## Contents

List of Figures

Forward by HSE

UKTFA Health and Safety Policy Statement

### Definitions

<table>
<thead>
<tr>
<th>Part 1</th>
<th>Management of Health and Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 2</td>
<td>Risk Assessment</td>
</tr>
<tr>
<td>Part 3</td>
<td>Accident Recording &amp; Review</td>
</tr>
<tr>
<td>Part 4</td>
<td>Safe Work at Height</td>
</tr>
<tr>
<td>Part 5</td>
<td>Roof Work</td>
</tr>
<tr>
<td>Part 6</td>
<td>Scaffold Work</td>
</tr>
<tr>
<td>Part 7</td>
<td>Manual Handling</td>
</tr>
<tr>
<td>Part 8</td>
<td>Provision &amp; Use of Work Equipment Regulations</td>
</tr>
<tr>
<td>Part 9</td>
<td>Vibration and Vibrating Tools</td>
</tr>
<tr>
<td>Part 10</td>
<td>The Noise at Work Regulations</td>
</tr>
<tr>
<td>Part 11</td>
<td>Control of Substances Hazardous to Health Regulations (COSHH)</td>
</tr>
<tr>
<td>Part 12</td>
<td>The Construction (Health Safety &amp; Welfare) Regulations</td>
</tr>
<tr>
<td>Part 13</td>
<td>Personal Protective Equipment at Work Regulations</td>
</tr>
<tr>
<td>Part 14</td>
<td>Method Statements</td>
</tr>
<tr>
<td>Part 15</td>
<td>Training &amp; Certification</td>
</tr>
<tr>
<td>Part 16</td>
<td>Design Stage Considerations</td>
</tr>
<tr>
<td>Part 17</td>
<td>Contractor/Principle Contractors Responsibilities</td>
</tr>
<tr>
<td>Part 18</td>
<td>Company Representatives Role/Lifting Operations</td>
</tr>
<tr>
<td>Part 19</td>
<td>Erection Team Supervisors Role</td>
</tr>
<tr>
<td>Part 20</td>
<td>Transportation of Components</td>
</tr>
<tr>
<td>Part 21</td>
<td>On Site Storage of Components</td>
</tr>
<tr>
<td>Part 22</td>
<td>List of Applicable Legislation &amp; Guidance</td>
</tr>
<tr>
<td>Part 23</td>
<td>Fire Safety on Timber Frame Construction Sites</td>
</tr>
<tr>
<td>Appendix 1</td>
<td>Accident Recording</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>Erector Team Qualifications</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>Five Steps to Risk Assessment</td>
</tr>
</tbody>
</table>
Foreward by the Health and Safety Executive

The UK Timber Frame industry, along with others in the construction sector faces many challenges in maintaining safe places of work. Too many people are injured, killed or suffer ill health as a result of their work activities. The Timber Frame industry is aware that more needs to be done to control the risks from working at height, slips and trips, manual handling and many other significant workplace hazards; this Code of Practice sets out the management and operational standards that the HSE will expect to be adopted by all those involved with the supply and erection of timber frame structures, from houses to multi-story buildings.

This is a Code developed and implemented by the UK timber frame industry in partnership with the HSE, and compliance with it will help to protect workers, clients and members of the public. HSE inspectors will take cognisance of this Code of Practice when visiting sites involving the erection of timber frames, and will look to all CDM duty holders to have done likewise.

By working together we can make the construction industry a healthier and safer place to work. You can play your part by reading and following the guidance in this Code of Practice.

HSE signatory

Date:
UKTFA Health and Safety Policy Statement

Every Member company will have a Health and Safety Management System in place that conforms to the requirements of either: HSG 65, OHSAS18001 or BS8800, commensurate with their size.

Member companies of the UKTFA will be committed to continually improving Occupational Health and Safety (OHS) performance, and will ensure that appropriate policies, organization and arrangements are in place to achieve this.

All hazards will be identified and all risks appropriately assessed. Suitable risk control measures will be employed and maintained to reduce workplace risk to a level as low as reasonably practicable.

Only competent employees and contractors will be used and appropriate training, instruction, information and supervision will be provided as appropriate.

The UKTFA is committed to supporting the aims and objectives of the “Working Well Together” (WWT) campaign and all Members are urged to sign up to this initiative.

Signed:

Gerard Lockey
Health and Safety Committee (Chairman)
UKTFA

Dated:  

Definitions

**Hazard**  Anything with the potential to cause harm.

**Risk**  The likelihood of harm being realised (normally expressed as an equation between likelihood and severity or consequences of the potential event)

**Risk Controls**  Measures used to eliminate or reduce the level or risk.

**Company Representative**  Any person given the authority and responsibility by their company for the requisite task

**OH&S**  Occupational Health and Safety.

**Members**  Members of the UKTFA.

**CoP**  Code of Practice (this document).

**Reasonably Practicable**  A balance between the level of risk and the cost of reducing the risk further; note: risk must always be reduced to tolerable levels.

**Safety Reps.**  In this CoP safety representatives are individuals elected to address Health and Safety issues with their employer on behalf of their colleagues. Equal consideration must be given to trade union members and non-trade union workers when arranging the election/selection process.

**Safety audits**  are thorough investigations to determine how well the Health and Safety management system is understood and maintained and what remedial action needs to be addressed. Audits are less frequent than inspections — the whole system being investigated annually or twice yearly.

**Safety Inspections**  These are more frequent than audits and tend to address more obvious issues in the workplace. They should be conducted by senior managers to raise their awareness and to promote ownership of Health and Safety in the workplace.

**OHSAS18001**  It is a structured specification that addresses all aspects necessary for the successful management of Health and Safety and subsequent ongoing improvement of Health and Safety systems and culture.

**Erect Team**  The workforce selected by the Timber Frame Company to erect the structure, having the required competencies to deliver the agreed service. These may be direct employees or sub-contractors or a combination.

**Team Supervisor**  The competent person appointed to provide leadership and guidance to the erect team with regard to operational and Health and Safety matters.

**Client**  Is an organisation or individual for whom the construction project is carried out.

**Principal Contractor**  Is the main contractor managing the site and operations undertaken on it.

**Slinger Signaller**  Is the competent person responsible for the safe slinging of the load and safe transfer of the load to its resting point by providing the crane driver with clear operating instructions during its route.

**Lift Supervisor**  Is the competent person appointed to ensure that the lifting operation is conducted safely and in accordance with the lifting plan defined by the Appointed Person.
PART 1: Management of Health and Safety

The Health and Safety at Work etc Act 1974 and numerous pieces of subordinate legislation (Regulations) place many general and specific duties on employers, employees and others. The Regulations referred to in this Code of Practice (CoP) set out minimum legal requirements that will be adhered to at all times by UKTFA members. For more information, refer to the documents themselves, listed in Appendix B, and where necessary obtain competent, professional advice on Health and Safety matters, as required by the Management of Health and Safety at Work Regulations (as amended).

Management of Health and Safety at Work Regulations; Approved Code of Practice and Guidance

The Management of Health and Safety at Work Regulations requires all employers and self-employed to assess the risk to the Health and Safety of workers and any others who may be affected by the work carried out.

Risk Assessments will help to identify all the protective and preventative measures that need to be taken to comply with legislation to ensure that Health and Safety standards are maintained. Guidance on the procedures for risk assessments can be found in the Approved Code of Practice under the Management of Health and Safety at Work Regulations which includes definitions of hazard, risk and the hierarchy of risk control measures to be applied, and information of preventive and protective measures. Every employer shall appoint one or more competent persons to assist them in undertaking the measures they need to take to comply with Health and Safety Law. The competent person, as defined by the Management of Health and Safety at Work Regulations can be either an employee or a consultant. As a guide, the competent Health and Safety Adviser should be appropriately qualified through a body recognised by the industry.

Where applicable, emergency procedures must be established, and competent people nominated to adequately implement them.

Information and guidance will be provided to ensure correct levels of competency for all work activities and duties. For those directly involved with timber frame erection this will be based on the erector Training Matrix Level 1 and 2 (see attached appendix 2). These training levels are based on employer’s legal responsibilities and the requirements set out by the UK contractor group. On many sites operatives are unable to work without the correct training; therefore training is essential for business now and in the future.

In particular, comprehensive induction training will be provided on-site, prior to the individual commencing work and in accordance with client/Principle Contractor requirements.

General Approach to be taken to ensure adequate arrangements for Health and Safety Management

Planning

UKTFA members will ensure effective control of risk by adopting a systematic approach to the identification of hazards and the assessment of risk. Each member company should consider developing and maintaining an OH&S Action Plan that shows deadlines for the completion of risk assessments, together with dates for the implementation of appropriate risk control measures, which could then be prioritised and implemented in relation to potential risk of injury.

Wherever possible, members will ensure that risks are eliminated through the selection and design of facilities, equipment and processes.
Organisation

Employees and ‘safety reps’ of UKTFA members should be involved in the risk assessment process and in the implementation of workplace risk controls. Where appropriate, a team working approach should be adopted to involve employees in deciding on the Health and Safety measures, including local safety procedures. If member companies have Health and Safety Committees these could be used to coordinate and monitor this effort.

Members should ensure that effective channels of communication exist in line with their general management system requirements, and consultation should be undertaken in accordance with company and client requirements.

Members should ensure that all those involved in the risk assessment process are given adequate information, instruction and training so that they remain competent to comment on preventive and protective risk control measures.

Control

Each member company will be responsible for ensuring that its employees are given clear instruction and information on what they are expected to do, and that they have sufficient time and other resources to enable them to do it safely. This information should be clearly spelled out in the site specific ‘Safety Method Statement’.

Safety performance standards should be set e.g. Safe Systems of Work and risk assessment documentation, and site specific Safety Method Statement and other safety procedures. Members might wish to consider rewarding good safety performance through ‘safety award schemes’ and sub-standard safety performance should be challenged by Management, who will be responsible for putting in place appropriate corrective measures.

Each Member company will be responsible for providing adequate control for all work activities and processes, with particular emphasis on young and new employees, and those still developing safety skills/behaviours.

Monitoring

An effective Health and Safety culture will be developed through close monitoring of performance. Workplace inspections should be carried out by Managers in accordance with their company procedures, and/or in line with the client requirements.

Formal safety monitoring should also be conducted as described in the definitions supplied with this CoP (possibly by external Health and Safety professionals) to check the effectiveness of the Health and Safety management system and its application.

Member companies should have arrangements in place to investigate the immediate and underlying causes of accidents and incidents.

Trend analysis of accidents, incidents and ill health should also be undertaken by the Managers to ensure that risk control resources are directed appropriately.
Review

Priorities should be set for the implementation and improvement of risk control measures. This should be risk based and could be reflected in the companies Health and Safety Action Plans.

A Health and Safety management review procedure should be in place and proportionate to the size of the business. This should identify any changes required that will be acted upon with the overriding aim to achieving continuous improvement.

The following model provides the recommended route to achieving a successful Health and Safety management process which generates a continuous improvement cycle:

ISO 18001: 1999 Model for Managing Health and Safety

In line with quality management systems, and based on the ‘Plan/Do/Check/Act’ principle, ISO 18001: 1999 is one model that can be used to effectively management Health and Safety risks. This system has the added advantage that companies can seek registration to this management system specification through a 3rd Party awarding body. Such ‘accreditation’ is becoming more and more important as clients require subcontractors to be able to demonstrate high standards of safety management; gaining registration to ISO 18001 is a good way of being able to demonstrate this.
Key Issues

Always assess the risks of your work activities.
Good safety management will address:

- Leadership
- Policy
- Organisation
- Planning
- Control
- Monitoring
- Review

For reference, further information about Health and Safety management systems includes:

HSG65 – Successful Health and Safety Management
BS8800 – Occupational Health and Safety Management Systems
PART 2: Risk Assessment

This Code of Practice gives guidance to evaluate risk but is not definitive. Site specific risk assessments conducted by a competent person will remain an imperative part of your safety management processes.

‘Suitable and Sufficient’ risk assessment is a legal duty and will be carried out in accordance with the UKTFA “5 Steps” procedure (see Appendix 3):

1. Identify the hazards
2. Consider the people at risk
3. Analyze the level of risk and implement appropriate controls
4. Record significant findings
5. Review as appropriate

Each member company will be required to have a system in place for the completion of risk assessments and will ensure that no work activity is undertaken until the significant risks have been evaluated and assessed.

The assessment of risk will allow the proper development of ‘safe systems of work’ e.g. Safety Method Statements etc.

Appropriate instruction, training and levels of supervision will be provided and maintained to ensure that the significant findings of risk assessments are implemented at all work sites.

The aim is always to eliminate the risk, or if this can’t be done, to reduce the risk to tolerable levels. Risk assessment is not an ‘exact science and good judgement and common sense must be applied.

Key Issues

- Risk assessments must be carried out.
- Risk assessments are a means of facilitating a safe system of work.
- Everyone involved must know what the ‘safe system of work’ is and must comply with it.
PART 3: Accident recording and review

Introduction

The UKTFA is committed to the reduction of accidents in the workplace. To achieve this there is a requirement for member companies to maintain accident records for collation and analysis by the UKTFA. The information derived from these records will enable education and training to be delivered to eliminate or reduce more frequent accidents and incidents or those which suggest trends root causes.

Responsibility

Accident

Employers have a responsibility to record and report accidents under the Health and Safety at Work act 1974. A B1510 accident book (HSE publication) should be made available to record accidents — or an internal document which results in provision of the same information as a minimum.

Reportable accidents

RIDDOR (Reporting of Injuries Diseases and Dangerous Occurrences Regulations) requires employers to report specific categories of accident/incident to the HSE. This can be done on line or by filling in the F2508 document provided by the HSE for that purpose. This document is also to be used to report injuries received at work that have resulted in the injured person being off work or unable to do the full range of their normal work for longer than 3 consecutive days — excluding the day of the accident but including weekends and public holidays. Notification to the HSE must be within 10 days of the accident unless otherwise specified in the regulations/ HSE ACOP.

Death or Major Injury

The HSE or Local Authority must be notified as quickly as possible in the event of a death or major injury occurring at work as a result of an accident at work.

This can be your employee, a self employed person working on your site, visitors (invited or uninvited), members of the public etc. Calls should be made to your local HSE office or Local authority. Alternatively, The National Contact Centre can deal with your call between 08.30 and 17.00 on 0845 300 9923.

Telephone numbers for the HSE or your local authority should also be displayed on The Health and Safety Law poster in the site office — or in the factory/ premises you occupy.

The location of the poster should be pointed out to new arrivals at their induction.

Dangerous Occurrences

Incidents which could have resulted in injury may be identified as dangerous occurrences and therefore must be recorded even if there is not an injured party. Dangerous occurrences are described in the RIDDOR ACOP and are reportable to the HSE or local authority within 10 days and care needs to be taken to ensure compliance.

Accident Statistics

To enable the UKTFA to consider training solutions with regard to statistics supplied by members, there will be a need for members to provide data which is specific and relevant. This ensures that members’ time in preparing information is effectively utilised, meaningful and can translate into appropriate action.

Appendix 1 illustrates a typical way of recording accidents by type, reportable and nonreportable, throughout the year. This also enables comparisons to be made with regard UKTFA Code of Practice v2 Part 3; Page 2 of 2 © 2010 to issues such as workload, weather, daylight hours etc. Further breakdowns/splits can be made to isolate departments, sites, or processes etc. as required. Continuous improvement anticipated from remedial action can also be plotted and/or demonstrated.
PART 4: Safe work at height

General

The Work at Height Regulations defines work at height as: ‘A place is ‘at height’ if a person could be injured falling from it, even if it is at or below ground level’. Work at height therefore has direct bearing on members’ activities.

There are Schedules to the Regulation which need to be understood and complied with by members; these cover requirements for ladders, working platforms, collective fall prevention, collective fall arrest, personal fall protection and inspection reports.

The overriding principle is to do all that is reasonably practicable to prevent anyone falling.

Figure 2 below shows the hierarchy for managing and selecting equipment for work at height.

The Regulations require duty holders to ensure:

- All work at height is properly planned and organised
- All work at height takes account of weather conditions that could endanger Health and Safety
- Those involved in work at height are trained and competent
- The place where work at height is done is safe
- Equipment for work at height is appropriately inspected
- The risks from fragile surfaces are properly controlled
- The risks from falling objects are properly controlled
Ladders & Stepladders

The Work at Height Regulations does not ban ladders or stepladders. They require that ladders should only be considered where a risk assessment has shown that the use of other more suitable work equipment is not appropriate because of the low risk, and short duration of the task or considerations of where the work is located. Short duration is accepted to mean no more than 30 minutes in one position. Common practice within the industry is to use step ladders for multi-position fixing of timbers and associated components.

Schedule 6 of the Work at Height Regulations deals with the requirements for ladders and includes the following requirements:

- Every employer shall ensure that a ladder is used for work at height only if a risk assessment under the Management Regulations has demonstrated that the use of more suitable work equipment is not justified because of the low risk and:
  - the short duration of use; or
  - existing features on site which he cannot alter.

- Any surface upon which a ladder rests shall be stable, firm, of sufficient strength.

- A ladder shall be positioned to ensure its stability during use.

- A portable ladder shall be prevented from slipping during use by:
  - securing the stiles at or near their upper or lower ends or part way down;
  - an effective anti-slip or other effective stability device; or
  - any other arrangement of equivalent effectiveness;
  - ‘footing’ is the last resort and should be avoided.

- A ladder used for access shall be long enough to protrude sufficiently above the place of landing to which it provides access, unless other measures have been taken to ensure a firm handhold.

- No interlocking or extension ladder shall be used unless its sections are prevented from moving relative to each other while in use.

- A mobile ladder shall be prevented from moving before it is stepped on.

- Every ladder shall be used in such a way that:
  - a secure handhold and secure support are always available to the user; and
  - the user can maintain a safe handhold when carrying a load (not to exceed 10kg) unless, in the case of a step ladder, the maintenance of a handhold is not practicable when a load is carried, and a risk assessment has demonstrated that the use of a stepladder is justified because of:
    - the low risk; and
    - the short duration of use;
    - positioned where they will not be struck by vehicles; and
    - where they will not be hit by an opening window or door;
    - operator to wear clean robust footwear.
Key Issues

- Carry out a risk assessment for all significant work at height
- Always avoid work at height where you can
- Put measures in place to prevent falls
- If you can’t prevent falls, minimise the distance and consequences of a fall
- Always give collective protective measures (e.g. guard rails) priority over personal protection measures (e.g. safety harness)
- Ladders (except fixed scaffold access ladders) will only be used for short duration, lightwork
- Have no visible defects
- Do not use top three rungs
- Use a Class 1 or EN131 ladders or stepladders.
PART 5: Roof work

Introduction

There are currently 2 methods of assembling roofs, construct in sections at a designated area on site and lift into position on the building (Site Constructed) or assemble individual trusses in situ (Truss Form). These processes are addressed as follows:

Site Constructed

The company's individual method statement should detail the precise process of constructing and installing the required section of roof on the jig which is positioned in a designated area in reasonable proximity of the main building. More detailed information of the building sequence can be obtained from the UKTFA Open Learning Workbook Health and Safety and Site Erector Practical Skills. Health and Safety issues to be considered in this process include:

Assembly

Off-loading of trusses from the delivery vehicle. It is up to the supplier to ensure that vehicles arriving on site can be safely off loaded using the facilities available to that specific site. Such deliveries should be arranged and co-ordinated between the purchaser and supplier with an understanding of the erector's method statement. The supplier should also provide a method statement or a safe system of work detailing the off loading sequence – particularly if multiple deliveries are included on the same load.

NB At no time should operatives access the trailer/flatbed to achieve this

Manual handling of trusses into position – the truss should be marked with weight details by the manufacturer. Operatives must have received appropriate Manual Handling Training and be familiar with the site specific method statement and risk assessments relevant to this task. Truss weights in excess of safe manual handling recommendations as identified by the risk assessment, should be manoeuvred by mechanical means.

Access to height during the assembly stage should comply with the relevant risk assessment. Where required, access equipment with handrails fitted should take preference over stepladders whenever practical.

Nail gun use will require operatives to be competent and evidence of training should be accessible on site if required.

Installation:

Controlling the load is subject to the correct load points being identified in the design process and annotated on the drawing for site information. Further control measures need to be considered with regard to structural integrity of the design for the lift and weather conditions particularly wind speed. If windy conditions prevail prior to the lifting operation the competent person and crane driver will assess the conditions to determine if the lift is safe to proceed and on the practical use of taglines. If the conditions are unacceptable then the lift is to be aborted. All lifts must be conducted by competent staff and in accordance with the lift plan.

Truss Form

This form of construction requires all previous elements of the Site Constructed section to be considered with addition of:

Installation of trusses will commence by craning in a set of trusses – the supplier therefore must ensure that sufficient information is available to enable the crane driver to determine the total weight being lifted.

Manual handling risks remain the same as previously stated for Site Constructed

Work at Height – when fixing high level bracing i.e. ridge bracing a temporary working platform must be considered with the fixing of handrails where appropriate. Fall arrest equipment may also be required in or around the temporary platform as an additional safety measure.
PART 6: Scaffold work

The NASC have issued guidance in their document SG28:09 for scaffolding of Timber Frame structures. This guidance document is available by contacting the NASC: Telephone 020 7822 7400; e-mail: enquiries@nasc.org.uk or visit their web site: www.nasc.org.uk

The following are the key areas of guidance contained within SG28:09

When constructing timber framed buildings, initially there is no building or structure in place against which the scaffold structure can be tied. The scaffold may be rectangular in shape, and surrounding a structure, but it is still vital that measures to ensure stability are incorporated. Accordingly the initial stability of the scaffold structure must be achieved by means other than ties to the Timber Frame building or structure.

The principal contractor/user and timber frame (TF) engineer must supply any relevant architectural drawings to the scaffold contractor and the scaffold/temporary works designer at the tender/planning stage to enable tie locations, buttresses, loading bays and access and egress points to be established.

The Scaffolding Contractor must:

- Ensure that the design complies with the specification provided by the client, covers all statutory requirements, is safe and fit for purpose has strength and stability.

- Agree the tie type, size and location agree access and egress points based on frequency and duration of its intended use, including any emergency arrangements.

- Provide a detailed design, including a plan and elevations. Detailed sections should be provided at various intervals where there is a change in the type of construction. The design should be fully annotated giving as much detail as possible.

- Consider the requirement and suitability of ground conditions.

- Clients and Scaffold Contractors must take into consideration how the access scaffold will be provided and sufficient space must be made available for buttressing or any other means of achieving stability.

- The lift height requirements must be confirmed.

- If during the construction phase the structure needs to be altered and the structural stability of the scaffold is likely to be affected, the design must be checked by the scaffold designer in consultation with the TF Engineer and if necessary may need to be re-drawn.

Anchor Ties

- Many free standing temporary scaffold structures need to be anchored to the ground to resist wind forces. Individual anchor capabilities are dependent on local ground conditions and must be properly assessed in every case (Ref: NASC Guidance TG16).

- It is the responsibility of the scaffold/temporary works designer to liaise with the Principal contractor or permanent works designer, to specify the tie loadings required to ensure the stability of the scaffold structure and to agree that the type of tie selected is suitable for use with the Timber Frame Building construction.
Guys

- After severe weather conditions it is extremely important that any guy anchorages are inspected. It is recommended that the anchor stakes have some visual indicator attached to them, so that any pull out is immediately visible. For further details of tube anchors, refer to NASC guidance note TG16

Note:

The NASC recommends that any external ladder access is restricted to the first and second lift only. For further details refer to NASC guidance note SG25 – Ladder access points on scaffolds

Dismantling procedure

- The user must give the scaffolding contractor permission in writing before the Scaffolding can be dismantled.

- The scaffold contractor must inspect the scaffold before partial or complete dismantling of the structure commences.

- An updated Risk Assessment/Method Statement must be made available to all operatives prior to dismantling.

- All stability measures such as buttresses, ground rakers, ground anchors; ties and loading towers (also used as buttressing) must be removed progressively as the scaffold is dismantled.

Internal service gap

The question of what is an acceptable internal gap, which will determine the need for guardrails or alternative safe systems of work, is the real undefined area.

- At the tender/planning stage of the contract the internal service gap between the timber frame building and the scaffold structure, generally between 50-100mm, needs to be discussed and approved by the principal contractor and TF Engineer.

- For gaps in excess of 225mm, where there is no doubt that someone could fall or suffer injury because of the size of the gap, then double guardrails and toeboards must be installed.

- Generally, where the internal service gap is less than the width of a scaffold board after the timber frame building has been erected and where there are no door or window openings, guardrails would not normally be required.
• When the user wishes to work off inside boards beyond which there are gaps as described in 1 above, then a safe system of work including a full body harness with a work restraint lanyard attached to a suitable anchor point must be employed by the scaffold user.

Note:

In compliance with SG4, when a scaffold is being erected and there is an inside gap in excess of 225mm on a non-working lift, then a single scaffolders guardrail is recommended.

Internal Toe boards to protect against falling objects

Generally in situations where double guardrails are required internally, toe boards should also be fitted.

• The key is proper risk assessment with appropriate control measures to ensure a safe system of work is in place. As work progresses, the scaffold user will be required to reassess the effectiveness of the safe system of work/control measures and amend as necessary.

Documentation

The Scaffolding Contractor must:

• Produce a Scaffolding Plan for each Project, which will include, as a minimum, the documents listed below and communicate this plan to all operatives during the erection, alteration and dismantling phases.

• Drawing of the Scaffold

• Scaffold plan/method statement inclusive of erection and dismantle procedure. (ref: SG24)

• Risk Assessment. (ref: SG7)

• Emergency & Rescue Plan (ref: SG19)

• Handover Certificates

• Tie Tester Calibration Certificate

• Tie Tests forms (This may be encompassed within the Handover note.)

• Copies of operatives CISRS cards

• Harness & Lanyards Report (ref: SG16)

Reference Documents

• NASC Guidance SG29 – Internal edge protection on scaffold platforms

• UK Timber Frame Association (UKTFA) Code of Practice
Figure 3 shows a typical side elevation using 3 board reducing to 2 board 'hop-ups' to maintain an acceptable close fit to the structure, while enabling follow-on trades to operate.
Scaffold to be erected & tied in accordance with manufacturers guidelines.

Where standard tie pattern cannot be achieved, design advice must be taken for suitable buttress arrangement including butting face of building, splicing of joints in standards and kentledge etc.

**TYPICAL SECTION**
(For Erection of Kit Panels 3
Board Hop-Up 100mm Clearance)

**TYPICAL SECTION**
(For Erection of Brick work 2
Board Hop-Up 100mm Clearance)

FIGURE 4
Key Issues

- There is a fundamental requirement for co-operation between the Client and their representatives and the timber frame supplier prior to commencement of works to establish a safe design and safe sequence of work.

- The relevant scaffold design drawings must be available on each site, with the PC or their representative.

- Scaffolds must be properly supported and tied as required by the scaffold design specification.

- There should be no gap greater than 100mm between hop-up and structure.

- Where suitable edge protection cannot be afforded by the scaffold, the Work at Height Regulations hierarchy must be applied to reduce the risk of falls.

- Sawn off standards must be suitably protected to prevent injury in the event of a fall.

- Inside boards to be clipped.

- Where harness points are required, they must be clearly identified and only these must be used.

- Panels and trusses must not be leant against scaffolding for build or storage purposes, as this can compromise its structural integrity or create accidents through product instability.
PART 7: Manual handling operations regulations

The Timber Frame industry recognises the risk from manual handling. The regulations apply to a wide range of manual handling activities involving the transporting or supporting of a load, this includes lifting, lowering, pushing, pulling, carrying and moving. The first requirement of the Regulation is to avoid manual handling where it is reasonably practicable to do so. ‘Reasonably practicable’ means reducing the risk until the cost of any further precautions – in time, trouble or money – would be far too great in proportions to the risk reduction benefits.

Manual Handling Assessment

To reduce the risk of an injury, Timber Frame design, site conditions and the way the work is organised must be properly planned. This document contains practical advice on these matters and will help designers and specifiers, those managing work on site and those who erect Timber Frame structures.

Individual companies must carry out their own manual handling risk assessment in respect of the requirements for their own products and employees, in compliance with these Regulations. Where assessments indicate a possibility of risks to employees from the manual handling of loads, the following requirements of the Regulations must be followed:

1. Avoid hazardous manual handling operations so far as is reasonably practicable. This may be done by redesigning the task to avoid moving the load or by mechanising the process.

2. Make a suitable and sufficient assessment of any hazardous manual handling operations that cannot be avoided.

3. Reduce the risk of injury from those operations so far as is reasonably practicable. Particular considerations should be given to the provision of mechanical assistance but, where this is not reasonably practical, then other improvements to the task, the load and the working environment should be explored.

Typical manual handling risks within the Timber Frame industry include:-

1. Heavy loads and poor posture leading to excessive stress and strain causing injury to muscles and tendons, particularly if the handling involves bending, twisting, stooping or other difficult postures.

2. Slips, trips and falls, particularly when manually handling Timber Frame components.

3. When handling floor joists the risk of injury is largely determined by the weight of individual items. The longer the floor joists, the heavier the weight, the heavier the joist the higher the risk of injury.

4. Where because of site conditions, beams and purlings cannot be positioned by crane or other mechanical handling equipment, manual handling risks are greatly increased. In such cases the route between the delivery position of the beams and the erection location must be carefully planned and prepared to minimize the risks created by obstacles or tripping hazards.
Precautions

Designers and Specifiers should, where reasonably practicable, minimize the size and weight of the components in accordance with HSE Guidelines and CDM Regulations.

Project Planners, Designers and Contractors should ensure that the items listed below are taken into account when planning the work and when devising safe systems of work. Sub-Contractors should also give instruction and exercise supervision to ensure that these workers follow these plans and systems of work. Manual Handling Risk Assessment must take into account the task, the load, the working environment and the individual capability. An ergonomic approach should be taken to optimize productivity and Health and Safety. Additionally, other factors, such as the use of handling aids and PPE should also be considered. Risk assessments should be carried out by competent assessors in accordance with HSE Guidance.

Key Issues

- Designers must eliminate or reduce the weights of components in their designs, as far as is reasonably practicable.

- A manual handling risk assessment must be carried out for all significant manual handling tasks *(use manual handling assessment charts (MAC). LINK TO HSE WEBSITE)*

- Where feasible, a crane erect method should be used.

- The weights of timber frame components must be available on site.

- All those engaged in manual handling must have received appropriate training and instruction.
PART 8: Provision and use of work equipment regulations

Work equipment can be anything from a hammer to a large crane, and includes ladders.

The Provision and Use of Work Equipment Regulations (PUWER) lay down important Health and Safety requirements for the use of work equipment. The primary objective of PUWER is to ensure the provision of safe work equipment, and its safe use. The Regulations impose explicit general duties on employers and the self-employed to provide safe plant and equipment. The regulations must not be considered in isolation. In particular, they need to be read in conjunction with the Management of Health and Safety at Work Regulations and the Lifting Operation and Lifting Equipment Regulation (LOLER).

Although the prime duty for ensuring Health and Safety rests with employers, employees also have legal duties. These duties have been supplemented by the Management of Health and Safety at Work Regulations which require that employees must use all work items provided by their employer correctly and in accordance with the training and instructions they receive to enable them to use the items safely. This is particularly relevant to employees using work equipment.

Members must ensure that all their work equipment is in good order, appropriately maintained and serviced to ensure it remains safe. This will include electrical and mechanical testing and or inspection.

Key Issues

- All work equipment must be properly selected and maintained.
- It must meet any statutory inspection requirements e.g. for electrical and lifting equipment etc.
- Only competent employees can use work equipment.
- All work equipment must be ‘fit for purpose’.
- Where appropriate maintenance and inspection records must be kept.
PART 9: Vibration and vibrating tools

Hand Arm Vibration Syndrome (HAVS) is caused by vibration transmitted from work equipment into workers’ hands and arms. It might typically be caused by operating handheld power tools such as portable disc cutters and nail guns.

Regular and frequent exposure to high levels of vibration can lead to permanent injury. This is most likely when contact with a vibrating tool or process is a regular part of a person’s job. Occasional exposure is unlikely to cause immediate ill health, although any exposure should be avoided by people with medical conditions such as Raynaud’s Disease.

Exposure to long term vibration can lead to chronic ill health effects, including HAVS and other vibration induced ailments.

All members should have a vibration management system in place, that will identify potential vibration from their tool and equipment, and that will allow individuals to have their daily dose of vibration monitored, to ensure that over-exposure does not occur. Those employees who are subjected to significant levels of vibration will need to be subject to ‘health surveillance’.

Key Issues
- Know what vibration levels are emitted from your tools and equipment.
- Know what level of exposure your employees are at risk from.
- Reduce exposure to tolerable levels i.e. maximum daily exposure for an 8 hour day should not normally exceed 2.5m/s²
- Consider reducing exposure by selection of better equipment and job rotation.
- Users of vibrating tools should keep hand warm.
- Don’t waste your money on ‘anti-vibration’ gloves.
- Give employees information on vibration
- Provide health surveillance if significant vibration levels are present.
PART 10: The noise at work regulations

Noise at work can damage your hearing, leading to short or even long term hearing loss. The Noise at Work Regulations impose duties on employers, employees and manufacturers. The noise created by drilling, cutting, pneumatic and percussion tools etc. may be excessive and an cause a health hazard, which will require assessment and control.

The Noise at Work Regulations effective from April 2006 define the following action levels to enable effective control.

The new Action levels are:

**Lower Exposure Action Values:**
- Daily or weekly exposure of 80 dB
- Peak sound pressure of 135 dB

**Upper Exposure Action Values:**
- Daily or weekly exposure of 85 dB
- Peak sound pressure of 137 dB

**Exposure Limit Values:**
- Daily or weekly exposure of 87 dB
- Peak sound pressure of 140 dB

These exposure values take account of any reduction in exposure provided by hearing protection.

The new Regulations require an employer to:
- Carry out a noise risk assessment (must be a competent assessor).
- Take action to reduce noise exposure.
- Provide appropriate hearing protection if unable to reduce noise exposure by other methods.
- Make sure legal noise exposure limits are not exceeded.
- Provide employees with information, instruction and training.
- Provide health surveillance where employees are at risk.
Key Issues

- Your existing noise risk assessments may be obsolete after April 2006; new assessments required?

- Try to reduce noise at source by using quieter equipment.

- Provide hearing protection and enforce its use.

- Provide information, instruction and training.

- Provide health surveillance.

- Employees are required by law to follow the employers Health and Safety arrangements.
PART 11: Control of substances hazardous to health regulations (COSHH)

Introduction
The COSHH regulations require that all potentially hazardous substances must be assessed and suitable control measures be put in place. Typically hazardous substances include chemicals, dust and biological agents. Wood dust and construction site dusts also need to be considered.

General Procedure
COSHH Assessments for hazardous products/substances used on site are to be issued to those affected. The assessment will inform operatives involved in the use of these materials e.g. adhesives and end treatments, of the hazards of the particular substance to be used and all necessary precautions to be taken. Appropriate equipment must also be provided as required.

All substances received on site will be stored and used in accordance with the instructions contained in the COSHH Assessment, and in the event of any spillage, appropriate action must be taken in accordance with instructions detailed in the COSHH Assessment.

Empty containers and waste material must be disposed of in accordance with the approved procedures, as noted on the COSHH Assessment for the product concerned. Copies of COSHH Assessment may form part of the Company's Work Method Statement. The Company Representative should request the Main Contractor to supply details of any other substances on site that could affect the Company's employees or their sub-contractors.

Key Issues
- Members must be aware of the risks associated with the substances and products they use.
- Employees must be given information, instruction and training on the use of any hazardous substances.
- Instructions on labels and packages of products should be complied with.
- Where appropriate, dust masks should be provided and used if cutting timber on site.
- PC to provide relevant COSHH data for on-site hazards
PART 12: The construction (health safety and welfare) regulations

The provision of Welfare Facilities on the majority of sites will be on a shared welfare basis, where the Principle contractor provides the necessary facilities which can be used by operatives engaged in the Timber Frame erection.

The responsibility for providing facilities that are compliant with the Construction (Health Safety & Welfare) Regulations therefore resides with the Principle Contractor. The Company Representative must be satisfied that those facilities provided, from whatever source, comply with the regulations.

**Key Issues**

- Timber frame erectors should know what the fire, first aid, traffic management and other welfare arrangements are on the site. These should be covered by the Principal Contractor at Induction.

- Timber frame erectors will keep all welfare facilities in good order and report any defects or lack of facilities to the Principal Contractor.
PART 13: Personal protective equipment at work regulations

The provision of PPE will be assessed, provided and used in accordance with the Regulations. PPE is a secondary form of protection and preference should always be given to primary protection measures.

All operatives, irrespective of the nature of particular site conditions, must be provided with personal protective equipment to meet general needs, e.g., protective footwear, gloves, weatherproof clothing and suitable head protection and Hi-Viz Clothing. All PPE must be properly stored and maintained in accordance with manufacturers’ recommendations.

The distribution and type of PPE are matters of individual company policy. However, all protective equipment or clothing must carry the appropriate CE Mark. Records should be maintained with regard to PPE type and to whom it has been issued.

Wherever possible, the Company should consider the views and comments received from their operatives when deciding upon particular types of PPE. The physical attributes of operatives should be matched as closely as is practicable by any PPE. Personal protective equipment must also be compatible if worn with other PPE, e.g. hearing protection worn with head protection.

The Company must ensure that all protective clothing and equipment is fit for use and should ensure that their employees are using such items in a proper manner. Operatives, issued with such equipment, have a duty under the Health and Safety Act to use and look after it. The company must ensure that operatives receive adequate instruction regarding the proper use and storage of protective equipment and clothing.

On certain sites the conditions or method of working will necessitate the use of special protective clothing and equipment. Certain items such as eye protection, respiratory protection and ear protection should be used as the need arises or made available to the erection team, prior to the commencement of work. The use of specific protective equipment, must be identified by the risk assessment, contained in the method statement and the PPE be available prior to commencement of the operation.

Erectors should conduct regular inspections of all their equipment and clothing and any items found to be missing or defective should be notified to the management for immediate replacement or repair.

Key Issues

- Employers should provide the correct PPE and give training and instruction for its safe use.
- Employees should use PPE as instructed.
- As a minimum, all kit erectors must wear Hi-Viz tops, hard hats and safety footwear while on site.
- Principle Contractor PPE requirements must be complied with.
PART 14: Method statements

Introduction

Following the Risk Assessment, a Method Statement will be produced and form an integral part of the overall Safety Management System covering hazardous activities, such as the erection of Timber Frame and associated components. They provide the information on the arrangements and where required, the actual sequence of work necessary to manage Health and Safety. Basic information must be provided and communicated to all concerned parties at the planning stage, thus allowing time for approval or modification of the Method Statement prior to site erection.

Timber Frame erection is similar in nature on many sites and therefore a Method Statement can be written with generic elements and activities. However the Method Statements must take account of specific site conditions/requirements, Health and Safety information from the Health and Safety Plan/Design Risk Assessment and/or Contractor’s requirements.

Content of Method Statement

Method Statements must be concise but informative and should contain the following information as a minimum:-

Section 1 - Management and Control

<table>
<thead>
<tr>
<th>Contractor</th>
<th>The name of the Principal Contractor or Contractor in charge of the site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Address</td>
<td>The address at which the proposed work is to be carried out</td>
</tr>
<tr>
<td>Site Manager/Agent/ Contact</td>
<td>The point of contact at the site</td>
</tr>
<tr>
<td>Complied by</td>
<td>Name of Compiler, date compiled, position held (competent employee or consultant)</td>
</tr>
</tbody>
</table>

Section 2 - Description and Information (Contract, Site and Plant)

<table>
<thead>
<tr>
<th>Description of Contract</th>
<th>Description of the work to be carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method of Erection and Sequence of Work</td>
<td>How the units will be lifted and positioned and other relevant requirements e.g. will bracing etc be required and where will work commence? Description of scaffold requirements and sequence.</td>
</tr>
<tr>
<td>Lifting Plan/Survey</td>
<td>Weight and Nature of the Load Method of Lifting and Slinging Position of the Load before and after the operation Position of the Crane Selection of the Crane and other Lifting Equipment Proximity Hazards – in particular Overhead Electric Cables Ground conditions including any underground services</td>
</tr>
<tr>
<td>Deliveries and Site Access</td>
<td>On what form of transport the components are to be delivered and the access requirements (e.g. hardstanding, and local hazards, delivery times and site opening hours)</td>
</tr>
</tbody>
</table>
### Section 3 - Personnel

<table>
<thead>
<tr>
<th><strong>Manager/Supervisor</strong></th>
<th>The name if known or a statement allowing the Supervisor to make himself known on arrival at site.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other Site Operations/ Third Parties</strong></td>
<td>Where co-operation and co-ordination with other Site operations/third parties is required this must be stated</td>
</tr>
</tbody>
</table>

### Section 4 - Health and Safety Management and Control Measures

<table>
<thead>
<tr>
<th><strong>Personal Protective Equipment</strong></th>
<th>General statements showing that all operatives will comply with current/site requirements.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to Work Area</strong></td>
<td>Method of access is the main contractor's responsibility to supply. The use of scaffolding and temporary access.</td>
</tr>
<tr>
<td><strong>Positioning of Components</strong></td>
<td>Standard and extraordinary methods of positioning for erection and storage</td>
</tr>
<tr>
<td><strong>Working at Heights</strong></td>
<td>Detailed information specifying fall prevention and fall mitigation procedures and equipment to be used</td>
</tr>
<tr>
<td><strong>Leading Edge Protection</strong></td>
<td>The use of fall prevention/mitigation equipment e.g. airbags, beanbags, safety decking, nets etc. means of rescue from faller position</td>
</tr>
<tr>
<td><strong>Welfare Facilities</strong></td>
<td>Provision of facilities e.g. First Aid and Toilets, are joint facilities.</td>
</tr>
</tbody>
</table>

### Section 5 - Amendments and additional information

| **Amendments to the Method Statement** | Should any part of this method statement require amendment or alteration, this must be notified for agreement by all relevant parties prior to being enforced. |
Communication of the Safe Working Method Statement

The Method Statement must be sent to the Principal Contractor for inclusion in the Health and Safety Plan. Where the Client is not the Principal Contractor, the Method Statement must be sent to the Client who then has the responsibility to provide a copy for the Principal Contractor. Where changes are made, these must be recorded and the appropriate amended copy sent to the Principal Contractor or Client. The erection team must be in possession of the current Method Statement and Working Drawings. These will be kept on site at all times when the Timber Frame Erection is being undertaken and will be complied with. The supervisor must monitor the adequacy of the Method Statement and any variations recorded and reported back to the Company.

Additions to the Safe Working Method Statement

The Method Statement may be added to by attaching and/or referring to other documents, for example:-

- Company Site Safety Booklets
- Company procedures (e.g. Handling and Storage)
- Craneage Supplier site visit/Craneage Reports
- Company Representative Reports
- Risk Assessments and COSHH Assessments
- Addendums to the Safe Working Method Statement
- Specifications and Certification of plant and equipment etc.
- UKTFA Code of Practice
- The Health and Safety Plan

The list is not exhaustive and the level of information/inclusion will vary and depends on the nature of the contract.

Special Considerations

Information must be supplied following consideration of special hazards.

Key Issues

- No work should be undertaken unless a completed Method Statement is available on site.
- All employees must comply with the requirements of the method statement.
- Weaknesses in the Method Statement should be brought to the attention of management.
PART 15: Training and certification

Introduction
The UKTFA is committed to ensuring suitable training for all involved in timber frame operations carried out by its Member companies. This is to ensure a good understanding of hazards, risks, legislation and rules applicable to Health and Safety as outlined in the UKTFA Health and Safety Code of Practice.

Member companies should determine the level of training required in their businesses to ensure that all operatives are competent to undertake the given task/role.

Following this assessment the company should determine the level of training individuals have achieved in associated areas and where necessary agree additional training.

The company should ensure that proof of training is in a convenient format and readily available for approval by others as appropriate.

The member company should record all training received and ensure they have a procedure for reviewing and renewing qualifications in an appropriate time frame.

Scope
This procedure defines the requirements for the training that applies to all personnel involved in the timber frame process.

Responsibility
Employers have a responsibility under the Health and Safety at Work etc. Act Management of Health and Safety at Work Regulations, Provision and Use of Work Equipment Regulations and the Construction (Design and Management) Regulations to provide appropriate training for their employees and ensure that their sub contractors have received the appropriate training.

Section 2 of the Health and Safety at Work Act etc. imposes a general duty on every employer to provide as much information, instruction, training and supervision as is necessary to ensure, so far as is reasonable practicable, the Health and Safety at work of the employees. If employees are injured at work or are engaged in a potentially dangerous activity for which they have been ill prepared or advised by their employer, criminal prosecution may ensue.

It is the responsibility of the Company sponsoring the individual(s) to ensure that they have appropriate experience or training for them to carry out the tasks allocated to them and for ensuring that full records of any training are provided and maintained.

General Requirements
All personnel are to be trained in the objectives of the UKTFA Code of Practice for the Safe Erection of Timber Frame and associated areas. The extent of the employee’s training will depend upon the position held within the Member Company however the following guide levels of understanding are expected to be followed with regard to this Code of Practice.

Managers will require a full working knowledge, Supervisors a working knowledge and operators must possess awareness. Consistency will then be demonstrated with the ethos applied to Bronze, Silver and Gold levels relating to The Open Learning Workbook for Timber Frame Manufacture & Design Health and Safety.

Please see Appendix 2 for the UKTFA Erector Team Training Requirements.
PART 16: Design stage considerations

Erecting timber frame usually involves operatives working at heights and the use of cranes. To assist Engineers, Designers, Contractors and Planning Supervisors in meeting the requirements of the Construction (Design and Managements) Regulations, the following detailed information is provided to assist in co-ordination of designs to achieve safe erection. In the text that follows, the Timber Frame Designer is not necessarily the Building Designer.

The Existing Environment

1. The sizes and weights of the components will determine the method of off-loading and placing the units.
2. Timber Frame is usually delivered on site on articulated lorries. Narrow roads or restricted access may necessitate the use of rigid lorries.
3. Site Pedestrian and Traffic management measures should be considered in relation to the delivery, off loading and storage of Timber Frame. The contractor will be responsible for providing hard access routes to the Timber Frame operation. Hard standing will also be provided by the principle contractor for unloading and supporting loads imposed by the crane’s outrigger.
4. Excavations, underground services, drains and basements are a hazard and their location should be considered in relation to the Timber Frame operation. Principle Contractor to inform on location.
5. The presence of power lines, railway tracks, trees or overhead structural obstructions may hinder the operation of cranes and other lifting equipment.
6. On restricted sites, it may be necessary for loads to be lifted over adjacent land and buildings. In these circumstances, permission must be obtained to operate within the airspace of third parties and contract lifting may be required.

Design and Planning

1. The CDM Regulations require that a Designer’s competence has to be considered. Members of the UKTFA must be able to demonstrate their experience and competence in the Design and Manufacture of Timber Frame.
2. To assist the Timber Frame Designer, the following information should be provided:
   - Third Party Design risk assessments, typically Architect.
   - Pre tender stage Health and Safety Plan.
   - Design loads including finishes and imposed loads.
   - Drawings showing the supporting type and build up of the supporting base.
   - Phasing or sequencing of the works.
Designers must take into account stability of the structure during the Erection of Timber Frames

When an order is placed for the Timber Frame, the Contractor should provide the Timber Frame Specialist with the following information:

1. Any relevant amendments to the Health and Safety Plan.
2. Fully dimensioned “Construction Issue” drawings.
3. Loadings and types of finish, etc.
4. Provisional route of build and programme dates.

Construction Phase

1. The installation of Timber Frame should only be undertaken by competent persons. Members of the UKTFA only employ Erectors who are trained, competent and experienced in this work.
2. The Principal Contractor must ensure that the Standard Health, Safety and Welfare Attendances have been provided (See Part 17). Link to HSE and relevant document.
3. Installing timber frame should not be undertaken without the provision of a job specific method statement and risk assessments, which may address some or all of the following activities:
   - Manual Handling
   - Working at heights with risk of personnel/objects falling
   - Working with cranes/other lifting equipment
4. The Principal Contractor must ensure that other trades and the public are kept out of the working area covered by cranes used for installing the Timber Frame
5. Consideration should be given to the proposed sequence of construction and the effects of any temporary removal of parts of the structure to facilitate the safe erection of the Timber Frame

The Health and Safety File

1. The Timber Frame Supplier will provide “as installed” Drawings at completion of the installation, showing any changes from the original. Thereafter the Principal Contractor will be responsible for recording departures from the as installed drawings.
2. The Timber Frame drawings and structural calculations detail the loads for which the building was designed
3. Care should be exercised to ensure that during the Construction Phase and during the life of the building, the design loads are not exceeded and any future modifications are not made without reference to the Timber Frame supplier.
Lifting, Placing and Safe Handling of Units

Attention to the on-site practicalities of handling Timber Frame and their erection sequence must be a prime consideration at the design stage.

Working drawings and specifications must convey any special design requirements to the installer, such as special fixing techniques or sequence of work, or temporary measures (e.g., braces, props).

Imposed Loads During Installation

In addition to the self-weight of the floor units, other loads may be imposed during the erection operation. These loads should be included at the design stage and must be considered when selection joist and layouts.

When screeds are required, the imposed loads must be anticipated by the Designer and special provisions clearly noted.

Design loadings for the floor are stated in the calculations and must not be exceeded during the construction works. Advice should be sought prior to the storage of unfixed materials on floors by following trades.

The General Design for Timber Frame does not include for tying back the scaffold, as the Timber Frame is a stand alone structure. When there is a requirement to tie the scaffold or support the scaffolds, a competent scaffold company should be appointed early in the design process allowing the imposed loads to be calculated. This will allow the structure to take the load and to be built in a stable manner. Where a free standing scaffold is to be used this will be erected to suit Timber Frame (refer to Member Companies).

Stability of Supporting Structures During Erection

The designer should refer to the General Risk Assessment and method statement for the project and then ensure the design process does not compromise the erection sequence. Special items should be referred to the project staff and engineers for solutions.

Key Issues

- Getting the design considerations right at the planning stage is vital to the successful and safe build of any project.

- Designers have a key role to play and must ensure that they are complying with the ‘spirit’ and letter of the CDM Regulations.
PART 17: Contractor/principal contractor’s responsibilities

Typical Schedule of Attendances and Facilities

The following attendances and facilities are normally provided and maintained at all times, for the duration of and in relation to the provision of the Services at the Place of Delivery, free of charge and in a manner so as not to disrupt or restrict the regular progress of the Services, and in compliance with all relevant statutory provisions:

- Any hoisting, craneage, forklifts or plant requirements of any kind required for the unloading, distribution or erection of the structure, together with skilled and qualified operatives as appropriate, unless specifically incorporated within the quotation.
- Labour and plant for unloading, checking and distribution of any materials supplied which do not form part of the structural erection.
- Scaffolding and any other item necessary for access or roof edge protection etc. which is required to meet with HSE statutory requirements and which may require to be altered during the progress of the Services. The external scaffolding must be erected prior to the delivery of the Goods.
- Fall/arrest, soft landing systems, nets, harnesses, etc. to be supplied and moved as and when necessary for the execution of the Services.
- Suitable hard standing and clear access to all sides of the structure to permit access and for cranes etc. to operate and free from obstruction such as overhead cables, power lines, trees and other similar obstructions.
- 110-volt power supply adjacent to the works and all temporary lighting.
- Messing, canteen, first-aid and welfare facilities including drying facilities.
- Secure, lock fast container for tools and sundry materials.
- Skips or the like placed immediately adjacent to and at the same level as the working area for the removal of rubbish and debris off site, including tipping charges.
- Protection of the works, where taken over by other trades or contractors or where the Seller has left the site.
- Provision of security (including security personnel) to safeguard the plant, equipment and the Goods.
- Access to telephone/fax facilities.
- Fire prevention

Key Issues

- Early collaboration between the client and timber frame company is essential to ensure that there is a clear understanding of basic infrastructure and site requirements.
- An approach based on trust, respect and co-operation is best.
- Consider requirements of 16 Steps and Site Safe.
- Ensure you agree who is providing which items prior to commencement of site works.
PART 18: Company representative’s role/lifting operations

Agreed sequence of installation

The Company Representative will liaise with the Contractor at the site to agree the actual build sequence in which the units are to be erected, with reference to floor levels, flat or house types, or the like. Should it be necessary for the installation sequence to be varied, for whatever reason, this should only be implemented after reference to the Company and after all safety requirements have been satisfied. If deemed necessary, the Safe Working Method Statement should be amended by an addendum to cover the revision agreed.

Method of Lifting

The Appointed Person (appointed by the crane hirer) used for the lifting operation will be a representative of the sub-contractor Timber Frame company or the sub-contracted Erector company. The person to be appointed (normally by the hirer) will be notified to the relevant contractor prior to the commencement of the works. This work should be carried out to the current version of BS 7121.

In liaison with crane hire representative, the Company Representative shall decide upon the type of lifting plant and equipment to be used plus the location and requirements of the hard standing for each installation/lift. The weight of components to be lifted, the radius of lifting, and any special handling requirements should also be considered.

As a guide to the Contractor, the Company Representative shall discuss and advise upon the type and size of delivery vehicles and craneage, in order that the Contractor may provide adequate access and hard standings or other facilities which may be required to accommodate delivery and lifting equipment.

The Company Representative shall also bring to the attention of the Contractor any obstruction likely to hinder the safe working of hoisting equipment e.g. aerial obstructions, stacked materials, earth-works, in order that these may be removed or made safe prior to the erection of the Timber Frame.

Following a site survey, the Appointed Person shall formulate a lifting plan. Upon its completion, the plan will be circulated to the site and, where applicable, to the sub contract Timber Frame company based on the information provided by the timber frame manufacturer (component/pack weight) and the PC (i.e. ground bearing pressure).

If at any time subsequent to the Company’s initial choice, the design is altered causing component weights to vary from those originally envisaged, the Designer must liaise with the appointed company representative/appointed person to ensure that the crane or lifting equipment is still adequate.

During the routine pre-erection visit, the Company Representative/appointed person must satisfy himself that the site conditions observed or anticipated at the time when the crane or lifting equipment was selected have not changed, or will not change.

If change has occurred, the following actions are to be taken:

1. **Main Contractor Supplies Crane**
   
   Revised lifting plan to be supplied to Principle Contractors site taking into account the latest changes. Main contractor to ensure correct equipment is ordered. Company rep/appointed person must ensure that crane lifting equipment is adequate.

2. **Erection Company Supplies Crane**
   
   Revised lifting plan to be supplied to site and company rep/appointed person to ensure correct crane and lifting equipment is ordered. The company rep/appointed person must ensure that the crane or lifting equipment is adequate.
3. Contract Lift

If circumstances or equipment limitations do not allow the lift to be completed safely with the resources available following the evaluation of the lifting plan, then a specialist contractor should be employed to carry out that lifting operation. The contract lift company will normally provide suitably qualified Appointed Person, Lift Supervisor, Slinger signaller, crane and driver. Caution should be taken to verify competencies before employing their services.

In any instance where the crane or lifting equipment is changed from the original, the Appointed person or Lift Supervisor must advise the Contractor’s Site Representative of such change, in order that access, standing area, or other measures may be amended if deemed necessary by the Company Representative.

Site Access

In addition to the access required for the method of lifting, the Company must agree with the Contractor access from the public highway onto site, the type and location of hard roads and hard standing areas for delivery vehicles and the need for temporary or long term removal of any fences, walls or other obstructions. Consideration must be given to the sizes of vehicles to be used including the possibility of abnormal loads and the effect parked vehicles may have on the site entrance. It may be necessary for the Contractor to involve the police, local authority and others before arriving at a satisfactory solution.

The condition of the agreed access roads must at all times be maintained by the Contractor to an acceptable standard.

Whilst making these arrangements, locations of and access to stacking areas, stores, temporary buildings and lorry/trailer holding areas must be agreed.

On reaching agreement, a marked record of what has been agreed must be left with the Contractor. The agreed access and other arrangements must then be incorporated into the Site Health and Safety Files as an addendum, in order that all parties will have the information readily available and to avoid misunderstanding or confusion when the installation commences.

Access into the building(s) as construction progresses must be agreed, together with protection on and around the flooring, in accordance with the requirements of the PFF Standard Health, Safety and Welfare Attendances issued at tender stage. Particular attention should be paid to barriers, guardrails/handrails, toe-boards, access, lighting and similar. The Company must monitor the provision of these Attendances during the period of the site works.

Attendances Liaison

The Contractor will be aware of the general requirements with regard to Attendances, having received the UKTFA Health, Safety and Welfare Attendances as specified in Section 5.

The Company Representative should discuss the general requirements with the Contractor in order to agree more specific Attendances, which reflect the nature of the site and the contract works.

All agreements reached between the Company Representative and the Contractor’s Site Representative must be confirmed either in writing or by inclusion on marked up record, copies being held by both parties to the agreement.
Supervision of Installation

On contracts of a complex nature, the Company Representative should spend time with the installation team and, in certain cases, where the difficulty or hazards of installation demand, the Company Representative should oversee the complete installation.

Where the Appointed Person has determined that the General Lifting Operations are basic or standard, the Appointed Person’s duties can be delegated. The person that those duties are delegated to will then assume the duties of Crane Supervisor.

Key Issues

- No lifting operation will commence until a ‘lifting plan’, developed by a competent ‘Appointed Person’ is available on site.
- All lifting operations will be supervised by a competent ‘Lift Supervisor’.
- All slinging of loads will be carried out by competent Slinger.
- All Slinger/Signaller duties will be performed by a competent person.
- The Slinger/Signaller may fulfil the role of Lift Supervisor for small non-complex lifting operations.
- Timber frame lifting operations may be simple and repetitive and may be subject to generic lifting plans.
PART 19: Erection team supervisors role

Working to Sequence

Prior to the arrival of the Timber Frame kit, a sequence of on-site installation must have been agreed. The Erection team must familiarise themselves with this sequence and the appropriate method statements, with a copy kept on site.

It is the responsibility of the Team Supervisor to ensure adherence to the agreed sequence. In circumstances where a deviation from the sequence is unavoidable, the Team Supervisor must satisfy himself that it will have no detrimental effect upon stability or safety of installation. The Team Supervisor must seek advice before altering the sequence by referring back to the Timber Frame Company responsible for that contract.

Checking of Attendances

Before commencing the installation of any Timber Frame, the Team Supervisor must satisfy himself that the Attendances agreed for that contract are in fact available and of a satisfactory standard. Where possible, such a check should be conducted together with the Team Supervisor and the Contractor’s Site Representative.

If any item is found to be inadequate or missing, the Team Supervisor must highlight the problem and, if necessary, delay commencement of the installation, until Attendances are satisfactory. In such circumstances the Team Supervisor must fully acquaint his office and the Timber Frame company with the situation.

Supervision of Installation

In all cases the Team Supervisor is responsible for the installation of the Timber Frame Kit and any instruction given by the Timber Frame company will go through him.

The delegation of specific tasks within the team is the responsibility of the Foreman, who must be satisfied that the person to whom the task is assigned is competent to carry out the work safely.

Before placing any products, the Team Supervisor must ensure that the crane (where applicable) is operating in a safe and proper manner, and that the crane operator is fully aware of the nature of the work and can identify and understand the Slinger/Signaller.

During the actual installation of the Timber Frame Kit, the Team Supervisor must ensure that correct handling and placing procedures are being adhered to, and that all aspects of the work are being executed in a safe and proper manner, in accordance with the Safe Working Method Statement and Working Drawings.

Key Issues

- The person responsible for the on-site supervision of the erection process must ensure that all aspects of the Method Statement are complied with, and that all appropriate safety precautions are in place.

- It will be incumbent on the responsible Supervisor to stop the job if he/she is not completely satisfied that work can commence or continue in a safe manner.
PART 20: Transportation of components

The Stacking and Making Secure of Loads

The fundamental concerns, when loading delivery vehicles, must be to ensure an even weight distribution and load stability.

When considering the loading of a Timber Frame Kit, it is important that the loading arrangements allow the maximum protection against damage or breaking. Components must have bearers placed at correct positions along their width, in accordance with the Company's recommendations.

When loaded the Timber Frame Kit must be properly and adequately secured to the vehicle, to prevent movement during transit. Particular attention must be paid to loose items, e.g. blocks, boxes, dwangs/noggin and, if required, loose items should be restrained by the use of nets.

Loading Sequence

From the point of view of safety, during the installation operation, it is important that components are loaded so that unloading may be in appropriate sequence. However, this must never be at the expense of the safe transit of the complete load and therefore some double handling may be required at the point of installation to achieve the final build sequence.

Site Access

Before a vehicle arrives on site, the access from the highway onto and around the site should have been agreed between the Company Representative and the Contractor. The Team Supervisor should have assessed and agreed access suitability with the Contractor's Site Representative and developed a delivery plan upon site commencement.

A nominated member of the Erection team should act as marshall to supervise and assist in the positioning of the delivery vehicle on and off site.

Notwithstanding the above, the final acceptance of the access suitability will remain with the vehicle driver, and, in these circumstances, the driver must satisfy himself before entering the site that his vehicle can travel safely on the access provided.

In all cases the driver must not remove any securing ropes, chains or tarpaulins, until his vehicle is at rest in the area agreed for unloading.

Unloading

The Lift Supervisor/Slinger-Signaller must ensure that the correct lifting equipment is available on site to off load components and must also visually inspect the Timber Frame Kit to ensure that no damage has occurred in transit which may impair the offloading operation.

Components must be unloaded in such a manner that the stability of the delivery vehicle is not adversely affected. The Team Supervisor should (when necessary) liaise with the delivery driver to ascertain the most suitable unloading sequence, must be taken to ensure that in transit any pack or product stabilisation strips are in place.

N.B. At no time should anyone access the trailer to achieve this.
Key Issues

- Each member company should have clearly established loading and unloading procedures in place.
- Consultation with clients about space restriction and methods for off loading at sites is crucial.
- Those responsible loading timber kit prior to despatch also have a responsibility for ensuring that the load can be safely and effectively off loaded.
- When a Hi-Ab vehicle is used a generic lifting plan may be acceptable.
- Where a FLT is used a revised off loading plan may be required.
- No access or standing on the trailer permitted.
PART 21: On site storage of components

Storage at Ground Level

The guidelines for stacking components will generally be similar to those contained in the previous section of this document. In addition to the precautions to be observed when stacking, e.g. the position of bearers, care must be taken to ensure that the ground or surface on which the components are to be stacked is suitable.

The ground must be firm and level and, wherever possible, stacking of components should be firm hard-core or oversite concrete.

The height to which components can be safely stacked on site will be greatly influenced by the condition of the ground on which they bear. Another prime consideration should be the height to which a man can reach, to pass lifting chains or slings around the components.

The need to climb onto stacked components to secure chains or other means of lifting must be avoided.

Where the stacking is pre-planned, the Company’s Representative must specify the type and location of stacking areas to the Contractor, at the time when site access is agreed.

However, when re-planning of the stacking arises, the Team Supervisor should liaise with the Contractor’s Site Representative to find the most suitable stacking area, or to agree other arrangements.

If the Timber Frame is to be left stacked for any length of time, consideration should be given to the practicalities and sequence of their subsequent fixing. Units should be stacked as near as possible to their final fixed positions, to avoid additional handling or transport hazards.

Where lifting/fixing points are present, these should be covered to stop deterioration during inclement weather.

In instances where doubt exists concerning any aspect of site stacking, the Foreman or Company’s Representative must refer back to the Company before allowing units to be stacked.

Storage above Ground Level.

In most circumstances the following measures should be applied to ensure minimum risk:

- All loads should be lowered gently onto the floor, avoiding sudden impact, which may cause damage.

- When beams are being stacked, bearers should run transverse to the span of the floor joists on which they bear.

Loading out of the Timber Frame building with materials may be required by the Contractor. Where this is a requirement, the storage position will be predetermined prior to or during the design process, as per the CDM Regulations. This will allow, where required, the storage position to be structured to take the required load. The storage position to be clearly identified to the Timber Frame Erection Team.

When unplanned stacking occurs the load should be removed immediately and the designers consulted for an approved method.
Key Issues

- Safe on-site storage of material and timber components is essential.
- Stillages or other method of preventing loads from falling over must be used.
- Due consideration must be given to how others will pick up and move the loads.
- Consider the distance from storage area to final use and minimise it.
- Storage arrangements must not adversely affect access and egress, fire evacuation routes or impede traffic management plans.
### PART 22: List of applicable legislation and guidance

<table>
<thead>
<tr>
<th>REGULATION / ACT</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Health and Safety at Work etc Act</td>
<td>1974</td>
</tr>
<tr>
<td>2  Management of Health and Safety at Work Regulations</td>
<td>1999</td>
</tr>
<tr>
<td>3  Construction (Design and Management) Regulations</td>
<td>2007</td>
</tr>
<tr>
<td>4  Construction (Head Protection) Regulations</td>
<td>1989</td>
</tr>
<tr>
<td>5  Control of Asbestos Regulations</td>
<td>2006</td>
</tr>
<tr>
<td>6  Control of Noise at Work Regulations</td>
<td>2005</td>
</tr>
<tr>
<td>7  Control of Substances Hazardous to Health Regulations</td>
<td>2002</td>
</tr>
<tr>
<td>8  Control of Vibration at Work Regulations</td>
<td>2005</td>
</tr>
<tr>
<td>9  Electricity at Work Regulations</td>
<td>1989</td>
</tr>
<tr>
<td>10 Employers’ Liability (Compulsory Insurance) Act</td>
<td>1969</td>
</tr>
<tr>
<td>11 Environmental Protection Act</td>
<td>1990</td>
</tr>
<tr>
<td>12 Gas Safety (Installation and Use) Regulations</td>
<td>1998</td>
</tr>
<tr>
<td>13 Health and Safety (First Aid) Regulations</td>
<td>1981</td>
</tr>
<tr>
<td>14 Health and Safety (Information for Employees) Regulations</td>
<td>1989</td>
</tr>
<tr>
<td>15 Lifting Operations and Lifting Equipment Regulations</td>
<td>1998</td>
</tr>
<tr>
<td>16 Manual Handling Operations Regulations</td>
<td>1992</td>
</tr>
<tr>
<td>17 Reporting of Injuries, Diseases and Dangerous Occurrences Regulations</td>
<td>1995</td>
</tr>
<tr>
<td>18 Personal Protective Equipment at Work Regulation</td>
<td>2002</td>
</tr>
<tr>
<td>19 Provision and Use of Work Equipment Regulations</td>
<td>1998</td>
</tr>
<tr>
<td>20 The Health and Safety (Display Screen) Equipment Regulations</td>
<td>1992</td>
</tr>
<tr>
<td>21 The Regulatory Reform (Fire Safety) Order</td>
<td>2005</td>
</tr>
<tr>
<td>22 Work at Height Regulations</td>
<td>2005</td>
</tr>
<tr>
<td>23 Workplace (Health, Safety and Welfare) Regulations</td>
<td>1992</td>
</tr>
<tr>
<td>24 The Health and Safety (Consultation with Employees) Regulations</td>
<td>1996</td>
</tr>
</tbody>
</table>
PART 23: Fire safety on timber frame construction sites

UKTFA Guidelines and Recommendations

The guidance below is good practice and relates to timber frame sites under construction where materials could be exposed and where methods of working and security factors may increase the risk of fire. Although it has been designed for timber frame sites, it is also relevant to other methods of construction. Jointly funded by the UK Timber Frame Association and wood for good, it is intended to promote best practice for the safety of site workers, the public and for the mitigation of loss from construction site fires.

IMPORTANT This guidance should be taken in conjunction with the ‘Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation’ published by the Construction Confederation and the Fire Protection Association.

These publications are for guidance only and are not necessarily appropriate for all building sites. The decision to adopt some or all of the steps should be taken following an individual risk assessment.

Link to 16 Step to Fire Safety here

Link to Site Safe Policy here
# Accident by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Jan</th>
<th>Feb</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact with moving machinery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Struck by moving, flying or falling object</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Struck by moving vehicle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strike against something fixed or stationary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injured while handling, lifting or carrying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slips, trips or falls on same level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Falls from height &lt; 2 metres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Falls from height &gt; 2 metres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trapped by something collapsing/overturning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drowning or asphyxiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to contact with a harmful substance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to fire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exposure to explosion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact with electricity or electrical discharge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injured by an animal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts of violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Accident by Department

<table>
<thead>
<tr>
<th>Department</th>
<th>Site</th>
<th>Staff</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The boxes would typically be filled in as shown:

```
Rep

N/Rep
```

3

1
## APPENDIX 2  Erector team qualifications

### UKTFA Erector Member (Minimum Competence Requirements)

<table>
<thead>
<tr>
<th>Level</th>
<th>Role</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td><strong>APPRENTICE</strong></td>
<td>CITB H&amp;S Operative Touchscreen Test, CSCS Trainee Card, Registered for N/SVQ Timber Frame Erect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tools/Equipment training, Fire Safety training</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td><strong>IMPROVER</strong></td>
<td>CITB H&amp;S Operative Touchscreen Test, CSCS Skilled Card, N/SVQ Timber Frame Erect, Slinger Signaller</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tools/Equipment training, Fall Arrest Systems, Tools/Equipment training, Plant Operator (i.e. forklift etc)</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td><strong>TEAM LEADER</strong></td>
<td>CITB H&amp;S Supervisor Touchscreen Test, CSCS Skilled Card, N/SVQ Timber Frame Erect, Slinger Signaller</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tools/Equipment training, Fire Safety Training, Fall Arrest Systems, Plant Operator (i.e. forklift etc)</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td><strong>MANAGEMENT LEVEL</strong></td>
<td>CITB Manager &amp; Professional Touchscreen Test, CSCS Manager Card, Crane Appointed Person</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/SVQ in Management L3 or 4, Fall Arrest Systems, Tools/Equipment training</td>
</tr>
</tbody>
</table>

### UKTFA Accredited Member (Competence Requirements)

<table>
<thead>
<tr>
<th>Level</th>
<th>Role</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td><strong>APPRENTICE</strong></td>
<td>CITB H&amp;S Operative Touchscreen Test, CSCS Trainee Card</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registered for N/SVQ Timber Frame Erect, Tools/Equipment training, Fire Safety training</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td><strong>IMPROVER</strong></td>
<td>CITB H&amp;S Operative Touchscreen Test, CSCS Skilled Card, N/SVQ Timber Frame Erect, Slinger Signaller</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CPCS Slinger Signaller, CPCS Plant operator (i.e. forklift etc), NVQ Plant Operations Level 2, Tools Equipment, Fire Safety training</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td><strong>TEAM LEADER</strong></td>
<td>CITB H&amp;S Supervisor Touchscreen Test, CSCS Skilled Card, CITB Site Supervisors Safety Training, N/SVQ Timber Frame Erect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CPCS Lift Supervisor, Fall Arrest Systems, First Aid, Tools Equipment, Fire Safety training</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td><strong>CONTRACTS MANAGER</strong></td>
<td>CITB Manager &amp; Professional Touchscreen Test, CSCS Manager Card, CITB Site Managers Safety Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/SVQ in Management L3 or 4, CPCs Crane Appointed Person, Fire Safety training</td>
</tr>
</tbody>
</table>
Five steps to risk assessment

**STEP 1**
**Look for the hazards**
If you are doing the assessment yourself, walk around your workplace and look afresh at what could reasonably be expected to cause harm. Ignore the trivial and concentrate on significant hazards which could result in serious harm or affect several people.

Ask your employees or their representatives what they think. They may have noticed things which are not immediately obvious. Manufacturers’ instructions or data sheets can also help you spot hazards and put risks in their true perspective. So can accident and ill-health records.

**STEP 2**
**Decide who might be harmed and how**
Don’t forget:
- young workers, trainees, new and expectant mothers etc who may be at particular risk,
- cleaners, visitors, contractors, maintenance workers etc who may not be in the workplace all the time,
- members of the public, or people you share your workplace with, if there is a chance they could be hurt by your activities.

**STEP 3**
**Evaluate the risks and decide whether the existing precautions are adequate or whether more should be done**
Consider how likely it is that each hazard could cause harm. This will determine whether or not you need to do more to reduce the risk. Even after all the precautions have been taken, some risk usually remains. What you have to decide for each significant hazard is whether this remaining risk is high, medium or low.

First, ask yourself whether you have done all the things that the law says you have got to do. For example, there are legal requirements on prevention of access to dangerous parts of machinery. Then ask yourself whether generally accepted industry standards are in place. But don’t stop there – think for yourself, because the law also says that you must do what is reasonably practicable to keep your workplace safe. Your real aim is to make all risk small by adding to your precautions as necessary.

If you find that something needs to be done, draw up an ‘action list’ and give priority to any remaining risks which are high and/or those which could affect most people. In taking action ask yourself:

a) can I get rid of the hazard altogether?

b) if not, how can I control the risks so that harm is unlikely?

In controlling risks apply the principles below, if possible in the following order:

- try a less risky option,
- prevent access to the hazard (eg by guarding),
- organise work to reduce exposure to the hazard,
- issue personal protective equipment,
- provide welfare facilities (eg washing facilities for removal of contamination and first aid).
Improving Health and Safety need not cost a lot; for instance, placing a mirror on a dangerous blind corner to help prevent vehicle accidents, or putting some non-slip material on slippery steps are inexpensive precautions considering the risks. And failure to take simple precautions can cost you a lot more if an accident does happen.

**But what if the work you do tends to vary a lot or your employees move from one site to another?**

Identify the hazards you can reasonably expect and assess the risks from them. After that, if you spot any additional hazards when you get to a site, get information from others on site, and take what action seems necessary.

**But what if you share a workplace?**

Tell the other employers and self-employed people there about any risks your work could cause them, and what precautions you are taking. Also think about the risks to your own work-force from those who share your workplace.

**But what if you have already assessed some of the risks?**

If, for example, you use hazardous chemicals and you have already assessed the risks to health and the precautions you need to take under the Control of the Substances Hazardous to Health Regulations (COSHH), you can consider them ‘checked’ and move on.

**Record your findings**

If you have fewer than five employees you do not need to write anything down, though it is useful to keep a written record of what you have done. But if you employ five or more people you must record the significant findings of your assessment. This means writing down the significant hazards and conclusions. Examples might be ‘Electrical installations; insulation and earthing checked and found sound’ or ‘Fume form welding; local exhaust ventilation provided and regularly checked’.

You must also tell your employees about your findings.

Suitable and sufficient - not perfect! risk assessments must be suitable and sufficient. You need to be able to show that:

- a proper check was made,
- you asked who might be affected,
- you dealt with all the obvious significant hazards, taking into account the number of people who could be involved,
- the precautions are reasonable, and the remaining risk is low.

Keep the written record for future reference or use; it can help you if an inspector asks what precautions you have taken, or if you become involved in any action for civil liability. It can also remind you to keep an eye on particular hazards and precautions. And it helps you show that you have done what the law requires. There is an example at the end of this guide which you may find helpful to refer to but you can make up your own form if you prefer.

To make things simpler, you can refer to other documents, such as manuals, the arrangements in your Health and Safety policy statement, company rules, manufacturers’ instructions, your Health and Safety procedures and your arrangements for general fire safety. These may already list hazards and precautions. You don’t need to repeat all that, and it is up to you whether you combine all the documents, or keep them separately.
Five steps to risk assessment continued...

**STEP 5**

**Review your assessment and revise it if necessary**

Sooner or later you will bring in new machines, substances and procedures which could lead to new hazards. If there is any significant change, add to the assessment to take account of the new hazard. Don’t amend your assessment for every trivial change, or still more, for each new job, but if a new job introduces significant new hazards of its own, you will want to consider them in their own right and do whatever you need to keep the risks down. In any case, it is good practice to review your assessment at least 3 yearly to make sure that the precautions are still working effectively.
STEP 1 Hazard

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following examples as a guide:

- slipping/tripping hazards (eg poorly maintained floors or stairs),
- fire (eg from flammable materials),
- chemicals (eg battery acid),
- moving parts of machinery (eg blades),
- work at height (eg from mezzanine floors),
- pressure systems (eg steam boilers),
- vehicles (eg fork-lift trucks),
- electricity (eg poor wiring),
- dust (eg from grinding),
- fumes (eg welding),
- manual handling,
- noise,
- poor lighting,
- low temperature.

List your significant hazards here:
### STEP 2  Who might be harmed?

There is no need to list individuals by name – just think about groups of people doing similar work or who may be affected, eg

- office staff,
- maintenance personnel,
- contractors,
- people sharing your workplace,
- operators,
- cleaners,
- members of the public.

Pay particular attention to –

- staff with disabilities,
- visitors,
- inexperienced staff,
- lone workers,

- they may be vulnerable.

List groups of people who are at risk from the significant hazards you have identified:
STEP 3  Is more needed to control the risk>

For the hazards listed, do the precautions already taken:

- meet the standards set by a legal requirement?
- comply with a recognised industry standard?
- represent good practice?
- reduce risk as far as reasonably practicable?

Have you provided:

- adequate information, instruction or training?
- adequate systems or procedures?

If so then the risks are adequately controlled, but you need to indicate the precautions you have in place (you may refer to procedures, company rules, etc).

Where the risk is not adequately controlled, indicate what more you need to do (the ‘action list’).

List existing controls or note where the information may be found. List risks which are not adequately controlled and the action needed:
STEP 4 Record your findings

Show that:

- a proper check was made
- you asked who might be affected
- you dealt with all the obvious significant hazards, taking into account the number of people who could be involved
- the precautions are reasonable, and the remaining risk is low.
STEP 5  Review and revision

Set a date for review of the assessment (see above).

On review check that the precautions for each hazard still adequately control the risk. If not, indicate the action needed. Note the outcome. If necessary complete a new page for your risk assessment.

Making changes in your workplace, eg when bringing in new -

- machines
- substances
- procedures

- which may introduce significant new hazards. Look for them and follow the 5 steps.