Code of Conduct for Contractors working on behalf of the University of Warwick

General safety requirements

Version 1.5

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Index

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All contractors who work on behalf of the University of Warwick must comply with this Code of Conduct.
Introduction

The University is fully committed to health and safety and will only engage with those contractors who are also fully committed. Contractors are expected to familiarise themselves with the procedures, precautions and guidelines in this booklet – they’re here to keep everyone safe, contractors included. While working at Warwick, Wellesbourne, our off-campus leased and housing properties, or any other building that the University operates out of, contractors must strictly adhere to them at all times. The same goes for contractors’ workforce, their sub-contractors and anyone else brought on to any of our sites.

Our operations never stop. Even when our undergraduate students have gone home for the summer, there will still be hundreds of people on our campus. Health and safety is our priority 24 hours a day, 365 days a year.

Primarily, contractors are bound by the duties contained within the Health and Safety at Work etc Act 1974. This places duties upon the University and contractors to ensure the health and safety of employees and others who may be affected by the work.

The Management of Health and Safety at Work Regulations 1999 (as amended 2003), require co-operation and co-ordination of work activities where two or more employees share a workplace, whether temporary or on a permanent basis.

Dependent upon the nature of the work involved, other legislation may also apply, for example, the Control of Substances Hazardous to Health Regulations 2002 (as amended 2003).

You’ll see many references to health and safety legislation in this document, and it’s your responsibility to keep track of any changes to legislation and take them into account in your work. We keep up to date with our legal duties and current best practice, and we expect you to do the same.

We expect you to work in accordance with the written arrangements and the suitable and sufficient risk assessments you carry out in relation to your work activities. The Project Manager you’re working with will request evidence of these before you start work, and can ask for them at any time you’re on site. Make sure that you and your staff are familiar with them.
# Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>CDM</td>
<td>The Construction, Design and Management Regulations (CDM) 2015.</td>
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<tr>
<td>Client</td>
<td>The University of Warwick.</td>
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<tr>
<td>Principle Contractor</td>
<td>The contractor with control over the construction phase of a project involving more than one contractor.</td>
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<tr>
<td>Contractor</td>
<td>A person or firm that undertakes a contract to provide materials or labour to perform a service, do a job, or carry out any work on behalf of the University.</td>
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<td>Sub-Contractor</td>
<td>Anyone brought to work on the premises by the Contractor and used to support the Contractor.</td>
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<td>Form F10</td>
<td>A document used to notify the HSE of construction work in line with the requirements of the CDM regulations.</td>
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<tr>
<td>Health and Safety File</td>
<td>A document used to record work undertaken on the premises that details materials and services within the premises.</td>
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<tr>
<td>Health and Safety Plan</td>
<td>A document prepared by the Principal Designer and Principal Contractor for the construction phase of a project and used to record site health, safety and welfare matters: for reference purposes by all persons on a site.</td>
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<tr>
<td>HSE</td>
<td>Health and Safety Executive, the government body that enforces health and safety legislation.</td>
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<tr>
<td>Project Manager</td>
<td>Any person responsible for leading or commissioning any work from a contractor or managing any project whether large or small.</td>
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</table>
Safety Standards for Contractors

Contractors working on behalf of the University or at one of our sites must not put anybody at risk, themselves included, and must comply with all relevant legislation. This includes:

- Health & safety legislation.
- In particular, the Construction, Design and Management (CDM) Regulations.
- Building regulations.
- Fire safety legislation.
- Environmental legislation.

In particular, contractors must comply with Part 4 of the CDM Regulations where this applies. This covers:

- Safe places of work.
- Site security.
- Stability of structures.
- Demolition and dismantling.
- Use of explosives.
- Excavations, coffer dams and caissons.
- Reports of inspections.
- Energy distribution installations.
- Traffic routes and vehicles.
- Prevention of risk from fire.
- Emergency routes and exits.
- Emergency procedures, fire detection and firefighting.
- Provision of fresh air, temperature/weather protection and lighting.

Basic Contractor Rules

Contractors on all projects or works must:

- Check that clients are aware of their duties.
- Satisfy themselves that they and anyone they employ or engage are competent and adequately resourced.
- Plan, manage and control their own work to ensure any workers under their control are safe from the start of their work on site.
- Ensure that every contractor who will work on the project is informed of the minimum amount of time that they will be allowed for planning and preparation before they begin work on site.
- Provide workers under their control with any necessary information they need to work safely, report problems and respond appropriately in an emergency.
- Make sure that any design work they do complies with the law.
- Make sure that any work carried out complies with the law.
- Comply with relevant provisions of the CDM Regulations, where applicable.
- Co-operate with others and co-ordinate their work with others involved in the project.
- Provide workers with appropriate PPE at no charge and make sure they wear it.
Ensure the workforce is properly consulted on matters affecting their health and safety, and obtain specialist advice, where necessary, when planning high risk work.

Ensure that they coordinate, cooperate and communicate safety arrangements with the University and any other organisations or workers involved.

Fulfil the duties given in the Approved Code of Practice: Managing Health & Safety in Construction (L153).

Follow the guidance given in the Construction Industry Training Board Construction Site Safety - Safety Notes (GE700), where appropriate.

Comply with University policy and requirements. Details of these are available at http://www2.warwick.ac.uk/services/healthsafetywellbeing/guidance/handspolicy

Comply with any departmental, local and site rules brought to their attention.

Have a Health & Safety Policy Statement and be able to produce it on demand.

We expect all employees of contractors to be fully and properly trained in the skills of the trade or craft they practice. If they are still in training, we expect them to be properly supervised at all times while on University sites. Contractors must supply training, and must be able to produce evidence of employee competence on demand.

As a contractor you are expected to wear ID or branded work wear at all times and make arrangements to come onto our sites. This is particularly important if access is required to our higher risk facilities, such as laboratories, workshops and plant rooms, or if there is a need to enter residential accommodation or areas where maintaining confidentiality or security is vital.

Failure to follow these rules could lead to your staff being removed from the site and University premises, so it’s important that the rules are known by all those attending our sites before their arrival.

We reserve the right to intervene directly, where there is a serious and immediate hazard.

When work is complete the site must be made good and any markers, protective covers and warning notices restored.

Smoking, including e-cigarettes, is not permitted in any building, including those that form part of a construction site or compound, unless a designated smoking area has been formally agreed inside the compound. In these situations, you’ll be advised where you can smoke by local induction. Our policy is that smoking is not permitted within 3 metres of any building air intake, opening window or door. This rule applies to everyone.

Using mobile and camera phones is also restricted to site cabins, compounds or other areas where safety and security won’t be compromised.
Permits to Work

We operate a Permit to Work system and the conditions on the Permit must be obeyed. If the work is inside a designated site and wholly managed by a Contractor, Permits to Work will be controlled by the Principal Contractor. Permits are otherwise issued by the Project Manager or other authorised person of the University and may require other University staff to confirm that the areas have been made safe before you start work.

Contractors will need a Permit to Work before carrying out the following activities:

- Ground excavations, including any striking of the ground.
- Roof access and working at height.
- Entry into a confined space.
- Isolations of services, including electrical and fire detection/alarm systems.
- Hot works.
- Any work requiring access to a high hazard laboratories/workshops or plant rooms.

Equipment and Plant

We reserve the right to inspect power tools, plant and any other equipment brought onto campus and to forbid their use if we consider them unsafe.

We expect contractors to provide all necessary plant, equipment (including access equipment), tools etc. required to carry out the work safely. No item owned or controlled by the University may be borrowed.

Contractors must not use items owned or controlled by other contractors unless authorised in writing by that contractor.

If a portable generator is required, it must be located outdoors, away from air intakes, doors and windows, so that fumes do not enter any buildings.

We will not permit any electrical live working.

See also sections on ‘Plant (inc. handheld petrol driven equipment, e.g. disc cutters/saw/grinders)’ and ‘Power Tools’

Vehicles and Traffic

All drivers must obey the local traffic rules, which are clearly indicated by notices or standard symbols and the Highway Code. No responsibility can be accepted by the University for any theft of or damage to any bicycle, motor cycle, or motor vehicle on site, whether authorised or not.

Drivers must hold an appropriate, valid driving licence and have been trained in the correct operation of their vehicles. This includes dumpers, fork lift trucks, cranes and mobile elevated working platforms (MEWPs or “cherry-pickers”).
Vehicles must be maintained in good condition and test certificates and inspection records must be made available to the University on request.

When driving through campus please take great care – it can be very busy at times. You are expected to observe the correct speed limits at all times. These are:

- 20 mph on Central campus.
- 15 mph on Westwood campus and Wellesbourne campus.
- 10 mph on Gibbet Hill campus.

Any vehicle that contravenes the University traffic regulations will incur a fine. We reserve the right to exclude anyone found speeding or operating a vehicle unsafely on the University's roads from campus.

Drivers should take particular care in the low speed, shared space environments on University Road and Gibbet Hill Road.

Parking on sites is limited, so make sure drivers have authority to park where they need to. Parking on double yellow lines, grass verges, pavements, or blocking disabled parking bays, will not be tolerated unless it has been authorised by Security Services. Parking on fire hydrants and on yellow or red crosshatched areas is never allowed - these are emergency access areas.

The Project Manager will give advice on safe access to and exit from your site or work place.

**Personal Protective Equipment (PPE)**

Where appropriate, wear suitable and sufficient protective clothing and equipment. This must be supplied by your employer.

If wearing PPE is mandatory, checks must be carried out to ensure it is being worn, so find out what the requirements are before you start work.

**Asbestos**

Due to its age, many of our buildings may contain asbestos. Before any work starts that might disturb the fabric of a building constructed before the year 2000, an appropriate asbestos survey of the work area must be arranged by the appointed Project Manager. This documentation will be made available along with the relevant building’s Asbestos Management Survey.

When working, remember that only areas covered by the asbestos survey have been fully inspected and deemed safe to work in. If there is a need to alter the scope of work for any reason then, as a contractor, you must confirm that this is acceptable with the Project Manager before proceeding.

Anyone engaged to work on site (including sub-contractors) should have been provided with asbestos awareness training from a competent training provider in the last 12 months. Any certification issued in recognition of the completion of such training must be in date (not expired) for the duration of the on-site works.
Evidence of this training must be shown within 24 hours of any member of the University requesting it. Failure to do so will result in the operatives for whom the certification is not provided being asked to leave site until the requested certification is produced.

Any work that is required on known asbestos-containing materials must be undertaken by a licensed asbestos removal contractor, and will be carried out in accordance with the requirements of the *Control of Asbestos Regulations 2012*.

Following the completion of any asbestos removal work, which involves a 4 stage clearance test, the University (who will have arranged this testing) will provide a copy of the certificate of reoccupation for the areas covered by the work.

Any works to remove identified asbestos materials from the University estate must be carried out in accordance with the *Waste (England and Wales) Regulations 2011* and the *Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009*.

Consignment notes for all asbestos materials removed from the University estate will be provided and no invoices for asbestos removal works will be passed for payment until this documentation has been received.

The Contractor shall, upon the discovery of any suspect material, stop work and report to the Project Manager. If the material is broken, the contractor must:

- Stop work.
- Leave any potentially contaminated materials in the work area.
- Ask others working nearby to stop work.
- Exit the area.
- Put measures in place to prevent access.
- Report to the supervisor.
- Report to the University Supervising Officer.

**The University will not accept the importing of asbestos-containing materials (whether as components or contaminants) onto its grounds or into its buildings.**

Should this situation be discovered then the responsible person, people or organisation(s) will be expected to pay in full the cost of safely removing those materials (to the satisfaction of the University) and also the cost of re-instating with suitable non-asbestos-containing materials.

**Noise**

If the work is likely to produce noise above 80 dB(A) then discussions must be held with the Project Manager to:

- Reduce the noise to an acceptable level,
- Remove affected people to a quieter environment for the duration of the work, or
- Reschedule the work out of normal hours.

The requirements of the *Noise at Work Regulations* must be met.

Provision of hearing protection should be seen as a control measure of last resort.
Power Tools
Maintain all power tools in a safe working condition.

We prefer tools operating at 110v 50Hz or battery operated tools to be used in preference to 240v 50Hz equipment. Where this is not practical, you can use 240v 50Hz, provided that the circuit from which they are supplied is fed via a residual circuit breaker set to operate at 30mA or less.

- Don’t use cartridge fixing tools on site.
- Route cables to minimise the risk of mechanical damage and avoid trip hazards.
- Protect transformers from damage - especially from water.
- The electrical load demand must not exceed the supply of the socket / outlet.

We reserve the right to inspect power tools and any other equipment brought onto campus and to forbid their use if we consider them to be unsafe.

If you need a portable generator, it must be located outdoors, away from air intakes, doors and windows so that fumes do not enter any buildings.

Metal Welding and Cutting
A Hot Works Permit is required before any welding, brazing or soldering takes place on site or at any of our buildings.

- Work should ideally take place outside and in such a manner that passers-by cannot view the arc directly.
- Firmly support cylinders and regulators. Valves etc. must be in good condition. Flash back arresters must be used.
- Only use acetylene if it can be demonstrated that no other method will achieve the required results. Ideally use methylacetylene/propadiene (MAPP) as fuel gas.
- Keep acetylene cylinders upright and remove them to a secure storage overnight.

Welding equipment and cylinders must not be left unattended unless:

- All the valves are turned off.
- Keys are removed.
- The equipment is stored securely.

Paints, Adhesives, Sealants and other Hazardous Substances
All hazardous and flammable substances must be subject to agreement with the Project Manager. Their use must be subject to relevant risk assessments and suitable and sufficient control measures established. Such substances may give off toxic fumes or cause respiratory sensitisation. Water-based paints etc. should be specified/used wherever practicable. Affected areas must be well ventilated and respiratory protection worn if necessary. There must be a plan to deal with first aid and other emergencies.

Storage of materials on site must be kept to a minimum and consideration paid to the suitability of storage, chemical compatibility and restricting access to materials when the work area is vacated. Refer also to ‘Site Storage of Flammable Liquids, LPG, Compressed Gases and Acetylene’ and ‘Waste Materials’.
Breaking into Services

- Services must not be interrupted without prior permission. This will be issued via the Project Manager.
- All work must be carried out by trained and authorised personnel.
- Appropriate Regulations and Codes of Practice (especially for gas and electricity) must be followed.

Radiation

- Contractors proposing to bring a source of ionising radiation onto campus must inform the University Radiation Protection Officer. Refer to the University Health and Safety contacts page for current contact details: [http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts](http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts)
- We reserve the right to take our own radiation dosage measurements.
- All appropriate safety precautions must be taken by anyone likely to receive a radiation dose.

Waste Disposal

Contractors must:

- Remove and dispose of all waste and debris in a safe manner, in compliance with the law.
- Consider recycling as the first option on any construction site, in line with our policy.
- Not accumulate any hazardous or combustible waste on site.
- Not deposit any waste, chemicals or any other material into University drains, water courses, dustbins, waste containers, or in any other place on campus.
- Make sure their waste containers are secure and that University and other waste cannot be placed in them.

For details of where skips should be located, see section on Fire Safety: [http://www2.warwick.ac.uk/services/healthsafetywellbeing/guidance/temporarystructures](http://www2.warwick.ac.uk/services/healthsafetywellbeing/guidance/temporarystructures).

Working at Ground Level

Contractors must:

- Make an assessment of the risk to other people in the area.
- Make sure that all reasonable precautions are taken to segregate the work from passers-by, using fences, ropes, tape or other suitable barriers. The suitability of these must be assessed with each different situation.
- Enclose any area handed over for exclusive contractor use with a secure fence or similar barrier.
- Maintain all barriers in a serviceable condition at all times.
- Adequately protect all authorised stores of materials wherever it has been agreed they can be located.
- Provide direction signs and adequate lighting, if appropriate.
- Display appropriate warning signs.
- Avoid trailing cables and other trip hazards.
Take precautions in the vicinity of overhead power lines.

Keep fire exits and escape routes free from obstructions.

Appropriate barriers, temporary lighting and warning signage will usually be necessary when working on or near roads or areas to which pedestrians have access, in accordance with The New Roads and Street Works Act and Chapter 8.

Work above Ground Level

Contractors must:

- Comply with the Work at Heights Regulations.
- Only use ladders and stepladders for access and short duration work where three points of contact can be maintained.
- Maintain ladders and other access equipment in good condition.
- If using a ladder, ensure it can be secured by tying both stiles bottom and top. If this is not practicable, an effective ladder stability device must be used, or the ladder wedged against a wall or other heavy object. Having a second person foot the ladder only be used as a last resort.
- Make sure ladders project at least 1.05 metres (3ft 6in) above the platform level, where used for access.
- Deny access or use of ladders to trespassers or pranksters. See “A toolbox Talk on Leaning Ladder & Stepladder Safety” (HSE; INDG403).
- Erect, maintain and inspect scaffolding in conformity with the appropriate legislation and Codes of Practice.
- Erect scaffolding on a firm foundation.
- Make sure scaffolding is capable of withstanding the forces that will act on it, ensuring it is adequately braced, tied to the building or otherwise supported.
- Provide toe boards and guard rails.
- Label incomplete scaffolding as such.
- Dismantle scaffolding safely.
- Protect individuals who might be at risk from falling objects.
- Never place objects near roof edges or unguarded platforms.
- Take precautions with overhead cables.
- On flat roofs etc., either
  - Ensure suitable edge protection is in place so that people working at height cannot fall, or,
  - Ensure that suitable safety harnesses, attached to a suitable anchorage point, are worn.
- Make sure all hoists, access platforms and cranes used on University sites conform to relevant legislation.
- Do not obstruct emergency exits from buildings with access equipment or materials.
**Working Below Ground Level and Breaking into Ground**

Working below ground level includes any operation that has the potential to interfere with buried services.

Contractors must have a clear method statement for any work which involves breaking or striking the ground such as digging an excavation or post installation, and this must be agreed with the Project Manager or person in charge of the works. Relevant permits and information must be obtained before work can commence.

Contractors must:

- Ascertain whether there are buried services or other obstructions in the area of the excavation and take appropriate precautions.
- Excavate cautiously, even when no services are expected.
- Hand-dig in areas where services are anticipated using safe tools, and never use picks or forks.
- Make, maintain and inspect trenches and excavations in compliance with appropriate *Regulations and Codes of Practice*.
- Shore up excavations correctly and adequately so as to prevent the sides of the trench collapsing.
- Not place spoil heaps, vehicles or other material where they could collapse into excavations.
- Adequately light and ventilate excavations.
- Provide suitable access.
- Comply with the *Confined Spaces Regulations*.
- Erect suitable barriers around excavations with clearly visible warning lights at night.

**First Aid & Emergencies**

Contractors must:

- Provide first aid equipment and trained first aiders to meet the requirements of the *First-Aid at Work Regulations*.
- Be informed about the provision of first aiders in the University and the location of local first aiders in areas where contractors will work, especially in high hazard areas like science departments where specialised first aid services might be required.
- Keep records of accidents involving employees and make statutory reports of injuries and dangerous occurrences to enforcing authorities.
- Immediately inform the University, via the Project Manager, of any incident whether or not it resulted in injury or property damage.

The University reserves the right to inform the Health and Safety Executive or the Environment Agency independently of any accident or incident we consider worthy of further investigation.
All Contractors (and their sub-contractors) must be made aware that the University has an emergency telephone system which applies to our campuses. Dialling 22222 on any telephone on campus, day or night, will immediately put you in touch with Security Services, who will obtain the services required and ensure they respond to the area they are needed. Users of mobile phones should dial 02476 5 22222.

If working elsewhere there may be other local arrangements in place. If in doubt under these circumstances, dialling 999 from any phone will take you to the UK emergency services.

The Environment

The University is committed to the environment beyond simply ensuring legal compliance with environment-related statutory provisions. The Estates Department operate an Environmental Management System which satisfies the requirements of ISO 14001 and, as a consequence, our expectation is that our contractors will make sure their activities align with these principles, take steps to identify environmental risks and adopt appropriate measures to mitigate those risks.

Contractors must:

- Identify and monitor any environmental risks (including noise levels), and, if appropriate, adopt measures to mitigate those risks.
- Maintain records and inform the University immediately, via the Project Manager, of any environmental incidents or potential for serious incidents that could occur.
- Arrange the necessary licences and permits for the discharge of foul water, removing and disposing of all waste and debris in a safe manner in compliance with the law. Waste consignment notes must be made available if requested by the Project Manager.
- Ensure any hazardous or combustible waste generated is managed and disposed of by competent people holding suitable valid waste carrier licences.
- Ensure waste is not allowed to accumulate on site or be deposited into drains, water courses, dustbins, waste containers or in any other place on our sites.
- Ensure any waste containers are appropriate for the waste type, secured and positioned away from our buildings to reduce the risk of arson.

Fitness to work

The Contractor shall ensure that all employees, agents and sub-Contractors are able and competent to carry out their functions at all times while on the University’s premises. Any condition that would render such an employee liable to put themselves or others at risk shall automatically preclude them from working across the University’s sites while that condition is present.

The University reserves the right at any time to carry out or require contractors to carry out such medical screenings or examinations as the University considers necessary or desirable, in order to ensure the safety and health of the individual and those affected by them.
Alcohol and Drugs
Consuming alcohol during working hours is strictly forbidden. Anyone found to be under the influence of alcohol or drugs will immediately be removed from site and may be refused future entry.

Mobile Phones
On site use of mobile phones must be restricted to site cabins, compounds or other areas where safety and security will not be compromised.

Mobile phones must not be used by workers or supervisory staff on scaffolding, areas where equipment, cranes or hoists are being used overhead, confined spaces, whilst driving or areas where there are potentially explosive atmospheres.

Dignity at Warwick
We are proud of our diverse culture and cosmopolitan nature, and committed to the belief that all of our staff, students, visitors and contractors have the right to be treated fairly and with dignity.

In line with the Dignity at Warwick Policy, we expect all contractors undertaking work for the University to behave in an appropriate manner. Contractors must:

- Respect the rights and dignity of others.
- Treat others fairly.
- Be courteous and good mannered in every interaction, appreciating that individuals have different styles and expectations and valuing those differences and the contribution they make.

Fire Safety
General
Everyone involved in contractual or construction work must work together to ensure that, where possible, the existing fire alarm system and fire evacuation arrangements remain in place. However, where alterations are necessary:

- Adequate fire detection and prevention methods must be incorporated during the contract planning stage.
- The work on site is undertaken to the highest standard of fire safety, affording the maximum level of protection to buildings and their occupants.
- All contractors must comply with relevant parts of current edition of the Fire Prevention on Construction Sites (The Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings (the ‘Joint Code’)). This document is revised regularly and contractors must ensure that they have a copy of the current edition (obtainable from the Fire Protection Association).
Non-compliance with the *Joint Code* could lead to insurance cover ceasing to be available or being withdrawn. The University insurers require notification by the Estates Office of all construction projects above a specified contract value. These projects may be subject to inspection by the insurers to ensure that the *Joint Code* is being complied with.

Proper planning for fire safety must be an integral part of overall preparation and budgeting for the efficient running of projects. Clear procedures and standards must be laid down at the start and adequate resources, in terms of time, materials and money, must be committed to the prevention of fires.

A fire check must be made at the end of the working day, particularly in areas where hot work has been undertaken, and records maintained of such arrangements.

The necessity for a Fire Safety Plan should be identified early by the Project Manager, where necessary in consultation with the University Fire Safety Adviser ([http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts/](http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts/)). Where a Fire Safety Plan is required, the Principal Contractor or the appointed Site Safety Co-ordinator will be responsible for assessing fire risks and for formulating and regularly updating a *Fire Safety Plan* which must be to the satisfaction of the University’s Fire Safety Adviser. The plan must detail:

- The organisation of and responsibilities for fire safety.
- General site precautions, fire detection and means of warning.
- The requirements for a hot work permit regime.
- Site accommodation - location, construction and maintenance.
- Fire escape and communications (including an effective evacuation plan and procedures for calling the fire service).
- Fire service access, facilities and coordination.
- Fire drills and training.
- Effective security measures to minimise the risk of arson.
- A materials storage and waste control regime.

**Role of the Principal Contractor / Site Safety Coordinator**

The Principal Contractor or Site Safety Coordinator must:

- Ensure that all procedures, precautionary measures and safety standards as laid down in the *Site Fire Safety Plan* are clearly understood and complied with by all those on the project site(s).
- Ensure that a system using hot work permits is established (if required) and compliance is monitored.
- Carry out weekly checks of firefighting equipment and test all alarm and detection devices installed on the construction site. The University will continue to maintain its systems and will require access accordingly.
- Conduct weekly inspections of work areas, escape routes, fire service access points and firefighting facilities and monitor the requirements laid down in the *Site Fire Safety Plan*.
- Carry out end of day checks of the site to ensure it has been left in a safe and secure manner.
- Liaise with site security personnel where they are employed.
- Maintain a written record of all checks, inspections, tests, fire patrols and fire drill procedures.
Execute those duties required for the safe evacuation of the site if there is a fire alarm, and ensure that all staff and visitors report to the assembly points and are accounted for.

Promote a fire safe working environment at all times.

On large projects (where specified by the insurer(s) in the policy), the Principal Contractor or Safety Coordinator should appoint a Fire Marshal and Deputy Fire Marshal(s) to assist in the implementation of the Site Fire Safety Plan. Marshals must be given sufficient time to execute their duties, be adequately trained in fire safety matters, and have sufficient status and authority for the effective execution of their duties and responsibilities.

**Emergency Procedures**

Contractors must ensure that all their employees are familiar with:

- Location of the fire alarm call points and how to raise the alarm in the event of an emergency.
- Fire escape routes and evacuation assembly areas.

When the alarm sounds everyone must leave the building immediately by the nearest available exit. People working in the vicinity of buildings must evacuate to the nearest assembly point.

When on Campus, existing buildings have Evacuation Wardens or other people with designated roles responsible for ensuring that the building has been fully evacuated. Contractors must follow their direction.

- There must be a means of warning of fire. Hand bells, whistles, klaxons or manually operated sounders may be practical so long as they are clearly audible above background noises in all areas and can be readily identified as being a fire alarm.
- Written emergency procedures must be displayed in prominent locations and given to all employees on site.
- Clear access to the site and buildings must be maintained at all times. Fire lanes (yellow hatched areas) must not be blocked.
- If necessary, identified personnel must be briefed to unlock gates, doors etc., in the event of an alarm.
- Clear signs must be installed and maintained in prominent positions indicating the locations of fire access routes, escape routes and positions of dry riser inlets and fire extinguishers.
- Cover existing signage where it is giving contra-indications.
- Contractors are responsible for providing firefighting equipment on their sites and for carrying out a roll-call of employees following an emergency.
- Lighting levels must be maintained to allow safe access and exit, and these need to take into account the time of day and the nature of the work.

**Fire Alarm System Works**

Contractors must not interfere with the existing fire alarm system, unless a full plan of works has been agreed with the University.

All fire alarm works shall be in accordance with BS5839 Part 1:2013.
All installation, modification and commissioning work is to be carried out by a specialist contractor with LPS1014 certification. All Relevant LPS1014 certificates will be issued on completion and handover of the system. The specialist shall be employed and coordinated by the contractor. The company must be listed in the LPCB List of Approved Fire and Security Products and Services Red Book. The use of non-listed third parties to certify the fire detection alarm system is not permitted.

Wiring shall be carried out using suitably cored Red Coloured ‘firetuf’ enhanced fire resistant, zero halogen, low smoke cable, clipped with metal clips at a minimum of 450mm spacing.

In order for any works to be carried out on the existing fire alarm installation, a Permit to Work must be requested from the University at least 72 hours beforehand. In order for a Permit to be issued, the contractor must submit a complete method statement for the works, clearly identifying the duration of any interruption in the fire alarm provision and the planned resetting checks on completion of the works. The contractor must clearly identify how they will advise the building occupier and visitors to the building of the intended disruption and planned testing, etc.

When conducting work on any of the University campuses, immediately before and after, the contractor shall inform the Security Gatehouse (Extension (024765) 22083). Before any work starts a text file download shall be taken of the existing system. This shall be in the form of a memory stick and shall provide a backup if the system requires rebooting to its original state. It shall be handed to the University Engineer prior to any modifications being carried out to the panel.

**Prioritising Fire Protection Installations**

Projects must be planned in sequence to achieve the early installation and operation of:

- Automatic fire detection systems.
- Permanent protected fire escape stairs and corridors.
- Fire compartments, including the installation of fire doors, and fire stopping with special attention given to lift shafts, service ducts and voids which offer a passageway to heat and smoke.
- Fire protective materials on structural steelwork.
- Firefighting shafts duly commissioned and maintained.
- Lightning conductors.
- Automatic sprinklers and other fixed firefighting installations.

Adequate water supplies for firefighting will normally be achieved by maintaining access to the existing fire hydrants. A hydrant lay-out plan is available on request for all University campus buildings.

**Temporary Covering Materials**

When finished surfaces or fittings incorporated into a building are temporarily protected during construction/refurbishment, regard must always be paid to the fire load and potential for fire growth and spread.

Temporary flexible covering materials (such as sheeting) must conform to the requirements of *Loss Prevention Standard LPS 1207 Fire Requirements for Protective Covering Materials*. Covering for scaffolding must comply with LPS 1215.
**Portable Fire Extinguishers**
Personnel must be trained in the use of portable firefighting equipment.

- Adequate numbers of suitable types of portable extinguishers must be located in conspicuous positions throughout a work site.
- Adequacy of firefighting equipment must be reviewed as work progresses.
- Appropriate extinguishers must be provided close to electrical equipment, such as distribution boards.
- Mechanically-propelled plant should carry an appropriate fire extinguisher.
- Fire protection equipment must be adequately maintained and regularly inspected.

**Site Security against Arson**
The most effective method of deterring trespassers, as well as preventing malicious fires, is to erect a hoarding or fence around the perimeter of the whole site and restrict access to combustible materials.

Where this is impracticable, buildings, flammable liquid stores, liquefied petroleum gas cylinder storage and combustible material stores must be fenced or otherwise suitably protected. Such arrangements must be submitted in writing to the University's Fire Safety Adviser via the Project Manager and agreement obtained. Contact details are available from:
[http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts/](http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts/)

Illumination of the site is an additional deterrent to unauthorised access and is recommended. On high risk or expensive projects, the use of CCTV cameras should be considered in discussion with University Security Services or the Project Manager, dependent upon the location of the work.

**Temporary Buildings**
The recommendations in *Fire Safety in Construction Sites* must be followed. Temporary buildings should be separated from the building under construction/refurbishment and other permanent buildings by at least 10 metres.

- Where there is less than 5 metres space, temporary buildings must be constructed with materials that do not significantly increase the fire loading on the near structure, or create smoke or corrosive fumes.
- Temporary buildings located inside a building must be fitted a fire detection system.
- Temporary buildings outside a building would benefit from being equipped with a domestic type smoke detector.
- It is often necessary to erect temporary buildings inside the building under construction/refurbishment when space is severely restricted. Such temporary buildings must meet the current fire performance characteristics stated above.
- They should be erected in locations that provide ease of access for the fire and rescue service and easy evacuation for personnel. Locating temporary buildings in basements or on upper floors, i.e. at a height in excess of 7.5 metres from site access level, should be avoided. Where this is not practicable, other suitable precautionary measures must be adopted after consultation with the University Fire Safety Adviser. Contact details are available from: [http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts/](http://www2.warwick.ac.uk/services/healthsafetywellbeing/contacts/). These measures must be maintained during the course of construction and until a time when the temporary buildings can be relocated to the lower floors.
Raised floors must be enclosed to prevent waste accumulation while allowing under-floor ventilation. Combustible materials must not be stored under temporary buildings.

Heaters for use in temporary buildings must be fixed in position, fitted with securely fixed metal guards and maintained in a sound condition.

Coat stands and drying racks must be firmly positioned at a safe distance from heaters.

All heaters and cooking appliances must be properly installed and adequate ventilation provided. Automatic fire detection systems must be installed in temporary buildings used for cooking. Consideration should be given to automatic sprinkler systems and intruder alarms.

Areas where flammable liquids and gases are stored should be protected by automatic fire detection systems and intruder alarms.

Temporary buildings should not contain more than the minimum of furniture and fittings meeting relevant ignition resistance levels.

Site Storage of Flammable Liquids, LPG, Compressed Gases and Acetylene

- Containers of highly flammable liquids and LPG should be stored in external, open compounds which are securely fenced and shaded from the sun.
- Stores containing highly flammable liquids must be surrounded by a bund sufficient to contain the maximum contents of the largest drum stored, plus 10 per cent, and must not be allowed to fill with water or waste material. Relevant regulations must be complied with.
- Diesel fuel, fuel oil and other flammable liquids must be stored safely with precautions taken to minimise fire risks, mechanical damage of tanks etc. and avoidance of contamination of watercourses in the event of a spillage.
- Acetylene must be stored upright and out of direct sunlight. Welding sets must not be left unattended, valves must be turned off and the cylinder stored securely when not in use. Their use is subject to a ‘Hot Work’ permit.
- Where it is necessary to store flammable liquids and gases in circumstances other than mentioned previously, quantities stored must be kept to the minimum and in any case below 50 litres or half a day’s supply, whichever is the lesser. The containers must be kept in a store, cupboard or bin which is of fire resistant construction.
- Storage areas should be at least 10 metres from permanent and temporary buildings. Containers must not be stored within 4 metres of any building or boundary fence unless the boundary is a wall with at least 30 minutes fire resistance and drums should be at least 1 metre below the top of the wall. 30 minutes fire resistance can be traditional masonry brick/block wall, (no doors or windows within 3 metres of the compound, 12.5 mm plasterboard, or calcium silicate board).
- Products which could add to the intensity of a fire (e.g. oxygen) or to the toxic hazard (e.g. chlorine), must not be stored in the same compound as flammable liquids and LPG.
- Appropriately worded warning signs, e.g. “HIGHLY FLAMMABLE LIQUIDS”, “NO SMOKING” and “NO NAKED LIGHTS”, must be displayed boldly at the entrances to stores.
- The floors of flammable liquid and LPG cylinder stores should be paved or compacted level with a suitable hard standing provided for the delivery and dispatch of cylinders. The area must be kept clear of all flammable materials, weeds and rubbish.
- Any electrical fittings therein, e.g. lights and switches, must be intrinsically safe.
- The provision of automatic flammable gas detection equipment should be considered for enclosed storage locations, and adequate numbers of appropriate extinguishers should be sited at storage area entrances.
Electricity and Gas Supplies

- Electrical supply installations, both temporary and permanent, must be installed in accordance with the current edition of *The Institution of Electrical Engineers Regulations for Electrical Installations (the IEE Wiring Regulations)* and the *Electricity at Work Regulations 1989*.

- All electrical work must be undertaken by a competent electrician.

- Installations (especially of a temporary nature) must be inspected regularly and tested at intervals not greater than every three months. The results must be recorded in a register kept for the purpose.

- Where possible, main switches, other than those controlling security lights and fire safety systems, should be turned off when work ceases and all equipment unplugged when not in use.

- All gas supplies must be installed by a Gas Safe registered gas fitter with the correct qualifications for the work. The Principal Contractor, or Project Manager if a direct appointment, must check that those carrying out the work are so registered.

- Gas supply to appliances should be by fixed piping or armoured flexible tubing. Gas cylinders should be located outside buildings, secured and protected from unauthorised interference. Gas appliances should be fitted with control taps. LPG connected to an appliance by a flexible link must only be installed by a competent person.

Hot Work

- A Permit is required for all temporary operations that involve open flames or produce heat or sparks. This includes, but is not limited to, brazing, cutting, grinding, soldering, thawing, gas/electric welding and tar boilers.

- Fire extinguishers of appropriate type must be at hand and a watch suitable for the risk maintained while work is in progress. There must be available a person trained in the use of fire extinguishers.

- When welding, cutting or grinding, the work area must be suitably screened using non-combustible material. This activity should ideally be conducted outside the building.

- Gas cylinders must be secured in a vertical position and fitted with a regulator and flashback arrester.

- “Tar” boilers, lead heaters and similar equipment must not be used on site without permission from the Principal Contractor or Project Manager if the contractor is directly appointed. Lead heaters and tar boilers should only be taken onto roofs in exceptional circumstances, when a non-combustible heat insulating base must be provided to prevent heat igniting the roof. Such equipment must always be supervised by an experienced operative and be sited where spilled material can easily be controlled. Gas cylinders must be at least 3 metres from the burner and at least one fire extinguisher of appropriate class and capacity for the hazard available.

- Fire watch must be provided during the entire work period and for a period of 1 hour after any hot work. (Remember that adjacent surfaces need to be checked, walls, ceiling voids etc.)
Smoking

Smoking is not allowed in any structures or buildings that form part of a construction site or compound. However, a designated smoking area can be declared inside a compound, providing it complies with the University Smoking Policy – i.e. no smoking in buildings, external work areas or within 3 meters of any building, opening windows and doors. Smoking includes tobacco and e-cigarettes.

Plant (incl. hand held petrol driven equipment, e.g. disc cutters/saw/grinders)

- Internal combustion engines should be positioned in the open air or in a well-ventilated non-combustible enclosure. They should be separated from working areas and other buildings by at least 5m and sited so that exhaust pipes and exhaust gases are kept clear of combustible materials. Compressors should be housed singly, away from other plant and in separate enclosures, not only to reduce risk of fire but also carbon monoxide poisoning.
- Fuel tanks must not be filled while engines are running.
- Stand-alone fuel tanks should be separated from the combustion engine by 5 metres.
- Do not re-fuel inside a building. Designate a separate refuelling area.
- Plant and equipment must be protected against accidental impact.
- Air intakes must be situated so that the air is cool, uncontaminated and free from flammable gases or vapours.
- Where appropriate, sand trays should be provided to absorb drips of fuel or lubricant.
- Suitable fire extinguishers should be provided.

Waste materials

- Good housekeeping is essential on all sites.
- All waste, packing materials, wood, shavings and oily rags must be regularly removed.
- Unwanted materials from the more open areas of a site must be collected at regular intervals.
- Open skips must be at least 10 metres away from any building, closed skips must be at least 5 metres away from any building.
- Separate metal bins, with close-fitting metal lids, must be provided for oily rags and other combustible waste.
- Waste materials awaiting disposal must be stored 10 metres away from temporary and permanent buildings, stores and equipment.
- All dry vegetation must be cleared regularly.
- Rubbish must not be burned on site.

Fire alarm systems

All University buildings are covered by automatic fire detection and alarm systems which incorporate smoke or heat detectors located in most rooms, corridors, stairwells, risers and plantrooms. These detectors are extremely sensitive and will go into alarm if any dust, heat or fumes are generated in the vicinity. They will automatically trigger the fire alarm in the building. Similar systems may also exist in other buildings that the University has responsibility for or works in.
Avoiding False Alarms

- When any work involving dust, heat or fumes is to be carried out, the contractor must first seek the Project Manager’s (or other University appointed person’s) approval. On University campus, the Project Manager will notify the Fire Safety Adviser and the Estates Fire Alarm section, who will in turn notify Security Services. Once agreed, a Permit to Work will be issued. Plastic covers will also be provided for issue to the contractor to protect the detectors during the course of the work. On other sites, the notifications may be different, so it is important to understand who will be notified and what arrangements need to be put into place. The Project Manager will verify how to proceed under these circumstances and will confirm any special arrangements that need to be made.

- The Contractor must survey the working area and note the location of all detector heads. Where covers are to be used, the covers should be fitted to all detectors in the area and those in the corridors beyond before work starts, and left in place for the duration of the work. The covers must not be removed until at least 2 hours after work is complete to allow the air to clear. Where applicable, the covers must be returned to the Project Manager on final completion of the work.

- If the work is in areas that are in use by University staff or students outside the period of planned work, the covers must be removed at the end of every working day so that the alarm system is fully operational, and should be refitted every morning before work starts. Such areas will include residences, Arts Centre, etc.

Work in Areas Wholly Handed Over to Contractors

The points below apply to work areas wholly handed over to contractors; being areas vacated by staff, students, visitors and the general public, etc. Specific precautions may also apply to work in these areas.

- Work site or parts of the premises not required by occupiers or the public for access should be secured to prevent unauthorised access. The work site should be enclosed within a boarded or sheeted perimeter fence of at least 2m high, which is sufficient to prevent access by unauthorised people, particularly children, unless this is already achieved by an adequate boundary wall or barrier.

- All aspects of fencing and protection should be confirmed at a site hand-over meeting. Perimeter fencing should be erected before the works begin and when the surrounding areas are clear of people not engaged in the work activity. Due regard should be paid to the possible presence of underground services during the fence installation.

- The contractor should provide all necessary security provisions, including padlocked entrance gates, where appropriate, and ensure that they are closed when they are not in use and are locked whenever the site is unattended.

- If fencing is to be removed or adapted during the works, this should be undertaken only when the surrounding areas are clear of staff, students, visitors and the general public, etc. All fencing should be dismantled and removed at the completion of the works, but not until all danger to University employees, students, visitors and the general public has passed.

- All site visitors must report to the Principal Contractor when arriving on site. Notices informing visitors of this requirement and any additional reporting requirements agreed by the Project Manager and the Principal Contractor must be posted at entrances to the site.