

# CONNECT2COLLEGE

# **CONSTRUCTION** PRE-ENROLMENT RESOURCE PACK Carpentry & Joinery













Site Joinery Induction Booklet 2020/21









Chris Wright Assistant Principal - Automoti... Automotive Construction Eng...

0161 674 3843 Work 07715 634 505 Mobile ChrisWright@tmc.ac.uk



Andy Addy Director of Curriculum Construction

0161 674 7017 Work AAddy@tmc.ac.uk



Louise Nixon Head of Department East

0161 674 8909 Work 07850 736 304 Mobile LNixon@tmc.ac.uk

#### List of useful websites:

balfourbeatty.com laingorourke.com galifordtry.co.uk wilmottdixon.co.uk





# **1.HASAWA**

# HEALTH AND SAFETY AT WORK ACT





### HEALTH AND SAFETY AT WORK ACT 1974

Health And Safety At Work 1974 (HASAWA) covers all persons in the workplace.

#### The main OBJECTIVES of HASAWA are:

- 1. To secure the health and safety and welfare of all persons at work.
- 2. To protect the general public from risk to health and safety arising out of work activities.
- 3. To control the use, handling, storage and transporting of explosives and highly flammable substances.
- 4. To control the release of noxious or offensive substances into the atmosphere.

The Act is enforced by inspectors, employed by the Health and Safety executive





# HEALTH AND SAFETY AT WORK ACT 1974

#### Their power permits them to:

- 1 Enter premises to carry out investigations involving taking measurements, photographs, recordings and samples.
- 2 Take statements
- 3 Check records required by legislation.
- 4 Give advice and information.
- 5 Demand seizure, dismantle, neutralise or destroy material, equipment or substance that is likely to cause immediate serious personal injury.
- 6 Issue prohibition notices- ban all activity until the situation is corrected.
- 7 Prosecute. All persons, including employers, employees, self-employed, designers, manufacturers and suppliers who fail to comply with their safety duty, may be prosecuted in a magistrates court.

CONVICTION CAN LEAD TO LARGE FINES OR A PRISON SENTENCE



# HASAWA- EMPLOYER AND EMPLOYEE DUTIES

EMPLOYERS AND MANAGEMENT DUTIES

- 1. Provide and maintain a safe working environment.
- 2. Ensure safe access to and from the workplace.
- 3. Provide and maintain safe machines, equipment and methods of work.
- 4. Ensure safe handling, transporting and storage of machinery, equipment and materials.
- 5. Provide the employees with the necessary information, instruction, training and supervision to ensure safe working.
- 6. Prepare, update as required and issue to employees a written statement of the firm's safety policy.
- 7. Involve trade union safety representatives (where appointed) in all matters concerning the development, promotion and maintenance of health and safety requirements.





### HASAWA- EMPLOYER AND EMPLOYEE DUTIES

#### EMPLOYEE'S DUTIES

- 1 Take care at all times and ensure that they do not put themselves, their work colleagues or any other person at risk by their actions.
- 2 Co-operate with their employers to enable them to fulfil the employer health and safety duties.
- 3 Use the equipment and safeguards provided by the employers.
- 4 Never misuse or interfere with anything provided for health and safety.

The duties as an employee extend to the time spent in the training centre, whether employed, or as a full time trainee, just as the training centre fulfils the role of employer or management.





Task 1	
1. What do the initials HASAWA stand for?	
2. State two objectives of the act.	
3. Give one power that a HASAWA inspector can use to enforce the act.	
4. Give one each of the employers and employees duties as stated in the act.	





# PPE

# PERSONAL PROTECTIVE EQUIPMENT





Remember you have a responsibility to conduct all your activities in a safe manner. It is against the law for you to endanger yourself or others by your actions or omissions.

Your duty to yourself and others covers such things as;

1. Using the correct tools and equipment for the job.

2. Correct use of the safety equipment provided.

- (a) Helmets
- (b) Goggles
- (c) Safety boots and Harnesses
- (d) Roof ladders
- (e) Dust masks

Report defects and faults immediately to your supervisor.

Do not improvise with equipment and plant.

Warn new persons of known hazards.

Refrain from horseplay.

Alcohol and working in a high risk industry are not compatible. If you have had an alcoholic drink, don't be surprised if you are asked to leave the site. You are a danger to yourself and to others.

Don't use drugs, even outside of work time, you could be putting yourself and work colleagues at risk.

Keep workplace tidy, free of loose materials, brick bats, etc.

Don't obstruct gangways or stairs with tools or materials

**Remember** It only takes one foolish action in haste or temper to cause a serious or fatal incident.



### PERSONAL PROTECTIVE EQUIPMENT (PPE)

A range of protective clothing is available, and should be worn when hazards to health occur, or when you are told to do so by legal requirements.

The following checklist outlines the main PPE available.

SAFETY HELMET



Used to protect the head from falling objects, and knocks against obstructions.

Made from moulded plastic or fibreglass reinforced polyester.

Inside it has an adjustable harness. This provides ventilation and a clearance of 32mm between the outer shell and the persons head.

Regulations state that every employer must provide each of their employees with suitable head protection, and maintain it

Safety helmets must be worn at

All times on site.

DO NOT MISUSE IT, YOUR LIFE MAY DEPEND ON IT. SAFETY GOGGLES



Worn when cutting, chipping, abrading or scrapping metal.

The type worn should be compatible with the operation being carried out.

Flexible or soft box goggles with the correct safety lenses are suitable for the cutting of bricks and blocks with hand cutting tools.

Keep lenses clean, wash with warm water and mild detergent. store in a dry dust free area.

GOGGLES ARE REPLACEABLE YOUR EYES ARE NOT





DUST MASK



SAFETY BOOT

steel toe cap



Disposable facemasks are simple facemasks designed to filter out harmful dust particles.

They are lightweight, comfortable to wear and cheap. They should not be worn by more than one person and should be disposed of at the end of the day.

In high dust levels they should be disposed of more frequently.

Only suitable for non-toxic dust.

When toxic material is liable to create dust, full respiratory masks must be worn. Safety footwear is used to prevent accidents by objects falling on the foot and by soles being penetrated by sharp objects, e.g. projecting nails in timber.

They should have steel toe caps, and the sole should have a steel plate inner sole embedded in the sole of the Boot.

#### USE THE WRONG RESPIRATOR AND YOUR HEALTH COULD BE SERIOUSLY AFFECTED





#### EAR DEFENDERS



A wide range of equipment on site can be harmful to your ears. Even if you are not using the Equipment, you can still be affected When someone is using it close by.

Where excessive noise is encountered ear defenders must be worn.

Small fibre earplugs can be used where noise is not too severe. Hands should be clean before inserting plugs And they should be disposed of after one use.



Safety gloves should be worn at all times. There are several types of safety gloves available.

Builders hands are subject to all types of skin complaints, so it is very important that you wear the correct safety gloves.

Gloves are available for jobs such as handling bricks, blocks, timber, cement as well as glass and concrete.



Always wash your hands regularly.

There is a wide range of hand creams available. It is advisable to use a barrier cream, especially after handling building materials, without wearing gloves.





#### SAFETY EQUIPMENT-EMPLOYERS SHOULD PROVIDE THE FOLLOWING

- 1. Suitable protective clothing for working in rain, snow, sleet etc. (Health and safety at work act, sec 8)
- 2. Eye protection or eye shields for dust, sparks or chipping. (Protection of Eyes Regulations, reg 5)
- Storage accommodation for protective clothing and equipment when not in use.
   The Construction (Health, Safety and Welfare) Regulations, Reg 22
- 4. Ear protectors where noise levels cannot be reduced below
  90dB all noisy activities should be checked.
  (The Noise At Work Regulations.)
- 5. Adequate protective clothing when exposed to high levels of lead, lead dust, fumes or paint. (Control of Lead at Work Regulations, reg 81)
- 6. Safety helmets for protection against falling material or protruding objects.
  (NJBCI National Working Rules)
  The Construction (Head Protection) Regulations.
- Industrial gloves for handling rough abrasives, sharp and coarse materials, e.g. rough cast concrete or when using toxic or corrosive materials. BS 1651

Note; You are required by LAW to wear or use the above items where necessary.

City <mark>&amp;</mark> Guilds	The Manches College
Task 2	
RESPONSIBILITIES AND EQUIPMENT	
1. State two safety duties which you are expected to obse days work.	erve during a typical
<ol><li>List five items of safety equipment, and give examples use them.</li></ol>	s of where you would
A B C	
D E	





# SAFETY SIGNS



# These signs are of an international system.

The message they convey is for;

- 1. The prevention of accidents. 2. Identification of health hazards.
- 3. Actions in cases of emergencies.

Safety signs fall into FIVE separate categories which can be recognised by their shape and

colour.

#### Prohibition

A red circular band with diagonal cross bar on a white background, the symbol within the circle is black denoting a safety sign that indicates that a certain behaviour is prohibited.

#### Hazard

A yellow triangle with black border and symbol within the yellow area denoting a safety sign that gives a warning of a hazard.



#### Mandatory

A blue circle with white symbol denoting a sign that indicates that a specific course of action must take place.



#### Safe Condition

A green oblong or square with symbol or text in white denoting a safety sign providing information about a safe condition.

#### Fire Equipment

A red oblong or square with symbol in white denoting a safety sign that indicates the location of fire fighting equipment.









# PROHIBITION SIGNS



Do not drink

No access for

unauthorised persons



Do not extinguish with water



No naked flames



Do not touch



No access for pedestrians





No access for industrial vehicles





# MANDATORY SIGNS



Safety boots must be worn



Face protection must be worn



Ear protection must be worn



General mandatory sign



Eye protection must be worn



Pedestrians must use this route



Respiratory equipment must be worn



be worn



Safety gloves must be worn



Safety harness must be worn









Biological risk



Explosive materials





Corrosive materials



Flammable materials or high temperature



Danger : Electricity



General danger



Harmful or irritant material



Overhead load



Laser beam



Toxic materials



Low temperature



Radioactive materials













FIRE SIGNS

The following signs will help you to identify :

- The positions of fire extinguishers and blankets
- Where fire alarms are positioned
- Safe routes of exit







	four categories of safety signs. B
	D
	two of the above categories and describe the shape, nd meaning for each.
Complete	the sign for WEAR EAR PROTECTION
What ca	tegory of sign is this?





# FIRST AID





First Aid and Accident Reporting

The priorities of first aid are to:

- 1. Save life.
- 2. Prevent the injured person/s condition from getting worse.
- 3. Get the injured person/s to medical help as soon as possible.

#### Before first aid is required:

- 1. Make sure you know where the first aid kit is kept.
- 2. Know who is the first-aider and the appointed persons are.
- 3. If you use anything from the first aid box, get it replaced.
- 4. Always make sure you have a travelling first aid kit available when you working away from the main site.
- 5. Always know where the nearest telephone is, and understand the procedure for calling the emergency services.

When first aid is required:

- 1. Call for help from someone knowledgeable, preferably the first aider.
- 2. Send someone to telephone for an ambulance if necessary.
- 3. Do not move the casualty, unless in immediate danger.
- 4. Remain with the casualty and give him/her reassurance.





When first aid is required:

5. Make the casualty as comfortable as possible.

6. Do not give drinks or food to the casualty, moisten lips only.

7. Do not allow casualty to smoke.

Accident reporting:

- 1. By law you must report all accidents and dangerous occurrences which happen at work to your employer.
- 2. You must also ensure that all correct details are entered into the accident book.
- 3. If you do not do these things, you could be prosecuted and be unable to claim for compensation for your injuries.





# FIRE SAFETY





#### Responding to emergencies

To save life and reduce the risk of injury occurring, all new persons must be told of the current safety and emergency procedures.

From the very first day, you should be aware of what do, in the event of a fire or an accident.

Action to be taken in the event of a fire:

- 1. Raise the alarm and then call the fire brigade. (Make sure you know the address of the building).
- 2. Close the doors and windows to stop the spread of the fire.
- 3. Evacuate the building or area where you are working.
- 4. Fight the fire with extinguishers that should be provided, but don't put yourself at risk.

DO NOT USE WATER ON ELECTRICAL FIRES

If there is a lot of smoke in the building-keep low, wear a damp cloth over your nose and mouth.

Fire precautions

- 1. Make sure you know the escape routes from the building.
- 2. Know where the fire assembly point is.
- 3. Keep the fire doors clear of obstructions.
- 4. Never obstruct access to the fire extinguishers.
- 5. Ensure you know how to operate the fire extinguishers in your area.





Responding to emergencies

Fire prevention

- 1. Do not hang clothing over or near heating equipment.
- 2. Do not let flammable rubbish accumulate.
- 3. Do not smoke in prohibited areas.
- 4. Do not overload electric sockets.
- 5. Switch off any electrical equipment not in use at the mains.





The following chart shows which extinguisher should be used for different types of fires.

Each extinguisher is colour coded for easy recognition and you should familiarise yourself with the colour codes and their uses.

Types of portable fire extinguishers and types of fire they are used on.









Task 4					
STU	DENT ACTIVITY				
line the three privations of fines and					
LIST	the three priorities of first aid.				
1	2				
3.					
What is contained in a fire extinguisher that is red or has a red label?					
A.	Carbon dioxide				
B.	Foam				
C. D	Water Dry powder				
	e two types of fire extinguisher that MUST NOT be used electrical fire				
Α.	Foam				
В. <i>С</i> .	Water Carbon dioxide				
D.	Vaporizing liquid				
Where would you go in the event of a fire?					
A.	To the canteen for a cup of tea				
В. <i>С</i> .	To the fire assembly point To the site hut				
D	To the fire to see what is going on				
What should you do if you hear the fire alarm?					
<b>A</b> .	Ignore it because it might be someone playing about				
B.	Go towards the sound to find out what is going on				
C. D.	Evacuate the premises to a designated place of safety Leave work for the day				
A carbon dioxide extinguisher puts out a fire by:					
Δ	Catting rid of the heat				
А. В.	Getting rid of the heat Excluding the oxygen				
С.	Removing the fuel	·			
D.	Damping down				





# MANUAL HANDLING





Manual Handling

Almost 25% of all injuries at work are caused by accidents during manual handling.

Mistakes made today can cause you health problems for the rest of your life.

Considerations when manual handling:

- 1. Always use mechanical handling methods, instead of manual handling if possible. These include forklifts, pulleys, levers, etc.
- 2. Be aware of your own capabilities and only tackle loads you are comfortable with.

3. Decide if it is a one man load, or if you need help.

4. Is there a clear walkway with good lighting in the work area.

5. Be sure you know the weight of the load before lifting.

- 6. Wear gloves to protect your hands.
- 7. Wear safety boots to protect your feet from falling objects, and from protruding objects.
- 8. Get the feel of the load before you lift properly.





#### Rules for manual handling

1. Keep your back straight and upright, bend your legs and let your legs do the work

- 2. Keep your arms as close to your body as possible, and as straight as possible.
- 3. Avoid sudden movements and twists of your spine. Let your feet, not your spine, take the weight.
- 4. Grip loads with the palm of the hand, not just the fingers.
- 5. When objects are carried on the shoulder, the centre of gravity has to be directly above it. This calls for least effort.







#### Cleanliness of working area

Good craftsmen always have a clean and tidy work area. Quality work and a tidy workspace go hand in hand.

There are three good reasons for this:

1 Safety: Waste materials left lying about can cause serious accidents.

Scaffolds, doorways, passages and runways should be kept clear and free of materials.

- 2 Health: Waste food left lying around cabins, make the perfect breeding ground for vermin.
- 3. Economy: Materials are expensive- don't waste them. Broken bricks, tiles, stone etc, can be used as hardcore below paths.

#### Working Area

- 1. Keep your work area tidy by stacking the bricks and timber correctly.
- 2. Do all your cutting in one place, using a dust sheet (if indoors).
- 3. Do not overload spotboards.
- 4. Keep the tools you are not using in your tool bag or tool box.
- 5. Sweep your area regularly (this helps keep your boots clean).
- 6. Leave time at the end of the day to clean the area, and leave it spotless for the next day.





# Task 5

#### Handling and Cleanliness

1. What percentage of accidents are caused by manual handling?

2. Name two items of safety wear, which should be used when handling heavy materials.

3. State three safety considerations you must observe in your own working area.

4. Name three other regulation documents which deal with safety at work.





# Task 6

#### When used on site, what is the meaning of this sign?

- A: Wear eye protection
- B: Eye wash station
- C: Risk of splashes getting into the eyes
- D: Look out for sprinklers

What does this sign tell you?

- A: Hearing protection advisable
- B: Ear protection must be worn
- C: Keep noise to a minimum
- D: Noisy machinery in this area

When used on site, what does this sign mean?

- A: Fire-alarm call point
- B: Fire-hose reel
- C: Turn key to open
- D Not to be used in case of fire

What do blue and white safety signs tell you?

- A: Things you must do
- B: The nearest fire exit
- C: The hazards in the area
- D: Things you must not do

What is the meaning of this sign?

- A: Smoking allowed
- B: Very Toxic material
- C: No smoking
- D: Smoke-free rest area















# Task 7

Identify the meaning of each of the symbols below



















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#### **Student Self Evaluation / Review**

What have you learnt?

What went well?

What went less well?

How might you improve further?

Signed (Student).....