

SAFE WORK PROCEDURES POWER TOOLS (ELECTRIC)



SPECIAL INSTRUCTIONS:

1. Electric power tools should not be used unless the operator has received training or has been fully instructed in the safe use of the tool.
2. Appropriate personal protective equipment must be worn when using power tools.
3. Mains powered electric power tools must only be used on circuits protected by a safety switch.

Sequence	Identified hazards	Key processes to be followed	Precautions / PPE required
1. Pre-start checks	Electric shock	Check casing for damage, cracks and missing screws. Inspect lead and plug for damage; current test tag must be attached. Make sure that controls operate smoothly.	If any damage, missing parts, or out of test, do not use machine – arrange for immediate repairs.
	Cuts, lacerations	Where applicable, ensure that guards are fitted and operating correctly – guards should move easily, and spring back to original position when released. Check suitability of blade, bit or cutter for work to be performed, and inspect blade, bit or cutter for cracks, damage, or excessive or uneven wear.. Ensure that handles and grips are fitted firmly, and do not move.	Do not use tools without guards, or lock or tie guards in open position. Do not use unsuitable parts. Replace blade if teeth chipped, broken or missing.
	Cordless tools	Chargers for connection to a mains powered outlet should be tested and tagged at the same intervals as other electrical equipment to ensure their intrinsic safety. Chargers should only be used with the equipment that it was provided with or has been approved for use with other equipment from the same manufacturer. Always inspect cordless tools in the same way as mains powered tools before use. Ensure that battery fits into tool correctly before use.	Do not use chargers that are damaged, faulty, or out of test. Ensure that chargers are compatible with the batteries to be charged. Do not use faulty or damaged cordless tools.
2. Maintenance and replacement of cutters	Cuts, lacerations Foreign body in eye	Unplug machine before carrying out maintenance. Place machine on firm, stable surface or bench to carry out maintenance. Use correct (supplied) spanners and tools to remove cutter. Use brush to clean dust and debris from guards, spindles and backing plates. Ensure spindle thread is undamaged, and that backing plate sits flush. Ensure that saw blade speed matches that of a saw; that spindle holes match the diameter of spindles, and that spindle diameters of cutters match the cutter holder. Mount blades, cutters, washers and nuts in correct order, and tighten firmly with the correct tools and spanners.	Wear leather gloves when handling rough or sharp parts. Wear eye protection if using compressed air for cleaning. Do not use incompatible cutter, or cutter which does not meet all of the criteria listed at left. Ensure all surfaces are clean. Do not over tighten nuts.
3. Preparation of work area	Slips, trips and falls Fire (ignition source) Flying particles Falling objects	Ensure that floor or working surface is free from rubbish and debris, and that a good foothold is available for persons using power tools. Ensure that flammable liquids or other readily ignited materials are cleared from area, or covered to protect from sparks. Observe fire restrictions. Prevent sparks from entering or affecting adjacent work areas. Restrict entry into area where grinding is to be carried out. Ensure that object being worked on is secured and prevented from accidental movement while work is in progress.	Provide suitable fire extinguisher . Use fire blanket to cover. Use welding curtain or similar. No unauthorised entry to area. Wear Type 1 footwear .

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4. Operation	<p>Flying particles</p> <p>Cuts, lacerations</p> <p>Foreign body in eye</p> <p>Noise</p> <p>Dust</p> <p>Vibration</p>	<p>Always work so that sparks and debris are directed away from body.</p> <p>Do not direct sparks or debris towards another person.</p> <p>Always cut away from the body – never cut towards the body.</p> <p>Avoid dust and debris in eyes – eye protection must be worn.</p> <p>In restricted areas, or where sparks or debris are reflected back towards the user, the use of additional protection to the eyes and face will be necessary.</p> <p>Many power tools will generate high noise levels in enclosed work areas.</p> <p>Provide mechanical ventilation where dust generated by the work process will hang in the air, and will be breathed in or lodge in eyes.</p> <p>If vibration seems excessive, switch machine off and inspect for damage.</p>	<p>Wear protective clothing (apron, overalls, long sleeves and trousers)</p> <p>Wear eye protection.</p> <p>Use face shield in addition to other eye protection.</p> <p>Wear hearing protection.</p> <p>Wear suitable particulate dust mask or respirator.</p> <p>Do not use faulty tools.</p>
5. Special precautions	<p>Toxic dust</p> <p>Harmful dust</p> <p>Risk of fire</p> <p>Risk of electric shock</p>	<p>Medium density fibreboard (MDF) (Craftwood) contains a formaldehyde based adhesive which is toxic, and dust must not be inhaled.</p> <p>Prevent entry of persons into areas where MDF is being worked on.</p> <p>Asbestos based materials must never be cut using power tools.</p> <p>Avoid breathing dust generated by cutting of metal with circular saws fitted with fibre blades.</p> <p>Fine sawdust is extremely and readily combustible.</p> <p>Take care to not expose leads to damage from the work process.</p> <p>Always ensure that users of power tools are protected from electric shock.</p>	<p>Wear Type P2 particulate dust mask or respirator.</p> <p>No unauthorised entry.</p> <p>Dust mask must be worn.</p> <p>No smoking in areas where sawdust may be present.</p> <p>Keep leads off floor.</p> <p>Always use safety switch or RCD.</p>
6. Storage	<p>Damage to tools</p>	<p>Power tools should be stored in a purpose-built case or container designed to protect them from damage.</p> <p>Cutters, drill bits, etc., which may be damaged during storage should be removed before storing the tool, and be stored separately in a container which will prevent them being damaged.</p>	<p>Where possible, ensure that sufficient supplies of personal protective equipment which will be required when the tool is used are available with the tool.</p>

PRECAUTIONS:

The following precautions are to be observed in areas where these procedures are carried out.

