANCE

Where we work and what we do can cause an environmental nuisance. If you understand the problems caused by site activities you are in a better position to minimise the impact.

CAUSES

1. Environmental nuisance from site activities causes a disturbance to the sites neighbours.
2. The creation of dust, odour, smoke and other emissions may cause health risks to you or to other people near to the site.
3. Dust can damage vegetation and crops, wildlife and watercourses.
4. Odours and smoke can cause breathing problems when inhaled and lung diseases, which can shorten life.
5. Poor housekeeping will help create an environment that causes a nuisance.
6. Poorly maintained, poorly located or incorrect plant and equipment can cause noise and vibration nuisance.

CONTROL MEASURES

1. Dampen down traffic routes and use wet cutting to minimise dust.
2. Minimise dropping heights from a bucket into a haulage vehicle to reduce noise and sheet the loads to reduce the potential for spills and dust.
3. Keep to site speed limits and use wheel wash facilities to help reduce noise, vibration, mud and dust on roads.
4. Well planned and safe storage for materials prevents the additional potential for airborne nuisance and contamination.
5. Do not ignore complaints.
6. Keep noisy plant away from public areas.
7. Monitor activities and report any shortfalls to your supervisor.

PRECAUTIONS

1. Use dust suppression techniques where possible.
2. Don't use poorly maintained plant and equipment.
3. Avoid leaving engines running when not in use.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 77

EMERGENCY SPILL CONTROL

Spills on site damage the environment and can harm animals, plants, fish and humans. If you know how to act following a spill you can help protect the environment and avoid costly clean ups.

EMERGENCY SPILL CONTROL

1. Accidental releases of fuels, oils and chemicals from construction sites make up many of the pollution incidents that happen each year.
2. Most spillages can be avoided with proper planning, care and control.
3. It is very important that everyone on site knows how to control a spill, what equipment is available and where it is, so they can help to minimise the impact. They also need to know who to report it to and how to correctly dispose of spilled material.
4. Spill kits come in a variety of forms, including absorbent pads, socks, granules, pillows and wipes. Drain covers and barriers are also used.
5. An assessment of the potential areas of harm should be carried out on site and suitable kits placed in appropriate areas.

CONTROL MEASURES

1. Know where the spill kits are on site. Make sure you know what to use, how and when, and what protective measures you need, including PPE.
2. Stop work to deal with any spill.
3. If the spill is likely to be flammable remove potential ignition sources.
4. Contain the spill with either a spill kit or use available materials to create a bund to prevent it from spreading and tell your supervisor as soon as possible.
5. Clean up manageable spills and place used absorbent material into hazardous waste bags for later safe disposal.
6. Ask your supervisor to get spill kits replenished after they have been used.

PRECAUTIONS

1. Do not put yourself in danger of exposure to harm from spills that you cannot identify. Seek advice.
2. Do not hose down or bury spills.
3. Do not allow spilt materials to enter a drain, gully or water course.
4. Do not store harmful materials within 10m of a drain and watercourse.
5. Do not refuel plant and equipment unless authorised and in a protected area.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 78

PUMPING, OVER PUMPING AND WASHING DOWN PLANT

Construction activities often create water contaminated with content harmful to the environment. If you know how to contain and manage contaminated water you will avoid causing pollution.

CONTAMINATED WATER

1. Excavations often require dewatering, such as the removal of ground or rainwater, which may contain silt and other contaminants.
2. Site is composed of very fine particles of soil that, when mixed with water, create mud that can be washed off sites into nearby watercourses, harming wildlife and humans.
3. Bentonite is a type of clay that swells and gels when dispersed in water. The use of bentonite can lead to spillage around operational and mixing areas. Bentonite, in a liquid form, is highly polluting if it enters watercourses.
4. Water from washing down plant and machinery is likely to contain not only contaminants from site movements but also oils and greases from under the vehicles and, if invasive plants are present, it may help to carry them elsewhere.

CONTROL MEASURES

1. Plan all activities carefully, including settlement tanks, lagoons, using grassed areas, hay bales or silt socks, and always have contingency plans in place. Check with your supervisor that consent has been given to discharge liquids to the proposed location.
2. Regular monitoring arrangements should be put in place and followed to ensure control measures are fully implemented.
3. Consider installing cut off trenches or silt fences to prevent run off.
4. Wash down water must be contained and checked to prevent a pollution incident.
5. When using bentonite ensure there are no spills of the dry powder or granules, or leakage onto the ground of the mixed material, but, if it does spill, it must be cleaned immediately.
6. Monitor weather forecasts and check regularly to ensure there are no leaks or build ups of contaminates in the system being used.

PRECAUTIONS

1. Do not pump, over pump, or discharge without prior approval, or alter discharge arrangements without approval.
2. Do not leave pumping operations unattended unless you are authorised to do so by your supervisor.
3. Do not strip land, unless it is absolutely necessary, as vegetation reduces silt run off.
4. Do not leave bentonite in the open air or ignore spillages.

5. Do not wash down vehicles except in designated areas , or release water through grips.
6. Do not allow water into drains, gullies, ditches or watercourses, without approval.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 79

FUEL AND OIL

Fuel spills damage the environment and harm animals, plants, fish and humans. If you know how to handle fuel and keep it secure you are less likely to have a spill.

USE AND STORAGE

1. The most commonly found fuels and oils on site are diesel and petrol.
2. Poor storage, lack of care during refuelling, vandalism and poorly maintained plant can all result in spillage.
3. Even a small spill can damage the environment and harm animals, plants, fish and humans, as well as contaminating watercourses and ground water.
4. A spillage is likely to be expensive to clean up and there is the likelihood of prosecution and a large fine.

CONTROL MEASURES

1. Ensure that bulk fuel and oil storage tanks are bunded with a capacity of 110% and kept secure (locked when not in use) and checked regularly.
2. All containers should be stored in secure, bunded areas with a capacity of at least 25% more than the total volume of the containers.
3. Refuelling should be carried out by authorised people in controlled areas, and drip trays or absorbent mats placed under static plant.
4. All fuel deliveries should be supervised.
5. Spill kits should be available near the refuelling operation and drain covers should be provided.
6. Clear up minor spillages immediately and report the incident to your supervisor.
7. Seek advice before attempting to dispose of fuels, oils and contaminated water or ground materials.

PRECAUTIONS

1. Do not pour waste or wash spillages of fuel or oil down drains.
2. Always refuel in designated areas and follow refuelling procedures.
3. Do not store or carry out refuelling within 10m of a watercourse or drain.
4. Do not leave refuelling hoses outside bunds after use.
5. Always return containers to bunded areas after use.
6. Do not allow drip trays to overflow or leave a tank to fill unsupervised.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 80

WASTE

Waste management and control is a vital element in the construction industry. Every year millions of pounds are wasted by poor management of materials and resources.

WASTE MANAGEMENT AND CONTROL

1. The golden rules are

PREVENT – Avoid producing waste in the first place.

REUSE – Use items as many times as possible.

RECYCLE – Recycle what you can after you have re-used it.

RECOVER – Send what cannot be recycled for energy recovery, to produce energy.

DISPOSE – As a last resort, send the waste to landfill for disposal.

2. Waste comes from many sources, including contaminated ground, road sweeping arisings, excavations, damaged materials, off cuts and left overs. Anything not used is classed as waste if you intend to discard it.
3. Minimise waste by following the golden rules takes more effort but is good for the environment and the company.
4. Segregating waste into hazardous, non hazardous and inert types for disposal or recycling maximises opportunities for recovery costs and penalties can be avoided.
5. Check whether your site is using a site waste management plan.

CONTROL MEASURES

1. Store materials properly and safely to prevent damage before use.
2. Keep significant off cuts for reuse and know the correct place to stockpile and protect materials for reuse.
3. Consider the quantity of material to be used before ordering or opening a pack and use it all before opening a new pack.
4. Reuse materials where practical.
5. Tell your supervisor about instances in your work where you could reduce waste.

PRECAUTIONS

1. Do not place materials for reuse in areas where they could be damaged or be contaminated by other materials.
2. Do not use a new length of timber, pipe or cable without checking the reuseable stock.

3. Do not dispose of contaminated waste, other than in designated areas.
4. Do not overfill skips.
5. Do not mix hazardous, non hazardous and inert waste together because it prevents recycling and it more costly.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 81

CEMENT, CONCRETE AND PLASTER

Some types of materials in construction are known to cause harm to the environment and to the user when working with them unless precautions are taken. If you recognise the problems and know what action to take, you can help to prevent environmental and personal harm.

MATERIALS IN THEIR DRY AND WET STATE

1. All dusty materials (cement, lime, plaster and even sand) can cause health hazards to the skin, eyes and lungs.
2. Cement, concrete and plaster should be disposed of and washed out only at designated locations.
3. Only use designated washout areas to clean off plant and equipment, as the dirty water can pollute water courses.
4. Wet concrete and mortar are potentially hazardous to the skin as they can burn and damage the cell structure. Where incorrect or inadequate PPE has been worn, this has, in some cases, resulted in amputations.
5. Poor storage facilities, damp environments, burst bags or leaking bulk storage systems cause environmental hazards, through potential contamination of the ground and watercourses.

CONTROL MEASURES

1. Be aware of personal hygiene, wear the correct PPE and wash properly before consuming food.
2. Ensure that the storage area of materials is suitable.
3. Carry out mixing and batching works in areas well away from watercourses, gullies and drains.
4. Use designated washout areas and ensure that delivery drivers are aware of where they can wash out.
5. Waste plasterboard should be segregated and disposed of in a separate skip.
6. Minimise your exposure to dust from dry materials by wearing the correct PPE.

PRECAUTIONS

1. Do not hose down spills of materials into watercourses or drains.
2. Do not allow washout water to enter watercourses or drains.
3. Wear the correct PPE.

SITE SAFETY TOOL BOX MEETING

SAFETY WORK BOX NO. 82

MODERN SLAVERY IN CONSTRUCTION

Slavery was abolished but never eradicated. In 2016, around 40.3 million men, women and children globally were victims of slavery with over 50% in forced labour in sectors such as construction, manufacturing, mining, utilities, agriculture, forestry, fishing and domestic work.

Modern slavery is the illegal exploitation of people (of any nationality, gender, or age) for personal or commercial gain. It can include:

- Labour exploitation: victims are forced to work with little or no pay and may suffer poor working conditions, excessive working hours or wage deductions, or be housed in squalid accommodation
- Domestic servitude: victims are forced to work (normally in private homes), subject to ill treatment, humiliation and excessive working hours with little or no pay
- Sexual & criminal exploitation: victims are forced into prostitution or forced to commit crimes
- It is estimated that there is a large number of people within modern slavery in the UK construction industry
- Victims may be subject to violence and under the control of gang-masters.

MODERN SLAVERY VICTIMS IN CONSTRUCTION

The risks from modern slavery can occur anywhere in our operations, be they through direct employment, sub-contract employees of their material suppliers. The risks vary from failure to pay minimum wage in the UK to the use of bonded or child labour in our extended supply chains.

While it may be unlikely large companies are directly employing trafficked people, contractors and sub-contractors (or the agencies supplying labour) could find themselves targeted by unscrupulous gang-masters who may be offering a ready supply of labour at knocked down rates.

Anyone can become a victim of modern slavery. However, victims of this crime are often Eastern European men who are promised a job in the UK and then forced by traffickers to work as labourers, or in factories for instance, for little or no money. Through threat, violence or coercion they may be forced to live in squalid accommodation and have their identity documents taken from them.

THE WARNING SIGNS

Indications of modern slavery can be difficult to spot. Some of the things to look out for include:

- Workers who don't have written employment contracts
- Workers who have had to pay fees to obtain work
- Workers who can't prove that they're legally entitled to work in the UK
- A large number of people listed as living at the same address
- Agencies charging suspiciously low rates against standard industry pricing
- Workers who seem to have few personal possessions or often wear the same clothes
- Workers who appear frightened or reluctant to talk to others
- Workers who are dropped off or collected for work by the same person regularly, either very early or very late at night
- Workers showing signs of physical abuse and may appear malnourished or unkempt.

DO's AND DON'Ts

DO

- Be vigilant – look out for the warning signs that may indicate something is wrong
- Speak Up if you're concerned that someone might be a victim
- Take a look at the Persimmon Modern Slavery statement on our website

DONT's

- Attempt to act on your suspicions by confronting a trafficker or a potential victim. This can put you, and possibly the victim in danger. Instead, speak up about your concerns with the project manager or phone the whistle blowing line on 0800 0147 060, or the police if the individual is in immediate danger
- Employees must not take any other action or carry out investigations without the approval of the Group Compliance Director.

HOW TO REPORT A CONCERN

If you're concerned that an employee, or someone working on our behalf could be a victim of modern slavery, you must report it via the Persimmon whistle blowing helpline (0800 0147060 or whistleblowing@persimmonhomes.com). You can also get help via:

Via the App: 'Unseen'

National helplines (any language):

Modern Slavery Helpline – 0800 0121700 (24 hours)

GLAA – 0800 4320804 (09:00 – 17:00)

If you're worried that the individual is in immediate danger, phone 999.