



Risk assessment and method statement

Power tools risk assessment

Use of power tools and hand tools. Pre-filled with typical hazards, controls and sequence: edit it for this site.

PROJECT

SITE ADDRESS			
ACTIVITY		RAMS REFERENCE	
Use of power tools and hand tools			
CONTRACTOR CARRYING OUT THE WORK		PRINCIPAL CONTRACTOR	
PREPARED BY	APPROVED BY	REVISION	DATE

Revision record

Reissue and rebrief when the sequence, the programme, the team or the conditions change. If you would have written it differently had you known, it needs a new revision.

REV	DATE	WHAT CHANGED	BY

THE WORK

The activity, the place and the people

Pre-filled for this kind of work. Make every line specific to this site: this sequence, this access, these people, this weather.

Scope of the activity

What is being done, and what is not included.

MHSWR REGULATION 3(1)

Use of power tools and hand tools for [trade or package] at [site]: [list tools, for example circular saw, angle grinder, cut-off saw, SDS drill, core drill, cartridge tool, nail gun]. Each tool is listed on the tool by tool check page with its checks, guards, supply and authorised users. Not included: [fixed workshop machinery, covered separately].

Location and access

Where on site, how people and materials get there, and the restrictions.

Site access via [gate]. Tool store and charging point at [location], on an RCD-protected supply. 110V transformers at [locations]. Cutting station at [location] with water and extraction. Working hours [08:00 to 17:00].

Programme and interfaces

When the work runs, and who else is working nearby.

CDM REGULATION 15(2)

START DATE

DURATION

WORKING HOURS

INTERFACES WITH OTHER TRADES

Other trades near cutting, grinding and fixing work: [trades]. Work areas barriered where sparks, fragments or fixings could reach others. Hot work timed and permitted through [name].

Documents this RAMS relies on

Tool register with inspection and test dates [ref]; maker's instructions for each tool; training records; noise and vibration assessment [ref]; dust risk assessment [ref]; construction phase plan.

The team, and their competence

CDM REGULATION 8

ROLE	NAME	CARD, TICKET OR TRAINING NEEDED	CONTACT
Assessor		Knows the tools, the tasks and the site conditions, and reads the maker's instructions for each tool.	
Supervisor		Trained in the tools the team uses; checks guards, supplies and inspection dates, and stops unsafe use.	
Operatives		Trained on each tool type they use, with records, including how to check it before use.	
Abrasive wheel moulder		Trained in selecting, checking and mounting discs, as HSE HSG17 describes, with a record of the training.	
Cartridge tool users		Trained on the make and model they use, and named in this assessment as authorised.	
Tester		Competent to carry out formal visual inspections and combined inspection and testing of portable tools.	

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METHOD STATEMENT

The sequence of work

The order the team will work in on the day, with the controls built into each stage. If the sequence changes on site, revise the RAMS and brief it again.

STAGE	WHAT IS DONE, AND HOW	CONTROLS AT THIS STAGE	BY
Choose the method and tools	List each task and the tool it needs. Cut out work where you can by ordering to size, and choose the tool suited to the material and the conditions, with battery tools first.	Tools chosen under PUWER regulation 4; tool list attached to this assessment.	Contracts manager
Set up the power supply	Provide 110V transformers and site-grade leads where battery tools are not used. Where a 230V tool is unavoidable, supply it through an RCD and test the RCD daily.	Supply set up by a competent person; charging point on an RCD-protected socket.	Supervisor
Check inspection status	Check every tool and lead against the register before it goes into use on site, including hired tools and tools the team brings.	Combined test before first use on site; tools out of date not used.	Supervisor
Train and authorise users	Confirm each user is trained for the tools they will use. Restrict cartridge tools and disc mounting to the people trained and named for them.	Training records held; names of authorised users listed in this assessment.	Supervisor
Brief the team	Brief the tools, the guards, the power supply, the PPE, the dust and noise controls, and the daily trigger times.	Briefing signed against this revision before work starts.	Supervisor
Pre-use checks	Check the lead, plug and casing for damage, the guard for movement and fit, and the blade, disc or bit for type, sharpness and damage. Take faulty tools out of use.	Faulty tools labelled and quarantined until repaired or replaced.	Operatives
Set up the work	Clamp or support the work, check for hidden services, keep others clear, and set up water or extraction for dusty cuts. Clear combustibles before grinding or cutting metal.	Services scanned; work area barriered where sparks or fragments can reach others.	Operatives
Use the tool	Use both hands where the tool is designed for them, stand to one side of the cut, and let the tool stop before putting it down. Wear the eye, hearing and respiratory protection set for the task.	Supervisor checks guards are in place and controls are in use during the work.	Operatives
Change accessories safely	Remove the battery or unplug the tool before changing a blade, disc or bit, or clearing a jam. Check the disc speed rating against the tool before fitting it.	Discs fitted only by trained people; chuck keys and spanners removed before use.	Operatives
Store, charge and review	Store tools dry and secure, charge batteries at the charging point, and lock cartridges away. Review the assessment when tools, tasks or the team change, and after any incident.	Cartridges counted back in; review dated and signed.	Supervisor

CDM REGULATION 15(2): PLAN, MANAGE AND MONITOR THE WORK

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RISK ASSESSMENT

Hazards, controls and the risk that remains

Each significant hazard rated before and after its controls, as likelihood times severity. The ratings are typical: check them for this site.

	LIKELIHOOD		SEVERITY		
	1	2	3	4	5
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5

1 to 4 low 5 to 12 medium 15 to 25 high

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Contact with blades, discs and bits	Operatives using saws, grinders, routers and planers, and anyone reaching in near a running tool.	4 x 4 = 16 High	- Guards fitted, adjusted and working on every tool; a tool with a missing or wedged guard taken out of use. - Work clamped or supported so both hands stay on the tool where it is designed for two hands. - Tool allowed to stop running before it is put down, and never carried with a finger on the trigger.	2 x 4 = 8 Med	
Circular saw kickback	Carpenters, joiners and fixers ripping and crosscutting timber and sheet with hand-held circular saws.	4 x 4 = 16 High	- Lower guard checked to return freely before each use; riving knife fitted where the saw is designed for one. - Blade sharp and suited to the material, with the cutting depth set to just clear the work. - Work supported on both sides so the cut does not close and pinch the blade; operator stands to one side of the cut line.	2 x 4 = 8 Med	Supervisor
Grinder discs bursting	Grinder users and people nearby, struck by fragments when a disc breaks at speed.	3 x 5 = 15 High	- Disc speed marked on the wheel at least the speed of the grinder; disc type and marked restrictions matched to the task. - Discs mounted by a trained person with the correct flanges, inside their use-by date and checked for damage. - Guard set between disc and operator; a new disc run free for a short time with everyone clear.	1 x 5 = 5 Med	Supervisor
Petrol cut-off saws	Operatives cutting concrete, kerbs, pipe and steel with disc cutters, and people working close by.	4 x 5 = 20 High	- Blade or disc rated for the saw and the material; guard set as the maker directs. - Saw started on firm ground and held with both hands; no cutting with the upper front of the blade, where it kicks back. - Cutting zone kept clear; refuelled with the engine stopped, away from sparks; water suppression for dust.	2 x 5 = 10 Med	
Electric shock from tools and leads	Anyone using mains-powered tools, especially outdoors, in wet conditions or with damaged leads.	3 x 5 = 15 High	- Battery tools first; 110V centre-tapped earth tools elsewhere; no domestic reels or 13 A sockets unless of a site type and RCD protected. 230V tools only where nothing else will do, through an RCD tested with its test button every day. - RCDs never bypassed; damaged leads, plugs and casings taken out of use, not taped.	1 x 5 = 5 Med	Supervisor
Tools not inspected or tested	Users of tools that have deteriorated in site conditions without anyone checking.	3 x 4 = 12 Med	- Every tool and lead on a register with its inspection and test dates, including hired and own tools. - Intervals set from HSE HSG107: 110V tools user-checked weekly, inspected monthly, tested before first use on site then every 3 months. - Shorter intervals where faults keep being found.	2 x 4 = 8 Med	
Trailing leads and extension reels	Everyone moving around the work, and users whose leads are cut, crushed or wet.	4 x 3 = 12 Med	- Leads routed along walls or overhead, away from walkways, doors and plant routes. - Site-grade leads only: no twin and earth cable used as an extension. - Leads kept short, out of water, and protected where they cross a route.	2 x 3 = 6 Med	
Drills and core drills snatching	Operatives drilling and coring, whose wrist or arm is twisted when a bit jams.	3 x 3 = 9 Med	- Side handle fitted and used, with the clutch or torque setting the maker provides. - Larger core drills mounted on a rig and fixed as the maker directs, not hand-held. - Wet coring on 110V or battery supply, with water kept away from the motor and leads.	2 x 3 = 6 Med	

MHSWR REGULATION 3(6): WITH FIVE OR MORE EMPLOYEES, RECORD THE SIGNIFICANT FINDINGS

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RISK ASSESSMENT, CONTINUED

More hazards, and those specific to this site

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Hidden cables and pipes	Operatives drilling, chasing or cutting into walls, floors and ceilings.	3 x 5 = 15 High	- Drawings and services information checked before work, and the area scanned with a cable and pipe detector. - Services isolated where practicable, and no drilling in zones where cables are likely to run.	2 x 5 = 10 Med	
Cartridge-operated fixing tools	Users and anyone behind or beside the material, from a fixing or fragment passing through.	3 x 5 = 15 High	- Treated as a specific risk under POWER regulation 7: use restricted to the people given the task and trained on that tool. - Material checked as suitable; the lowest cartridge strength that sets the fixing; nobody behind the work. - Tool unloaded when not in use; cartridges kept locked away and counted back in.	1 x 5 = 5 Med	Supervisor
Nail guns	Carpenters and roofers using air, gas or battery nailers, and people working close by.	3 x 4 = 12 Med	- Trigger mode set as the maker recommends for the task; nailer never pointed at anyone or carried with a finger on the trigger. - Air hose, battery or gas cell disconnected before clearing a jam or leaving the tool. - Hands kept well clear of the nose; eye protection for user and others nearby.	2 x 4 = 8 Med	
Sparks and hot work from grinding	Users and others near grinding and cutting, where sparks can start a fire.	3 x 4 = 12 Med	- Combustibles cleared or covered and a fire extinguisher at the work; a hot work permit where required. - Sparks directed away from people, gas cylinders and openings; screens for others nearby. - Area checked for smouldering after the work.	1 x 4 = 4 Low	
Flying chips and particles in the eyes	Users of grinders, saws, drills, chisels and hammers, and people passing.	4 x 3 = 12 Med	- Eye protection worn for all grinding and cutting, and for striking tools. - Screens or barriers to protect others, with the work area kept clear.	2 x 3 = 6 Med	
Dust from cutting, chasing and drilling	Users and others breathing silica or wood dust from power tools.	4 x 5 = 20 High	- Water suppression or on-tool extraction to an H or M class unit, as set out in the dust risk assessment. - RPE with an APF of 20, face-fit tested, where the task needs it.	2 x 5 = 10 Med	
Noise and hand-arm vibration	Users of grinders, breakers, hammer drills, saws and cartridge tools.	4 x 4 = 16 High	- Daily trigger time for each tool set from the noise and vibration assessment. - Low-vibration, quieter tools chosen, and discs and bits kept sharp. - Hearing protection in marked zones; tingling or numb fingers reported.	2 x 4 = 8 Med	
Hand tools in poor condition	Anyone using hammers, chisels, knives, hand saws and spanners.	4 x 2 = 8 Med	- Right tool for the job; tools with split handles, loose heads or mushroomed striking ends repaired or replaced. - Retractable or safety knives, cutting away from the body, with cut-resistant gloves. - Tools carried in a bag or holder, and not left where they can fall from height.	2 x 2 = 4 Low	
Entanglement and changing accessories	Users of drills, sanders and grinders with loose clothing, or changing a bit or blade.	3 x 3 = 9 Med	- No loose cuffs, ties or jewellery near rotating parts; long hair tied back; gloves that cannot catch on the bit. - Battery removed or plug pulled before changing a blade, disc or bit, or clearing a jam. - Chuck keys and spanners removed before the tool is switched on.	1 x 3 = 3 Low	
Untrained users and unsuitable tools	New starters, young workers and anyone using a tool they have not been trained on.	3 x 4 = 12 Med	- Training on each tool type, with records, before unsupervised use; supervisors trained too. - Tools chosen for the task and the conditions, used only within the maker's instructions. - Young and new workers supervised until they are competent.	2 x 4 = 8 Med	Contracts manager

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EQUIPMENT

Plant, equipment and PPE

Plant and equipment

Each item, the checks and certificates it needs, and who may operate it.

POWER 1998, LOLER 1998

ITEM	CHECKS AND CERTIFICATES	OPERATOR COMPETENCE
Hand-held circular saw	Lower guard returns freely; riving knife fitted; blade sharp.	Trained user
Angle grinder	Disc rated at least the tool speed; guard set; side handle on.	Abrasive wheels trained
Petrol cut-off saw	Guard, blade and water feed checked; no fuel leaks.	Trained operative
Drills and core drills	Side handle fitted; clutch working; core rig fixed.	Trained user
Cartridge tool	Checked by the user each day; serviced as the maker directs.	Authorised user
110V transformers and leads	Casing and leads undamaged; inspection and test in date.	Trained user

Personal protective equipment

PPE is the last line of defence, after the controls above. Specify the type, not just the item.

PPE AT WORK REGULATIONS 1992

ITEM	NEEDED	TYPE AND SPECIFICATION
Safety helmet	☒	To site standard
Safety footwear	☒	Safety boots with protective toecaps
High-visibility clothing	☒	To site standard
Gloves	☒	Cut-resistant; none near rotating bits
Eye protection	☒	For all cutting, grinding and fixing
Hearing protection	☒	In marked zones and for cartridge tools
Respiratory protection Type, and face-fit tested	☐	
Harness or restraint Anchor points identified	☐	

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CONTROLS

Substances, permits, emergencies and the environment

Hazardous substances

Each substance and its COSHH assessment.

COSHH 2002, REGULATION 6

SUBSTANCE	COSHH ASSESSMENT REFERENCE	CONTROLS
Silica and wood dust from cutting and drilling	[COSHH ref]	Water or H/M class extraction; APF 20 RPE, fit-tested
Petrol for cut-off saws	[COSHH ref]	Approved container; refuel with engine off, away from sparks

Permits and plans

PERMIT OR PLAN	NEEDED	REFERENCE
Hot work permit	☒	
Permit to work	☒	
Permit to dig or break ground	☒	
Confined space entry	☐	
Lift plan	☐	
Temporary works design	☐	

Emergency and rescue

First aid, fire, and how someone is rescued.
The rescue plan belongs in the RAMS, not after it.

First aider and first aid kit on site, with eyewash for particles in the eye. For a deep cut or amputation, call 999, control the bleeding and keep any severed part. For electric shock, isolate the supply before touching the person. Serious injuries are reported under RIDDOR, and the tool is quarantined for investigation.

Environment and neighbours

Dust, noise, vibration, waste, spills and hours of work.

Cutting slurry collected and kept out of drains. Fuel stored in approved containers with a spill kit to hand. Used discs, blades and spent cartridges disposed of as the maker directs. Noisy work kept to agreed hours.

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TOOL BY TOOL CHECKS

Tool by tool check sheet

One row for each tool on this job. Take the checks from the maker's instructions and the inspection dates from the tool register. The examples are typical: replace them with your tools.

TOOL	CHECK BEFORE EACH USE	GUARD AND SAFETY DEVICES	POWER, INSPECTION AND TEST	AUTHORISED USERS
Hand-held circular saw	Lead and plug; blade sharp and right way round; depth set	Lower guard returns freely; riving knife fitted	110V or battery; test in date	[Names]
Angle grinder	Disc type, speed rating and use-by date; no cracks or chips	Guard between disc and user; side handle on	110V or battery; test in date	Trained in disc mounting: [names]
Petrol cut-off saw	Blade rated for the saw; no fuel leaks; water feed working	Guard set as the maker directs	Serviced to the maker's schedule	[Names]
SDS drill and breaker	Bit sharp and seated; casing and handles sound	Side handle fitted; clutch working	110V or battery; test in date	[Names]
Core drill	Rig fixed; water feed and seals sound; services scanned	Clutch working	110V; test in date	[Names]
Cartridge tool	Daily check as the maker directs; material suitable	Safety devices working as the maker describes	Serviced as the maker directs	Named, trained users only: [names]
Nail gun	Hose, gas cell or battery sound; nose clear	Trigger mode set as the maker recommends	Serviced as the maker directs	[Names]
Hand tools	Handles sound; heads tight; striking ends not mushroomed	Retractable or safety knives	Not applicable	All operatives

POWER 1998, REGULATIONS 4 TO 12; HSE HSG107 TABLE 1, HSG141 AND HSG17

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Briefed before the work starts

BRIEFED BY	REVISION BRIEFED	DATE AND TIME

[illegible]

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