BRITISH WOODWORKING FEDERATION

Health & Safety in the Woodworking Industry

BRITISH WOODWORKING FEDERATION

About the BWF

The British Woodworking Federation is the leading representative body for the woodworking and joinery manufacturing industry in the UK.

The BWF has over 500 members drawn from manufacturers, distributors and installers of timber doors, windows, conservatories, staircases, all forms of architectural joinery including shopfitting, timber frame buildings and engineered timber components, as well as suppliers to the industry.

It also provides a range of industry specific health and safety guidance and publications to its members including woodworking machinery safety cards covering most woodworking machines.

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List of appendices & abbreviations used within the guide

Appendices

Abbreviations

ACOP	Approved Code of Practice
BWF	British Woodworking Federation
CDM	Construction (Design and Management) Regulations 2015
CE	European Conformity Mark Designated by the letters CE
COSHH	The Control of Substances Hazardous To Health Regulations 2002
DSEAR	Dangerous Substances and Explosive Atmospheres Regulations 2002
dB(A)	Decibels (A-weighted). A weighting is approximately equivalent to the human ear frequency response.
dB(C)	Decibels (C-weighted). Used to measure peak, impact or explosive noise.
FFI	Fee For Intervention
HAVS	Hand Arm Vibration Syndrome
HSE	Health and Safety Executive
HSWA	The Health and Safety at Work etc. Act 1974
IOSH	The Institution of Occupational Safety and Health
LCPT	Limited Cutter Projection Tooling
LEV	Local Exhaust Ventilation
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
NEBOSH	National Examination Board in Occupational Safety and Health
NVQ	National Vocational Qualifications
PAT	Portable Appliance Testing
PPE	Personal Protective Equipment
PUWER	The Provision and Use of Work Equipment Regulations 1998
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrence Regulations 2013 (RIDDOR)
RPE	Respiratory Protection Equipment
UKCA	UK Conformity Assessed marking
WEL	Workplace Exposure Limit

Introduction

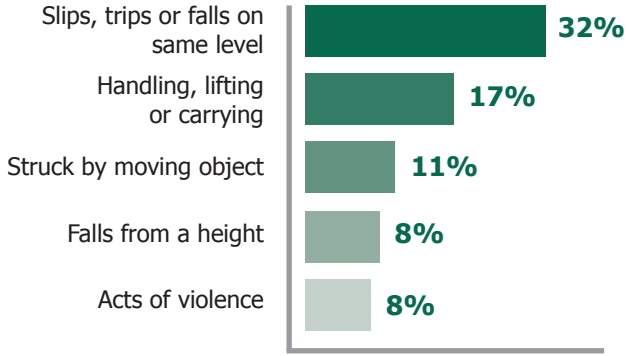
Introduction

Scope and purpose of the guide

There is no escaping the fact that, by its very nature, the woodworking industry poses a significant risk of injury to its workers. High-speed cutting machinery is inherently dangerous, so small errors or momentary carelessness can have serious consequences. There are also the risks of a factory environment such as noise, dust, vibration, slips and trips.

Wood as a raw material also creates its own risk, as no two pieces of wood are the same. Each piece behaves differently when machined or shaped. Knots and natural changes in the direction of the grain can give rise to snatching and kickback of the work piece.

While we can and should applaud the improvements made by many members of the British Woodworking Federation (BWF), we must always be concerned by the results of any accident or occupational health problem. The human cost of injury is immediate and distressing, and a responsible employer's first duty is to ensure that its employees can work safely.



Source: https://www.hse.gov.uk/statistics/assets/docs/hssh2223.pdf

But beyond this, the impact on businesses is also considerable. The HSE estimate that the annual cost of work-related injury and ill health in 2021/22 was £20.7 billion, excluding long latency illness such as cancer.

Of this, £13.1 billion can be attributed to costs associated with new cases of work-related ill health in 2021/22, excluding long latency illness such as cancer. The balance of £7.7 billion can be attributed to the annual costs of workplace injury in 2021/22.

The causes of non-fatal injuries to employees by most common accident kind (as reported by employers) in 2021/22 still demonstrates that many of these injuries are preventable.

In 2012 the HSE introduced 'Fee For Intervention' (FFI) a cost recovery scheme where those who break health and safety laws (a material breach) are liable for recovery of HSE's costs. This includes inspection, investigation and taking enforcement action. The total cost (fee) is based on the amount of time it takes HSE to identify and conclude its regulatory action multiplied by the relevant hourly rate. In April 2024, the HSE increased the hourly rate of the "Fee For Intervention" for 2024/25 from £166 per hour to £174. The fee is subject to change and you will find the latest costings on the HSE link below:

HSE: Fee for Intervention - What is FFI?

www.hse.gov.uk/fee-for-intervention/what-is-ffi.htm

Investigations can be hugely time-consuming and there is the possibility of expensive litigation and court action by the HSE; in addition, insurance premiums may rise and the company's reputation can be damaged.

You cannot assume it will never happen to you.

The law demands best practice, and any oversight can be hugely damaging both financially and in terms of reputation.

But the law is also increasingly complex, and with the move to legislation setting goals, which require risks to be assessed and judgements to be made, rather than simply presenting the specifics, the requirements placed on employers can be confusing.

The BWF has completely revised this popular guide as part of its continuing commitment to improving health and safety awareness and practice within the joinery and woodworking industry. It represents the most comprehensive single guide to the legislation, regulation and best practice within the industry.

This guide can help companies improve their health and safety provision, something that is particularly important for businesses that do not have the in-house resources of larger firms. In encouraging its own members towards better health and safety performance through its Code of Conduct, the BWF is committed to publishing a wide range of up-to-date guidance and best working practice. The Federation also offers its members immediate advice via a telephone helpline.

This document is intended to help all woodworking employers, and members of their management and supervisory staff, in meeting the duties that are placed upon them under health and safety legislation.

SPECIAL NOTE

In compiling this publication, every care has been taken to interpret correctly the various Regulations, Codes of Practice and obligations, as they existed in November 2023. The advice given is subject to any amendments that might affect legislation and regulations in the future.

You should check the BWF **www.bwf.org.uk** and HSE **www.hse.gov.uk/woodworking** websites regularly for additional information, and updates on legislation changes.

1. Managing Health & Safety

1.1 Health and Safety at Work etc. Act 1974

The Health and Safety at Work etc. Act 1974 (also referred to as HSWA, the HSW Act or HASAWA) applies to all work activities and lays down very specific duties on various parties in respect of Health and Safety. HSWA includes the phrase 'so far as reasonably practicable', this means you must balance up the risks to health and safety against the time money and effort it will take to reduce the risk. Certain risks will need to be addressed whatever the cost; in other situations, the level of risk will determine the action that you should take. The most important of these duties are summarised as follows:

Employers

A general duty is placed on employers, so far as it is reasonably practicable, to:

- Ensure the health, safety and welfare at work of their employees.
- Maintain safe premises, plant and systems of work.
- Provide whatever information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety at work of all employees.
- Provide an adequate and appropriate level of supervision.
- Provide safe access and egress.
- Provide welfare facilities.
- Ensure that their activities do not endanger persons not in their employment.
- Prepare and publicise a written statement of their safety policy and arrangements for implementing it (if 5 or more employees).
- Consult employees' representatives concerning arrangements for joint action on health and safety matters.

Directors Responsibilities

In 2002, the Health and Safety Commission published guidance for company directors. HSC advise that:

- The board needs to accept formally and publicly its collective role in providing health and safe leadership in its organisation.
- Each member of the board needs to accept their individual role in providing health and safety leadership for their organisation.
- The board needs to ensure that all board decisions reflect its health and safety intentions, as articulated in the health and safety policy statement.
- The board needs to recognise its role in engaging the active participation of workers in improving health and safety.
- The board needs to ensure that it is kept informed of, and alert to, relevant health and safety risk management issues. HSC recommends that boards appoint one of their members to be the health and safety director.

Employees

A general duty is placed on employees to:

- Take reasonable care for the health and safety of themselves and of anyone else who may be affected by their work activities.
- Co-operate with employers and others to enable them to meet their statutory requirements.

All Persons

A general duty is placed on everybody not to misuse anything provided in the interests of health and safety at work.

Suppliers and manufacturers

There is a general duty, under the General Product Safety Regulations 2005, placed upon manufacturers and suppliers to give information, warnings and instructions about the use of their products, so that the safety of purchasers and users is protected. This may include details of noise levels, or vibration magnitude, produced by machinery.

Regulations

The HSWA is an umbrella Act and allows for the development of regulations; regulations tend to be more specific and are often related to a particular topic, e.g., The Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended) and the Control of Noise at Work Regulations 2005. This document explains the action you should take to comply with your duties as an employer under these and other Regulations.

Health and Safety Management

Employers should have a clear and defined method of managing Health and Safety in their workplace and all their activities.

HSE publication HSG 65 - **www.hse.gov.uk/pubns/priced/hsg65.pdf** - Managing for Health and Safety, published in 2013 and has a well proven model of how to manage health and safety from writing policies to reviewing performance.

The model approach of managing health and safety is 'Plan, Do, Check, Act' and is designed to be a continuous circle of improvement rather than a once-and-for-all action. It is likely you will need to go round the cycle more than once when starting out, or when developing a new process, product or service, or when implementing any change within your business.

Plan

- Think about where you are now and where you need to be.
- State what you want to achieve, who is responsible, how this will be achieved.
- Decide how you will measure your success and performance.
- Consider other emergencies such as fire. Communicate and co-operate with anyone who shares your workplace or premises and discuss plans with them.
- Make sure that you account for any legal requirements that apply to you and plan for changes.

Do

- Manage and identify risks. Determine what could cause harm, who could be affected.
- Determine what the priorities are and the biggest risks.
- Involve and communicate so everybody involved is clear on what is required and can discuss the issues.
- Make sure you have adequate resources including competent advice where needed.

Check

- Measure your performance so you can see how your plan is being implemented and progressing.
- Assess how well risks are being controlled and that you are achieving your aims.
- Investigate and determine the cause of any accidents, incidents or near misses.

Act

- Review your performance and learn from the results especially any accidents, incidents or near misses.
- Review your plans, policy documents and risk assessments to see if they need updating.
- Take actions on lessons learned.

1.2 Health and safety policy

HSWA requires all employers with 5 or more employees to have a written health and safety policy statement. If you have fewer than 5 employees, you are not exempt from having a policy, it just does not have to be in writing although you may wish to consider developing a policy statement to set out your intentions regarding health and safety. You may find your clients requesting a copy of your health and safety policy when tendering for work; it is good practice to have a policy and a signed statement can demonstrate your commitment to health and safety.

Your Health & Safety Policy should relate directly to your business and should contain information relevant and specific to all your activities. It is essential that you participate in writing your own safety policy; an outside body will not be experienced in your activities or in the way in which you carry on your business.

The policy should be split into three main sections:

1.2.1 Your policy statement

Your company statement of intent is where you state in simple terms your general aims regarding your employee's health and safety. This is your company statement and your Managing Director or most senior person within the company should sign and date the statement make clear their commitment to the policy.

1.2.2 Your organisation for safety

The second section of the policy should detail the organisation for safety. While overall responsibility for health and safety rests at the higher management level, individuals at various levels will accept some responsibility for health and safety and wherever possible should be named.
A simple company organisation chart, showing the structure and hierarchy of reporting within your company will assist in explaining the organisation. This also allows all employees to see what responsibilities they have and who to report to on health and safety matters.

1.2.3 Your arrangements or procedures

The third section of your policy will be the arrangements for health and safety and will describe the systems and procedures that your company follows to ensure employees' health and safety. As an employer you also need to consider those who are not your employees who may be affected by your activities such as visitors, customers and members of the public.

1.2.4 Your policy

A good starting point is to look at the different activities that your firm carries out E.g., using woodworking machinery, stacking finished products, loading delivery lorries etc.
You should then have a procedure for each activity where a hazard exists. Employees carrying out that activity can read the procedure and know the company's policy and arrangements for carrying out that activity.

Your arrangements should also cover general procedures used in the event of an injury or incident. For example:

- Who reports accidents to the Health and Safety Executive?
- What are the fire and emergency procedures for your workplace? (Your arrangements should also refer to what your employees should do when reporting to a new work location).
- What health and safety training arrangements you have in place within your organisation.
- How you consult with your employees on matters of health and safety.

These and other relevant issues should be contained within your policy. You may also wish to refer to your company disciplinary procedures for non-compliance with the Health and Safety Policy.

1.2.5 Informing your employees

You have a duty to bring to the notice of all your employees your health and safety policy. You should provide a copy of the whole policy to each employee, and they should sign to acknowledge receipt and understanding (file this with personnel records). A current copy of the policy should also be pinned to the company noticeboard where all employees will see it. It may not suit all employees to receive this important information in the form of a written document and the employer should consider alternative methods of presenting the information, e.g. training sessions and toolbox talks.

Another effective way of passing on the information contained within the policy is to display signs and notices in appropriate places. There may be a sign on a particular machine stating that eye protection must be worn, or no smoking signs may be placed around the workshop area. The organisation and procedures should be explained during induction training for new employees and existing employees will need to be made aware of your policy each time it is updated, this can be achieved through training sessions or toolbox tools. Any visitors or sub-contractors will also need to be aware of, and understand, the contents of your policy.

1.2.6 Reviewing your policy

It is important to review your policy annually, to ensure that it is effective and up to date. You must also ensure that your policy is relevant to your organisation. If you don't carry out an activity you do not need a procedure for it. If the law changes, or any of your work methods, activities or employees change, you will need to consider whether your policy needs updating. It is no good having 'John Smith' as the first aider if he no longer works for you. Any revisions to the policy must be brought to the attention of all your employees.

And finally

Your policy can be as simple or as complex as you wish. The easier it is to access, read and understand the better for you and your employees.

- If a particular procedure is relevant to a certain machine, display the procedure above the machine.
- Use notice boards to inform your employees who is a qualified first aider or a fire marshal.
- Use safety posters to spread the message about the health and safety requirements within your organisation.
- It is a requirement to ensure that you display The Health and Safety Law poster. This must be correctly filled in with contact details. Alternatively, you can provide workers with the equivalent approved leaflet, available from the HSE. **www.hse.gov.uk/pubns/books/lawposter.htm** Employees should sign to acknowledge receipt if using these.
- Ensure that all levels of management set a good example.
- Discuss and explain new policies and procedures with those it will affect.
- Ensure your employees understand the importance of the procedures and make sure that they comply with the requirements.
- Do not have procedures for the sake of it. If nobody follows the safe work methods detailed in the policy, are they wrong? Or is the procedure wrong, or not being enforced?

Example policy templates can be downloaded from the BWF webpages.

1.3 Risk assessment

1.3.1 Regulations

Under the Management of Health and Safety at Work Regulations 1999 there is a specific requirement for all employers and self-employed persons to carry out suitable and sufficient risk assessments of the workplace and individual activities, to identify the risks to workers and any others who may be affected. Certain other regulations require assessments specific to activities, E.g., COSHH and Noise at Work. These are covered elsewhere in this document.

You must:

a. Make a suitable and sufficient assessment of the risks to workers and any others who may be affected by your activities.

b. Review the risk assessment if you believe it is invalid or there has been a significant change in circumstances.

c. Where you employ more than five people you must record the significant findings of your assessments.

The main goal of any risk assessment process is to identify the measures that need to be taken to establish a safe system of work and an efficient system of safety management. Any existing hazards and the level of risk should be identified; all efforts should then be made to reduce the risk to as low as possible. If the present method of carrying out the activity is eventually established as the only practicable safe method, then management must fully inform employees of the reasons why the method of work must be adhered to.

A suitable level of supervision and training must be arranged to ensure that the method of work is fully understood and complied with (see Section 1.1 HSWA, Employers duties).

1.3.1 Regulations (continued)

You must identify a competent person to carry out the necessary risk assessments for your organisation.
To be competent they must have:

a. Received appropriate training.

b. Adequate knowledge.

c. Suitable experience of the activities concerned.

d. An awareness of their own limitations.

To carry out a risk assessment you should take the following steps:

1.3.2 Identify activities/tasks.

It may help to prepare a list of all the tasks and activities that you carry out. Some of these may be simple tasks whereas others may be complex activities.

1.3.3 Determine the hazards.

You now need to identify the hazards associated with the task. A hazard is the ability of something to cause harm, loss or damage and has the potential to interrupt or interfere with a process or person, E.g., an unguarded machine or a trailing cable.

1.3.4 Identify who may be harmed.

Consider who in your workplace may be affected by a particular hazard. This may be employees, visitors, members of the public etc.

1.3.5 Assess the significant risks.

Risk is the chance or probability of the hazard being realised and harm occurring. Your answers should be limited to high, medium, low or insignificant risk. Many factors will contribute to the level of risk, E.g., the number of people who may be affected, the severity or outcome in terms of injury damage and loss etc.

1.3.6 Consider and implement controls to reduce risks.

Wherever possible you should eliminate the hazard. E.g., selecting a different machine or a change of process may eliminate a hazard. Where eliminating the hazard is not possible you must reduce the risk as low as possible. Your priority should be to provide safe place controls, which are physical or mechanical measures intended to make the place or equipment safe.

This type of control measure protects everyone, e.g., machine guarding. Information, instruction and training, and personal protective equipment are all forms of control measures. However, these types of controls only protect individual workers and should not be used in isolation, they should be used in addition to safe place controls and are a last resort control measure.

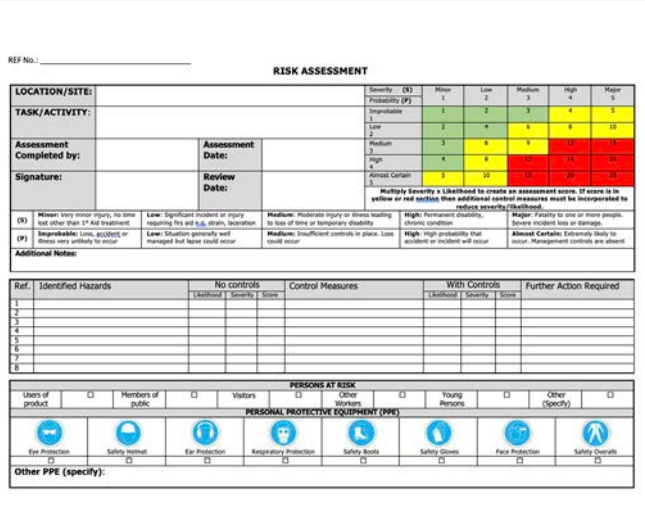
1.3.7 Record the findings and inform workers.

Employers with 5 or more employees must record the significant findings of their assessment and must pass on the information to employees and those affected by the activity. You must tell workers why a particular work method has been selected and how control measures should be used and maintained. Consulting workers on the initial results of your risk assessments may provide valuable information on alternative control measures that could be used. A sample risk assessment form is contained at Appendix 9.

1.3.8 Review and revise as necessary.

You must regularly review your risk assessments to ensure that the controls are still effective when you suspect that the assessment is no longer valid or there has been a significant change in the matters to which it relates. This may include use of new or different machinery or equipment, changes in the work method or a different operator. If the review reveals that changes to your assessments are required, you should revise the risk assessment and inform your employees, this may require further training depending upon the changes made.

Example Risk Assessment templates can be downloaded from the BWF webpages.



REF No.: _____

RISK ASSESSMENT

LOCATION/SITE:				Severity (S)	Minor 1	Low 2	Medium 3	High 4	Major 5
				Probability (P)					
TASK/ACTIVITY:				Improbable 1	1	2	3	4	5
				Low 2	2	4	6	8	10
Assessment Completed by:		**Assessment Date:**		Medium 3	3	6	9	12	15
				High 4	4	8	12	16	20
Signature:		**Review Date:**		Almost Certain 5	5	10	15	20	25

Multiply Severity x Likelihood to create an assessment score. If score is in yellow or red section then additional control measures must be incorporated to reduce severity/likelihood.

(S)	**Minor:** Very minor injury, no time lost other than 1st Aid treatment	**Low:** Significant incident or injury requiring firs aid e.g. strain, laceration	**Medium:** Moderate injury or illness leading to loss of time or temporary disability	**High:** Permanent disability, chronic condition	**Major:** Fatality to one or more people. Severe incident loss or damage.
(P)	**Improbable:** Loss, accident or illness very unlikely to occur	**Low:** Situation generally well managed but lapse could occur	**Medium:** Insufficient controls in place. Loss could occur	**High:** High probability that accident or incident will occur	**Almost Certain:** Extremely likely to occur. Management controls are absent

Additional Notes:

Ref.	Identified Hazards	No controls			Control Measures	With Controls			Further Action Required
		Likelihood	Severity	Score		Likelihood	Severity	Score	
1									
2									
3									
4									
5									
6									
7									
8									

PERSONS AT RISK

Users of product	☐	Members of public	☐	Visitors	☐	Other Workers	☐	Young Persons	☐	Other (Specify)	☐

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye Protection ☐	Safety Helmet ☐	Ear Protection ☐	Respiratory Protection ☐	Safety Boots ☐	Safety Gloves ☐	Face Protection ☐	Safety Overalls ☐

Other PPE (specify):

1.4 Health & safety assistance

The Management of Health and Safety at Work Regulations 1999 require you to have a competent person to assist you in complying with health and safety matters. You may appoint one or more of your employees to provide health and safety assistance or you may enlist your assistance from an outside organisation.

If you have a competent person within your organisation they should be appointed in preference to an external person.

By appointing someone from within your organisation, while they will be more aware of how you operate and the problems that you face. You must ensure that they are suitably trained and competent. An external adviser may have more general health and safety knowledge but may require more specific knowledge of your tasks and how to comply with health and safety law within your company.

Depending upon the size and risks within your company your health and safety advisor may fulfil other roles or may concentrate purely on health and safety issues. You may seek your health and safety advice from an external source and appoint someone within your organisation to ensure this advice is implemented and followed.

Whoever provides health and safety assistance to your organisation must be competent; this includes receiving relevant training, having appropriate knowledge of the legal requirements and your activities and an awareness of their own limitations.

Recognised qualifications for health and safety advisers include:

- NEBOSH (National Examination Board in Occupational Safety and Health) Certificate and Diploma.
- Level 5 NVQ in Occupational Health and Safety Practice.
- The professional organisation for health and safety is IOSH (Institution of Occupational Safety and Health).

Risk Assessment Guidance can be downloaded from the BWF webpages.

1.5 Consultation with employees

By law (The Health and Safety Consultation with Employees Regulations 1996 and The Safety Representatives and Safety Committees Regulations 1977) employers must consult all of their employees on health and safety matters. Consultation involves employers giving information to and receiving views from, employees on matters of health and safety. You should consult your employees on issues such as:

a. Any change which may affect their health and safety at work e.g., in procedures, with new equipment or ways of working.

b. Your arrangements for receiving health and safety assistance.

c. Information on risks and dangers arising in the workplace and any control measures Health and safety training.

Your method of consultation should be chosen to suit both you and your employees.

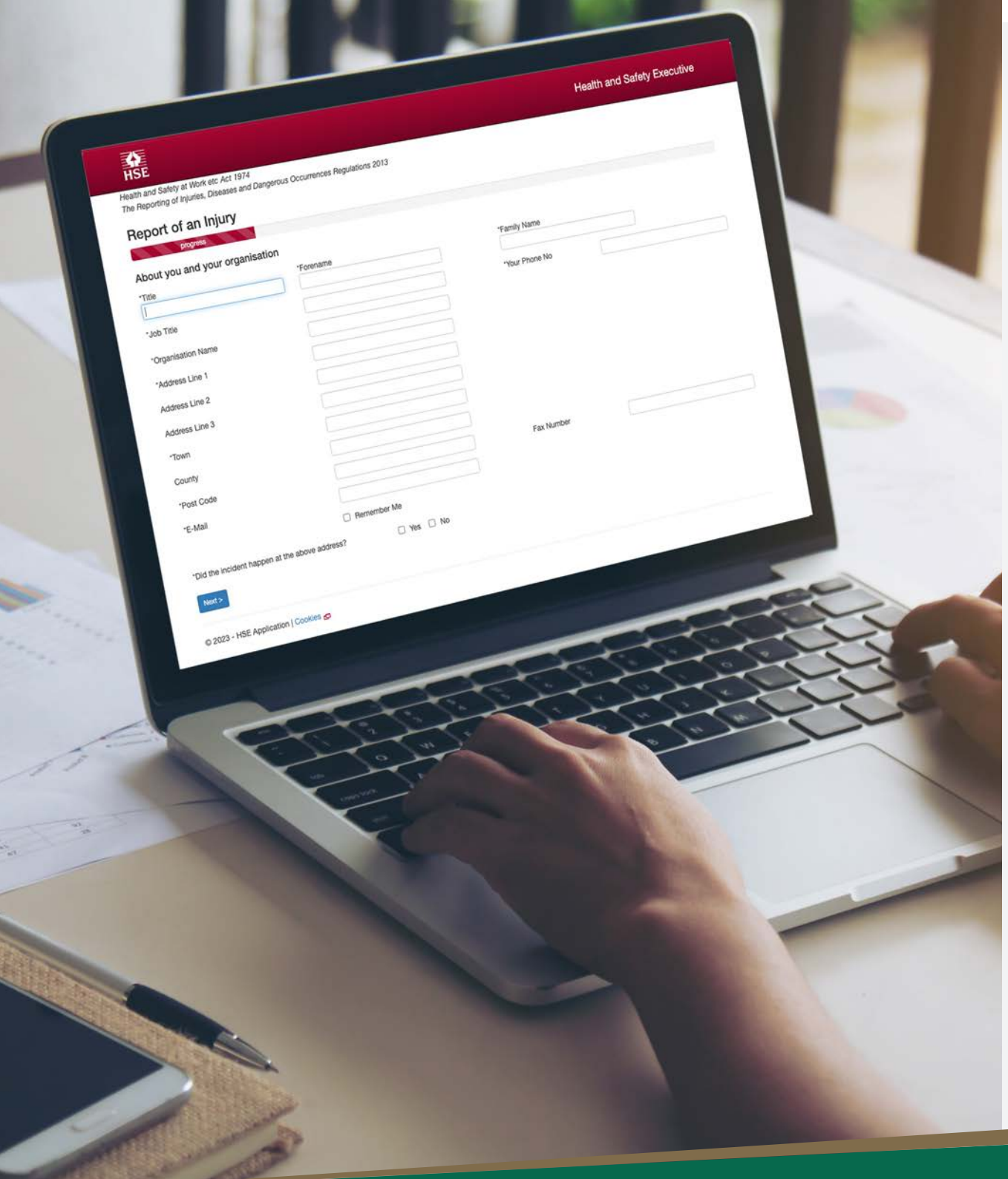
1.5.1 Trade union consultation

If you recognise a trade union (TU) and there are health and safety representatives appointed, then you must consult those safety representatives on matters affecting the people that they represent. TU representatives should be appropriately trained by their TU and must be given time off with pay to take part in any training required. As an employer you are required to establish a safety committee if two trade union representatives request you to do so in writing.

1.5.2 Non-trade union consultation

You must also consult those employees not represented by a trade union and you can either do this by consulting employees directly or through representatives elected by the workforce. Any elected representatives must be appropriately trained and provided with any resources necessary to fulfil their function; this may include the use of a room for meetings and time to prepare for meetings.

If you choose to consult with your employees directly, you can do this through regular meetings, open two-way tool-box talks, using notice boards, company newsletters, etc.



2. Accident Reporting

2.1 The Reporting of Injuries, Diseases and Dangerous Occurrences (RIDDOR) Regulations 2013.

Under the Reporting of Injuries, Diseases and Dangerous Occurrences (RIDDOR) Regulations 2013, certain types of incidents are reportable to the Health and Safety Executive or the Local Authority. In the case of woodworking establishments, the enforcing authority is normally the Health and Safety Executive.

RIDDOR reports are submitted to the HSE on-line at www.hse.gov.uk/riddor where you will complete the appropriate form. The form will then be submitted directly to the RIDDOR database, and you may download a copy for your records. Fatal and specified injuries can be reported by telephone on **0345 300 9923 (Monday to Friday 08:30 to 17:00).**

Such reports identify what types of incidents are occurring, where and how risks arise, and any trends. Enforcing authorities are then able to target their activities and advise employers where and how most accidents happen, allowing them to address areas of concern.

Reporting applies to accidents causing injuries, certain occupational diseases and particular types of incidents where no injury resulted, (known as dangerous occurrences).

A report should be submitted within 10 days of an incident. For accidents resulting in over seven-day incapacitation you must notify the enforcing authority (usually the HSE) within 15 days of the incident. For accidents resulting in over three-day incapacitation an accident record must be kept but there is no need to report. (Social Security (Claims and Payments) Regulations 1979)

You should have an accident book at each workplace and a designated person to complete the book. All accidents in the workplace causing injury, however small, must be entered into the accident book and the person in control of the premises notified. The HSE Accident Book (BL 510) was last revised in 2018 and complies with the Data Protection Act 1998 as it is designed to allow for accidents to be recorded, while details of individual(s) can be stored separately in a secure location. This book can be used to record details of work-related injuries for which state benefits could be payable.

If you are on a construction project, you should notify the principal or main contractor. You need to identify the nature of the incident and the extent of any injuries and then follow the procedure detailed in the table overleaf:

Incident	Action	By Whom
Death or serious/major incident at a workplace requiring immediate HSE investigation	• Notify enforcing authority without delay by telephone • Complete on-line form without delay: **www.hse.gov.uk/riddor/report.htm** • Ensure scene is made safe (where practicable) and preserved for pending investigations	By Police, HSE and/or employer. In the case of self-employed by person in control of the premises at the time of the event (this may be themselves or someone on their behalf)
Major injury[1]	• Complete on-line form within 10 days of the incident. **www.hse.gov.uk/riddor/report.htm** • Complete accident book • Carry out investigation	By employer or in case of self-employed by person in control of the premises at the time of the event (this may be themselves or someone on their behalf)
Incident resulting in the injured person being incapacitated and absent from work for more than seven consecutive days[2]	• Complete on-line form within 15 days of the incident **www.hse.gov.uk/riddor/report.htm** • Complete accident book • Carry out investigation	By employer or in case of self-employed by person in control of the premises at the time of the event (this may be themselvesor someone on their behalf)
Not classified as major but will result in the injured person being absent from work for less than seven consecutive days[2]	• Complete accident book • Carry out investigation	By employer or in case of self-employed by person in control of the premises at the time of the event (this may be themselves or someone on their behalf)
Death of an employee as a result of injury that occurred within the last year while at work	• Notify enforcing authority in writing	Employer
Occupational Disease[3]	• Complete on-line form within 10 days of diagnosis and reporting **www.hse.gov.uk/riddor/report.htm** • Complete accident book • Carry out investigation	By employer or in case of self-employed by person in control of the premises at the time of the event (this may be themselves or someone on their behalf)
Dangerous occurrence[4]	• Notify enforcing authority as soon as possible by telephone • Complete on-line form within 10 days **www.hse.gov.uk/riddor/report.htm**	The person in control of the premises

[1] Major injuries are defined in Appendix 1, [2] Do not include the day of the accident within the seven or three days. Do include weekends or holidays if the injured person would have been unfit to return to work,
[3] Occupational Diseases are defined in Appendix 2, [4] Dangerous Occurrences are defined in Appendix 3.

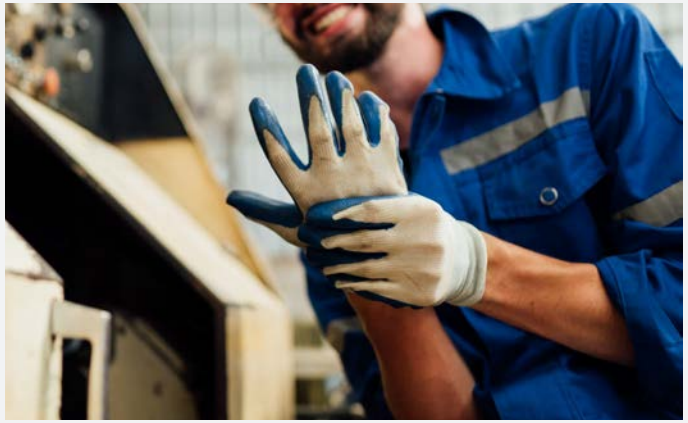
2.2 Investigation

You should have an accident investigation procedure for all incidents that occur within the workplace. The aim of an investigation is not to apportion blame but to identify what happened and to try and prevent it from happening again. Whoever carries out the investigation must be competent to do so and should aim to be independent. The results of the investigation may lead to changes in the way you do things in the workplace. Any findings should be communicated to your employees.

2.3 Diseases

You are required to report certain diseases, which are linked with specified work activities. The usual procedure is that an employee will receive a written diagnosis from their doctor. If the disease is listed alongside the work activity that your employee was performing, then you must report it to the enforcing authority using the on-line form.

In case of a self-employed person, it should be reported by the person in control of the premises at the time of the event; this may be themselves or someone on their behalf. Appendix 2 lists the diseases associated with the woodworking industry. (For a full list of reportable diseases refer to RIDDOR 2013) **www.legislation.gov.uk/uksi/2013/1471/contents/.**



3. CDM Regulations 2015

The Construction (Design and Management) Regulations 2015, known as CDM, applies to all building and construction work and includes new build, demolition, refurbishment, extensions, conversions, repair and maintenance. CDM includes both domestic and commercial projects.

CDM is about forward planning and managing health and safety issues on a project. You may find that you have duties as either a client if you are having work carried out on your premises, as a designer if you are designing or specifying the work or as a contractor if you are working on a construction project. Your approach to CDM will be different depending upon the role you are fulfilling.

3.1 CDM application

Construction work is notifiable to the HSE for all projects where the work is expected to:

- Last longer than 30 days and have more than 20 workers working simultaneously at any point in the project.
- Involve more than 500-person days.

3.2 Client roles

A client is defined as anyone for whom a construction project is carried out. This applies to non-domestic (commercial) clients and domestic clients i.e., clients for whom the work carried out that is not done in connection with a business E.g.,, their own, or a family member's home.

The Regulations apply in full to commercial clients, but for domestic clients' duties are passed onto the contractor (on a single contractor project) or the principal contractor (projects involving more than one contractor). Domestic clients can choose to have a written agreement with the principal designer to carry out the client duties.

The degree of detail, time and effort required to comply with your duties as a client need only be in proportion to the nature, size and risks involved in the project, and applied correctly you should reap many benefits from CDM. Client duties under CDM are not particularly difficult but there is a contractual duty to appoint designers and contractors with the appropriate skills, knowledge and experience and, if they are an organisation, the organisational capability necessary to fulfil the role they are appointed to undertake.

Responsibilities as a client are to make suitable arrangements for managing the project and this includes making sure:

- Relevant information is prepared and provided to other duty holders.
- That the principal designer and principal contractor carry out their duties.
- Money, time and other resources are properly determined.
- Welfare facilities are provided.
- The HSE is notified of the project (where applicable).

3.3 Designers and principal designers role

Designers are those who, as part of a business, prepare or modify designs for a building, product or system relating to construction work. For example, designs can include staircase, windows, doors and any other joinery products.

A **principal designer** is appointed by a client in projects involving more than one contractor. They can be an organisation or an individual with sufficient skills, knowledge and experience to carry out the role.

A designer is required to plan, manage and coordinate the planning and design work. They should be appointed as soon as possible to help you gather information about the project and ensure that they have done all they can to check that the project can be built safely.

When you design a particular element to be incorporated within a structure you need to consider any health and safety hazards associated during construction phase and during use. If you can alter the design to eliminate or reduce these hazards, then you must do so. E.g., Window frames may be designed to be fitted from within a structure, this reduces the risk of falling from external scaffolding. Windows may also be designed to be cleaned from within buildings; this can reduce the risk of falling by window cleaners.

It is not always possible to eliminate hazards completely; in this event you must provide information on the remaining risk to those who need it. To ensure that the information reaches the person who needs it, the most appropriate place for this information is on drawings or on information provided with the component. E.g., you may not be able to reduce the weight of a heavy component, it would therefore be appropriate to mark the weight on the component or its packaging in addition to providing it to the planning supervisor.

Designer responsibilities include:

- Preparing or modifying designs, to eliminate, reduce or control foreseeable risks that may arise during construction and the maintenance & use of the building once it is built.
- Plan, manage, monitor and coordinate health and safety in the pre-construction phase of a project.
- Identify and eliminate foreseeable risks.
- Prepare and provide relevant information to other duty holders.
- Provide relevant information to the Principal contractor to help them manage, monitor and coordinate health and safety in the construction phase.
- Ensuring designers carry out their duties (for projects involving more than one contractor).
- Cooperate with other duty holders involved in the project, different aspects of design need to be co-ordinated to ensure a health and safety hazard is not unwittingly introduced.

3.4 Principal contractor and contractor role

A principal contractor is appointed by the client to coordinate the construction phase of the project. If more than one contractor is involved, then the client will need to appoint (in writing) a principal designer and principal contractor. The role of a principal contractor is required to plan, manage and coordinate the construction phase of the work. They should be appointed as soon as possible so that they can be involved with discussions with the principal designer about the work.

Contractors are those who do the actual work and can be either an individual or a company. Contractors must plan, manage and monitor the construction work under their control so that it is carried out without risks to health and safety. For projects involving more than one contractor, they must coordinate their activities with others in the project team.

A client has a duty to ensure that the principal contractor (or contractor for single-contract project) has the skills, knowledge, experience and organisational capability to fulfil their role. The principal contractor's duties include:

- Liaising with the client and principal designer.
- Preparing the Construction Phase Plan. This document sets out the arrangements for securing health and safety during the period construction work is carried out. The plan must be drawn up during the pre-construction phase and before the construction site is set up.
- Organising cooperation between the contractors and coordinating their work.
- Ensuring suitable site inductions are provided.
- Taking reasonable steps to prevent unauthorised site access.
- Providing welfare facilities for the duration of the works.
- Ensuring those engaged to carry out work are capable of doing so.
- Consulting with workers and engaged in securing their health and safety.
- Appoint contractors and designers and ensure they have the skills, knowledge, experience and organisational capability to fulfil their role.
- Ensure that all duty holders carry out their responsibilities, communicate and co-operate with each other and the client when requested to do so.
- Ensure sufficient resources and time are allowed for each phase of the project.
- Maintain and review the management arrangements for the duration of the project.
- Where applicable, prepare a health and safety file.

In the majority of cases your role will probably be as a contractor sub-contracted to the principal contractor under CDM. You should be provided with relevant parts of the health and safety plan to ensure that you are aware of any health and safety issues that will affect you on the project. If any of these issues affect your work directly you will need to incorporate this into your tender documentation.

Your main duties as a contractor in respect of CDM are:

- To co-operate with the Principal contractor
- To comply with any site rules or directions given by the Principal contractor
- To inform the principal contractor of any reportable incidents (under RIDDOR)
- To provide any information that the principal contractor may need.

You must receive the names of the planning supervisor and the principal contractor and the relevant parts of the health and safety plan before you allow any employees to start work on the project. You may be requested to provide information for the health and safety file, and you should provide such information promptly when asked.

3.5 Worker role

Workers are the people who work for or under the control of contractors on a construction site. They must:

- Be consulted about matters which affect their health, safety and welfare.
- Take care of their own health and safety and others who may be affected by their actions.
- Report anything they see which is likely to endanger either their own or others' health and safety.
- Cooperate with their employer, fellow workers, contractors and other duty holders.

3.6 Health and safety file

A Health and Safety File is only required for projects involving more than one contractor. The Principal designer is responsible for preparing and updating the file which is a record of key health and safety risks that will have to be managed during future maintenance, repair or construction work. If the Principal designer's role is completed before the end of the contract, then the file must be passed to the Principal contractor who will then be responsible for reviewing, updating and revising it as necessary before passing to the client at the completion of the project. As a client you then have a duty to pass on the information in the file to any person carrying out work to the property.

3.7 Construction phase plan

The Construction Phase Plan is a document that sets out the arrangements for securing health and safety during the period construction work is carried out. The plan must be drawn up during the pre-construction phase and before the construction site is set up.

The plan should identify how health and safety issues and highlighted areas of risk will be managed during the works. It should also cover issues such as the management on site, the welfare facilities and emergency procedures.

The plan should be relevant to the works being carried out and should show management issues as well as specific risk assessments and method statements for the works in hand. The plan will change as the work progresses and it should always be kept up to date.

Further guidance on CDM is available to download from the HSE via document ref L153 **www.hse.gov.uk/pubns/priced/l153.pdf**

4. COSHH

4.1 WELs

The COSHH Regulations are accompanied by a document called EH40 and this document contains Workplace Exposure Limits (WELs) for the inhalation for hazardous substances. EH40 is updated annually, as scientific knowledge progresses WELs for substances change.

Download the EH40 guidance: **www.hse.gov.uk/pUbns/priced/eh40.pdf**

A WEL is the maximum concentration of an airborne substance averaged over a reference period to which an employee may be exposed by inhalation. Both hardwood and softwood dust have a WEL.

4.2 Prevention is better than cure!

Individual or group exposure to many substances used in the woodworking industry can result in a variety of health problems. Exposure can show immediate results such as dermatitis (skin rashes) breathlessness and burns. There are also long-term effects, which not only prevent a worker from continuing in their occupation E.g., allergic asthma, allergic dermatitis but can cause death E.g., nasal, stomach and lung cancer.

An allergic reaction means that you have become sensitised to a substance and only need to be exposed to a minute amount of a substance to show a reaction. The word 'sen' after a substance in EH40 means that substance is a known sensitiser.

Imagine suffering from a severe asthma attack every time you encounter a speck of hard wood dust.

4.3 So, what is a hazardous substance?

A substance that has already been classified as being very toxic, toxic harmful corrosive or irritant, is allocated a WEL under the COSHH regulations which cover biological agents, dust and any other substance or compound which creates a hazard to health while at work.

There are various types of materials used within the woodworking industry, which are hazardous by inhalation, ingestion (swallowing) and absorption (through the skin) E.g.,

Adhesives	Pesticide
Hardwood Dust	Resins
Herbicide	Softwood Dust
Paint strippers	Stains
Paints	White Spirit
Isocyanates	Lubricants

4.3.1 Hazard classification of substances

Chemical producers are required to give information on the hazardous properties of the chemicals they supply and to package them safely. The information they must give is supplied on the label and on Safety Data Sheets (SDS). Safety data sheets will also list hazard, risk and other safety phrases that will help you identify risks with the material and controls that may be required. The Classification, Labelling and Packaging (CLP) Regulations requires manufacturers, importers or downstream users of substances or mixtures to classify, label and package their hazardous chemicals appropriately before placing them on the market to help users identify hazardous chemicals and explain what the hazards are and how to avoid them.

Hazard pictograms are used as a visual indication of the presence of hazardous material or substances which may cause harm. They are intended to indicate the type of hazard and potential risk associated with it in a clear and visual form.

There are 9 pictograms all with a white background, a red diamond frame and have a black hazard symbol inside.

Symbol	What does it mean?	Examples of where to find it	Examples of precautionary statements
Gas Cylinder 	• Gas under pressure. May explode if heated. Contains refrigerant gas; may cause cryogenic burns or injury	Gas containers	• Protect from sunlight. Wear cold insulating gloves/face shield/eye protection. Get immediate medical advice/attention
Exploding Bomb 	• Unstable explosive • Explosive; mass explosion hazard • Explosive; severe projection hazard • Explosive; fire, blast or projection hazard • May mass explode in fire	Fireworks, ammunition	• Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/ sparks/open flames/hot surfaces • No smoking. Wear protective gloves/protective clothing/eye protection/ face protection. Use personal protective equipment as required. Explosion risk in case of fire
Flame over circle 	• May cause or intensify fire; oxidiser. • May cause fire or explosion; strong oxidiser.	Bleach, oxygen for medical purposes	• Keep away from heat/sparks/open flames/hot surfaces. – No smoking • Wear protective gloves/protective clothing/eye protection/face protection • Rinse immediately contaminated clothing and skin with plenty of water before removing clothes
Flame 	• Extremely flammable gas • Flammable gas • Extremely flammable aerosol • Flammable aerosol • Highly flammable liquid and vapour • Flammable liquid and vapour • Flammable solid	Lamp oil, petrol, nail polish remover	• Do not spray on an open flame or other ignition source • Keep away from heat/sparks/open flames/hot surfaces – No smoking • Keep container tightly closed • Keep cool • Protect from sunlight
Corrosion 	• May be corrosive to metals • Causes severe skin burns and eye damage	Drain cleaners, acetic acid, hydrochloric acid, ammoniac	• Do not breathe dust/fume/gas/mist/vapours/spray • Wash hands thoroughly after handling • Wear protective gloves/protective clothing/eye protection/face protection • Store locked up • Keep only in original container

Symbol	What does it mean?	Examples of where to find it	Examples of precautionary statements
Exclamation Mark 	• May cause respiratory irritation • May cause drowsiness or dizziness • May cause an allergic skin reaction • Causes serious eye irritation • Causes skin irritation • Harmful if swallowed • Harmful in contact with skin • Harmful if inhaled • Harms public health and the environment by destroying ozone in the upper atmosphere	Washing detergents, toilet cleaner, coolant fluid	• Avoid breathing dust/fume/gas/mist/vapours/spray • Use only outdoors or in a well-ventilated area • If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing • If swallowed: Contact the NHS or your general practitioner if you feel unwell • Wear protective gloves/protective clothing/eye protection/ face protection • If on skin: wash with plenty of soap and water • If in eyes: rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing • Do not eat, drink or smoke when using this product
Skull & Crossbones 	• Fatal if swallowed • Fatal in contact with skin • Fatal if inhaled • Toxic if swallowed • Toxic in contact with skin • Toxic if inhaled	Pesticide, biocide, methanol	• Wash hands thoroughly after handling • Do not eat, drink or smoke when using this product • If swallowed: Contact the NHS or your general practitioner immediately • Rinse mouth • Store in a closed container • Do not get in eyes, on skin, or on clothing • Wear protective gloves/protective clothing/eye protection/ face protection • If on skin: gently wash with plenty of soap and water • Remove/take off immediately all contaminated clothing • Wash contaminated clothing before reuse • Do not breathe dust/fume/gas/mist/vapours/spray • Use only outdoors or in a well-ventilated area • Wear respiratory protection • If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing • Store locked up

Symbol	What does it mean?	Examples of where to find it	Examples of precautionary statements
Health Hazard 	• May be fatal if swallowed and enters airways • May cause damage to organs • May damage fertility or the unborn child • May cause cancer • May cause genetic defects • May cause allergy or asthma symptoms or breathing difficulties if inhaled	Turpentine, petrol, lamp oil	• If swallowed: Contact the NHS or your general practitioner immediately • Do NOT induce vomiting • Store locked up • Do not breathe dust/fume/gas/mist/vapours/spray • Wash thoroughly after handling • Do not eat, drink or smoke when using this product • Get medical advice/attention if you feel unwell • If exposed: Contact the NHS or your general practitioner immediately • Obtain special instructions before use • Do not handle until all safety precautions have been read and understood • Use personal protective equipment as required • If exposed or concerned: Get medical advice/attention • Avoid breathing dust/fume/gas/mist/vapours/spray • In case of inadequate ventilation wear respiratory protection • If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
Environment 	• Very toxic to aquatic life with long lasting effects • Toxic to aquatic life with long lasting effects	Pesticides, biocides, petrol, turpentine	• Avoid release to the environment • Collect spillage

4.3.2 What must you do about hazardous substances?

Employers and self-employed must carry out an assessment to identify the hazard, evaluate the risk to employees and any control measures that should be implemented. Remember you are assessing the activity being carried out using the substance and not just the substance alone.

You must also consider the effects if you are using more than one hazardous substance at once, or substances are mixed. They may be each hazardous in their own right but may also become more hazardous when combined.

To carry out an assessment you need to follow these steps:

- Assess the risks
- Prevent or adequately control exposure
- Ensure the control measures are used and maintained
- Monitor the exposure
- Carry out appropriate health surveillance
- Ensure employees are properly informed, trained and supervised
- Asking the following questions will assist in carrying out your initial assessment:

- What is the substance?
- What form does the hazardous substance take?
- What are the harmful components?
- How does the substance enter the body?
- What are the health effects of the substance?
- Is the substance listed in EH40, i.e. does it have a WEL?
- What process causes exposure to the substance?
- What is the level of exposure in your process?
- Who is exposed and when?
- What control measures (except PPE) do you have in place?
- What maintenance do you carry out on your equipment, ventilation, PPE etc.
- Do you carry out health surveillance? If so, what type
- How is the exposure of employees monitored?
- Who is responsible for monitoring substances?
- What training is provided to employees regarding their exposure to substances?

Information to answer these questions should be available on the safety data sheet (SDS) provided by the supplier of the substance, within EH40 and with knowledge of your own process. If a WEL is given to the substance you need to know if you are exceeding the set limits. You can find out the actual level of exposure within your process/environment by requesting a competent person to carry out air sampling, personal monitoring of workers or use a dust lamp to find out the level of contaminant in the air.

From the answers to the questions, you should be able to identify the risk to the health of your employees and whether they are exposed to a substance in excess of the set limits. If you suspect exposure to be above the limits, you must consider workplace monitoring to establish the operational exposure levels. Then you must act upon the findings if they are over the limits or if they are close enough that they may exceed limits at certain times. You must reduce the exposure to the substance by engineering methods or material replacement, with PPE being the last resort when all other reasonable routes have been explored.

4.3.3 How do you reduce exposure?

COSHH requires you to reduce the exposure of a worker and not just by the use of PPE. PPE is a last resort and must be used if exposure to a substance cannot be reduced by other control measures. In some cases, PPE will still be necessary to control residual exposure risk. If PPE is used it must protect the operative from the substance to which they are exposed; further information on PPE is provided in Section 12.

The hierarchy of control measures is listed below, and you can use a combination of controls to reduce exposure:

4.3.4 Elimination

Is the substance or the process that creates the hazard really necessary?

4.3.5 Substitution

Can an alternative substance or process be used that is a safer option? Remember to ensure that the alternative substance does not create a different hazard that still needs to be controlled.

What about the cost of an alternative product? It may be slightly more expensive but if control measures are not required the extra cost is worth it. A workforce not exposed to a hazardous substance means a happier and healthier workforce and increased productivity.

4.3.6 Enclosed process

Can the process be enclosed to prevent workers being exposed to the substance? Can the process be partially enclosed with the use of ventilation?

4.3.7 Local exhaust ventilation

The use of ventilation removes the hazardous substance from an individual process. Monitoring residual dust in work areas will help in understanding how effective LEV is in removing waste and what further controls may be required.

4.3.8 Removal of operatives

Only operatives concerned with the works should be allowed in the area. Could these operatives also be excluded by remote control etc.?

4.3.9 Reduce exposure time

Is it possible to reduce the amount of time a worker is exposed to the substance?

4.3.10 Storage

Ensure accidental exposure does not occur by having a safe method of storage.

4.4 Personal protective equipment (PPE)

The use of PPE and RPE will only protect the individual, and then only if it is worn correctly for all of the time. The regulations require you to use other methods to control exposure to a substance before resorting to the use of PPE.

Any PPE identified must continue to work effectively in combination with any other items of PPE required.

4.4.1 Emergencies

In the event of an emergency, procedures must be in place for limiting the extent of risks to health and regaining adequate control as soon as possible.

4.5 Maintenance of control measures

Once you have decided upon your control measures, you need to ensure that they protect the worker by reducing exposure to the substance and that you have a suitable and sufficient maintenance schedule for these control measures.

Local exhaust ventilation (LEV) must be thoroughly examined and tested at least every 14 months; a competent person should also carry out weekly inspections (e.g. spray booth filters). A suitable record must be kept of all thorough examinations and tests carried out on LEV. A suitable record form indicating the details that should be recorded is provided in Appendix 4. Remember that thorough test and examination applies to on-tool extraction and vacuum cleaners (Minimum of Class M/H standard) used to remove wood dust waste. Current WELs for both hardwood and mixed dust waste are 3mg/m3. Softwood dust is 5mg/m3. It is expected that WEL's will be further reduced, down to 2mg/m3. Details can be found on the HSE website **www.hse.gov.uk/coshh/basics/exposurelimits.htm**

Tight fitting Respiratory Protective Equipment (RPE) must be Face Fit Tested to ensure that it is working effectively. RPE must be adequate and suitable for the work to be carried out. Tight face fitting RPE will not perform correctly on faces with facial hair or stubble. Employees with facial hair must be provided with alternative air fed RPE full face masks. Face Fit Testing should be carried out on all new employees and thereafter every two years unless there is a change such as increase or decrease in weight.

RPE must be examined and tested (where appropriate) each month and more frequently where the conditions are particularly severe. However, in the case of half-mask respirators used only occasionally, for short spells against dusts or fumes of relatively low toxicity, longer intervals between examinations may be suitable. In such cases, the person responsible for the management of all aspects of RPE maintenance should determine suitable intervals, but in any event, the intervals should not exceed 3 months.

Always ensure that the correct RPE is used for the appropriate task. If in doubt check with your equipment supplier. Correct storage in clean containers is vital in prolonging the life of reusable RPE and in preventing contamination of the RPE between usages.

You should ensure that the RPE you select protects the worker from the hazardous substance in the air around them. There are various types of respirator available, and they are categorised by an assigned protection factor (APF) which indicates how much protection that RPE is capable of. For example, RPE with an APF of 20 will reduce the wearer's exposure by at least a factor of 20 (or one-twentieth) if properly used. There are only a few number ratings, so RPE APFs will be either 4, 10, 20, 40, 200 or 2000. Typically, for tasks in the wood industry, a minimum APF rating of 20 should be worn.

Records of such tests on RPE must be kept for at least 5 years. A suitable record form indicating the details that should be recorded is provided at Appendix 5.

To ensure that the control measures continue to be adequate, monitoring of the environment should be carried out.

4.6 Information and training

Employees must be given information, instruction and training that includes the following:

- The substance to which they are exposed and the risk to their health from this exposure.
- Factors which may influence or increase this risk, e.g. Smoking.
- The control measures to be adopted, the reason these control measures were selected and how they should be used.
- The use and maintenance of any PPE provided.
- Monitoring procedures.
- Details of any health surveillance.
- Any storage and cleaning information.
- Emergency procedures information.
- Defect reporting procedures.

An example of a COSHH assessment record is in Appendix 6

4.7 Health surveillance

Health surveillance is essentially the monitoring of employee's state of health and is appropriate where:

- Employees are exposed to substances hazardous to health linked to a particular disease or adverse health effect: and
- There is a reasonable likelihood under the conditions of the work of that disease or effect occurring; and
- It is possible to detect the disease or the effect.

The objective of any health surveillance is to protect the health of the employee by early detection of any adverse effects, and to monitor control measures that are in place.

Any results of the health surveillance should lead to some action being taken that will benefit the health of employees.

Health surveillance will always include the keeping of individual health records. Occupational health records must be kept for a minimum period of 40 years. It may also include:

- Inspections by a responsible person
- Basic enquiries and / or inspections about symptoms by a suitably qualified person E.g. A nurse.

Medical surveillance by a medical practitioner. The need to carry out surveillance and the extent it is carried out will depend upon the activity being carried out, the method and materials employed.

Examples include

- Vibrating equipment (Hand sanders/portable power tools) potentially leading to hand- arm vibration syndrome (HAVS) under the Control of Vibration at Work Regulations 2005,
- Noise exposure leading to tinnitus under the Control of Noise at Work Regulations 2005 or
- Exposure to wood dust or use of substances leading to occupational asthma, cancer or dermatitis under the Control of Substances Hazardous to Health Regulations 2002 (COSHH).

Where hazardous substances are being used, the extent to which surveillance is carried out will depend on the particular hazardous substance and the degree of exposure. (The COSHH Regulations stipulate where health surveillance must be carried out, none of these substances directly relate to a woodworking environment).

Sickness records may assist in identifying health issues within the workplace, a record of respiratory disease or disorders, complaints from employees about breathing problems or respiratory problems may all be indicators of a hazardous substance or inadequate control measures. It is recommended that low level health questionnaires are completed as standard to help identify health concerns.

Surveillance questionnaires should be completed as a new operative commences employment, then 6 weeks after and annually there onwards. See Appendix 14 for example forms.

Advice and assistance should be sought from an occupational health specialist to establish if health surveillance is necessary and what type of surveillance should be carried out. The main aim should be to eliminate the hazardous substance and / or introduce control measures to reduce employees' exposure. However, health surveillance may still be necessary in any case to ensure that your control measures are adequate.

4.7.1 Situations where health surveillance is appropriate in the woodworking industry

Exposure to substances known to cause occupational asthma and respiratory sensitisers, e.g. red cedar dusts.

Health surveillance will involve the keeping of health records as well as enquiries seeking evidence of respiratory symptoms.

Exposure to substances known to cause severe dermatitis and skin sensitisation, e.g. organic solvent-based wood preservatives.

A responsible person should carry out skin inspections at regular intervals.

Exposures to substances, which are known or suspected carcinogens, e.g. hardwood dust, iso-cyanate finishing materials and inorganic arsenic compounds.

4.7.2 Keeping records

Where any health surveillance is carried out individual records must be kept for 40 years. In the event of a business ceasing trading, health surveillance records must be made available to the Health and Safety Executive.

Where individual health records only are required, they should contain the following information:

- Surname and forename.
- Permanent address.
- Sex.
- Date of birth.
- National Insurance Number.
- Date of commencement of present employment.
- A historical record of jobs involving exposure to the hazardous substances requiring the health surveillance.

Where health surveillance is carried out which includes medical surveillance, the records must also contain the following information:

- Date of health surveillance.
- Name of person who carried out the surveillance.
- Conclusions of all other surveillance including decisions of the medical practitioner, e.g. fitness for work (not including confidential clinical data).

4.7.3 Action

Health surveillance is only appropriate and worthwhile if you can act on the results. If employees are suffering from an adverse health effect, e.g. respiratory diseases or dermatitis, then you must prevent further exposure to the substance. This may be by a change of process or material, by relocating the employee or by the provision of respiratory protective equipment or personal protective equipment. RPE and PPE are only suitable where exposure to the substance is a small part of the work, e.g. for short periods of time.

Advice on specific workplaces and / or problems may be sought from the Employment Medical Advisory Service (EMAS). EMAS are part of HSE and your nearest advisor can be contacted via your local HSE office.

4.8 Timber treatment

The treatment of timber involves the use of wood preservatives. Both COSHH and the Control of Pesticides Regulations (as amended) are applicable to the timber treatment process. The use of wood preservatives is a specialist process, and the Wood protection Association produces a 'code of practice for safe design and operation of timber treatment installations' detailing the safe practices which should be followed.

The issues to be addressed in timber treatment plants include:

People

- The training of all operatives involved in the timber treatment process.
- Lone working and safety controls for accessing treatment plant.
- Adequate supervision.
- The carrying out and updating of COSHH assessment record.
- Access to appropriate welfare facilities.
- Appropriate PPE.

Place

- Delivery of preservatives.
- Arrangements for preventing spillage, e.g. bunding – should allow to capture a volume equivalent to 110% of the material being stored.
- Dripping areas.
- Storage of treated timber (preferably under cover).
- Storage of preservatives in large and small quantities.

Plant

- Design and construction of plant and equipment.
- Interlocking doors / safe operating procedures, etc.
- Appropriate pressure relief valves.
- Written scheme of maintenance and examination of pressure systems.
- Thorough examinations.
- Markings on equipment.

Process

- Handling and disposal of waste preservatives.
- Maintenance procedures involving confined spaces etc.
- Emergency procedures.
- Fire prevention measures.
- Local environmental issues.

COSHH Assessment Record templates can be downloaded from the BWF webpages.

5. Electricity at Work

5.1 Workshop and woodworking environment

Within a workshop or joinery environment the electrical supply will be a permanent installation. This may be a 230-volt supply or a 415/230 volts three phase system. The permanent electrical installation will usually supply fixed and portable equipment such as woodworking machines, lighting and ventilation systems, heating and office equipment.

The electrical installation provided should be appropriate for the equipment that you will be using and should be installed in accordance with the IEE Wiring Regulations (BS 7621). Any new systems will be inspected, tested and commissioned by a trained and competent electrician before being put into service.

Any work carried out on the electrical installation should only be carried out by a trained and competent electrician. Work must not be carried out on live systems (work should only be carried out on live systems when it would be unreasonable to make the system dead). Any work should be supervised and controlled by an authorised person and should be carried out under a permit to work system.

Where proposed work is identified as having a high risk, strict controls are required. The work must be carried out against previously agreed safety procedures, a 'permit-to-work' system. **www.hse.gov.uk/coshh/basics/permits.htm**

5.2 Electrical inspection and testing of fixed installations

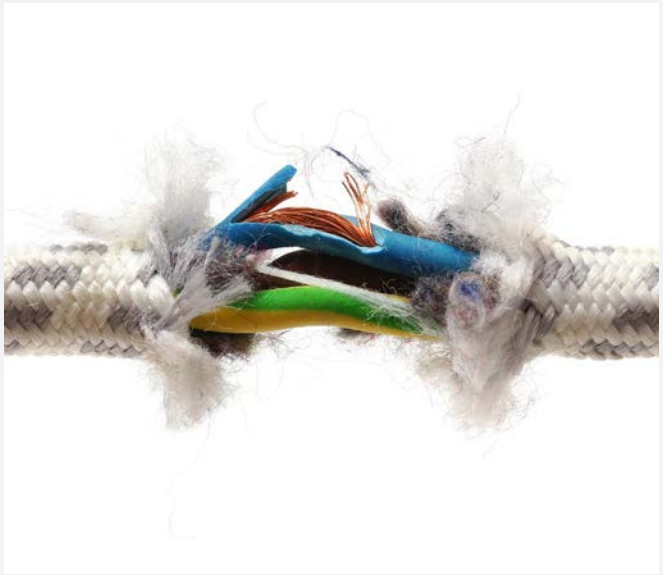
Electrical testing is necessary to ensure that the system continues to operate to the required standard. Testing also enables faults to be detected so that any modifications or repairs can be carried out before the fault develops and causes damage or injury. Fixed electrical installations should be inspected and re-certificated every 5 years.

The supply to individual machines or pieces of equipment will be inspected as part of the equipment inspection required under PUWER '98 (see Section 15). A competent person should advise you on the requirements of testing and inspection for the whole of the permanent installation. This information may have been provided during the initial installation and commissioning phase or assistance should be sought from a competent person.

5.3 Portable electrical appliances

Almost a quarter of all reportable electrical accidents involve portable electrical appliances, and faulty flexible cables, extension leads, plugs and sockets cause the majority of these. Where possible portable electrical appliances should utilise a 110V supply or, where practicable, be battery powered. If the equipment is to be used in a low-risk environment 230 V tools may be used but the following precautions must be taken:

- Appliances to be protected against overload and short circuits by suitable electrical protection such as fuses or circuit breakers.
- Tools to be insulated.
- Cables should be flexible, electrically insulated and protected against mechanical damage.
- All damaged cables should be replaced.
- Minimise trailing cables by providing sufficient suitably placed socket outlets.
- Use permanent wiring where possible rather than plugs and sockets.
- Use circuit breakers or residual current devices (RCD) typically operating at no more than 30 MA.
- When using reel type extension leads the entire cable should be unwound before use to avoid overheating and overloading the lead.



5.4 Inspection and testing of portable electrical appliances

Portable Appliance Testing (PAT) of all portable appliances including any extension leads should be identified by a serial number and recorded in a register. Visual inspections should be carried out on a pre-use basis with regular recorded inspections at a frequency determined in your local risk assessment. It is important to check battery tools and charging units for safe condition and location, with consideration given to fire and overheating if charged outside of normal working hours.

For all appliances an inspection will include checking for signs of damage or deterioration of:

- The plug.
- The socket.
- The body/casing of the tool.
- Cable.
- Controls.
- Any dust collection systems.

The results of any inspections must be recorded, and the record of inspection must accompany the equipment if it is moved to another undertaking.

All portable appliances should be tested using a portable appliance testing (PAT) device.

A PAT device provides an earth bond test and an insulation test. RCDs should be tested daily using the test button.

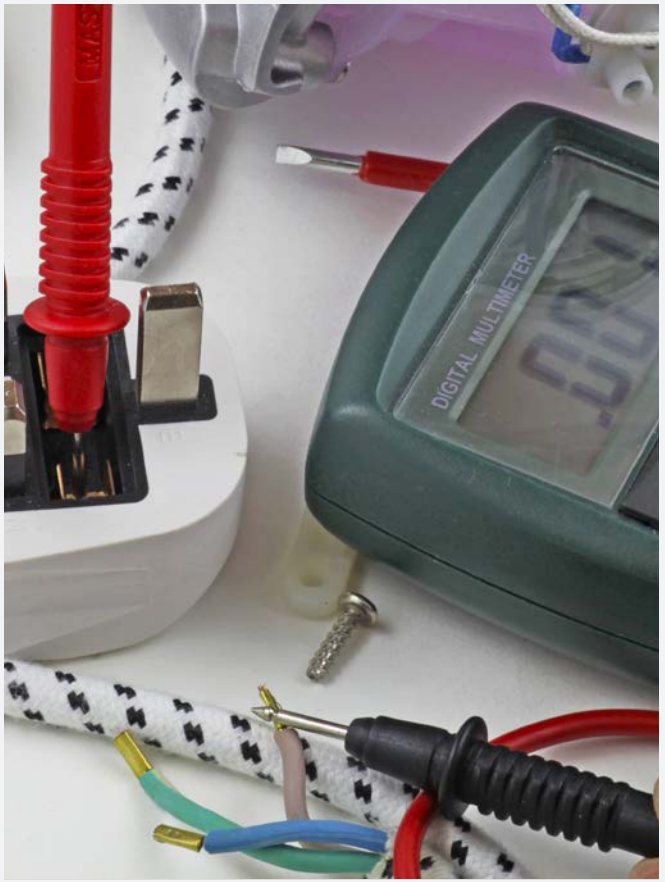
HSE recommends that 110 V portable tools are inspected and tested before first use and after that in line with the I.E.E recommendations (detailed elsewhere in this guide). Only trained and competent staff can conduct PAT testing.

5.5 Construction environment

Most construction sites have a temporary electrical distribution system; this system will supply transformer units around the site which reduce the voltage from 230 V to 110 V. On the majority of construction sites portable appliances will operate on a 110 V supply, 230 V appliances are not usually permitted within construction environments.

5.6 Training

Any person working on electrical installations and associated appliances must be adequately trained and competent. Where the necessary expertise is not held within the company it is advisable to employ a specialist electrical contractor. Members of the Electrical Contractors Association and those on the register of the National Inspection Council for Electrical Installation Contracting should be fully conversant with the standards required.



	Type of Premises	Type of Equipment Note (1)	User Checks Note (2)	Class I		Class II Note (4)	
				Formal Visual Inspection Note (3)	Combined Inspection and Testing Note (5)	Formal Visual Inspection Note (3)	Combined Inspection and Testing Note (5)
	1	2	3	4	5	6	7
1	Construction sites 110 V equipment	S IT M# P# H#	None None Weekly Weekly Weekly	1 month 1 month 1 month 1 month 1 month	3 months 3 months 3 months 3 months 3 months	1 month 1 month 1 month 1 month 1 month	3 months 3 months 3 months 3 months 3 months
2	Industrial including commercial kitchens	S IT M P H	Weekly Weekly Before use Before use Before use	None None 1 month 1 month 1 month	12 months 12 months 12 months 6 months 6 months	None None 3 months 3 months 3 months	12 months 12 months 12 months 6 months 6 months
3	Equipment used by the public	S IT M P H	Note (6)+ Note (6)+ Note (6)+ Note (6)+ Note (6)+	Monthly Monthly Weekly Weekly Weekly	12 months 12 months 6 months 6 months 6 months	3 months 3 months 1 month 1 month 1 month	12 months 12 months 12 months 12 months 12 months
4	Schools	S IT M P H	Weekly+ Weekly+ Weekly+ Weekly+ Before use+	None None 4 months 4 months 4 months	12 months 12 months 12 months 12 months 12 months	12 months 12 months 4 months 4 months 4 months	48 months 48 months 48 months 48 months 48 months
5	Hotels	S IT M P H	None None Weekly Weekly Before use	24 months 24 months 12 months 12 months 6 months	48 months 48 months 24 months 24 months 12 months	24 months 24 months 24 months 24 months 6 months	None None None None None
6	Offices and shops	S IT M P H	None None Weekly Weekly Before use	24 months 24 months 12 months 12 months 6 months	48 months 48 months 24 months 24 months 12 months	24 months 24 months 24 months 24 months 6 months	None None None None None

(1) **S** = Stationary equipment | **IT** = Information technology equipment **M** = Movable equipment | **P** = Portable | **H** = Hand-held equipment

(2) User checks are not recorded unless a fault is found.

(3) The formal visual inspection may form part of the combined inspection and tests when they coincide, and must be tested as Class I.

(4) If the class of equipment is not known, it must be tested as Class I.

(5) The results of combined inspections and tests are recorded see 7.2c.

(6) For some equipment such as children's rides a daily check may be necessary.

(+) By supervisor/teacher/member of staff.

(#) 110 V earthed centre tapped supply. 230 V portable or hand-held equipment must be supplied via a 30 mA RCD and inspections and tests carried out more frequently.

6. Fire Prevention Procedures

6.1 Fire prevention

You must consider the potential sources of ignition within your workplace and identify areas of high risk. Machines producing heat may require ventilation or some form of insulation to retain the heat. Any fires, stoves or boilers may need barrier guarding and restricting the proximity of combustible materials should be considered. Lighting in the workplace may produce heat; you must therefore ensure that objects cannot come into contact with lights that could result in a fire hazard.

Combustible and waste materials must not be allowed to accumulate and cause a fire hazard. Good housekeeping procedures will minimise the risk of fire and avoid the blocking of fire exits and escape routes. Certain materials such as flammable liquids will require special storage facilities and limitations in the volumes held.

Works known to involve heat and therefore create a fire risk, should be carried out under a permit to work system and detailed procedures should be followed to ensure safe working practices are understood by all concerned.

6.2 The Regulatory Reform (Fire Safety) Order 2005 (FSO)

The FSO came into effect in October 2006 and replaced over 70 pieces of fire safety law.

The law applies to you if you are:

- Responsible for business premises.
- An employer or self-employed with business premises responsible for a part of a dwelling where that part is solely used for business purposes.
- A charity or voluntary organisation.
- A contractor with a degree of control over any premises.
- Providing accommodation for paying guests.

Under the Fire Safety Order, the responsible person is required to carry out a fire risk assessment, and then to put appropriate safety measures in place to remove the hazards and minimise the risks. The local fire authorities will no longer specify the safety measures they require.

The responsible person will also be expected to be able to show that the safety measures have been correctly installed and properly maintained by a competent person.

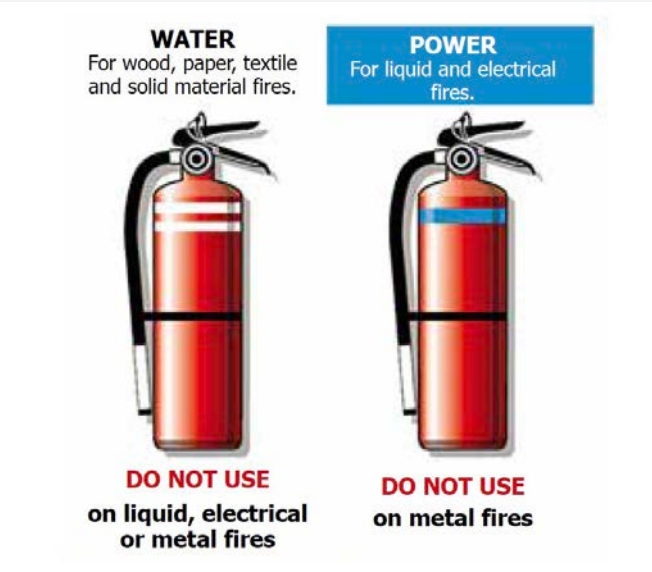
Fire Safety (England) regulations 2022 bring some additional responsibilities for those responsible for fire safety in residential buildings like student accommodation or blocks of flats. The Government have additional documents on fire safety law and guidance for those who have a legal duty for fire safety in a relevant building to help them meet those duties **www.gov.uk/government/collections/fire-safety-legislation-guidance-for-those-with-legal-duties**

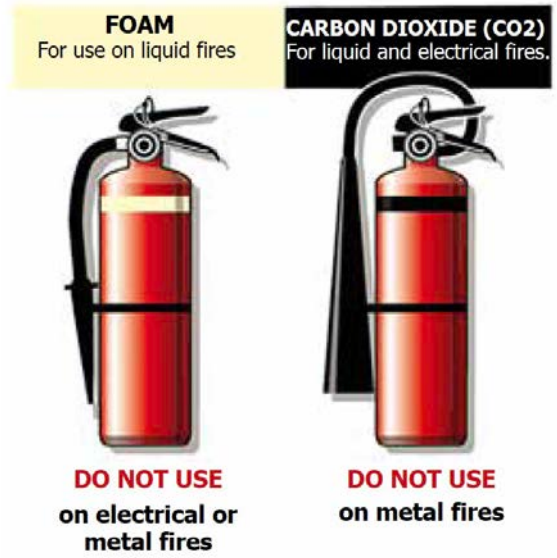
6.3 Firefighting and fire detection equipment

You will need to identify the type of fires likely to occur, i.e. fires involving solid materials, electrical fires etc. and identify the type and numbers of firefighting equipment required to fight such a fire. Firefighting equipment should be used to assist in the escape of persons and is best placed on an exit route. The firefighting equipment may consist of portable fire extinguishers, hose reels and/or sprinkler systems. The location of the firefighting equipment must be clearly indicated and should be stored in a readily accessible area easily visible without obstructing any exit routes, preferably wall mounted at the correct handling height, with the correct content identification sign above it for quick selection of the correct extinguisher for the type of fire.

All firefighting systems must be suitably maintained to ensure that they remain in good working order. A person should be nominated to check the systems on a regular basis and an inspection carried out every 12 months. You will most probably need an external service to maintain and repair such systems.

Your risk assessment should identify the type of fire detection equipment most appropriate to your workplace; this may include smoke or heat detectors. It may be necessary to consult your local fire brigade or an external consultant who specialises in fire issues to advise on the most suitable detection system.





A fifth type of fire extinguisher with a yellow colour code is also available for use of Class A and F fires (Cooking oil/Fat fires).

6.3 Emergency routes and exits

In the event of a fire there must be a means of escape for all persons within the premises. Escape routes must consist of a continuous route whereby persons can travel from wherever they are in the building to a place of safety in the open air. An alternative means of escape or a second exit should also be provided; this will usually be in the opposite direction from the first route (it may join the original route at some point). These escape routes must be maintained and clearly signposted at all times. There are some general rules that apply to means of escape and these are found in Appendix 7.

A notice giving details of the actions to be followed in event of a fire should be clearly displayed within the workplace and all employees must be instructed in the procedure to be followed in the event of a fire (or other emergency).

6.4 Maintenance of the arrangements

The arrangements put in place must be maintained to ensure that they operate in the event of a fire.

Extinguishers and escape routes need to be checked and employees should practice the procedures in emergency drills. You should establish a maintenance procedure for all your fire prevention and firefighting measures; this may involve a simple check register. Depending upon the number of persons employed you may need to appoint fire wardens to act in the event of a fire. Any fire wardens will require training and information on what they are expected to do.

Depending on the results of your own risk assessment, it is generally advised that workplaces should have one trained fire warden for every 50 employees in low-risk environments, one for every 20 employees in medium-risk environments and one for every 15 employees in high risk environments.

In smaller businesses, it would be advised to have a minimum of two trained fire wardens to account for absence, annual leave etc.

Contact with your local Fire and Rescue Service Authority is advised before any changes to your existing fire procedures are made. The Fire and Rescue Service is a valuable source of information on fire issues and in many cases will give assistance and advice on training and other issues.

Additional Fire Risk Assessment documents are available for download form the BWF webpages.

7. First Aid Provision

7.1 Regulations

Under The Health and Safety (First Aid) Regulations 1981 employers must ensure that suitable and sufficient first aid facilities are provided at each workplace.

There are no set rules as to the facilities that must be in each workplace and, as an employer, you will need to carry out a first aid risk assessment to identify the facilities you need to provide. This may be a fully qualified first aider or an appointed person. (HSE provide general guidance on first aid personnel, and this is shown in the chart).

Factors to be included within your risk assessment will include the size of the organisation, the hazards and risks in the workplace, the number of employees, access to emergency medical services, and the history of accidents within the workplace. Workplaces with higher risk activities and more people will require more first aid provision. You should also consider those workers who travel and any lone workers. Subject to your risk assessments, provision should also be made to ensure that adequate first aid cover is given to site based work (installation etc).

You are only obliged to consider your own employees when assessing the need for first aid, however, if members of the public regularly visit your workplace you may wish to include them within your assessment. If you share premises with another employer, you may wish to arrange joint first aid facilities. All of the employers should understand and agree to the arrangements and employees must be kept informed. A written agreement detailing the facilities agreed between such employers is recommended. Remember to inform all employees and others affected of the names and locations of First Aiders. Special circumstances may require more first aid personnel than is set out here.

Category of risk	Numbers employed at any location	Suggested number of first-aid personnel
Lower risk E.g., shops, offices, libraries	<50	At least one appointed person
	50 - 100	At least one first aider
	100+	One additional first aider for every 100 employed
Medium risk E.g., light engineering and assembly work, food processing warehousing	<20	At least one appointed person
	20 - 100	At least one first aider for every 50 employed
	100+	One additional first aider for every 100 employed
Higher risk E.g., Most construction, slaughterhouse, chemical manufacture, extensive work with dangerous machinery or sharp instruments	Fewer than 5	At least one appointed person
	5 - 50	At least one first aider
	More than 50	One additional first aider for every 50 employed
	Where there are hazards for which additional first-aid skills are necessary	In addition, at least one first aider trained in the specific emergency action

7.2 Equipment, facilities and personnel

First aid containers – each workplace should have a first aid kit appropriate to the number of people at that location. When you purchase your kit, you should specify the number of people it is to cover. There is no mandatory requirement for the content of first aid kits; however, Appendix 8 details the recommended minimum stock of first aid items. Standard kits are available and will cover most workplaces unless there is special risk. When you are at a location that has special risks, you may need additional equipment, i.e. locations where any injured persons would be exposed to the elements would require blankets or entry into hazardous atmospheres may require extra protection for the first aider.

Where mains tap water is not available at least 1 litre of sterile water or saline should be readily available. Once the seal is broken on these containers the remaining contents must be disposed of.

If you have employees who travel frequently you should consider providing travel first aid kits to be kept in vans or cars.

The contents of first aid containers and other supplies should be checked frequently to ensure that they are sufficiently stocked, in good condition and in-date. New supplies should be obtained as they are used.

First aid rooms – First aid rooms will usually be required in high-risk locations and should be available for use at all times by employees at work. The room should be clearly signposted, have adequate heating, ventilation, lighting and be easily accessible to stretchers and wheelchairs.

The room should contain facilities to allow an injured person to lie down, be kept clean and tidy and have blankets available. If the room is used for other purposes, it must be made immediately available in an emergency. Equipment and materials in the room must not impede the giving of first aid.

First aid rooms may include hot and cold running water, soap and paper towels, first aid materials and a container suitable for clinical waste. A telephone is useful particularly if the first aid room is some distance from the main office area.

First aid personnel - Your first aid risk assessment should identify the number of first aid personnel and level of training required that is appropriate for the hazards, category of risk and numbers employed at any location.

A first-aider is someone who has undertaken training by a competent training provider, appropriate to the circumstances. They must hold a valid certificate of competence in either:

- First aid at work.
- Emergency first aid at work.
- Any other level of training or qualification that is appropriate to the circumstances.

Employers can use the findings of their first-aid needs assessment to decide the appropriate level to which first-aiders should be trained.

- Emergency first aid at work (EFAW) – at this level they're qualified to give emergency first aid to someone who is injured or becomes ill while at work
- First aid at work (FAW) – qualified to EFAW level but can also apply first aid to a range of specific injuries and illnesses

www.hse.gov.uk/simple-health-safety/firstaid/first-aid-training.htm

To help keep their basic skills up to date, it is strongly recommended that first-aiders undertake annual refresher training.

Certificates for the purposes of first aid at work last for three years. Before their certificates expire, first-aiders will need to undertake a requalification course as appropriate, to obtain another three-year certificate. Once certificates have expired the first aider is no longer considered to be competent to act as a workplace first aider.

Appointed persons do not need first aid training; however, they may still benefit from an EFAW course (or suitable alternative).

You do need to consider first aid provision for when the first aider or appointed person are on leave or unavailable and make appropriate arrangements. This includes overtime and weekend working periods.

The HSE no longer approves training and qualifications for the purposes of first aid. An employer must evaluate how they select a training provider and ensure that the training provider is qualified, competent and that the training delivered is appropriate to the needs of the business.

FAW training involves at least 18 hours of training and is run over a minimum of three days. This certificate is valid for three years and you must ensure that your first aider attends a two-day refresher training course up to three months before the expiry date of their certificate.

EFAW training courses involve at least 6 hours of training and are run over a minimum of one day. This certificate is valid for three years and you must ensure refresher training before the expiry date of their certificate.

The current HSE recommendation is that all first aiders should refresh their skills annually. You should carefully select your first aiders as they will need to have the personal ability to cope with the training course and the actions they must take during an emergency. Many training providers will refuse to accept candidates who do not have the required attributes to pass the course and administer first aid safely.

If your workplace has specific risks that may require special skills you should discuss these with the course provider to ensure that the training received covers these risks.

It is the employer's duty to ensure that any training provider selected for the purposes of first aid training is competent to deliver that training. Training is available from a variety of providers including those that offer regulated qualifications, e.g. OFQAL, SQA, voluntary approval schemes, Voluntary Aid Societies, e.g. St John Ambulance, Red Cross, and those who operate independently by providing evidence that they meet the criteria set by HSE.

The HSE provides guidance on selecting a competent first aid training organisation **www.hse.gov.uk/firstaid/first-aid-training.htm**

Appointed persons – If your assessment identifies that you do not require a fully trained first aider arrangements must be made to identify an appointed person. This appointed person is to take charge of first aid arrangements, including looking after the facilities and calling the emergency services when required. Appointed persons are not first aiders and should not attempt to give first aid for which they have not been trained. Employers are advised to send appointed persons on an emergency first aid course to enable them to confidently carry out their duties.

You need to consider how you will maintain appropriate cover if your employees work in small gangs, on their own or on other employer's premises. You may consider providing mobile phones to enable workers to call the emergency services, or you should discuss with other employers using their first aid facilities when on their premises.

Remember – ensure that you have adequate cover when your first aider or appointed person is on holiday, if you have more than one first aider this may not be a problem. Where you have identified the need for a first aider it is not acceptable for an appointed person to cover for a first aider except in exceptional circumstances.

8. Forklift or Rider-operated Lift Trucks

Many factories, workshops and yards have a forklift truck to assist in the handling of materials.

The term "[forklift] truck" covers a wide range of mobile lifting devices with or without forks, more accurately termed "rider-operated lift trucks".

You should not allow anyone to operate lift trucks - even on an occasional basis - unless they have satisfactorily completed an appropriate training course, have been tested, and are competent to operate the equipment. Those undergoing training must be supervised at all times. This guidance, and the same basic principles, also apply to pedestrian (powered hand pallet) trucks.

8.1 Training

Training should be given on the type of lift truck and any attachments that operators will, or may be required to use in their work. You also need to consider the specific tasks that the operator will be carrying out and incorporate this into the training programme.

Training should include the following:

- Knowledge of the operating principles and controls of the lift truck and its attachments.
- Risks arising from using the lift truck.
- Routine inspections, servicing and maintenance of the lift truck in accordance with the manufacturer's instructions.
- Use of the truck in the conditions that the operator will meet at work, e.g. confined areas, loading bays, slopes, stacking and storing arrangements, etc.
- Instruction on workplace rules and layouts; one-way systems; speed limits, emergency procedures etc.
- Loading of the forks and safe stacking and storage arrangements of the type of material used.
- Organisation of lifting operations to ensure they are carried out safely.
- Safe systems of work to prevent unauthorised persons using the equipment.
- Refuelling procedures.

Persons who have received training should be designated authorised persons and must be the only persons allowed to operate lift trucks (including powered pedestrian trucks). Approved operators should receive written authorisation from the company to operate the relevant site equipment. Records should be kept of all training given and refresher training should be provided every three years.

8.2 Examination and inspection

Lift trucks are considered a piece of lifting equipment under the Lifting Operations and Lifting Regulations 1998 (LOLER). The truck itself should be thoroughly examined at least every 12 months and inspected at regular intervals. The chains are accessories for lifting and must be thoroughly examined every 6 months. Whoever carries out the thorough examination must be competent to do so. Where the forklift or attachment are used in conjunction with lifting persons the statutory inspection period is every 6 months.

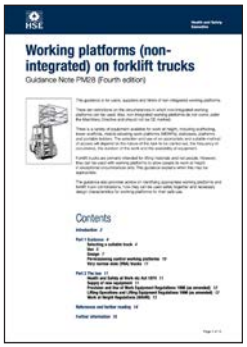
It is recommended that the forklift truck operator carries out a daily pre-use inspection and records the results of this inspection in an appropriate form. You must also ensure that your operator is competent to carry out this daily inspection.

Results of all thorough examinations must be recorded and must accompany the equipment should it leave your undertaking. Furthermore, any lifting equipment that you receive from another undertaking must be accompanied by evidence that it has been thoroughly examined within the previous 12 months.

Provision and Use of Work Equipment Regulations 1998 (PUWER) applies to all work equipment including lift trucks. The regulation requires that the equipment is suitable for use and the purpose and conditions in which it is used. It should be maintained in a safe condition for use so that people's health and safety is not at risk. It should be inspected at suitable intervals by a competent person. Typically, a PUWER inspection and LOLER inspection will be carried out at the same time. Consult your lift truck supplier/ manufacturer for advice.

A seat belt should be fitted and must be used. If the equipment is at risk of rolling over then you must minimise the risk of injury to the operator.

Rough terrain forklifts are unlikely to roll over although they fall on their side. Telescoping forklifts may roll over if used on uneven ground. If there is a chance of your equipment rolling over and there is no cab or rollover protection fitted, then you will need to consider the fitting of roll-over protection structures.



The HSE has published an Approved Code of Practice (ACOP) and guidance, available at **www.hse.gov.uk/pubns/books/l117.htm**

8.3 Attachments to forklift trucks

Attachments to forklift trucks can enable loads to be handled more efficiently and safely. Examples of these include fork extensions, booms, drum clamps and working platforms.

You should consult the forklift and attachment supplier/ manufacturer prior to use to ensure it is compatible, suitable and safe for use with your forklift. The attachment will affect the stability and reduce the capacity (de-rating) of the forklift. Operators must be properly trained and given full instruction on the safe system of working with the attachment and the lift truck to be used.

Attachments (including any straps and chains) must be thoroughly examined by a competent person at least every six months, or in accordance with an examination scheme drawn up by a competent person. Attachments should be securely fastened, and you should make sure it does not interfere with any part of the mast structure during raising/ lowering. A new capacity plate relating to the attachment should be fitted to the forklift prior to use.

Forklift trucks are primarily intended for lifting materials and not people. People should never be lifted balanced on the forks or on a pallet or similar as they can easily fall.

However, they can be used with working platforms to allow people to work at height in exceptional circumstances only. Your work at height risk assessment should consider and select the most appropriate means of access for the task to

be completed. They must also consider fall arrest controls and emergency evacuation/rescue.

There are two types of platforms available:

- Integrated working platforms have controls so the person on the platform can operate the lift height and truck movement.
- Non-integrated working platforms do not have any controls and so the person on the platform cannot control the height or move the truck. All movements are controlled by the truck operator.

More information regarding working platforms is available from the HSE Guidance Note PM28, working platforms (non-integrated) on forklift trucks **www.hse.gov.uk/pubns/pm28.htm**

9. Manual Handling

9.1 Manual handling – the current picture

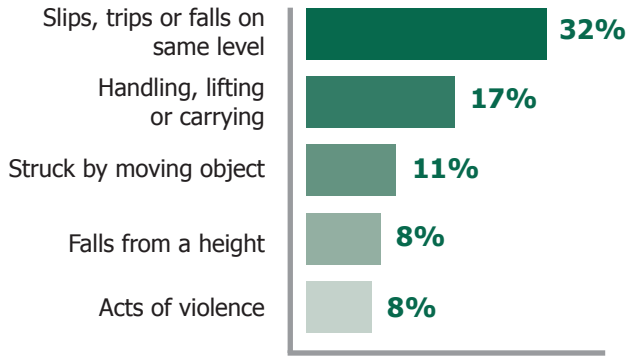
A significant proportion of all industrial injuries are caused by manual handling accidents. Work-related musculoskeletal disorders (WRMSDs) affect the back, upper and lower limbs and are the most common cause of occupational ill health resulting in an estimated 6.6 million working days being lost in 2022/2023.

The major accident rate for woodworking is more than 17% above the manufacturing industry average. Like most industries, handling and slips and trips account for most injuries.

Percentage of non-fatal injuries accounted for by different accident kinds based on (i) Self-reported over 7-day injury estimate from Labour Force Survey and (ii) Non-fatal injury notifications to RIDDOR.

Non-fatal injuries to employees by most common accident kinds

(Non-fatal injuries reported under RIDDOR 2022/23, includes those accident kinds that account for 5% or more of the total)



Source: https://www.hse.gov.uk/statistics/causinj/index.htm

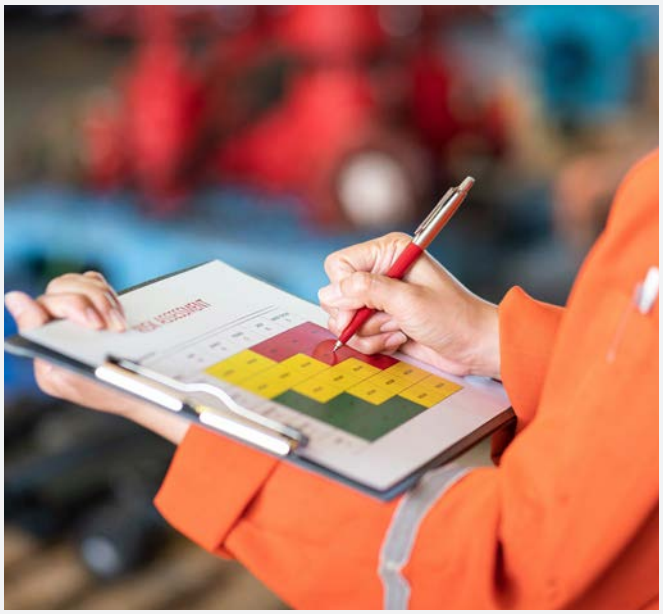
Handling injuries are not just back and muscle strains. They also include fractures, trapped nerves, abrasions and cuts, burns and hernias. There are twice as many laceration injuries during manual handling operations in woodworking as there are in industry generally. This is no doubt because of the necessity to frequently handle sharp, and heavy, cutter blocks and saw blades during tool changing – these are often heavy and awkward to grasp. Handling roughly sawn timber can also lead to cuts and splinters. Fractures are also more common than in other industries though strains appear to be less common.

9.2 Regulations

The Manual Handling Operations Regulations 1998 require employers to avoid the need to carry out manual handling which creates a risk of injury. Where you cannot avoid manual handling you must carry out a manual handling risk assessment. If you cannot eliminate the handling or movement and there is a risk of injury then you must aim to reduce the risk as much as possible. Clearly marking items with their weight or making this information available will assist in making your assessment.

As an employer you need to:

- Identify manual handling operations.
- Avoid manual handling where practicable.
- Assess remaining manual handling risks.
- Reduce manual handling risks.
- Provide information and training.



9.3 Assessing the risk

The following should be considered in deciding whether an activity presents a risk

- Excessive force required?
- Are there complaints of aches and pains from workers?
- Does the work require awkward postures such as stooping or stretching?
- Are there any reports of accidents or injuries associated with manual handling?
- Does the work activity involve repetitive movement?

9.4 Manual handling assessment

The hierarchy of measures that should be followed is:

- Assess any hazardous manual handling operations.
- Avoid hazardous manual handling operations so far as reasonably practicable, e.g. change operation.
- Use mechanical aids to reduce handling such as the use of forklift or rider-operated lift trucks or panel trolleys.
- Use a suitable number of people to carry loads, e.g. 2 people may be required for certain tasks.
- Use carrying aids to assist in handling. Aids which can be used include hooks, handles, etc. for large panels and saw blades.
- Alter work method to reduce height to be lifted, e.g. use adjustable height tables for close work.
- Reduce any repetitive movement, e.g. use vacuum panel lifters.
- Reduce distance for item to be carried or moved by providing extension tables or conveyors.
- Rotate the workforce to vary tasks.
- Train workers in safe lifting techniques, safe handling of loads and the use of equipment provided to avoid handling.

Workers should be encouraged to report all issues concerned with manual handling and should be fully informed of the long-term effects of poor manual handling.

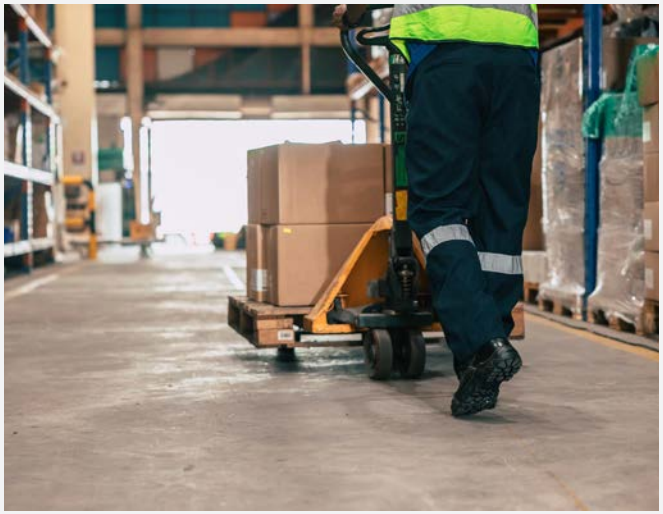
9.5 High-risk handling tasks and processes

The main risk factors associated with manual handling activities include:

- **The task** – twisting, stooping, strenuous pushing and pulling.
- **The load** – excessive weight, unusual size, awkward shape, instability.
- **Work environment** - constraints on posture, poor floor surfaces, hot, cold or humid conditions.
- **Individual capabilities** – health problems, the effects of protective equipment and clothing, pregnancy.

Evidence suggests that the key high-risk handling tasks and processes in the woodworking environment include:

- Manual loading and feeding of board products (fibreboard, chipboard, etc.) on machines, e.g. loading large panels onto beam saws.
- Handling large jigs, particularly those for CNC machines.
- Tool changing.
- Handling large, heavy or cumbersome products and workpieces, e.g. fire doors, factory glazed windows, pallets, large planks, etc.
- The use of hand-held tools, particularly orbital sanders, paint guns and nail/staple guns.



10. Materials – Stacking & Storage

10.1 Stacking and storage of materials

Great care and attention should be paid to the stacking and storing of materials. People are often injured by materials falling from height, e.g. when poorly stacked materials fall over or when attempting to move materials that have been badly stacked.

When considering storage and stacking arrangements there are various factors to consider and these include:

- The ground conditions.
- The manufacturers Safe Working Load (SWL), condition of storage system, quality of the shelving or storage system and the manner in which it has been loaded.
- The type of material, e.g. finished products or raw material.
- The turnover of the material in question, e.g. how accessible it will need to be.
- The weight of the materials.
- The quality and type of bearers or support timbers.
- Banding of sawn timber.
- The presence of pallets and/or packing, e.g. shrink wrapping.
- The training of those involved in both the stacking and the retrieving of the material for use.
- The transport routes available.
- The vehicles and access equipment used, e.g. rider-operated lift trucks, steps, order pickers.
- The space available for storage.
- Means of escape and evacuation in event of fire, racking collapse or equipment failure.
- Access to and from the storage area where blind spots may occur and pedestrians may come into conflict with vehicular transport.
- Clearance height between fire protection systems, lighting, pipework and stored goods.
- Possible load height limitation to prevent obstruction of sprinkler operation.
- Whether or not storage requires fire protection measures within the structure.

The above list is not exhaustive and will depend upon local conditions. Those reviewing their storage arrangements must identify their own site-specific hazards and assess their risk accordingly, putting into place any necessary control measures.

Storage needs to be considered very carefully and those persons responsible for stacking materials need to be appropriately trained to ensure that the storage arrangements are safe and in accordance with supplier and HSE guidance. Racking needs to be suitable for the materials in question and all those in the workplace must be aware of the safe procedure for retrieving materials. It must be remembered that timber may undergo distortion during storage due to the drying process and/or moisture penetration. This may lead to the materials becoming unstable and ultimately collapsing.

10.2 Temporary storage and stacking

The temporary storage and stacking of materials is often forgotten and needs to be addressed. Many accidents happen when sheets or lengths of timber are stacked awaiting removal to their final storage place, or are placed alongside a machine waiting to be used. The timber is not stable in this situation and will easily fall over if not properly secured. In these cases, suitable storage racks need to be provided and used specifically for holding timber in place until it is used or properly stacked.

Appropriate banding materials and fastening devices for timber and other materials being packaged must be selected. Each of the banding materials has their own advantages and disadvantages. The most suitable band material for a given application should be carefully selected bearing in mind the band's characteristics and what will happen to the banded pack in terms of storage, transport, treatment and handling.

Care must be taken when releasing banding on packs of materials as it is often under strain and will spring when cut. Uncontrolled release can result in load collapse due to the sudden release of pressure. Serious lacerations to hands and faces of those standing in the line of the banding release has also occurred specifically with metal strapping.

As with the banding equipment above, any tools used to cut banding must be suitable for the task under PUWER. Specialist cutters are available that hold banding secure while release takes place.

Storage of tools and equipment also needs to be considered; cutters must be properly stored to ensure that they do not accidentally fall out of cupboards or from shelves.

The HSE Woodworking Information Sheet WIS2 regarding 'Stacking round timber, sawn timber and board materials' can be downloaded from **www.hse.gov.uk/pubns/wis2.pdf**

Companies should take steps to review their current arrangements of how materials are stored and moved.

Steps should be taken to provide suitable storage racking such as that illustrated, and appropriate handling aids as part of a safe system of work All racking systems should be properly designed, installed and maintained. The maximum safe working load (SWL) and design configuration should be clearly displayed.

The storage equipment should be inspected on a regular basis by a competent person to ensure that it continues to be serviceable and safe. The Storage Equipment Manufacturers Association (SEMA) are able to provide training and advice **www.sema.org.uk.**

11. Noise at Work

Some of the noisiest working environments are found in the woodworking industries and noise levels can vary widely from machine to machine depending on the conditions of use. Excessive noise can cause progressive and generally irreversible loss of hearing, this is known as noise induced hearing loss. Many woodworking machines give risk to noise levels above the legal limits and as an employer you have a duty to reduce the noise and protect your workers.

11.1 Noise at work regulations

The Control of Noise at Work Regulations 2005 require employers to carry out an assessment of the noise levels in the working area and identify any employees who are likely to be exposed to noise levels high enough to cause hearing damage. A person who is competent to assess the noise and decide upon suitable control measures should carry out this assessment.

It will not always be necessary to make detailed noise measurements in order to establish the noise level. As a rough guide, if people have to shout to be heard clearly by someone about 2m away then you are above the first action level of 80dBA. If you believe that you are above this level then you do need to assess the actual noise level to decide the most appropriate control measures. Typical example noise levels are given below. These are 'short' sample equivalent continuous levels (Leq(s)) at machines where no noise reduction measures have been taken.

Example of noise Levels:

Level	Machine
97 dB (A)	Beam saws and sanding machines
98 dB (A)	Boring machines
100 dB (A)	Band resaws, panel planers and vertical spindle moulders
101 dB (A)	Portable woodworking tools
102 dB (A)	Bench saws and multi-rip saws
103 dB (A)	High speed routers and moulders
104 dB (A)	Thickness planing machines
105 dB (A)	Edge banders and multi-cutter moulding machines
107 dB (A)	Double end tenoners

11.2 Assessments

The competent person who carries out your assessments will need to understand how noise affects people and how to decide upon the most appropriate control measures. This will be someone who has experience in carrying out assessments and will also require some training. A record should be kept of your assessments, and they should be repeated whenever there is a significant change in the work to which the assessment relates.

The assessment should consider:

- The noise level.
- The activity creating the noise.
- Who is affected.
- For how long they are affected.

The noise will need to be controlled in some way and be reduced as low as is reasonably practicable in the circumstances. You must first try to reduce the noise level to acceptable limits; hearing protection is a last resort and should only be used as a control measure when you have tried to reduce the noise level by other means. This may involve:

- Using a machine with a lower noise level.
- Erecting noise enclosures around the working area.
- Removing unnecessary workers from the area and, as a last resort,
- Providing hearing protection.

11.3 Reducing noise levels

By changing work activities, working practices or equipment substantial reductions in noise levels can be achieved.

- When purchasing a new machine look to specify the noise levels and select a low noise machine.
- The structure of the machine should be designed to minimise direct noise radiation and to reduce vibration transmission through the machine. Acoustic absorbents, shields or enclosures for control of unavoidable noise sources should be an integral part of machinery design.
- Ensure that the most suitable blade and machine are used for the job, using the wrong machine or blade can produce more noise.
- Poorly adjusted saw guides can push noise levels up by 3 dB(A) and the use of an unnecessarily heavy gauge saw blade can produce a higher noise level.
- Make sure that the manufacturer's maintenance schedule is followed as well-maintained machines tend to make less noise.
- Well maintained machines can produce idling levels in the region of 80-90 dB(A), but poorly maintained machines, which are otherwise virtually identical, may idle at levels as high as 110 dB(A).
- Erecting a barrier or noise enclosure around a particular machine will help to reduce the exposure of workers in the area to noise.
- Effective enclosures may be constructed from a variety of materials. Homemade enclosures can be as efficient as commercially supplied models and may cost much less. A well-constructed enclosure is capable of attenuating sounds by 10-15 dB(A). If introducing homemade enclosures to a machine, ensure ventilation is maintained and fire risk is not increased!

11.4 Hearing protection

Hearing protection should be considered as the last measure of protection. You must try and reduce the noise level before you choose to use hearing protection as the only control measure. However, on some machines hearing protection will still be a mandatory requirement to help manage residual exposure risk.

At 80db(A), which is known as the first action level you will probably have to shout to be heard at a distance of 2m away from the person you are talking to. At this level employees must be provided with hearing protection at their request. At the second action level, which is 85db(A), or above, you will probably have to shout to be heard at a distance of 1m away from the person you are talking to. The exposure of employees to noise must be reduced, as far as reasonably practicable, without the use of hearing protection. If it cannot be reduced below this level, then hearing protection must be provided, and reasonable steps taken to ensure that it is used. Employees have a duty to use hearing protection in such circumstances.

Generally, both ear plugs and ear defenders provide adequate hearing protection; the type of hearing protection provided must be comfortable to wear, suitable for the job and compatible with any other personal protection worn. Some workers have a preference as to the type of hearing protection that they prefer to wear, and this should be taken into account. Workers are more likely to wear the protection if they feel comfortable.

When providing any form of personal protective equipment, employers must provide appropriate information, training and supervision to ensure (and where necessary enforce) that the equipment is used, stored and maintained correctly. Employees must use the equipment provided in accordance with any training and instruction given. Note, the HSE will act against an employer if they fail to enforce this.

11.5 Audiometry testing

Hearing loss is measured by audiometry, the most widely used technique being pure tone audiometry. This involves the subject sitting in a soundproof booth and listening through earphones to a series of pure tone sounds.

Each sound is gradually increased in intensity until the subject can hear it. At the end of the audiometry test, an audiogram is produced for each ear, which records the hearing of the subject over set frequencies.

You must provide health surveillance (hearing checks) for all your employees who are likely to be regularly exposed above the upper exposure action values, or are at risk for any reason, e.g. they already suffer from hearing loss or are particularly sensitive to damage. Employees have a duty to cooperate with health surveillance.

Audiometry can also be used to monitor whether your noise exposure control measures have been effective. If you do carry out audiometry, you may need to seek advice from a competent external specialist who can provide audiometric services. You should inform your employees of the reasons for carrying out such testing and how you intend to use the results. The results should be used to improve protections for your employees where necessary.

An appropriate programme of audiometric tests would begin with a baseline audiogram that will provide details of the condition of an individual's hearing, etc., before exposure to noise (although a programme can be introduced effectively at any time for employees already exposed to noise). This is often called pre-employment testing. This is then followed by a regular series of audiograms, usually annually for the first two years of employment and then at three-yearly intervals (although this may alter where an abnormality is detected or where the risk of hearing damage is high). You may decide to continue annual checks to give you more information about how well your hearing conservation programme is working and whether the advice you have given to employees about noise has affected their attitudes and behaviour.

11.6 The Control of Noise at Work Regulations 2005

Currently, under the Control of Noise at Work Regulations 2005, the first action level is a daily personal noise exposure of 80dB(A), the second action level is a daily personal noise exposure of 85dB(A), and the peak action level is a peak sound pressure of 137dB(A).

There are also levels of noise exposure that should not be exceeded; these exposure limits are a daily personal noise exposure of 87dB(A) and a peak sound pressure of 140dB(A). These exposure limit values will consider the reduction afforded by hearing protection.

11.7 Environmental noise

Noise from workplaces, as it affects the surrounding area, is covered by the Clean Neighbourhoods and Environment Act 2005 which gives Local Authorities statutory powers concerning certain types of environmental noise.

The Act has paragraphs specific to construction, including a procedure whereby operators of construction works can notify Local Authorities in advance of the noise they are likely to make, and the measures taken to reduce the noise. The Local Authority has only a limited time to respond to such a submission. If noise limits are imposed, they are likely to be for both noise level and working hours.

Experience has shown that complaints of environmental noise from activities can be reduced substantially by maintaining good communications with occupiers of surrounding buildings. This is particularly true of any activities that must be carried out at night.

More information regarding managing noise in woodworking environments visit HSE pages at **www.hse.gov.uk/woodworking/noise.htm**

12. Personal Protective Equipment

As an employer you have a duty to identify hazards and any risks to your employees and anyone else who may be affected by your activities. You must first try to eliminate the hazard and reduce the risks as low as you possibly can. In certain circumstances a hazard may not be eliminated, and a certain level of risk will remain. As a last line of defence, your final control measure may be the provision of personal protective equipment (PPE).

12.1 PPE

PPE is not the first option to be considered, eliminating the hazard or reducing the risk at source will protect all the workers exposed to a hazard. PPE will only protect the individual wearing it and PPE relies on an individual being provided with the right PPE, wearing it correctly and maintaining it in good working order. Therefore, selecting some form of protective equipment should only be considered as a control measure if you have reduced the risk as much as you can by selecting alternative work methods, materials, etc.

What is Personal Protective Equipment (PPE)?

PPE includes
Safety footwear
Eye protection
Safety helmets
Ear protection
Masks
Overalls and gloves
Respirators
High visibility jackets

As an employer you must identify activities that require the wearing of PPE and then select the right protective equipment for that activity, for the operator and others exposed to the hazard. You must provide the necessary PPE, appropriate training in its use, and correct maintenance and storage facilities, free of charge. PPE should ideally be purchased from a member of the Registered Safety Supplier Scheme - **http://www.bsif.co.uk/rsss/**

As an employer, you should ensure that you meet the requirements of the Personal Protective Equipment (Enforcement) Regulations 2018 for Great Britain and Regulation (EU) 2016/425 on Personal Protective Equipment For Northern Ireland and EU.

Your employee has an obligation to use the PPE in accordance with the training and to ensure that the equipment remains in good working order and is correctly maintained. There should be a procedure for employees to follow should their PPE become defective or lost.

12.2 Information and training

The information and training given to users of the PPE should cover:

- The reason why the PPE is necessary.
- When the wearing of PPE is necessary.
- How the PPE works and its limitations.
- Instructions on the fitting and wearing of the PPE.
- How to look after and maintain the PPE.
- The storage requirements.
- How to recognise defects and who to report defects to.

Employees should be trained on all new types of PPE and must be appropriately supervised to ensure the PPE is being worn and maintained correctly. Signs erected where PPE should be worn will assist in reminding employees that PPE should be worn. Signs may indicate particular areas, e.g. hearing protection zones, or may be relevant to particular machines, e.g. wear ear protectors when operating this machine.

CE marked products can be placed on the GB market up to 11pm 31 December 2024. They can then continue to circulate until they reach their end user. After 31 December 2024 newly manufactured PPE for the GB market must be UKCA marked. Products can carry both the CE and UKCA if they have been appropriately assessed for both markets.

12.3 Types of protection

12.2.1 Head protection

An employee who is at risk of a head injury will require some form of head protection, e.g. in storage areas where materials are kept at height. Safety helmets are required on most construction sites, as there is usually a risk of head injury that cannot be eliminated. The type of head protection selected will depend upon the particular hazard. Bump caps protect against striking fixed obstacles while industrial safety helmets protect against falling objects.

Turban wearing Sikhs are exempt from wearing head protection on construction sites under section 11(1) of the Employment Act 1989. For all workplaces, employers must carry out a risk assessment to control and reduce risks as much as practicable. This assessment should minimise risks sufficiently so that it is not necessary for turban-wearing Sikhs to wear head protection, in addition to the protection afforded by their turbans.

12.2.2 Ear protection

Where ear protection is to be provided (see Section 11) on noise at work for details) individuals should be consulted as to the type of ear protection they wish to use, as comfort is an important factor. Some people prefer the disposable ear plugs while others prefer to wear earmuffs. Ear protection should be issued on a personal basis and should not be shared. Earmuffs used by visitors should be cleaned after each use.

To ensure adequate protection the ear protection provided must be worn at all times when in a 'hearing protection zone', users must not remove their ear protection to communicate with each other. It is particularly important that ear plugs are worn properly to ensure adequate protection and that earmuffs are compatible with any other PPE being worn.

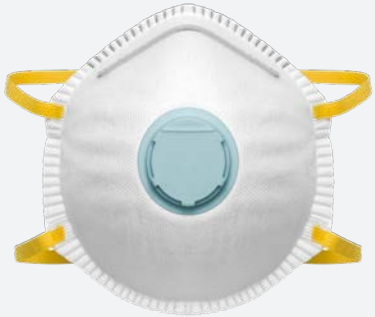
12.3.3 Eye protection

The type of eye protection provided depends primarily upon the hazard, however comfort, style and durability should also be considered. Eye protection will be required for a variety of activities, e.g. the chemical treating of timber, operating machinery, when using nail guns, etc.

Lenses of eye protection must be kept clean, and lenses that are scratched or pitted must be replaced. Eye protection should be issued on a personal basis and suitably stored to prevent damage.

When selecting eye protection, as well as impact protection, consideration should also be given as to whether the user requires prescription lenses for vision correction. Prescription safety glasses may need to be provided.

12.3 Types of protection



12.3.4 Foot protection

Employees at risk of foot injuries must wear suitable footwear. The type of footwear provided will depend upon the risk of injury. Where there is a risk of dropping heavy items, shoes or boots with steel toecaps should be worn and consideration should also be given to protection for metatarsal and/or shin injury, both of which are common injuries. Where there is a risk of sole penetration by sharp objects then shoes or boots with steel mid soles should be worn. Anti-static protection may be selected if operators work in flammable areas with a spark risk.

12.3.5 Respiratory Protective Equipment (RPE)

RPE is designed to help protect against the inhalation of unhealthy substances at work, such as dusts, fumes and gases. The type of RPE chosen is vital as different types of equipment protect the wearer against different substances. If the substance is wood dust, either a filtering half mask or disposable mask may be appropriate. Gases or vapours, e.g. produced from a chemical dipping process, will require a mask with the appropriate filter for the vapour. Confirm with your RPE supplier that the mask you are providing to your employee is suitable as protection for the hazardous substance and, where masks are used, that they fit.

The wearing of any RPE for prolonged periods of time can be uncomfortable and this must be taken into consideration when considering the protection of your employees. Maintenance and storage of filters is particularly important, as RPE is ineffective if the appropriate filter is not used.

Tight fitting face pieces need to fit the wearers face to be effective and must not leak. As people are different shapes and sizes it is unlikely that one type of RPE will fit everyone. Therefore 'Fit Testing' must be carried out by a trained, qualified, competent person to ensure the wearer is adequately protected. If a worker has facial hair or stubble, then tight-fitting face pieces will leak and allow dirty air to pass through the gaps and into the lungs. Therefore, alternative RPE should be used, such as an air fed mask. A company may be able to have a 'clean shaven' policy however some employees could have a beard for religious regions and must not be discriminated against.

12.3 Types of protection

12.3.6 Gloves

Hand protection will be required if there is a risk of injury to the hands. Gloves can reduce dexterity and must be carefully selected to suit the activity, e.g., gloves used with chemicals may quickly degrade and offer little protection if the type of material is not correct for the chemical being used. Check what type of glove is required from the safety data sheet or liaise with your PPE supplier about the chemicals to be used.

12.3.7 Overalls

Overalls will usually be worn to protect the wearer's own clothing from contamination, arrangements must be made for the cleaning of overalls to ensure other workers do not become contaminated. Disposable overalls may be appropriate for certain activities.

13. Training

Employers have a legal duty to ensure that those who use wood equipment have received adequate training in health and safety, including training in methods of work, the risks created and the precautions to be taken.

Supervisors and managers of people using wood equipment also have to be adequately trained for health and safety purposes.

Training costs money, but untrained wood machinists are more likely to have an accident and the consequences will cost you more!

13.1 Regulations

In respect of woodworking, machinery training is extremely important and any person who operates, supervises or manages woodworking machinery or equipment must be able to demonstrate their competence. This applies to all users (including supervisors and managers) of machinery at all levels.

Certain pieces of machinery can create particular hazards and are deemed to be high risk, which means that there is more potential for injury or accidents if the equipment is not used or maintained properly. This does not mean, however, that the correct use and maintenance of lower risk machinery is not required. The level of competence required will depend upon the work and responsibilities that individuals have with the required level of competence being attained through relevant experience and training.

The Health and Safety at Work Act etc. 1974 and various sets of regulations require training and instructions and authorisation to be provided to employees.

The Provision and Use of Work Equipment Regulations 1998 and the Safe Use of Woodworking ACOP L114 specifically refer to training, for the purposes of health and safety, of all persons who use work equipment and that includes those who supervise or manage the use of work equipment.

Safe use of woodworking machinery L114: **www.hse.gov.uk/pubns/priced/l114.pdf**

13.2 Who needs training?

Within your organisation you must identify who requires training and what type of training is necessary. Employees will require training appropriate to the machines they are to use and maintain. Supervisors will need specific training to ensure that they are competent to oversee a variety of activities and to manage the health and safety of these activities. Managers may have more general health and safety duties and will require general health and safety training to ensure that the company complies with all its duties under health and safety law.

In brief

- Everyone within a company who uses equipment need to be trained.
- As an employer you are required by law to identify areas of risks, and provide suitable and sufficient training.
- Managers and supervisors must know the company's Health and Safety policy and ensure compliance is met. They must also have the necessary qualities to supervise people to ensure they use machines safely and legally.
- Employees need to be trained to work without causing risk to themselves or to others.

13.3 Type of training

Training can be provided in-house or externally depending on the type and depth of training required and the level of experience of your staff. For general health and safety training you may use your health and safety advisor, they may be permanently employed, an external consultant or a training organisation. For machine specific training you should contact a specialist training provider, making sure that they are suitably qualified and experienced to provide relevant and high-quality training.

Whoever carries out the training, in-house or external, they must be competent themselves and be fully up to date with legal requirements and good practice. Records of training should be kept along with a summary of the content delivered to ensure it is clear as to what topics have been delivered. There are many trainers who claim to carry out machine training but have never operated a woodworking machine or have no qualification to train.

Induction training should be provided to all new employees and particular attention paid to young persons (under the age of 18 no person shall operate a Woodworking machine unless under close supervision and as part of a recognised training programme.). Induction training will include information specific to the workplace and should include details of your health and safety policy, emergency procedures and first aid provision and any prohibitions. Extra attention should be given to ensuring that young persons fully understand all the training that they are given, and that close supervision is maintained while their competence develops. See Section 18 for further details on obligations when employing young persons.

Qualifications are currently available at levels 2 and 3 in woodworking, furniture and machine woodworking and can be taken by various methods depending on the candidate's individual circumstances. You must ensure that delivery of the qualification includes training which should meet your specific requirements.

There are a number of short courses available, some of which are approved by Awarding Bodies, such as City and Guilds.

Younger persons in particular may require additional training and supervision. This will need to be supplemented from other sources including specific on-the-job training to meet your company's need.

All training schemes for persons who work in a joinery workshop and with woodworking machines should include the following:

1. **General.** Instruction in the safety skills and knowledge common to woodworking processes. This should include aspects of good housekeeping and awareness of the dangers such as "taking off", "dropping on" and "kickback".
2. **Machine specific.** Practical instruction in the safe operation of the machine, including in particular:
   - The dangers arising from the machine and any limitations as to its use.
   - The main causes of accidents and relevant safe working practices including, the correct use of guards, protection devices, appliances, stop controls, safe use of cutters and tools and the use of PPE.
3. **Familiarisation.** On the job training under close supervision.
   - If you carry out training in-house, the Safe Use of Woodworking Machinery ACOP provides a suggested training specification that should be followed.

13.4 Training records

Records should be kept of all training provided to employees, and this should include induction training, toolbox talks and other health and safety courses. These training records will be useful in identifying the training needs of your employees and will assist in demonstrating the training provided by you to your employees. HSE will ask to see these records as part of their inspection programme.

A sample training record specific to woodworking is contained in Appendix 11.

13.5 Competence

As well as providing relevant training to employees you must ensure that they are competent to operate the machine or equipment that they will be using. Competence includes the level of knowledge or experience an individual has in operating a machine. Before you allow any person to operate the equipment they should be assessed by a supervisor or trainer to ensure that they operate the equipment in a safe manner and in accordance with any training provided. Also, you need to ensure that the supervisor or trainer themselves are competent and suitably qualified to provide the appropriate training. Only when you are happy that the person is competent to use and operate the equipment should you authorise them to use it.

13.6 Refresher training

Training needs to be continually updated and should be adapted as machines and work methods change.

It is now a requirement that all people who use woodworking machine must receive refresher training, regardless of their age, experience and qualifications every three to five years. This also helps to eliminate poor practice and habit formed activities.

Can I provide in-house training?

It is perfectly acceptable for companies to use the expertise of their own staff and follow an in-house training scheme.

Whoever gives the training, e.g., a supervisor or manager, they must be competent in:

- The safe operation of the class and type of machine.
- The type of work or operation to be done.
- The risks and measures to control those risks.

Trainers should preferably be technically qualified to operate the machines they are giving training on.

They need to be good communicators and have up- to-date knowledge of the legal requirements. The in-house trainer would also be expected to be able to show details of what training had been delivered, including a breakdown of content and provide records of those trained to the current best practice.

I would like to use a specialist trainer but how do I know if they are suitable?

Many companies bring in a training provider so that their employees or apprentices are trained-up on their own machines. There are specialist woodworking training providers who deliver accredited courses certificated by awarding bodies such as the City and Guilds Institute. Some training providers are able to design and deliver in-house training programmes tailored to meet your company's needs.

Choose a training provider in the same way as you would make any other purchase. Start with a clear idea of your needs, get prices from two or three and compare the services they offer. Consider the experience, qualifications and skills of their trainers and their understanding of health and safety requirements. When researching training providers also look for accreditations from bodies like Ofsted or Matrix as an indicator of their having achieved recognised national standards.

Some providers offer courses that are accredited by awarding bodies such as City and Guilds. If these courses meet your needs, then you can be reasonably confident that they offer a consistent level of training through meeting these quality standards.

What should a training scheme include?

An individual will have been adequately trained when they have completed a training scheme that includes the following:

- General.
- The importance of good housekeeping.
- Avoiding horseplay.
- Isolation procedures before adjusting or maintaining the machine.
- Awareness of common dangers like 'taking off', 'dropping-on' and kickback.
- How to report faults.

Machine-specific

- The main causes of accidents at the machine.
- The tasks it is designed for.
- What procedures require additional guards or jigs etc.
- Safe working practices.
- How to use and adjust guards.
- How to use protection devices and appliances.
- How to select and fit tooling correctly.
- Stopping procedures including the use of brakes where fitted.
- Personal protective equipment requirements, e.g., hearing protection, eye protection.
- Health risks and how to control them, e.g., dust extraction.
- Job-specific (familiarisation).

Training specific to the particular job or task under close supervision (i.e., on-the-job training).

What records do I need to keep?

You are recommended to keep a list of authorised operators with the type(s) of machine upon which each operator has proven competence, and how and when their competence was assessed.

Do I need to train people using Portable Power Hand Tools?

Yes. Under the regulations, you are required to ensure that training is provided to staff who use any work equipment. This can include:

- Hand Routers.
- Power Planers.
- Chop Saws.
- etc.

WIT Forum

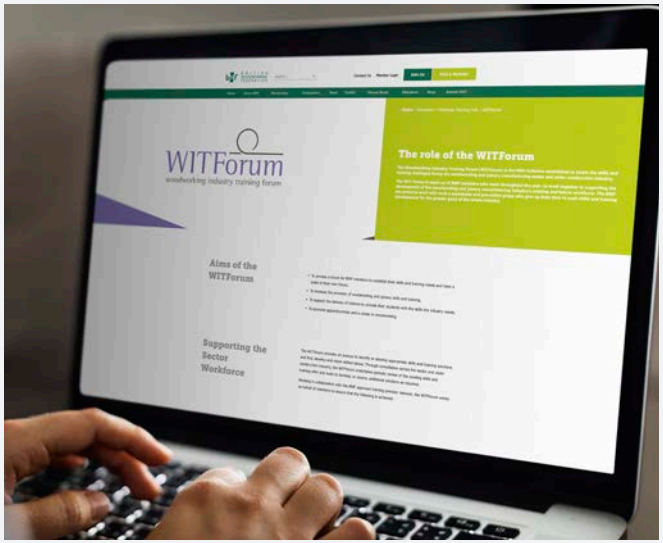
The Woodworking Industry Training Forum is the BWF's campaign to improve training provision for the woodworking industry.

The Forum has four simple aims:

- To provide a forum for BWF members to establish their skills and training needs and have a stake in their own future.
- To increase the provision of woodworking and joinery skills and training.
- To support the delivery of trainers to provide their students with the skills the industry needs.
- To promote apprenticeships and a career in woodworking.

The WIT Forum offers a range of subsidised training opportunities for members including management & supervisory, health & safety, estimating, and many more. The Forum can also offer advice on funding and other training opportunities for you and your staff.

As a BWF member, you can join the WIT Forum to help the BWF tackle the skills and training shortages facing the woodworking and joinery manufacturing sector. For more information visit the website: **www.bwf.org.uk/education/training-hub/bwf-wit-forum/**



14. Welfare Facilities

Suitable and sufficient welfare facilities must be provided to meet the requirements of the Workplace (Health, Safety and Welfare) Regulations 1992.

Within workshop and joinery premises you must provide suitable and sufficient sanitary and washing facilities. The facilities that you provide must meet the following standards as a minimum requirement.

14.1 Toilets and washing facilities

- Toilets should be connected to a suitable drainage system and be able to be flushed with water.
- Toilet paper must be provided in a holder or dispenser.
- Each water closet should be situated in a separate room or cubicle, with a door which can be secured from the inside. A coat hook should be provided within the cubicle.
- It should not be possible to see urinals, or into communal shower or bathing areas, from outside the facilities when any entrance or exit door opens.
- Windows to sanitary accommodation, shower or bathrooms should be obscured by means of frosted glass, blinds or curtains unless it is not possible to see into them from outside.
- The facilities should be fitted with doors at entrances and exits unless other measures are taken to ensure an equivalent degree of privacy.
- Soap and hand towels must be provided.
- Separate facilities are required for men and women (unless the toilet door can be locked and is in a separate room).
- Facilities used by women must have provision for the disposal of sanitary dressings.
- Must be adequately ventilated and lit.
- Must be kept clean and tidy.
- Washing facilities must have running hot and cold (or warm) water.
- Showers or baths should be provided where the work is particularly strenuous or dirty.
- Showers fed by hot and cold water should be fitted with a thermostatic mixer valve to prevent scalding.

No. Of people at work	No. Of	
	Toilets	Wash stations
1 to 5	1	1
6 to 25	2	2
26-50	3	3
51-75	4	4
76-100	5	5

14.2 Drinking water

Drinking water should be supplied by means of a tap connected directly to the water main. The drinking water supply should not be installed in an area at risk of contamination or in the toilet or washing facilities. Cups should be provided unless the water is from a drinking fountain.

14.3 Changing facilities and accommodation for clothing

Where workers wear clothing specifically for work such as overalls, and it would be unsuitable for them to change in another room, there should be suitable changing facilities.

This will usually be where more than outer clothing is changed, and in this situation, there should also be separate facilities for men and women. The facilities should be easily accessed, of sufficient capacity and provided with seating.

You must provide accommodation for workers' own clothing, which is not worn during working hours, and for any special clothing worn by any person at work but which is not taken home. This accommodation should be clean, warm, dry and well-ventilated and allow workers to hang clothes up.

14.4 Rest and eating facilities

Where workers stand to carry out their work, suitable seating should be provided for use during breaks, these should be in a suitable area where the rest break is not subject to excessive disturbance.

Facilities must be provided for eating. Seats in work areas can be used as long as the area is clean and there is a suitable surface on which to place food, dusty areas in workshops are not usually appropriate. Eating facilities should include a facility for preparing or obtaining a hot drink such as an electric kettle, vending machine or canteen. Where hot food cannot be obtained in or near to the workplace, workers must be provided with the means to heat up their own food.

You must also provide facilities for pregnant and nursing mothers to rest and lie down if necessary. These must be conveniently situated in relation to sanitary conveniences.

15. Woodworking Machines

15.1 Provision and Use of Work Equipment Regulations 1998 (PUWER 98)

On the 5 December 1998 there was a major change in the regulations applicable to woodworking machines with the enactment of the Provision and Use of Work Equipment Regulations 1998 (PUWER 98). HSE also produced the Safe Use of Woodworking Machinery ACOP covering very specific issues related to woodworking. The key requirements of PUWER 98 are covered throughout this guidance document.

What is PUWER?

The Regulations require risks to people's health and safety, from equipment that they use at work, to be prevented or controlled. In addition to the requirements of PUWER, lifting equipment is also subject to the requirements of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

In general terms, the Regulations require that equipment provided for use at work be:

- Suitable for use, and for the purpose and conditions in which it is used;
- Maintained in a safe condition for use so that people's health and safety is not at risk; and
- Inspected in certain circumstances to ensure that it is, and continues to be, safe for use.

What equipment is covered by the regulations?

Generally, any equipment which is used by an employee at work is covered, for example in addition to woodworking machines, hammers, ladders, drilling machines, portable tools, lifting equipment (including lifts) and motor vehicles, photocopiers, anything that is used to carry out your work.

Similarly, if you allow an employee to provide personal equipment, this too will be covered by PUWER and you will need to make sure it complies.

Examples of uses of equipment, which are covered by the Regulations, include starting or stopping the equipment, repairing, modifying, maintaining, servicing, cleaning and transporting.

Who do the regulations apply to?

If you are an employer or self-employed person and you provide equipment for use at work, or if you have control of the use of equipment, then the Regulations will apply to you.

15.2 Suitability of woodworking machinery

Some operations can be safely carried out on more than one machine. You should ensure that the most suitable machine that is available is selected for the task. For example, for grooving, a properly guarded vertical spindle moulding machine or routing machine are most suitable. A circular sawing machine is high risk to carry out this operation as the blade cannot be effectively guarded.

Some operations are higher risk when carried out on one type of machine rather than another. For example, cutting a rebate on a properly guarded spindle moulding machine is lower risk than using a cutter block of a surface planing machine, due to the inability to effectively guard the cutter block.

You must ensure that employees are using the most appropriate and safest machine for every operation.

15.3 Safe use of woodworking machinery

These Regulations and the ACOP set down objectives to be met and leave those responsible for health and safety of employees and others to decide how to satisfy the legal requirements.

The following illustrations are provided therefore as an indication of what can be done to reduce the risk of accidents. You must however make a suitable and sufficient assessment of the risks to the operator of the machine and any others who may be affected by the activity. You should also review the risk assessment if you believe it is invalid, or there has been a significant change in circumstances.

General dos and don'ts

Applicable to all Woodworking Machinery

1. Ensure that only trained and authorised employees use the appropriate machine.
2. Ensure that the most suitable machine that is available is selected for the task.
3. Always fit and properly adjust all guards and safety devices before starting the machine.
4. Do not leave the machine unattended while it is in motion or running down.
5. Always use appropriate braking device to stop the machine.
6. Use limited cutter projection tooling as required by PUWER 98 where required.
7. Ensure the working area around the machine is kept clear at all times.
8. Make sure that the machine in maintained in accordance with the manufacturer's instructions.
9. Ensure that all appropriate personal protective equipment (PPE) is available and is used (e.g., Hearing defenders etc.).
10. Ensure safe Manual Handling techniques are applied at all times.
11. Ensure extraction systems where fitted are operating correctly.

15.4 Maintenance of woodworking machinery

Correct maintenance of woodworking machines will ensure faster and better-quality work with less risk of kickback and other incidents, and also help to reduce noise emissions. The Safe Use of Woodworking Machinery ACOP (see below) provides guidance on the required frequency of maintenance, but this should be reviewed regularly to ensure a preventive approach, rather than reactive maintenance, is achieved. Those employees involved in maintenance should be competent, have had appropriate training for each type of machine, and be specifically designated as such.

There are 3 types of maintenance referred to within the Safe Use of Woodworking Machinery ACOP as follows:

Planned preventative maintenance (PPM) – involves replacing or maintaining parts at pre-set intervals before the equipment actually breaks down. This type of maintenance is essential where parts could fail and create a hazard.

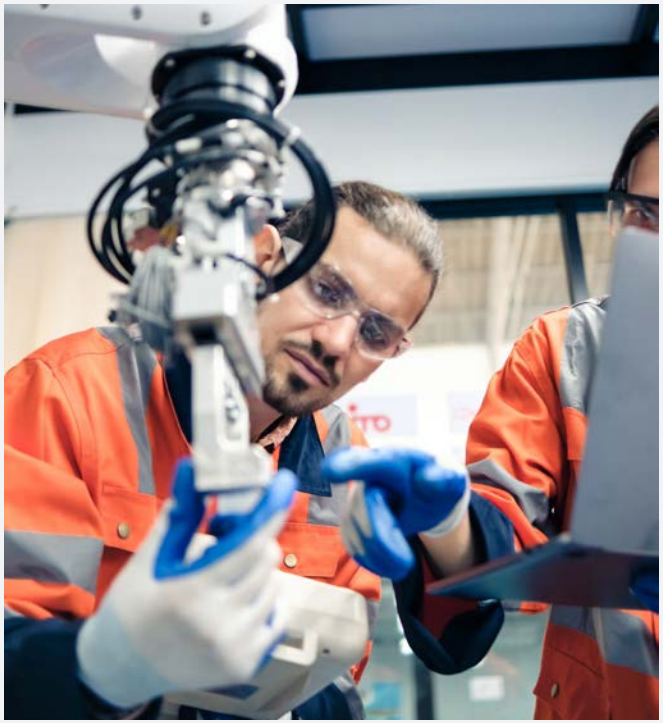
Condition based maintenance – involves monitoring the condition of the equipment and carrying out maintenance when necessary.

Breakdown maintenance – is only carried out after failure has occurred. This is not suitable where failure of a part could create a hazard.

The maintenance carried out on machines will vary depending upon the particular piece of equipment and records should be kept of all maintenance activities carried out on each machine.

Also check what the machine manufacturer's instructions say about maintenance to ensure it is carried out where necessary and to the correct standard.

Any maintenance schedule should be reviewed regularly to ensure a preventive approach, rather than reactive maintenance, is achieved. Remember - well maintained equipment lasts longer and is more efficient.



15.5 Inspection of woodworking machinery

The Provision and Use of Work Equipment Regulations 1998 require equipment where necessary to be inspected.

For the majority of woodworking equipment there is a risk of injury if the machinery is not kept in good working order. It is therefore recommended that all woodworking equipment be inspected at regular intervals. The inspection interval is flexible and may vary from machine to machine. It may suit your workplace for inspections to be carried out on a weekly basis for all machines. This avoids any confusion and will ensure that all machinery is kept in good working order.

You may find it appropriate to tie your inspections in with your maintenance regime. A competent person should determine for each piece of machinery when it should be inspected and what should be inspected. A competent person must then carry out the inspection. An inspection will vary depending on the risk but will usually include the following:

- Tooling is correctly fitted and secured.
- Guarding is correctly fitted and secured.
- Guarding is in good order.
- Safety systems are in place, e.g. riving knife.
- Equipment is clear of waste materials.
- The right cutter is in place.
- Cutters are in good condition.
- Lubrication systems are in good order.
- Operating systems are in good order.
- Local Exhaust Ventilation is in good order.

The results of the inspections must be recorded. A sample record of inspection is found at Appendix 10.

Local exhaust ventilation (LEV) (including spray booths, on-tool extraction and class M/H vacuum cleaners) must also be thoroughly examined and tested at least once every 14 months.

15.6 Guarding

Proper guarding and safeguarding of machinery is required by law; all potentially dangerous parts should either be securely out of reach or else fitted with a safeguard to prevent access. Guarding is required even when the dangerous part would be out of reach in normal circumstances.

Woodworking machines have a number of dangerous parts – the most obvious of which is a cutting tool.

There is a hierarchy of protective measures that must be followed, and these should be considered for all machines. There is also a wide range of guards, and their suitability depends upon the type of machine. You should always aim to provide the safest guarding system practicable.

15.6.1 Fixed guards

Fixed guards are permanently held in place and enclose the dangerous parts or the machinery. They are not usually adjustable in any way. They may be used to enclose the dangerous part below the bench where access during use is not required or may be in the form of enclosed gates that surround the machine.

Fixed guards should only be moved during maintenance and a specific safe system of work must be devised to ensure the maintenance person is not put at risk. Fixed guards should be fixed with unique fixings so they cannot easily be removed except by authorised persons. Frequent checks must be made to ensure that fixed guards have not been interfered with and continue to provide the protection required.

15.6.2 Adjustable guards

These guards remain in place but can be adjusted to suit the work piece or tool. Adjustment to the guarding should not be carried out while the cutter is in motion unless this can be done safely. Any adjustable guard must adjust to suit the range of work pieces and the range of cutters used. Must be kept adjusted as close as possible to the material at all times to prevent access to such cutters.

15.6.3 Interlocking guards

Interlocking guards work by preventing the machine from working when the gate or guard is open. They do not provide the same level of protection as fixed guards as the operator does have access to the dangerous parts of the machine, albeit when the moving parts are immobilised. Enclosures or gates, which give access to the machine, should also be interlocking. Supervision is particularly important if interlocking guards are used as operatives may disable or override the interlocking device.

15.6.4 Protective appliances

Protective appliances should not be used in isolation. They include jigs, work piece holders, push sticks, taking off tables etc. They do not guard the dangerous parts of the machine - they only distance the operator from the cutters. Appliances must be capable of being held firmly and must control the movements of the work piece.

The appliance should be available at the machine where it will be needed. Often these are viewed as only necessary on large runs; they are also required on short runs and one-offs.

15.7 Hazards of ejected material and disintegration

Adequate measures should be taken to control the risks from 'kickback' including the guarding at machines, which should provide a sufficient degree of protection in the event of a cutter or tool disintegrating, or a cutter being ejected.

- Kickback is relatively common and is dangerous on hand-fed machines, especially circular saws, vertical spindle moulder's and planing machines.
- Ejection as a result of kickback occurs when the tool bites into the timber.

To minimise these risks, you should use appropriate protection appliances such as clamps which can either be manually or power operated and protection devices such as feed rollers, belts, spring loaded pressure pads, drive wheels, jigs and work piece holders.

Form Lock - Cutterheads incorporating form lock fixing, such as location pins or serrations, are to be used to minimise the likelihood of cutter creep or ejection from the rotating cutterhead.

15.7.1 Riving knife

At circular saw benches, the risk of kickback of the work piece should be reduced by the provision and use of a properly designed and well-adjusted riving knife. The riving knife should:

- Be securely fixed below the machine table.
- Be positioned directly behind and in line with the saw blade.
- Be shaped so that the inner edge of the riving knife follows as closely as practical the contours of the largest saw blade that is designed to be used on the machine.
- Be strong and rigid.
- Have sides with smooth flat surfaces.
- Be kept adjusted so that it is as close as practicable to the saw blade and in particular is within 8 mm from the blade at table level.
- Be kept adjusted so the vertical distance between the top of the riving knife and the top of the blade is no more than 25 mm (except for saw blades that are more than 600mm in diameter in which case the extension should be to a height of at least 225 mm above the machine table).
- In the case of a parallel plate saw, be thicker than the plate of the saw blade.

At multi-rip sawing machines and straight-line edging machines processing more than one work piece, you must use anti-kickback fingers.

15.8 Braking devices or stop controls

For each machine there must be easily accessible controls, which will bring the equipment to a stop in a safe manner. This is particularly important for woodworking machines which can run at very high speeds and certain types of woodworking equipment can take a substantial amount of time to run down. Any braking device must operate in priority over other controls.

Stop controls – it is a requirement of PUWER to ensure that work equipment is provided with accessible controls to bring the equipment to a safe control in a safe manner. As woodworking machinery operates at high speed the rundown time is often significant, particularly in the event of an emergency.

The ACOP sets out the following guidance in relation to the fitting of braking devices in order to reduce the rundown time and comply with PUWER:

The transitional period to fit brakes ended on the 5th of December 2008 and all machines are required to stop within 10 seconds. Braking applies to all hand fed machines as listed within the PUWER L114 ACOP. Some Band Resaws are permitted a longer period to come to rest when switched off. Run down time cannot exceed time taken to reach full operating speed up to a maximum of 35 secs.

To ensure that standards are maintained for each machine specialist advice should be sought when fitting braking devices to existing machines. This advice may be in-house, from the machine manufacturer or from a specialist engineer. The device selected will depend upon the machine in question and the main ways of providing braking are to:

- Replace the existing unbraked motor with a braked motor.
- Fit a direct current (DC) injection braking device to the existing unbraked motor.

You do not have to fit a braking device if:

- Machines have a rundown time of 10 seconds or less
- The effect of braking could be detrimental to the integrity of the machinery
- Machines have been built to conformity with a harmonised European standard where the standard does not require braking devices.

New machinery is to have a braking device fitted when you purchase it.

15.9 Limited Cutter Projection Tooling (LCPT)

The use of limited cutter projection tooling also known as 'chip thickness limitation tooling' considerably reduces the severity of any injury if a machine operator's fingers come into contact with the rotating tool. LCPT should be used in addition to the normal guards, protection appliances and safe working practices, not as an alternative.

There are two types of limited cutter projection tooling 'round form' and non-round-form'. On round form tools, the tool body has a circular shape at any cross-section perpendicular to the rotational axis of the tool. On this type of tool, limited cutter projection should be achieved by restricting the projection of the cutter either beyond the profile of the tool or by means of a limiter.

The round profile of the tool body or a limiter which mirrors each cutter.

Limited cutter projection tooling must be used on the following hand-fed machines:

- Vertical spindle moulder;
- Single end tenoners;
- Rotary knife and copy lathes where the hazards of ejection and contact with the tool are not prevented by a system of fixed guards and/or interlocked movable guards and/or self-closing guards; and
- Any other machine onto which a moulding tool can be fitted, e.g. a trenching head fitted to a crosscut saw for trenching operations (with a clamping device to securely hold the material).
- Old style Whitehill blocks, French (or slotted) spindles and slotted collars are not to be used on spindles.

There is a requirement that router cutters over 16mm diameter also be of a chip limitation type.

15.10 Markings on equipment

Tooling should carry permanent marking identifying:

- The name or trademark of the manufacturer/supplier.
- The minimum and maximum speed range.
- Either "MAN" denoting for manual feed only or "MECH" denoting for mechanical feed only.
- The tool dimensions, diameter, thickness, bore diameter & maximum cutting circle.

Some older tooling may not be marked but remain compliant. In these cases, check with your tooling supplier for guidance.

The diameter of the smallest saw blade that should be used should be marked on every single speed circular sawing machine.

Toolsets may not be manufacturer marked in the same way as cutter blocks. If toolsets are used it is important that risk assessment and safe systems of work are developed that take account of any increased risk from the task or changes required to the machine set-up in allowing the toolset to be fitted to the machine.

If a combined surface planing and thicknessing machine is used for thicknessing and the machine does not have sectional feed rollers, or another device to prevent kickback/ejection, then a notice should be displayed stating that only one workpiece at a time should be fed into the machine. Similar precautions should be taken if a surface planing machine fitted with a demountable thicknessing device is used for thicknessing and the machine does not have sectional feed rollers etc.

15.11 CE marking

Much of the equipment that you will purchase will have a CE marking stamped upon it, this indicates that there is a European Product Directive, and the equipment has been manufactured to a certain standard. This does not guarantee that it complies with UK health and safety standards. Therefore, you must ensure that all equipment with a CE mark or without, complies with UK health and safety requirements and is safe to use. As the UK transitions its exit from the EU you will begin to see the UKCA mark appear on items purchased. This is the UK's standard mark moving forward and may also be seen alongside existing CE logos.

15.12 Programmable machinery

Woodworking machines can be programmed electronically; this allows them to perform many functions rapidly and allows the parameters, which they control, to be quickly and cheaply altered by changing the programme. However, the safeguard systems of the machine will be part of the programme and faults in the machine software can have serious consequences for operator safety.

These types of machines are often operated from one control point and no machine should be able to be started unless it is safe to operate. In particular a safe system of work must be in place for maintenance operations. The power should be isolated before any work is carried out and guards should be interlocked, preventing dangerous parts from moving if the guard is not in place. The control panel must not be able to override the safe systems on each individual machine.

All operators of computer-controlled equipment must be fully trained in its use and the safe systems of work to be followed at all times.

A range of machine specific safety solutions, in the form of machine safety cards for display at the machine site, is available from the BWF – See Appendix 12.

16. Working at Height

Within a workshop environment temporary work carried out at height should be minimal. There may be a need to access areas at height for maintenance purposes or for access to stored materials. A risk assessment should be carried out for each activity and the appropriate method of access selected to carry out the work safely. If access to stored materials is required on a regular basis a purpose made work platform or ladder system will be the most appropriate and should be considered. Access to storage areas on mezzanine floors, as within workshop roof trusses, should not be allowed unless the area is fitted with guard rails.

Temporary scaffolding or ladders will not be the most suitable means of access. When planning any work at height you must consider surrounding workers or persons to ensure that they are not put at risk by the work being carried out.

All work at height must be properly planned and undertaken only by competent persons. Where a suitable working platform is provided it is unlikely that any specific training will be needed.

The law requires that employers always select the safest possible management for working at height.

Remember these golden rules:

- Avoid work at height where possible.
- Take measures to prevent falls.
- Take measures to minimise the effect.
- Always use collective protection, e.g. nets or air bags before personal protection, e.g. a harness.

For temporary access the most common system used will be a ladder, mobile tower or scaffolding. The access selected must meet certain standards and be used in a certain manner. The safe methods of use are detailed below.

16.1 Mobile access platforms

Mobile elevated platforms (MEWPs) or cherry pickers are particularly useful and provide safe access and a working platform for work at height.

Operators must be trained and competent and the work platform must be provided with guard rails and toe boards or suitable barriers. The ground must be firm and level and the tyres on the equipment must be properly inflated. If the equipment is being used in a populated area adequate protection to persons working around the equipment should be provided, i.e. area cordons etc. Operators should wear a full body harness, which must be attached to an appropriate point on the platform. Your safe system of work must consider an emergency escape/recovery plan in the event of equipment failure or incapacitation.

The manufacturer's instructions must be followed particularly in respect of moving the equipment with the platform elevated and the operating limitations.

16.2 Scaffolding

Tower scaffolds can be constructed from tube and fitting scaffold components however they are more likely to be prefabricated aluminium towers. The tower should be provided with instructions and must be erected by a competent, trained person. The tower must be placed on firm level ground, with suitable access to the working platform. This access should be on the inside of the tower on the narrowest side.

Only if the tower is specifically designed with an external ladder should the access be on the outside. It is essential to check the manufacturer's erection guide which will state the maximum working height for inside or outside operations. Guard rails and toe boards must meet the same requirements as those detailed under scaffolds, inspections must also be carried out to the same standard as detailed below.

When moving the tower you must check for any overhead obstructions, and the tower must never be moved while there are persons or materials on the platform.

If working outside, it is essential to take account of weather conditions, especially wind. All towers should have the maximum wind speed allowable marked on them or in the user guide.

Scaffolds

A trained and competent person must erect any scaffolding. For scaffolds over 5m it is recommended that a competently trained and registered scaffolder is used. The scaffold must be appropriate for its intended use and must have a working platform of an adequate size for the type of work being completed, usually at least 600mm wide.

A suitable guard rail of at least 950mm in height and a toe board must be provided to prevent persons from falling. In addition, there should be no gap between the guard rail and toe board greater than 470mm. This is usually achieved by the use of a brick guard or intermediate guard rail. You must also ensure that materials cannot fall from the working platform.

The scaffold should be inspected before it is taken over and it is recommended that you receive a handover certificate from the person erecting the scaffold. As the user you have an obligation to ensure it is safe for use by your employees before it is used and if the scaffold is in place for 7 days or more it must be inspected, and the results of that inspection recorded. A competent person must carry out the inspection; you may choose to employ the scaffolding company to carry out the weekly inspection on your behalf. Scaffolds should be inspected at least every 7 days and also after inclement weather or if anything has occurred that could have affected its safety, i.e. being hit by plant etc. Scaffold must also be re-inspected after substantial alterations.

16.3 Ladders

Ladders are work equipment subject to the requirements of PUWER and should only be used for low risk work of short duration (30 minutes or less) and when the user can climb the ladder using both hands. You should only use ladders in situations where they can be used safely, e.g. where the ladder will be level and stable, and can be secured (where it is reasonably practicable to do so). When carrying out the work, the worker must be able to hold the ladder with one hand. All ladders should be checked before use to ensure that they are in good condition and free from defects.

Ladders with faults, damaged rungs or stiles should be disposed of immediately.

The ladder should be placed at an angle of 1 in 4 or 75° and be positioned to allow the worker to reach the work safely. Overreaching should be avoided at all times.
The ladder should be secured to prevent it from slipping (usually at the top), if this is not possible then the ladder must be footed at all times. Useful information is available via The Ladder Association guidance document LA455.
https://ladderassociation.org.uk/

17. Workplace Transport

17.1 Movement of vehicles and materials

The movement of materials within a factory environment involves the use of a wide range of vehicles, many of them creating their own hazards. Delivery vehicles, forklift trucks, factory employees and visitors all require good management while on site and there should be clear and strict rules on the movement of vehicles around the site. If sharing a workplace with other employers, there is also a need to Co-ordinate any safety arrangements that may be needed.

You should ensure that the roadways in use, both inside and outside, are of a suitable size and construction for the traffic that will use them. The standards of maintenance of the roadway and the rules for driving, parking, etc. should be as rigorous as those required for public highways.

Road signs should be the same as those in use on public highways and particular consideration must be paid to those unfamiliar with the site such as visitors and delivery vehicles. All drivers should be appropriately trained for the vehicle that they are driving.

When developing your site transport system important factors to include are:

- A one-way traffic system wherever possible.
- Avoiding the need for vehicles to reverse wherever possible, using a banksman where reversing is necessary.
- Segregating pedestrian routes and providing designated crossing places.
- Provide high visibility clothing for staff in high-risk areas.
- Introducing and enforcing speed limits.
- Use of speed bumps where appropriate.
- Placing mirrors and signs at any unavoidable blind corners.
- Clear signage with appropriate directions.
- Making of rights of way at junctions.
- Buildings should be clearly identified at their doorways.
- Warning signs should clearly indicate any unavoidable overhead obstructions.
- Locating vulnerable plant away from traffic routes or provide adequate barriers.
- Providing adequate lighting at critical points.
- The maintenance and cleaning of road surfaces.
- Any security arrangements.
- Parking arrangements.
- CCTV systems.
- Rear vision mirrors to ensure optimum rear vision.

17.2 Loading bays

Areas used for loading and unloading should be treated with particular caution and only those involved in the loading and unloading of materials should be within the area.

Issues to consider are:

- Who delivery drivers should report to.
- Site procedures for driver safety.
- The supervision of deliveries.
- The route available for delivery lorries.
- The size and weight of delivery lorries.
- The space available for loading and unloading.
- Any directions or signals that may be used.
- The need for ramps during loading and unloading.
- The weight of the loads being handled.
- The stability of the loads being handled.
- Protection of open edges after vehicles have moved away.
- The risk of forklift trucks going over the edge or loading bay staff falling.
- Sheeting facilities for lorries to significantly reduce the risk of material falling from height.
- The risk of materials falling through curtain sided vehicles. Load from one side only and ideally keep one curtain closed and make this a no-go area while loading or unloading activities are taking place.

All vehicles used on the workplace site need to be in good working order and well maintained. Where there is a risk of the operator/driver being injured, e.g. from falling out or the equipment falling over then a restraining system such as a seat belt should be fitted and used. If the equipment is at risk of rolling over then you must minimise the risk of injury to the operator and you may need to consider the fitting of roll over-protective structures.

Forklift trucks and similar lifting equipment are covered by LOLER and should have a thorough examination and report at regular intervals. This will be either 6 months or 12 months depending on whether the lifting equipment is for lifting people. Intervals may also be reduced if the equipment is subject to degradation of parts, e.g. exposure to cold and/or wet weather conditions.

When on the public highway road traffic legislation takes precedence, therefore, those vehicles that will be driven on the public highway need to be registered, insured, taxed, in a roadworthy condition and must comply with road traffic regulations. All drivers need to hold the appropriate licenses and must be competent. Under road traffic laws, driving a forklift truck on a public road without tax, insurance and/or a valid license puts the driver at risk of being reported to and prosecuted by the police. The vehicle may also be seized if driven illegally.

18. Young Persons

Operating woodworking machinery is considered a high-risk operation, particularly machinery that is hand fed. As required by the Management of Health and Safety at Work Regulations 1999 you must pay particular attention to how you deal with young person's using this type of equipment while in your employment.

18.1 What is a young person?

A young person is any person who has not attained the age of 18. Children between 13 years of age and the minimum school leaving age (which will be 15 or 16 depending upon when the persons birthday falls) are prohibited from being employed in industrial undertakings such as factories, construction sites etc. except when on work experience schemes approved by the local authority. Any young person on a work experience scheme is deemed to be the employee of the person providing the work experience and this will be you. Children under 13 years old are generally prohibited from any form of employment.

Local authority byelaws can also restrict the type of work, the start and finish times, and the maximum number of hours worked by a young person.

18.2 Risk assessment

For all persons under the age of 18 you must assess the risks to the young person before they actually start work. Your risk assessment must consider the fact that a young person will be less experienced and will therefore not react to situations in the same way as an experienced adult. Without experience of a particular activity the young person may attempt to complete the job more quickly or use an unsuitable work method.

A young person will not immediately understand the risks associated with activities, e.g. they may think that an area is very noisy but do not realise that it could be damaging their hearing. You may find that revising your current risk assessment procedure to ensure that it takes these issues into account is sufficient.

You must also consider the work environment which may be unusual. Joinery shops and construction sites can be hazardous places, and to a young person unfamiliar with their surroundings the dangers are not always seen. Young people have less awareness of potential risks and may unintentionally expose themselves to hazards to their health and safety.

Peer pressure, a reluctance to ask questions and a misunderstanding of the significance of a safe method of working can all lead to young people overstretching themselves and having, or causing, accidents.

Considering the factors above you should be in a position to make a judgement on the suitability of a young person's ability to carry out the activity. If a significant hazard to the young person still exists after the implementation of the control measures, the young person must not do the work.

There are certain activities that a young person should not be employed to do. Such work includes operating high-risk woodworking machinery that is considered to include any woodworking machine that is hand fed as well as the following machines, however fed:

- Any sawing machine fitted with a circular blade or saw blade.
- A planing machine used for surfacing.
- A vertical spindle moulder machine.

You must also consider activities that:

18.2.1 Are beyond their physical capacity

Repetitive work and awkward movements can lead to accidents, injuries and musculoskeletal disorders. Young workers may be more at risk as their muscle strength may not be fully developed. They may also be less skilled in handling techniques and/or in pacing themselves.

18.2.2 Are beyond their psychological capacity

Some jobs may require particular skills or experience that a young person may not yet have. Some areas of work involve dealing with aggressive behaviour or having to make decisions in stressful situations. A young person may not at this stage have the mental and emotional ability to cope with such situations without further experience and training.

18.2.3 Involve harmful exposure which affects health

Young people may not appreciate the dangers to their health, or they may not understand or follow instructions properly. Under COSHH you should be assessing risks to all workers health arising from working with substances. It may be that a young person requires more supervision or training to ensure that the risks are understood and controlled correctly.

18.2.4 The risk of accidents

This includes work where there is the risk of an accident which a young person may not be able to avoid due to their lack of experience, insufficient attention to safety and their lack of understanding of the consequences. i.e., work involving woodworking machines. Although a young person may not face greater physical risks from a woodworking machine, they may not have the necessary technical knowledge, experience and or understanding of the danger of working with the machinery. A young person may not know how to prevent the danger arising or how to cope with unexpected situations that arise during the work.

18.2.5 Work involving cold, heat, noise or vibration

Young people may not understand the dangers associated with such hazards and may require training or supervision to ensure that they are aware and understand any control measures. In some activities younger workers may be at a greater risk, e.g. muscles and bones are still developing, and damage may be sustained due to excessive movement and shocks experienced while operating certain machines. Noise and vibration requires specific risk assessment in all areas within the business where persons may be at risk, not just for young persons. The HSE provides guidance on vibration magnitude and an exposure calculation tool. See link below:

Hand arm vibration - Exposure Calculator
www.hse.gov.uk/vibration/hav/calculator-guide.htm

These prohibitions will not apply where young people are over the minimum school leaving age and are doing work necessary for their training and are under close supervision by a competent person. However, you still have a duty to reduce the risks, so far as is reasonably practicable. The prohibitions will apply to children under the minimum school leaving age all of whom within a factory environment or the construction industry must be on a local authority approved work experience scheme.

18.2.6 Information

Having carried out a risk assessment and implemented suitable control measures to reduce the risk to an acceptable level you must inform the young person of the findings and provide any training and instructions necessary. For children under the minimum school leaving age you, as an employer, must pass on the information to the young person's parents or legal guardians. This may be arranged through the school providing the work experience.

19. HAVS, Hand Arm Vibration Syndrome

What is Hand Arm Vibration Syndrome (HAVS)?

Hand-arm vibration is vibration transmitted into workers' hands and arms. This can arise from use of hand-held power tools (sanders, routers, jigsaws etc.), hand-guided equipment (such as pedestrian controlled floor saws) or by holding materials being worked by hand-fed machines.

Regular and frequent exposure to hand-arm vibration can lead to permanent adverse health effects, which are most likely to occur when contact with a vibrating tool or work process is a regular and significant part of a person's job. These ill-health effects are known as:

- Hand-arm vibration syndrome (HAVS); and
- Carpal tunnel syndrome (CTS).

If an employee develops HAVS or CTS, then this should be reported to the HSE under RIDDOR as a 'Reportable Disease'. See Section 2 of this guide.

Symptoms of both may come and go, however prolonged exposure to vibration can result in chronic or permanent pain, distress and disturbed sleep. Even only a relatively short exposure of a few months can create these symptoms.

Hand-arm vibration syndrome (HAVS)

- Tingling, numbness in fingers resulting in inability to do fine work or everyday tasks, e.g. fastening buttons.
- Loss of strength in the hands.
- Fingers going white (blanching) and becoming red or painful on recovery. Reduced ability to work in cold or damp conditions, e.g. outdoors.

Carpal tunnel syndrome (CTS)

- Tingling, numbness, pain and weakness in the hand. This can interfere with everyday tasks and may affect the ability to work safely.

The risk of permanent damage depends on:

- How high the vibration level is.
- How long you use the equipment for.
- How awkward it is to use the equipment.
- How tightly you have to grip.
- How cold and wet you get using the equipment.

What are the regulations?

The Control of Vibration at Work Regulations (COVWR 2005) require you to:

- Make sure the risks from vibration are controlled.
- Provide information, instruction and training to employees at risk and take action to control the risk.
- Provide suitable health surveillance.

The regulations include an exposure action value (EAV) and an exposure limit value (ELV) based on a combination of the vibration at the grip point(s) on the equipment or workpiece and the time spent gripping it. These values are:

- Daily EAV of 2.5 m/s^2 A(8)

Where daily vibration exposure is below 2.5m/s2 the risk is relatively low, and no action required.

- Daily ELV of 5 m/s^2 A(8)

If several tools are used the exposure values must be combined to the value of all the activities.

EAV and ELV is measured by the rate of vibration of a piece of machinery or workpiece in metres (m) per second (s), its movement per second, over an average eight hour working day A(8). Machine suppliers must provide information on the vibration magnitude value of their equipment.

The HSE provides guidance on vibration magnitude and an exposure calculation tool. See below:

Hand arm vibration - exposure calculator
www.hse.gov.uk/vibration/hav/calculator-guide.htm

An alternative method of calculating daily vibration exposure is with a 'ready-reckoner' (pictured below). Exposures for different combinations of vibration magnitude and exposure time are given in exposure points instead of m/s2 A(8) values. Cross referencing the vibration magnitude against the exposure time will give an exposure points reading.

The exposure duration is the 'trigger time', during which the hand is actually exposed to vibration for each tool or process.

Exposure points change with time - double the exposure time, then double the points. Exposure points can be added together to calculate the limit value in a day.

An EAV of 2.5 m/s A(8) is equal to 100 points and an ELV of 5 m/s^2 A(8) is equal to 400 points.

The 'ready-reckoner' displays whether the exposure is exceeded or is likely to exceed the EAV or ELV. In the example shown a vibration magnitude of 5 m/s2 and an exposure of 3 hours will equal 300 exposure points, which is above the action value.

Possible controls to reduce or eliminate HAVS risk exposure:

- Consider the design and process. Could it be changed to reduce or eliminate the need for the task involving exposure to vibration?
- Are there alternative tools or equipment that can perform the same function but have a reduced vibration magnitude level and will therefore reduce the exposure?
- Develop a policy to purchase tools with optimal ergonomic design. This should include good grip comfort, optimal angle of the main handle, and a short distance between the support handle and the front of the tool if used in a horizontal orientation. The tool that you are using should be the most effective for the job or task performed.
- For pneumatic tools, check the compressed air is set to insure the correct pressure and flow.
- Provide employees with training so they can avoid unnecessary exposure to vibration.
- Use job rotation to decrease exposure time.
- Use Personal Protective Equipment (PPE), however, this should be as a last resort.

Hand arm vibration - exposure calculator
www.hse.gov.uk/vibration/hav/calculator-guide.htm

HSE

HAND-ARM VIBRATION EXPOSURE CALCULATOR *Version 5.6 June 2019*

Company name / work area:
Employee ID and/or task name:

Tool or process name Select HSE recommended initial values or enter your own information	Vibration magnitude m/s²	Exposure points per hour	Time to reach EAV 2.5 m/s² A (8) hours	Time to reach EAV 2.5 m/s² A (8) minutes	Time to reach ELV 5 m/s² A (8) hours	Time to reach ELV 5 m/s² A (8) minutes	Exposure duration hours	Exposure duration minutes	Partial exposure m/s² A (8)	Partial exposure points

Zoom to fit | Help
Reset | Print (preview)

Reset Options:
☐ Lock tool or process information
☐ Lock company and calc. by names

Instructions for use:
Enter vibration magnitudes and exposure durations (for an individual worker or a task carried out by several workers) in the **white areas.** Results are displayed in the **yellow areas**
Information on tool types may be entered directly into the tools/process names columns, or selected from a drop-down list of HSE recommended initial data values.
To clear all cells, click on the **'Reset'** button
Tick the **'Lock tool or process information'** check box to prevent **'Reset'** clearing these cells
Additional information such as company name, worker name may be added if printing or saving the calculation.
For more information, click the **'Help'** button

Daily exposure m/s² A (8) | Total exposure points

Exposure calculation by:
Job role:
Calculation date:

Health surveillance for hand arm vibration

The purpose of health surveillance is to identify and warn employees who are at risk of suffering from an early stage of HAVS and to enable employers to identify whether there are adequate control measures in place to prevent and reduce the risk of HAVS.

You are required by law to provide appropriate health surveillance where risk is identified, and exposures are at or above EAV.

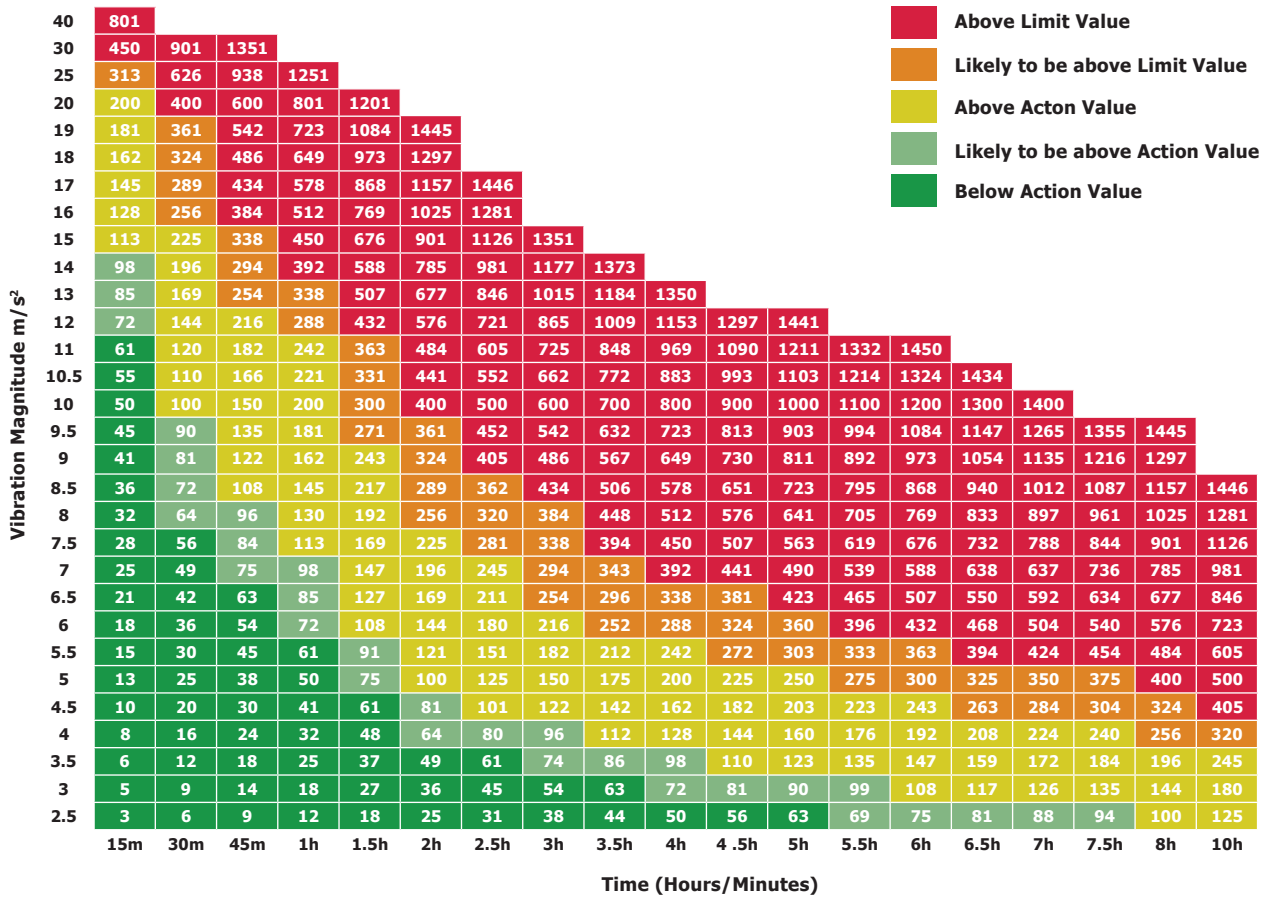
Basic low-level, health surveillance can involve a short set of questions until, for example, signs or symptoms are reported. An example of an annual HAVS screening questionnaire is shown in Appendix 15. Where symptoms are reported, or any ill health found, then these should be referred to an appropriately qualified doctor or nurse to deal with.

Where your risk assessment identifies that high- level monitoring is necessary then you should have a competent occupational health (OH) professional to advise and help you manage health risks. Your OH professional should ideally be able to combine monitoring of other health surveillance. This could include HAVS, spirometry (lung conditions), audiometry (noise exposure) and dermatitis (skin conditions).

The records of the health surveillance should be kept in a suitable form for at least 40 years from the date of last entry because often there is a long period between exposure and onset of ill health.

The Ready-Reckoner www.hse.gov.uk/vibration/hav/readyreckoner.htm

The Ready-Reckoner



Vibration Magnitude m/s²	15m	30m	45m	1h	1.5h	2h	2.5h	3h	3.5h	4h	4 .5h	5h	5.5h	6h	6.5h	7h	7.5h	8h	10h
40	801																		
30	450	901	1351																
25	313	626	938	1251															
20	200	400	600	801	1201														
19	181	361	542	723	1084	1445													
18	162	324	486	649	973	1297													
17	145	289	434	578	868	1157	1446												
16	128	256	384	512	769	1025	1281												
15	113	225	338	450	676	901	1126	1351											
14	98	196	294	392	588	785	981	1177	1373										
13	85	169	254	338	507	677	846	1015	1184	1350									
12	72	144	216	288	432	576	721	865	1009	1153	1297	1441							
11	61	120	182	242	363	484	605	725	848	969	1090	1211	1332	1450					
10.5	55	110	166	221	331	441	552	662	772	883	993	1103	1214	1324	1434				
10	50	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400			
9.5	45	90	135	181	271	361	452	542	632	723	813	903	994	1084	1147	1265	1355	1445	
9	41	81	122	162	243	324	405	486	567	649	730	811	892	973	1054	1135	1216	1297	
8.5	36	72	108	145	217	289	362	434	506	578	651	723	795	868	940	1012	1087	1157	1446
8	32	64	96	130	192	256	320	384	448	512	576	641	705	769	833	897	961	1025	1281
7.5	28	56	84	113	169	225	281	338	394	450	507	563	619	676	732	788	844	901	1126
7	25	49	75	98	147	196	245	294	343	392	441	490	539	588	638	637	736	785	981
6.5	21	42	63	85	127	169	211	254	296	338	381	423	465	507	550	592	634	677	846
6	18	36	54	72	108	144	180	216	252	288	324	360	396	432	468	504	540	576	723
5.5	15	30	45	61	91	121	151	182	212	242	272	303	333	363	394	424	454	484	605
5	13	25	38	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	500
4.5	10	20	30	41	61	81	101	122	142	162	182	203	223	243	263	284	304	324	405
4	8	16	24	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	320
3.5	6	12	18	25	37	49	61	74	86	98	110	123	135	147	159	172	184	196	245
3	5	9	14	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	180
2.5	3	6	9	12	18	25	31	38	44	50	56	63	69	75	81	88	94	100	125

1. Find the Vibration Magnitude (or closest value) for the tool on the scale on the left – this will be printed on the machine HAV label.
2. Find the exposure Time (or nearest value) on the scale across the bottom of the table.
3. Find the value in the table that lines up with the magnitude and time.
4. Compare the points value with the Exposure Action Value (100 points) and Exposure Limit Value (400 points).
5. If you are exposed to more than one tool or process during the day, repeat steps 1 – 3 for each one, add the points and compare the total with the exposure action and limit values.

20. Dangerous Substances & Explosive Atmospheres Regulations

Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)

The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) puts duties on employers and the self-employed to protect people from risks from fire, explosion or similar energy releasing events arising from the use, handling or storage of dangerous substances in the workplace or by work activity.

DSEAR require that a risk assessment is carried out wherever there is a substance used (or is liable to be present) that could, if not properly controlled, cause harm to people as a result of fire or explosion. Examples within the woodworking industry include wood dust from machining and sanding, LPG for forklift trucks, flammable solvents used in spray booths, paints and pressurised gases. When carrying out the assessment you should:

- Establish what the dangerous substances are and what are the risks.
- Implement control measures to either remove or reduce them to as low as is reasonably practicable.
- Put controls in place to reduce the effects of any incidents involving dangerous substances.
- Provide equipment and procedures to deal with accidents, and emergencies.
- Provide information, instruction and training to employees.
- Classify places where explosive atmospheres may occur into zones and mark the zones where necessary and avoid ignition sources (from unprotected equipment, for example) in those areas.

Work requiring entry into an area that has high potential for the presence of an explosive atmosphere must be strictly controlled to minimise the risk.

Wood dust usually has an explosion risk where the mean particle size is less than 200 microns, and where as little as 10% of the mixture contains dust less than 80 microns in size. Fine dust is usually assumed to be a higher explosive risk. Removing sources of ignition and by installing a well-designed, frequently maintained LEV system will reduce the risk of explosion.

For spray booths where flammable products are used, electrical equipment should be excluded from the booth, where possible. Any electrical equipment that has to be inside the booth should be designed and constructed for use in Zone 1 or Zone 2 according to the hazardous area classification.

Zone	Hazard	Description
0	Gas, vapour or mist	A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is present continuously or for long periods or frequently.
1	Gas, vapour or mist	A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.
2	Gas, vapour or mist	A place in which an explosive atmosphere consisting of a mixture with air of dangerous substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.
20	Dust	A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, or for long periods or frequently.
21	Dust	A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally.
22	Dust	A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

20.1 Types of hazard zones

Hazardous places are classified in terms of zones on the basis of the frequency and duration of the occurrence of an explosive atmosphere.

Recently installed electrical equipment should be marked with 'Ex' to show it is suitable for use in potentially explosive atmospheres. All new equipment must comply with 'The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016 that implements the European ATEX Directive. This requires it to be assessed as suitable for a particular explosive atmosphere type and for this to be marked on the equipment along with CE or UKCA and ATEX markings. All new equipment being sold in the UK for use in potentially explosive atmospheres must have an ATEX certificate.

20.2 Storage of flammable liquids & gases

DSEAR require risks from the indoor storage of dangerous substances to be controlled by elimination or by reducing the quantities of such substances in the workplace to a minimum and providing mitigation to protect against foreseeable incidents.

For practical purposes, it is likely that you will need a limited quantity of flammable liquid to be stored in the working area. Under DSEAR Regulation 5, your risk assessment should identify and justify the quantity held within the working area. The recommendation is that only the minimum quantity needed for use during a ½ day or one shift or for frequently occurring activities should be present in the working area. Actual quantities will depend on the work activity and the organisational arrangements for controlling the fire risks in the working area.

When not in use, flammable liquids should be stored in closed, suitable cabinets or bins of fire-resisting construction and which are designed to retain spills (110% volume of the largest vessel normally stored in it). These should be located (where possible) away from the working area and must not jeopardise the means of escape. The flammable liquids should be stored separately from other dangerous substances that may enhance the risk of fire or compromise the integrity of the container, cabinet or bin.

It is recommended that the maximum quantity stored in cabinets and bins is no more than 50 litres for extremely flammable liquids, highly flammable liquids and those flammable liquids with a flashpoint below the maximum ambient temperature of the workroom/working area: and no more than 250 litres for other flammable liquids with a higher flashpoint of up to 60°C. These quantities are intended to be viewed as recommended maxima representing good industry safe practice, rather than be taken as absolute limits. Note, the flash point is the minimum temperature at which a liquid forms a vapour above its surface in sufficient concentration that it can be ignited.

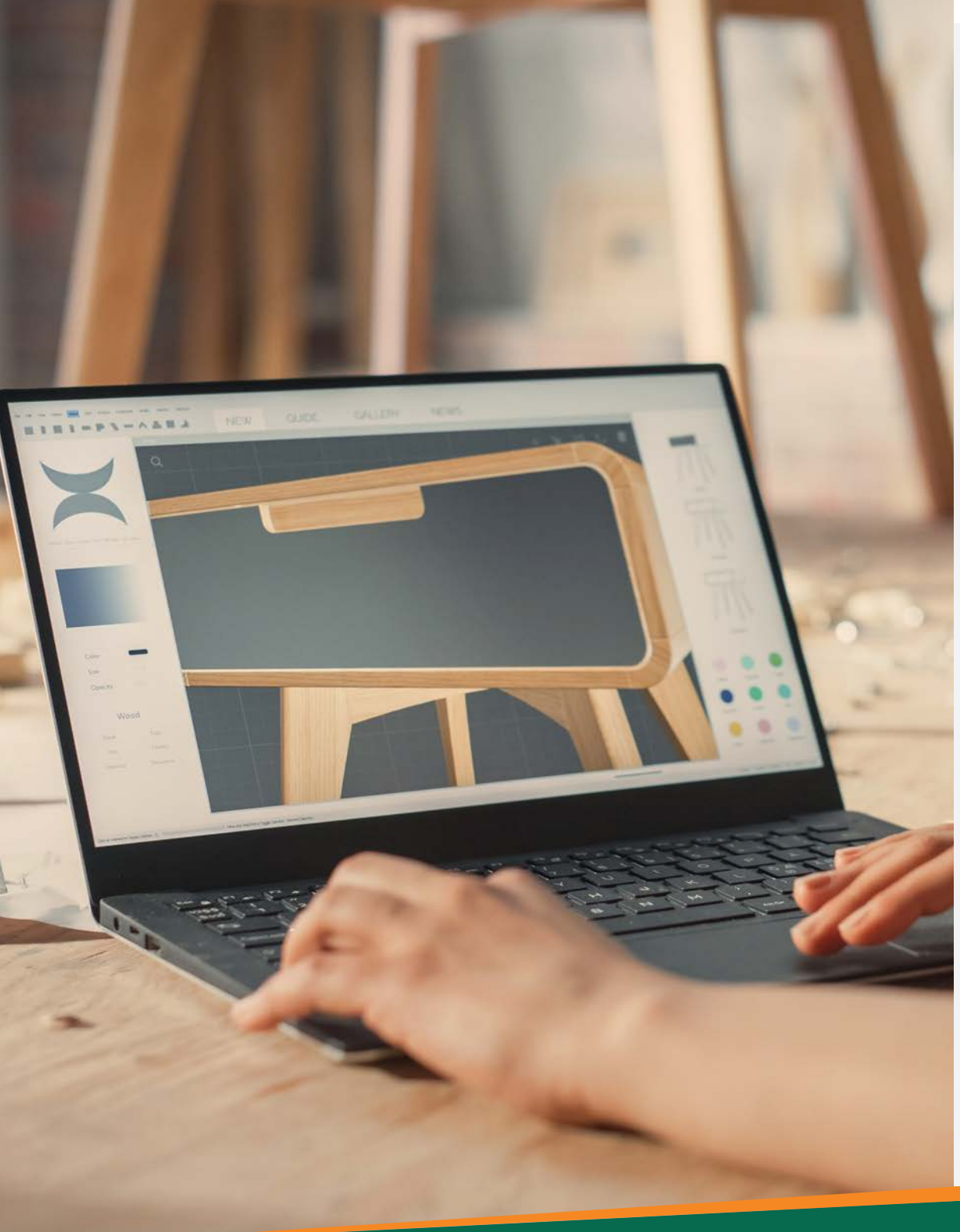
The majority of gas cylinders are designed so that they can be stored in the open air and, as such, they will not be adversely affected by inclement weather. Check with your supplier. The location of the storage area should consider the security of cylinders to avoid theft and to prevent tampering with the cylinders.

Gas storage areas should be located in an external area where there is good natural ventilation. Adjacent buildings, structures and geographical features may adversely affect natural ventilation and their effect should be considered during the risk assessment. The store should not be located in low lying areas, where gases may accumulate. Storage within a building is not recommended.

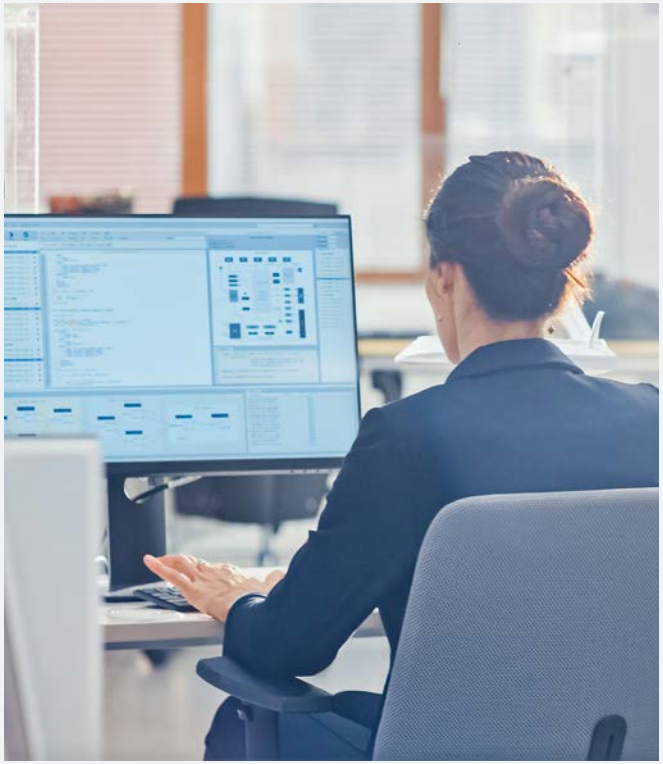
Where storage indoors cannot be avoided then the quantity of cylinders should be kept to the minimum necessary.

Cylinder stores are to be located away from site designated emergency exits and escape routes.

- Further information - HSE Document L138 **www.hse.gov.uk/pubns/books/l138.htm**
- HSE Wood Information Sheet No. 32 **www.hse.gov.uk/pubns/wis32.pdf**
- BCGA Code of practice No. 44 (2016) The Storage of Gas Cylinders - **bcga.co.uk/publications/cp44-the-storage-of-gas-cylinders-2022/**



21. Display Screen Equipment



The Health and Safety (Display Screen Equipment) Regulations 1992 apply only to employees whose work involves regular use of DSE as a significant part of their normal work (daily, for continuous periods of an hour or more). These workers are known as DSE users. The regulations do not apply to infrequent or short periods of time.

A DSE device is equipment that has a graphic or alphanumeric display screen and includes laptops, touch screens and other similar devices.

What are the health risks?

A range of conditions, associated with the arm, hand or shoulder areas, are described as work related upper limb disorders (WRULD). These range from temporary fatigue in the fingers or wrist to chronic tissue disorders, such as carpal tunnel syndrome or musculoskeletal problems stemming from poor posture.

Some workers may experience temporary visual fatigue leading to headaches, impaired visual performance and red or sore eyes.

What do I need to do to comply?

If you have DSE users, then you must:

- Analyse workstations to assess and reduce risks.
- Make sure controls are in place.
- Provide information and training.
- Provide eye and eyesight tests on request, and special spectacles if needed.
- Review the assessment when the user or DSE changes.

You should consult with your employees when assessing their workstations and work with them to identify risks and ensure any controls that will be implemented are practical. Discussing the assessment with your employees helps to increase the level of commitment to working in a healthy manner.

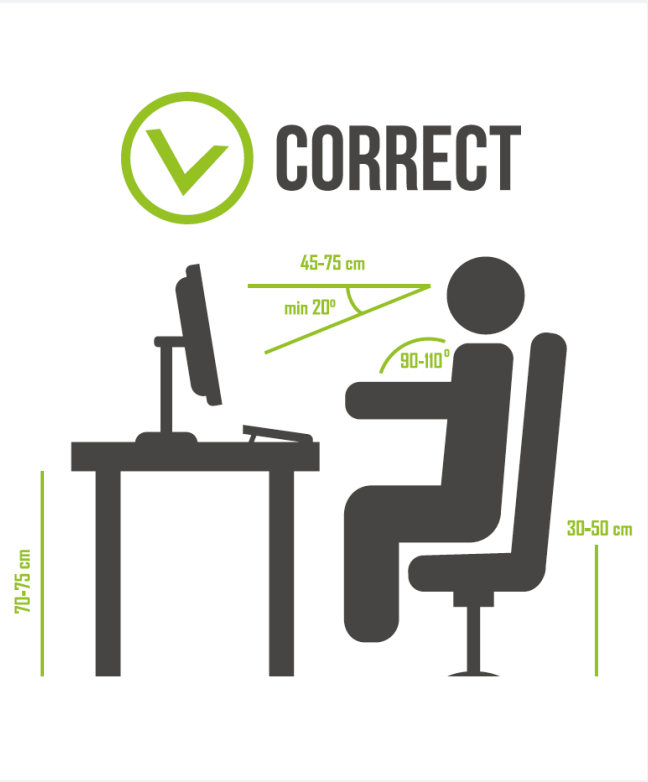
The HSE publish a DSE Workstation assessment checklist, and this can be downloaded from **www.hse.gov.uk/pubns/ck1.htm**

Completing the checklist will help you to comply with the DSE Regulations and prompt areas that are requiring further action and carry out a regular review as workplaces may change.

The following may help users:

- Adjust the operators chair and display screen to gain the most comfortable position. Forearms should be approximately horizontal, and the user's eyes should be the same height as the top of the screen. Ensure the chair is stable, adjustable (height & tilt) and offers good lumber support.
- The screen should have a stable image, be adjustable, readable and glare/reflection-free.
- Adjust the keyboard using the feet underneath. Remember space in front of the keyboard is helpful for resting the hand and wrists. The keyboard should be usable, adjustable, detachable and legible.
- Ensure there is enough workspace to accommodate all documents or other equipment. Try different layouts on the desktop to find one that suits the operator best.
- Check that there is enough space under the desk to move legs freely and clearances to allow postural changes.
- Avoid reaching or twisting, especially to move or pick up items, which will put excess pressure on the back and neck.
- Move about – don't sit in the same position for long periods. Take advantage of breaks.
- Arrange the desk and screen to avoid glare, or bright reflections. This is often easiest if the screen is not directly facing windows or bright lights.
- Ensure there is adequate lighting.
- Adequate contrast, no glare or distracting reflections Distracting noise is minimized.
- A window covering should be provided if needed to minimise glare.
- Make sure software is appropriate to task, adapted to user, providing feedback on system status with no undisclosed monitoring.
- The work surface should have space for flexible arrangement of equipment and documents and be glare-free.
- Provide a footrest if the user needs one.

Further information is available from the HSE Guide INDG 36, Working with display screen equipment **www.hse.gov.uk/pubns/indg36.pdf**



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Appendix 1 - Major injuries reportable under RIDDOR

Major injuries

1. Any fracture, other than to the fingers, thumbs or toes.
2. Any amputation.
3. Dislocation of the shoulder, hip, knee or spine.
4. Loss of sight or reduction of sight (whether temporary or permanent)
5. A serious burn (including scalding) which
   (a) covers more than 10% of the body
   (b) causes damage to the eye, respiratory system or other vital organs.
6. A chemical or hot metal burn to the eye or any penetrating injury to the eye.
7. Any injury resulting from an electric shock or burn (including any electrical burn caused by arcing or arcing products) leading to unconsciousness or requiring resuscitation or admittance to hospital more than 24 hours.
8. Any other injury –
   (a) leading to hypothermia, heat-induced illness or to unconsciousness
   (b) requiring resuscitation, or
   (c) requiring admittance to hospital for more than 24 hours.
9. Loss of consciousness caused by asphyxia or by exposure to a harmful substance or biological agent.
10. Either of the following conditions which result from the absorption of any substance by inhalation, ingestion or through the skin –

(a) acute illness requiring medical treatment; or

(b) loss of consciousness.

11. Scalpings which require hospital treatment.
12. Acute illness which requires medical treatment where there is reason to believe that this resulted from exposure to a biological agent or its toxins or infected material.
13. Crush injury leading to a brain or internal organ damage.

There is no longer a paper form for RIDDOR reporting since the online system is the preferred reporting mechanism to complete a report **www.hse.gov.uk/riddor/report.htm**

A telephone service is available for reporting fatal and specified injuries only. Call **0845 300 9923** (open Monday to Friday 08:30 to 17:00)

Over-seven-day injury

Accidents must be reported for any injury which results in absence from work for more than seven consecutive days, (excluding the day of the accident, but including weekends and other holidays which would not have been working days). Reports should be submitted within 15 days of the accident and applies to both employed and self-employed personnel.

Any injury which results in a worker being absent from work or incapacitated for more than three consecutive days, (excluding the day of the accident, but including weekends and other holidays which would not have been working days) must be recorded but not reported, unless the period goes on to exceed seven days.

If you are an employer who has to keep an accident book, the record you make in this will be enough. You must keep an accident book under social security law if you have more than 10 employees. Make sure you protect people's personal details by storing records confidentially in a secure place.

Non-fatal accidents to non-workers (e.g., members of the public)

Any injury to members of the public or others who are not at work must be reported if the person is taken directly from the scene to hospital for treatment. Examinations and tests do not constitute treatment. Incidents do not need to be reported where people are taken to hospital as a precaution and no injury is apparent.

Appendix 2 - Diseases relevant to the woodworking industry reportable under RIDDOR

Regulation 8 of RIDDOR requires employers to report cases of certain diagnosed reportable diseases which are linked with occupational exposure to specified hazards. The reportable diseases relevant to the woodworking industry are set below.

- Cramp of the hand or forearm due to repetitive movements.
- Subcutaneous cellulitis of the hand (beat hand).
- Traumatic inflammation of the tendons of the hand or forearm or of the associated tendon sheaths (Tendonitis or Tenosynovitis).
- Carpal tunnel syndrome.
- Cancer of the nasal cavity or associated air sinuses.
- Hand arm vibration syndrome (HAVS).
- Pneumoconiosis (excluding asbestosis).
- Occupational dermatitis.
- Occupational asthma.

Appendix 3 - Reportable dangerous occurrences relevant to the woodworking industry

(A full list in contained in Schedule 2 of RIDDOR)

1. Collapse, overturning or failure of load-bearing parts of lifts and lifting equipment
2. Explosion, collapse or bursting of any closed vessel (including a boiler or boiler tube) or associated pipework
3. Failure of any freight container in any of its load-bearing parts
4. Plant or equipment coming into contact with overhead power lines
5. Electrical short circuit or overload causing fire or explosion
6. Malfunction of breathing apparatus while in use or during testing immediately before use
7. Collapse or partial collapse of a scaffold over five metres high, or erected near water where there could be a risk of drowning after a fall
8. Carriage of dangerous substances by road such as a road tanker carrying a dangerous substance overturns, suffers serious damage, catches fire or the substance is released
9. A dangerous substance being conveyed by road is involved in a fire or released
10. Explosion or fire causing suspension of normal work for over 24 hours
11. Sudden, uncontrolled release in a building of:
    - 100 kg or more of a flammable liquid
    - 10 kg or more of a flammable liquid above its boiling point; or
    - 10 kg or more of a flammable gas; or
    - 500 kg of either of these substances if the release is in the open air
12. Accidental release of any substance which may damage health.

Appendix 4 – Record of thorough examination and testing of Local Exhaust Ventilation (LEV)

LOCAL EXHAUST VENTILATION (LEV)

Record of Thorough Examination and Testing

Name & address of employer responsible for the plant	Name, position & employer of person carrying out examination & test
Date of thorough examination & test	Date of last thorough examination & test
Process & hazard substance concerned	
Identification & location of the LEV plant	Conditions at time of test: normal production or special conditions (e.g. maximum use, stood down)
Details of: i) Intended operating performance of the LEV for the hazardous substance ii) Does the LEV still achieve that performance? iii) Repairs required to achieve that performance	
Methods used to judge performance (e.g. visual, pressure, measurements, air flow measurements, dust lamp, air sampling, filter integrity tests)	
Details of repairs carried out	

Signature of person carrying out examination _____ Date _____

Appendix 5 – Monthly Respiratory Protective Equipment (RPE) maintenance record

Issued To							**Location**							**Issue Date**			
Make							**Model**							**Serial No.**			
	Full Mask							**Half Mask**									
Date	Cleanliness	Filter check	Facepiece/seal	Visor	Head straps/buckles	Valves/Seals		Cleanliness	Filter check	Facepiece/seal	Visor	Head straps/buckles	Valves/Seals	Maintenance Needed	Date action complete	Fit for use? Y/N	Signature

Appendix 6 – COSHH assessment form

COSHH ASSESSMENT

Control of Substances Hazardous to Health Regulations 2002

Product Name(s)		**COSHH Assessment No:**	
Description of Substance:		**Assessed By:**	
		Dated Assessed:	
Description of Task/Process:		**Review Date:**	
		Location:	
Workplace Exposure Limits (WEL):		**Data Sheet available?**	

RISK RATING

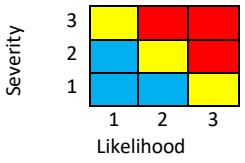
Severity	Likelihood	Example
☐1 – Minor injury ☐2 – Over 7-day injury ☐3 – Severe injury/death	☐1 – Unlikely ☐2 – Possible ☐3 - Probably	S = 2 L = 2 Yellow, Medium risk
Blue = Low Risk	**Yellow = Medium Risk**	**Red = High Risk**

DURATION & FREQUENCY OF EXPOSURE

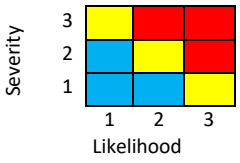
Duration: ☐Constant ☐daily ☐less than one minute per day

Frequency: ☐Constant ☐daily ☐less than once per week/month

Before Controls



After Controls



SUBSTANCE PROPERTIES & HAZARD LABELS

Flammable	Oxidising	Explosive	Health Hazard	Toxic	Harmful/Irritant	Environment	Corrosive	Compressed Gas
☐	☐	☐	☐	☐	☐	☐	☐	☐

Hazardous properties

ROUTE OF EXPOSURE							**PERSONS AT RISK**					
Skin	☐	Eyes	☐	Inhalation	☐		Users of product	☐	Members of public	☐	Visitors	☐
Ingestion	☐	Cuts/Abrasion	☐	Injection	☐		Other Workers	☐	Young Persons	☐	Other (Specify)	☐

PPE (Personal Protective Equipment) REQUIREMENTS

Eye Protection	Safety Helmet	Ear Protection	Respiratory Protection	Safety Boots	Safety Gloves	Face Protection	Safety Overalls
☐	☐	☐	☐	☐	☐	☐	☐

Other PPE (specify):

ADDITIONAL CONTROL MEASURES

GENERAL PRECAUTIONS	HANDLING
FIRST AID/HYGIENE ARRANGEMENTS	**HEALTH SURVEILLANCE**
Inhalation: Skin: Eyes: Ingestions:	
DISPOSAL	**STORAGE & SPILLAGE PROCEDURES**
EMERGENCY ARRANGEMENTS	**INFORMATION, INSTRUCTION & TRAINING**

ADDITIONAL NOTES/COMMENTS (use additional pages if necessary):

Appendix 6 – Employee record of understanding

EMPLOYEE RECORD OF UNDERSTANDING

This sheet is to be used to record that employees have read the COSHH Assessment prior to using a substance and/or carrying out a process that creates a hazardous substance. Ensure that employees have a full understanding of the risks and hazards and what is expected of them in controlling the risks and any action they need to take.

Risk Assessment		**COSHH Assessment No:**	

PLEASE READ THE FOLLOWING STATEMENT BEFORE SIGNING THIS FORM

I acknowledge that I have read and understood the risk assessment identified above and confirm that I have been informed of the hazards, risks and control measures associated with the task.

PRINT NAME	SIGNATURE	DATE

Appendix 7 - General rules which apply to means of escape

The following general rules apply to means of escape:

(a) The total travel distance between any point in a building and the nearest final exit or protected stairway should not be more than

(i) 18m if there is only exit, or

(ii) 45m if more than one exit.

(b) Two or more exists are necessary:

(i) from a room in which more than 60 people work, or

(ii) if any point in the room is more than 12m from the nearest exit.

(c) The minimum width of exit should be 750mm.

(d) (i) Corridors should not be less than 1m in width; and

(ii) in the case of offices, where corridors are longer than 45m they should be subdivided by fire-resisting doors.

(e) Stairways should be at least 800 mm in width, and fire resistant, along with doors connecting them.

(f) A single stairway is sufficient in a building of up to four storeys only.

(g) The following are not acceptable as means of escape:

(i) spiral staircases,

(ii) escalators,

(iii) lifts,

(iv) lowering lines, and

(v) portable or throw-out ladders.

(h) Fire doors must open outwards only.

(i) Doors providing a means of escape should never be locked. (If they have to be kept locked for security purposes, panic bolts should be fitted, or keys maintained in designated key boxes close to the exit.) A notice should indicate that the doors can be opened in case of fire.

(j) A fire exit notice should be fitted to or above fire exit doors.

(k) Appropriate notices should be affixed along fire escape routes, which should be provided with emergency lighting.

(l) Corridors and stairways forming a means of escape should have half-hour fire resistance, i.e., no fire should be able to break through within 30 minutes. This means that a corridor or stairway should be built from non-combustible materials, i.e., brick or concrete. The surface finish should also be non-combustible.

(m) Fire alarm warnings must be audible throughout the building. In larger buildings this will require the provision of electrically operated alarms, whereas in smaller buildings a manually operated gong or bell may suffice.

(n) Normally no person should have to travel more than 30m to the nearest alarm point.

Appendix 8 - Contents of first aid box

There is no mandatory requirement for the content of first aid kits. It depends on what you assess the needs are. As a guide however, and where there is no special risk in the workplace, a minimum stock of first aid items would be:

- A leaflet giving general guidance on first aid e.g., HSE leaflet Basic advice on first aid at work
- 20 individually wrapped sterile adhesive dressings (assorted sizes)
- two sterile eye pads
- four individually wrapped triangular bandages (preferably sterile)
- six safety pins
- two large, individually wrapped, sterile, unmedicated wound dressings
- six medium-sized, individually wrapped, sterile, unmedicated wound dressings
- a pair of disposable gloves

Tablets or medicines should not be kept in the first-aid box.

The above is a suggested list only; equivalent but different items will be considered acceptable.

Other useful items you may wish to include could be:

- saline solution
- saline cleansing wipes
- sterile adhesive tape
- resuscitation face shield with valve

Appendix 9.1 – Risk assessment

REF No.: _____

RISK ASSESSMENT

LOCATION/SITE:				Severity **(S)** / Probability **(P)**	Minor 1	Low 2	Medium 3	High 4	Major 5
TASK/ACTIVITY:				Improbable 1	1	2	3	4	5
				Low 2	2	4	6	8	10
Assessment Completed by:		**Assessment Date:**		Medium 3	3	6	9	12	15
				High 4	4	8	12	16	20
Signature:		**Review Date:**		Almost Certain 5	5	10	15	20	25
				Multiply Severity x Likelihood to create an assessment score. If score is in yellow or red section then additional control measures must be incorporated to reduce severity/likelihood.					

(S)	**Minor:** Very minor injury, no time lost other than 1st Aid treatment	**Low**: Significant incident or injury requiring firs aid e.g. strain, laceration	**Medium**: Moderate injury or illness leading to loss of time or temporary disability	**High:** Permanent disability, chronic condition	**Major**: Fatality to one or more people. Severe incident loss or damage.
(P)	**Improbable:** Loss, accident or illness very unlikely to occur	**Low:** Situation generally well managed but lapse could occur	**Medium:** Insufficient controls in place. Loss could occur	**High**: High probability that accident or incident will occur	**Almost Certain:** Extremely likely to occur. Management controls are absent

Additional Notes:

Ref.	Identified Hazards	No controls			Control Measures	With Controls			Further Action Required
		Likelihood	Severity	Score		Likelihood	Severity	Score	
1									
2									
3									
4									
5									
6									
7									
8									

PERSONS AT RISK											
Users of product	☐	Members of public	☐	Visitors	☐	Other Workers	☐	Young Persons	☐	Other (Specify)	☐

PERSONAL PROTECTIVE EQUIPMENT (PPE)							
 Eye Protection	 Safety Helmet	 Ear Protection	 Respiratory Protection	 Safety Boots	 Safety Gloves	 Face Protection	 Safety Overalls
☐	☐	☐	☐	☐	☐	☐	☐

Other PPE (specify):

Appendix 9.1 – Employee record of understanding

EMPLOYEE RECORD OF UNDERSTANDING

This sheet is to be used to record that employees have read the Risk Assessment prior to carrying out a task/activity. Ensure that employees have a full understanding of the risks and hazards and what is expected of them in controlling the risks and any action they need to take.

Risk Assessment

PLEASE READ THE FOLLOWING STATEMENT BEFORE SIGNING THIS FORM

I acknowledge that I have read and understood the risk assessment identified above and confirm that I have been informed of the hazards, risks and control measures associated with the task.

PRINT NAME	SIGNATURE	DATE

Appendix 9.2 – Risk rating guidance

Risk assessment involves an evaluation process to identify:

- Hazard –the potential to cause harm
- Risk – the likelihood of an event occurring which will allow the hazard to be realised

To assist in prioritising and identifying areas requiring improvements and controls the level of risk may be rated according to the Probability (likelihood) and Severity (consequence) of harm resulting from the hazard.

Therefore, Risk Rating = Probability (P) x Severity (S)

- Probability: How likely that harm will occur
- Severity: The amount of harm that will occur
- Risk Rating: The level of risk remaining after controls have been implemented

Probability (P)		
Title	**Description**	**Score**
Almost Certain	Management controls are absent. If the conditions remain unchanged there will be almost a 100% certainty that an accident will occur. e.g. untrained personnel, broken guarding, live exposed electrical cable	5
High	There is a severe failure in management controls. The effects of human behaviour or other factors could cause an accident but is unlikely without this additional factor e.g. poorly trained personnel, machine left unguarded	4
Medium	Insufficient or sub-standard controls in place. Loss is unlikely in normal operation; however, it may occur in emergencies or non-routine conditions e.g. blocked gangways, keys left in forklift, refresher training required	3
Low	The situation is generally well managed - however occasional lapses could occur. This also applies to situations where people are required to behave safely in order to protect themselves but are well trained.	2
Improbable	Loss, accident or illness could only occur in freak conditions. The situation is well managed and all reasonable precautions have been taken. Ideally, this should be the normal state of the workplace.	1

Severity (S)		
Title	**Description**	**Score**
Major	Will cause a fatality to one or more people. The loss or damage will result in severe disruption to business e.g. structural damage, major fire, explosion, scaffold collapse	5
High	Will result in a permanent disability e.g. loss of sight, limb amputation, loss of hearing, chronic illness	4
Medium	Causing temporary disability e.g. fractures or illness leading to loss of time	3
Low	Significant injury e.g. sprains, strains, lacerations	2
Minor	Minor, superficial injuries such as lacerations. No time lost other than 1st Aid treatment	1

Probability (P) x Severity (S) = Risk Rating (Score)

	Minor	**Low**	**Medium**	**High**	**Major**
Almost Certain	5	10	15	20	25
High	4	8	12	16	20
Medium	3	6	9	12	15
Low	2	4	6	8	10
Improbable	1	2	3	4	5

Appendix 10 – Provision & use of work equipment regulations 1998 report of inspection

Company Name:		**Site Address**	
Inspection carried out by:			

Date of inspection	Description of Equipment & Means of identification	Results of inspection	Next inspection due	Signed

Appendix 11.1 – Individual record of training

YOUR COMPANY NAME LTD

INDIVIDUAL RECORD OF TRAINING AND AUTHORISATION

Employee Name		Date of Birth		Address	
Employee Signature		Date			

Task/Activity/ Machine	Assessment of competence by:		Range of work authorised	Training course(s) or modules(s) completed: title and date	Any special conditions of use	Authorised Director/ Senior Manager
	Authorised Trainer	Date				

Appendix 11.2 – Skills matrix

PERSONNEL SKILLS MATRIX CHART FORM **YOUR COMPANY NAME LTD**

L : LEARNING **C : COMPETENT** **E :** EXPERIENCED/FULLY COMPETENT, MAY OVERSEE/TRAIN OTHERS AND COUNTERSIGN WORK

PROCESS/MACHINE TYPE

EMPLOYEE NAME	MACHINE							
	Cross Cut	Re-Saw	Tenon	Spindle	Router	CNC	Morticer	Planer/ Moulder
Reviewed by Production Supervisor:								
Date:								

Appendix 12 - BWF machine safety cards

Sawing Machines

No 1 - Safe use of Cross Cut Saw

No 2 - Safe use of Chop Saw

No 3 - Safe use of Circular Rip Saw

No 4 - Safe use of Dimension Saw

No 5 - Safe use of Panel Saw

No 6 - Safe use of Vertical (Wall) Saw

No 7 - Safe use of Narrow Bandsaw

No 8 - Safe use of Band Re-Saw

No 9 - Safe use of Straight Line Edger

No 10 - Safe use of Multi Ripsaw

Planing, Moulding and Profiling Machines

No 11 - Safe use of Surface Planer

No 12 - Safe use of Thickness Planer

No 13 - Safe use of Four-Sided Planer Moulder

No 14 - Safe use of Verticle Spindle Moulder

No 15 - Safe use of High-Speed Router

No 16 - Safe use of Power Hand Router

No 17 - Safe use of Edge Bander

No 18 - Safe use of CNC Machine

No 19 - Safe use of Copy Lathe

No 20 – Stair Trencher

Jointing Machines

No 21 - Safe use of Chisel Mortiser

No 22 - Safe use of Single End Tenoner

No 23 - Safe use of Double End Tenoner

No 24 - Safe use of Boring Machine

Miscellaneous

No 25 - Safe use of Power Air Tools

No 26 - Safe use of Sanding Machines

No 27 - Safe use of Abrasive Wheel

No 28 - Safe use of Forklift Truck

No 29 - Safe use of Profile Grinder

No 30 - Safe use of Spray Booths and Equipment

No 31 - Safe use of Nail Guns

No 32 - Safe use of RF (Radio Frequency) Equipment

Appendix 13 - Reference documents

- A guide to the Health and Safety (Consultation with Employees Regulations 1996 **www.hse.gov.uk/pubns/indg232.pdf**
- Code of Practice for safe design and operation of timber treatment installations (WPA) **www.thewpa.org.uk/**
- Construction (Design and Management) Regulations 2015 **www.hse.gov.uk/pubns/books/l153.htm**
- Control of Noise at Work Regulations 2005 **www.hse.gov.uk/noise/regulations.htm**
- Control of Substances Hazardous to Health Regulations 2002 **www.hse.gov.uk/coshh/**
- COSHH The new brief guide for employers **www.hse.gov.uk/pubns/indg136.pdf**
- Leading Health & Safety at Work, Actions for Directors, board members, business owners and organisations of all sizes (INDG 417) **www.hse.gov.uk/pubns/indg417.pdf**
- The Workplace (Health, Safety and Welfare) Regulations 1992 **www.legislation.gov.uk/uksi/2005/735/contents/made**
- Electricity at Work Regulations, The, 1989 **www.hse.gov.uk/pubns/priced/hsr25.pdf**
- The Work at Height Regulations 2005 **www.legislation.gov.uk/uksi/2005/735/contents/made**
- COSHH ACOP & Guidance **www.hse.gov.uk/pubns/priced/l5.pdf**
- HSG 65 Managing for Health & Safety **www.hse.gov.uk/pubns/priced/hsg65.pdf**
- HSG 137 Health Risk Management A Practical Guide for Managers in SMEs **www.hse.gov.uk/pubns/books/hsg137.htm**
- Health & Safety Statistics **www.hse.gov.uk/statistics/index.htm**
- HSE Woodworking Information Sheets **www.hse.gov.uk/pubns/woodindx.htm**
- Health & Safety at Work Act 1974 **www.hse.gov.uk/legislation/hswa.htm**
- Health & Safety Consultation with Employees Regulations 1996 **www.legislation.gov.uk/uksi/1996/1513/contents/made**
- Health & Safety (Display Screen Equipment) Regulations 1992 **www.hse.gov.uk/msd/dse/**
- Health & Safety (First Aid Regulations), The, 1981 **www.hse.gov.uk/firstaid/legislation.htm**
- Health & Safety in Sawmilling (HSG 172) **www.hse.gov.uk/pubns/priced/hsg172.pdf**
- Lifting Operations and Lifting Equipment Regulations 1998 **www.hse.gov.uk/work-equipment-machinery/loler.htm**
- Management of Health and Safety at Work Regulations 1999 **www.legislation.gov.uk/uksi/1999/3242/contents/made**
- Manual Handling Operations Regulations 1992 **www.hse.gov.uk/msd/backpain/employers/mhor.htm**
- Manual handling solutions in woodworking **www.hse.gov.uk/pubns/indg318.pdf**
- Personal Protective Equipment at Work Regulations 1992 **www.legislation.gov.uk/uksi/1992/2966/contents/made**
- Provision and Use of Work Equipment Regulations 1998 **www.hse.gov.uk/work-equipment-machinery/puwer.htm**
- Reporting of Injuries, Diseases, and Dangerous Occurrences Regulations 2013 **www.hse.gov.uk/riddor**/
- Safe use of woodworking machinery ACOP and Guidance **www.hse.gov.uk/pubns/books/l114.htm**
- Supervising for safety in the woodworking industry **www.hse.gov.uk/pubns/indg440.htm**
- Dangerous Substances and Explosive Atmospheres Regulations **www.hse.gov.uk/fireandexplosion/dsear.htm**
- Control of Vibration at Work Regulations **www.hse.gov.uk/vibration/hav/regulations.htm**

Appendix 14.1 – Health surveillance initial questionnaire

Confidential

<COMPANY NAME>
<COMPANY ADDRESS>

Initial questionnaire for surveillance of people potentially exposed to substances that cause occupational asthma

In this workplace substances are in use that have been known to cause allergic chest problems. Following the risk assessment under regulation 6 of the Control of Substances Hazardous to Health (COSHH) Regulations 2002, we have decided to carry out a program of pre-exposure and periodic health surveillance as required by regulation 11 of the COSHH Regulations.

In some cases further advice may be required from the company occupational health advisor.

I understand that a programme of health surveillance is necessary in this employment and will form part of my management health record.

Signature of employee : _____

Print Name : _____

Date : _____

Signature of responsible person:_____ Date: _____

for <COMPANY NAME>

Referred for further investigation? Yes/No

Would you please answer the following questions:

1. Surname _____ Forenames _____

Home Address: _____

_____

_____

Date of Birth:_____ Tel No. : _____

2 Have you any chest problems, such as periods of breathlessness, wheeze, chest tightness or persistent coughing? Yes ☐ No ☐

3 Do you believe that your chest has suffered as a result of any previous employment? Yes ☐ No ☐

Appendix 14.1 – Health surveillance initial questionnaire

Confidential

2 Do you or have you ever had any of the following? (Do not include isolated colds, sore throats or flu.)

a)	Recurring soreness of or watering of eyes	Yes ☐ No ☐
b)	Recurring blocked or running nose	Yes ☐ No ☐
c)	Bouts of coughing	Yes ☐ No ☐
d)	Chest tightness	Yes ☐ No ☐
e)	Wheezing	Yes ☐ No ☐
f)	Breathlessness	Yes ☐ No ☐
g)	Any other persistent or history of chest problems	Yes ☐ No ☐

I confirm that the responses given by me are correct and that I have received a copy of the completed questionnaire

Signed_____Date _____

Please note: It will be for a health professional to assess the relevance of any respiratory symptoms and to obtain a detailed smoking history as necessary.

.....

To be completed by the responsible person

a)	No further action required	Yes ☐ No ☐
b)	Refer to company occupational health advisor	Yes ☐ No ☐

Signed (responsible person)_____Date _____

Appendix 14.2 – Health surveillance ongoing questionnaire

Confidential

<COMPANY NAME>
<COMPANY ADDRESS>

Health questionnaire for on-going surveillance of people potentially exposed to substances that cause occupational asthma.

This questionnaire should be completed 6-8 weeks after employment commences and annually thereafter.

Further advice will be required from the company occupational health advisor if any yes box is ticked.

Signature of employee: _____

Print Name: _____

Date: _____

Since starting your present job have you had any of the following symptoms either at work or at home? (Do not include isolated colds, sore throats or flu.)

a)	Recurring soreness of or watering of eyes	Yes ☐ No ☐
b)	Recurring blocked or running nose	Yes ☐ No ☐
c)	Bouts of coughing	Yes ☐ No ☐
d)	Chest tightness	Yes ☐ No ☐
e)	Wheezing	Yes ☐ No ☐
f)	Breathlessness	Yes ☐ No ☐
g)	Any other persistent or history of chest problems	Yes ☐ No ☐

I confirm that the responses given by me are correct and that I have received a copy of the completed questionnaire

Signed_____

Date _____

To be completed by the responsible person

a)	No further action required	Yes ☐ No ☐
b)	Refer to company occupational health advisor	Yes ☐ No ☐

Signed (responsible person)_____

Date _____

Appendix 15 – Annual HAVS screening questionnaire for health surveillance

Private and Confidential

[INSERT YOUR COMPANY NAME HERE Ltd]
[INSERT YOUR ADDRESS HERE]

ANNUAL HAND-ARM VIBRATING SCREENING QUESTIONNAIRE

Screening questionnaire for workers using hand-held vibrating tools hand-guided vibrating machines and hand-fed vibrating machines

Personnel Details

Surname_____ Forenames _____

Home Address: _____

_____ Post Code _____

Date of Birth:_____ Tel No. : _____

Gender: M / F National Insurance No.: _____

Date of assessment: _____

Date of previous screening: _____

Have you been using hand-held vibrating tools, machines or hand-fed processes in your job, or if this is a review, since your last assessment? (detail work history overleaf)	Y/N

If NO or more than 2 years since last exposure, please sign the declaration & return the form - there is no need to answer further questions.

If YES:

1.	Do you have any numbness or tingling of the fingers lasting more than 20 minutes after using vibrating equipment?	Y/N
2.	Do you have numbness or tingling of the fingers at any other time?	Y/N
3.	Do you wake at night with pain, tingling, or numbness in your hand or wrist?	Y/N
4.	Have any of your fingers gone white* on cold exposure? *Whiteness means a clear or discoloration of the fingers with a sharp edge, usually followed by a red flush	Y/N
5.	Have you noticed any change in your response to your tolerance of working outdoors in the cold?	Y/N
6.	Are you experiencing any other problems in your hands or arms?	Y/N
7.	Do you have difficulty picking up very small objects, eg screws or buttons or opening tight jars?	Y/N
8.	Has anything changed about your health since the last assessment	Y/N

Appendix 15 – Annual HAVS screening questionnaire for health surveillance

HAND-ARM VIBRATION SYNDROME (HAVS):

- is a disorder which affects the blood vessels, nerves, muscles and joints of the hand, wrist and arm;
- can become severely disabling if ignored;
- best known form is vibration white finger (VWF) which can be triggered by cold or wet weather and can cause severe pain in the affected fingers

Signs to look out for in hand and-arm vibration syndrome:

- tingling and numbness in the fingers;
- in the cold and wet, fingers go white, then blue, then red and are painful;
- you can't feel things with your fingers;
- pain, tingling or numbness in your hands, wrists and arms;
- loss of strength in hands.

REMEMBER TO LOOK OUT FOR SYMPTOMS OF HAND-ARM VIBRATION SYNDROME (HAVS) AND CONTACT OCCUPATIONAL HEALTH IF YOU HAVE ANY CONCERNS. REPORT ANY SYMPTOMS OF HAVS TO OCCUPATIONAL HEALTH IMMEDIATELY

OCCUPATIONAL HISTORY

Dates	Job Title

DECLARATION

I understand that a programme of health surveillance is necessary in this employment and will form part of my management health record. I declare that the responses I have given on this form are true to the best of my knowledge and belief. I have received a copy of the completed questionnaire.

Signed_____Date _____

To be completed by the responsible person

a) No further action required

b) Refer to company occupational health advisor

Date of next Review: Annual_____Other_____

Signed (responsible person)_____Date _____

British Woodworking Federation
The Building Centre, 26 Store Street London WC1E 7BT
T: 0203 870 5020 **E:** bwf@bwf.org.uk **W:** www.bwf.org.uk

04/24