

LEARNER GUIDE



Training support material for:

RIISAM203E

Use hand and power tools

Produced by:



PICTURE BASED. PLAIN ENGLISH. LEARNING MADE EASY.

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PLAN AND PREPARE TO USE HAND AND POWER TOOLS

Element 1



Choose and wear personal protective equipment (PPE)

It is important to wear the correct PPE to keep you safe and protected. Here are some examples:

Here are some typical tools and equipment you might need.

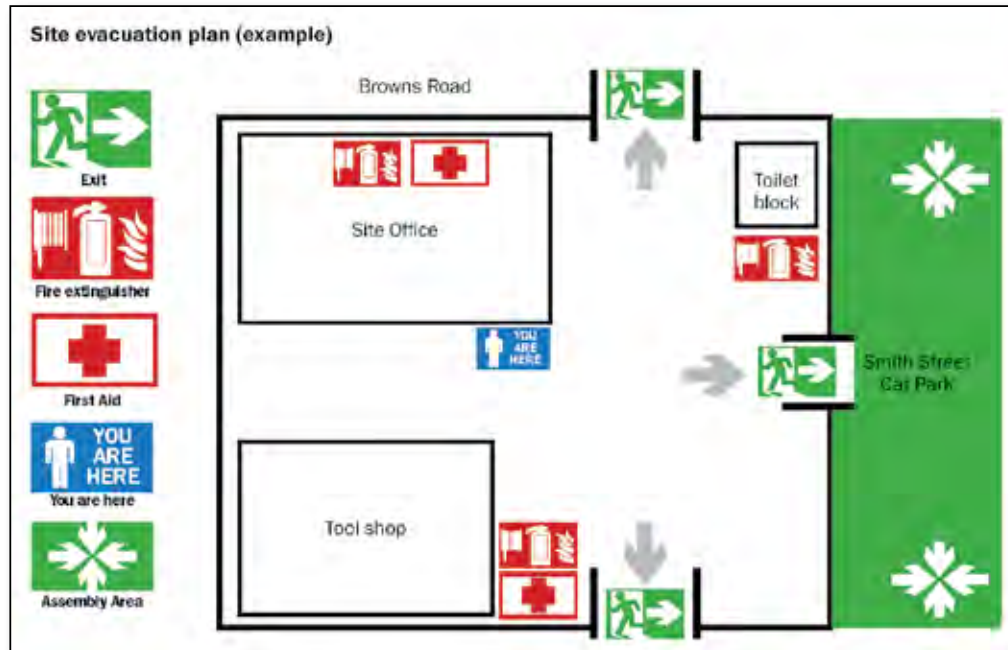


Emergency procedures

It is important to know what to do in an emergency. You might need to practice procedures ahead of time.

Evacuation

You may be required to evacuate the area. There will be set areas for you to assemble around your worksite. Workplaces should have site emergency plans and documentation clearly displayed.



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Emergency procedures (continued...)

Illness or medical emergency

Assess the person's condition and ensure their immediate safety and comfort.

If necessary, call emergency medical services (e.g., ambulance) immediately.

Provide appropriate first aid or medical assistance if trained to do so until professional help arrives.

Notify supervisors, managers, or designated personnel about the situation and provide them with relevant details.

Follow any specific workplace procedures for reporting and documenting medical emergencies.

It's important to note that specific emergency procedures may vary depending on the organisation, industry, and local regulations. Employers should establish comprehensive emergency response plans that address fire safety, accidents, and medical emergencies, and ensure that employees are trained on these procedures. It's also essential to regularly review and practice these emergency procedures to ensure preparedness and effectiveness in times of crisis.



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SELECT AND USE HAND TOOLS

Element 2



Choose the right tools for the job

Following are examples of jobs where hand tools are used:

Equipment Maintenance and Repair: Hand tools are frequently used for maintenance and repair tasks in resources and infrastructure industries.

This can include activities like servicing machinery, inspecting equipment, tightening or loosening fasteners, replacing components, or adjusting settings using tools such as wrenches, screwdrivers, pliers, or socket sets.



Construction and Assembly: Hand tools are essential for construction and assembly tasks in infrastructure development. This can involve activities like carpentry, where tools such as hammers, saws, chisels, or levels are used to cut and shape materials, drive nails, or assemble wooden structures. Other hand tools like wrenches, drills, or pipe cutters may be used in plumbing or electrical installations.



Field Surveying and Measurement: Hand tools play a role in surveying and measurement tasks within resources and infrastructure industries. Tools like tape measures, levels, compasses, or surveying equipment are used to measure distances, angles, and elevations for tasks such as land surveying, site layout, or infrastructure positioning.



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SELECT AND USE POWER TOOLS

Element 3



Choose the right power tools for the job

Tasks that commonly require the use of power tools within the resources and infrastructure industries include:

Drilling and Fastening:

Power drills are commonly used in resources and infrastructure industries for tasks such as drilling holes and fastening materials together. This can involve drilling holes for installation, attaching components, or securing fixtures using screws, bolts, or other fasteners.



Cutting and Grinding:

Power tools like angle grinders or circular saws are often used for cutting and grinding tasks in these industries. They can be used to cut through various materials such as metal, wood, or concrete, as well as for shaping or smoothing surfaces.



Material Removal and Surface Preparation:

Power tools such as sanders, grinders, or planers are employed for tasks involving material removal and surface preparation. They can be used to remove old paint or coatings, smooth rough surfaces, or prepare materials for further processing or finishing.

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Use power tools safely (continued...)

Be mindful of electrical cords:

Ensure that electrical cords are not damaged, tangled, or in the way. Keep them away from heat sources, sharp edges, and moving parts. Do not carry tools by their cords.

Store tools properly:

After use, store power tools in a safe and secure location, away from moisture and out of reach of children or unauthorised individuals.

Remember, these are general guidelines, and it's essential to follow the specific safety instructions provided by the manufacturer for each power tool. protect you.



Store power tools safely

Store power tools properly when they are not in immediate use but still required for the ongoing task is crucial to maintain their condition, prevent damage, and ensure easy access when needed. Here are some tips for storing power tools effectively:

Clean and Prepare the Tools:

Before storing power tools, clean them thoroughly to remove any debris, dust, or residue. Use a soft brush or cloth to clean the surfaces and an appropriate cleaning agent if necessary. Ensure that the tools are completely dry to prevent corrosion or damage.

Organize and Label:

Designate a specific storage area or toolbox for the power tools. Keep them in a clean, dry, and well-ventilated space.

Use dividers, foam inserts, or tool organizers to keep the tools organized and prevent them from shifting or colliding with each other.

Label the storage compartments or use color-coded tags to easily identify and locate the required tools.

Use Protective Cases or Bags:

Consider using protective cases or bags designed for power tools. These cases provide cushioning, impact resistance, and protection against dust, moisture, and other environmental factors.

Choose cases that are appropriate for the size and shape of the tools, and ensure they are securely closed or latched.



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Store power tools safely (continued...)

Secure Cords and Accessories:

Neatly wrap power cords and secure them with twist ties or cord organizers to prevent tangling or damage.

Store accessories, such as drill bits, blades, or attachments, in separate compartments or containers to keep them organized and easily accessible.

Avoid Excessive Heat or Cold:

Store power tools in an area where they are protected from extreme temperatures. High heat can damage internal components, while extreme cold can affect battery performance or cause condensation.

Avoid storing power tools in direct sunlight or near heat sources.

Battery Maintenance:

If the power tool uses rechargeable batteries, ensure the batteries are charged adequately before storage. Follow the manufacturer's guidelines for battery maintenance and storage.

Store batteries separately from the power tools if possible, and keep them in a cool and dry place.

YOUR TOOLS ARE VALUABLE!

If necessary, consider implementing security measures, such as locking storage cabinets or cases, to prevent unauthorised access or theft.



CONDUCT HOUSEKEEPING ACTIVITIES



Clear work area and dispose of materials

After completing work with hand and power tools it is important to perform various housekeeping duties to maintain a safe and organized work environment. Here are some housekeeping tasks to consider:

Remove any unused materials, debris, or waste generated during the work process.

Dispose of waste materials in designated containers or follow proper waste management protocols.

Sweep or vacuum the work area to remove dust, dirt, or other particles.

Securely store hazardous materials, chemicals, or flammable substances following safety protocols and guidelines.

Check and replenish stock levels of consumable items as needed.



Clear Pathways and Exits:

Ensure that pathways, walkways, and exits are clear of tools, equipment, or obstructions.

Remove any trip hazards, such as loose cords or materials, from the floor.

Maintain clear access to emergency exits and fire extinguishers.



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