

You should be aware that a bricklayer:

- Works from plans and specifications
- Constructs structures by spreading layers of mortar, placing bricks/blocks, checking vertical and horizontal alignment
- Constructs brickwork using traditional bonding patterns.



You should be aware that a stonemason:

- Dresses, carves and lays traditional stonework, including dry-stone walling
- Repairs and cleans existing traditional stone mouldings and other features.



Learners should be aware that a plumber:

- Installs cold water, hot water, sanitation (toilets), boilers, and central heating systems
- Follows relevant safety regulations, (e.g. 'Gas Safe')
Installs traditional lead flashings and roof coverings.

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Trades, employment and careers

Learners should be aware that a plasterer:

- Applies wet finishes and protective coverings on external walls
- Applies plaster to inside walls and ceilings
- Dry lines internal studs of walls
- Replicates traditional ornamental plasterwork using plaster, moulds and casts.



Learners should be aware that a painter and decorator:

- Prepares and applies paint, wallpaper and other finishes to interior surfaces
Prepares and applies paint and other finishes to exterior surfaces
- Follows relevant safety regulations.

You should be aware that a joiner:

Joins pieces of wood in a workshop, which a carpenter fixes on site.

You should be aware that a carpenter:

- Installs floor joists, floorboards, roof trusses, wall partitions
- Fits interior woodwork – staircases, doors, skirting boards, cupboards, kitchens
- Replicates traditional ornamental mouldings.

You should be aware that an electrician:

- Installs, inspects and tests electrical services and equipment
- Follows relevant safety regulations.



Learners should be aware that a floor layer: Prepares and applies levelling compounds

- Lays carpet and vinyl floor finishes to internal surfaces
- Installs ceramic wall and floor tiles.

You should know and understand that construction sites are hazardous environments with many risks:

- Workers are at risk from heavy construction equipment and vehicles, working at height, manual handling and slips, trips and falls.
- Employers have the responsibility for the safe operation of sites and may be held to account in the case of accidents or incidents
- The public may be at risk when close to a construction site, or if they gain access to the site, from harmful materials and site traffic.

You should know and understand that regulations require employers to protect the wellbeing of workers, visitors and members of the public, and control exposure to hazards in order to prevent illness or injury, including by:

- Preparing risk assessments
- Deciding what control measures are necessary
- Preventing (or controlling) exposure to hazards
- Ensuring that the hierarchy of control is followed
- Monitoring the level of exposure to hazards
- Preparing procedures to deal with accidents
- Training and supervising employees.



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Health and safety

You should know and understand the importance of following the correct procedures (rules) so that contractors and employees work safely and prevent accidents and injuries.

- General assessments of health and safety risks on construction sites and associated control measures
- Specific assessments for particular hazards such as working at height, manual handling and noise, and associated control measures.



You should know and understand that regulations require employers to control exposure to hazards to prevent illness or injury by:

- Assessing the use of PPE as a control measure
- Preventing (or controlling) exposure to dangerous environments, such as heat, cold, chemicals, biological risks, falls from height and working in enclosed spaces, by the selection of the correct PPE for the task
- Training and supervising employees in the correct use, storage and maintenance of PPE.

What is risk assessment?

Is a process of identifying hazards and risk factors that have the potential to cause harm (hazard identification).

You should know and understand the importance of following the correct safety procedures when working with gas, water and electricity:

- Gas and electric should only be worked on by a competent person who holds the necessary qualifications and accreditations (e.g. Gas Safe and NICEIC)
- Follow appropriate working practices, safety procedures and precautions
- Use the correct protective equipment know the means of cutting off the supply of gas, water or electricity for isolation prior to carrying out work.



You know that those working in enclosed spaces must manage risks from:

- Exposure to fumes
- Reduced oxygen levels
- Flooding/drowning
- The risk of fire and explosive atmospheres



Chartered Institute of Building



Royal Institution of Chartered Surveyors



Royal Institute of British Architects

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Introduction to the Built Environment

Extraction

The removal of natural resources such as gas, coal and oil from the earth's surface

Fossil Fuel

Non-Renewable raw materials formed from remains of plants and animals millions of years ago.

De-forestation: clearing of forest land to obtain wood for fuel, manufacturing and construction

Timber: wood that comes from tree trunks, that is dried and cut into planks. Naturally occurring material.

Timber: Natural why is it used in construction?

It is TOUGH:

Does not break easily

It is DURABLE:

Lasts a long time

Used in construction to make:

Roof Trusses
Framework
Beams
Boards/ wall sheathing

Fixings and fastenings

Stainless Steel



Light-weight Mild Steel

Lintels, purlins and rails



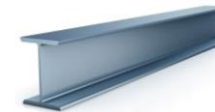
Profiled Sheeting

Wall and roof cladding



Structural Steel

Column and beamsections



Engineered Wood: made by binding real wood, scrap wood, and sawdust with adhesives to create products that look and act like wood but are stronger and more durable

Copper- A non-ferrous metals that does not rust and is malleable
Used in construction for water/ gas pipes and wires



Plastic- A man-made material that can be moulded into a shape while soft and set into a rigid form or slightly soft form

PVC is the most common type of plastic used in construction

Water and drainage pipes



Power sockets and trunking

Keywords: Hygienic, soft, attractive

Types of Demolition

Explosives: Quickest method. Must have exclusion zones pre and post-demolition structural inspections.

Hand Demolition: Smaller scale, or for issues like nearby structures. Slower and completed by workman with hand tools

Machine: Most common method. Machines include swinging ball on a crane, a wire rope, and a hydraulic pushing arm