



Risk Assessment - Safe Use of Portable Electric Power Tools

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Using Power Sanders

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Hand Arm Vibration (HAV) Excessive Amount of Time Using a Power Sander	Volunteers & Staff	1) CRITICAL - Administrative: The risk can be reduced by limiting the use of equipment to the exposure limit EAV value. All equipment is tagged. Green 8 hours a day, Amber 2 hours a day and Red 30 mins a day. - Effective	1 x 3 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	1) Elimination: Consider Reducing the Amount of Time Further - Effective	1 x 2 = 2 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a
Health and Safety	Inhalation of Harmful Dusts Dust is inevitably released during the coarse of sanding	Volunteers & Staff	1) CRITICAL - Engineering: Periodically Vacuum Away Dust in Work Area - Effective 2) CRITICAL - Administrative: Ensure that Work Area is adequately ventilated - Effective 3) CRITICAL - PPE: Wear Face Mask for this task - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	1) Administrative: Consider the Introduction of Improved Dust Extraction Equipment in Workshop - Effective	1 x 1 = 1 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a

Using Portable Power Drills

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Cuts and Bruises to Hands and Body Flying debris caused by drill breakage or improper drilling techniques.	Volunteers & Staff	1) CRITICAL - PPE: Always wear gloves and goggles - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	1) Administrative: Consider training in the use of power tools - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a



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Type	Hazard Cause	Persons Affected	Control Measures	L Overall	S T	Additional Control Measures	L Overall	S T	Owner/Action
Health and Safety	Hand Arm Vibration Excessive Amount of Time Using a Power Drill, especially with Percussion	Volunteers & Staff	1) CRITICAL - Administrative: The risk can be reduced by limiting the use of equipment to the exposure limit EAV value. All equipment is tagged. Green 8 hours a day, Amber 2 hours a day and Red 30 mins a day. - Effective	1 x 3 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	3	1) Elimination: Consider Reducing the Amount of Time Further - Effective	1 x 2 = 2 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	2	n/a
Health and Safety	Electric Shock Inadvertent contact between a drill bit and live electric cabling.	Volunteers & Staff	1) CRITICAL - Engineering: The mains sockets in the workshop are wired through Residual Current Device (RCD) trip switches to reduce the chance of a serious electric shock if a live wire touched by a drill. - Effective 2) CRITICAL - Administrative: Work Areas to be checked for the presence of hidden electric cables - Effective 3) CRITICAL - Administrative: Cabling to the electric drill to be carefully routed behind and away from the work area - Effective 4) CRITICAL - Administrative: Battery powered drills should be used when and where possible - Effective 5) CRITICAL - Administrative: All mains powered equipment to be PATS tested and certified - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	6	1) Administrative: Consider converting all powered drills to 110volt operation - Effective 2) Administrative: Consider training in the safe use of power tools - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	6	n/a

Using Angle Grinders

Type	Hazard Cause	Persons Affected	Control Measures	L Overall	S T	Additional Control Measures	L Overall	S T	Owner/Action
Health and Safety	Serious Injury to Eyes, Hands and/or Face. The Release of Sharp Hot Material fragments into the Surrounding Air	Volunteers & Staff	1) CRITICAL - Elimination: Erect a barrier if required to protect co-workers. - Effective 2) CRITICAL - Engineering: Ensure that Sparks etc travel away from areas where either the user or another volunteer is standing - Effective 3) CRITICAL - Administrative: Take Care not to Overstretch when working at height. - Effective 4) CRITICAL - Administrative: Ensure that Guard is Fitted to the Grinder to Contain the Flying Debris - Effective 5) CRITICAL - Administrative: Be mindful of the presence of others in the work area. - Effective 6) CRITICAL - PPE: Always wear goggles, gloves, and face mask. - Effective	3 x 2 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	6	1) Administrative: Consider training in angle grinder usage. - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	4	n/a
Health and Safety	Hand Arm Vibration Excessive Amount of Time Using an Angle Grinder	Volunteers & Staff	1) CRITICAL - Administrative: The risk can be reduced by limiting the use of equipment to the exposure limit EAV value. All equipment is tagged. Green 8 hours a day, Amber 2 hours a day and Red 30 mins a day. - Effective 2) CRITICAL - PPE: Gloves will Reduce The Effect - Effective	1 x 3 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	3	None	1 x 3 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	3	n/a



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Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Inhalation of Harmful Dust or Sharp Hot Fragments Angle Grinding Always Releases Sharp Hot Particles into the Surrounding Air	Volunteers & Staff	1) CRITICAL - PPE: Always Wear Face Mask - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	None	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a
Health and Safety	Cuts and Bruises to Body Sharp and Hot Material Fragments Contacting Body. Could also occur due to a shattering grinding disc.	Volunteers & Staff	1) CRITICAL - Administrative: Know your own limitations. Do Not Overstretch. Make Sure Area is clear of other objects, tools etc. - Effective 2) CRITICAL - PPE: Always wear overalls, gloves, goggles and face mask. - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	1) Administrative: Consider Training in the Proper Use of Angle Grinders - Effective 2) Administrative: Consider Limiting the Use of Angle Grinders to Competent People - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a
Health and Safety	Electric Shock Inadvertent contact between blade/disc and live electric cabling.	Volunteers & Staff	1) CRITICAL - Engineering: The mains sockets in the workshop are wired through Residual Current Device (RCD) trip switches to reduce the chance of a serious electric shock if a live wire is touched by a blade or disc. - Effective 2) CRITICAL - Administrative: Work Area to be check for the presence of hidden electric cables - Effective 3) CRITICAL - Administrative: Cabling to the power saw to be carefully routed behind and away from the work area. - Effective 4) CRITICAL - Administrative: All equipment must be PATS tested and certified - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Administrative: Consider training in the safe use of power tools. - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a

Using Power Saws and Knives

Type	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Serious Hand Injury from Cutting Blade Careless and/or improper use of a circular saw, hacksaw, jigsaw or angle grinder.	Volunteers & Staff	1) CRITICAL - Engineering: Blade guards always to be used. - Effective 2) CRITICAL - Administrative: Circular Saw always to be used horizontally and held in the hands - Effective 3) CRITICAL - PPE: Gloves and goggles always to be worn - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	1) Administrative: Use of these tools only by trained and competent volunteers - Effective 2) Administrative: Consider training in the use of power tools - Effective	1 x 3 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a



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Type	Hazard Cause	Persons Affected	Control Measures	L Overall	S T	Additional Control Measures	L Overall	S T	Owner/Action
Health and Safety	Electric Shock Inadvertent contact of blade with live mains cabling.	Volunteers & Staff	1) CRITICAL - Elimination: All equipment must be PATS tested and certified - Effective 2) CRITICAL - Engineering: The mains sockets in the workshop are wired through Residual Current Device (RCD) trip switches to reduce the chance of a serious electric shock if a live wire is touched by a tool. - Effective 3) CRITICAL - Administrative: Working area to be checked for hidden electric cables - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	6	1) Administrative: Consider training in the proper use of power saws - Effective	1 x 3 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	3	n/a
Health and Safety	Eye Injury Contact with Flying Debris caused by release of sharp material fragments and/or blade breakage..	Volunteers & Staff	1) CRITICAL - PPE: Goggles to be worn - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	4	1) Administrative: Consider training in the use of power tools - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	4	n/a
Health and Safety	Being Struck by An Insecure Workpiece Inadequate Clamping of Workpiece when Sawing or Cutting	Volunteers & Staff	1) CRITICAL - Administrative: Object to be Properly Clamped and Secure before being cut - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	4	None	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	4	n/a

Using Hot Air Guns

Type	Hazard Cause	Persons Affected	Control Measures	L Overall	S T	Additional Control Measures	L Overall	S T	Owner/Action
Health and Safety	Burns to hands and/or body. Inadvertent touching of a hot gun nozzle, or excessive amount of hot gas contacting hands or body.	Volunteers & Staff	1) Elimination: All equipment must be PATS tested and certified - Effective 2) CRITICAL - Engineering: The mains sockets in the workshop are wired through Residual Current Device (RCD) trip switches to reduce the chance of a serious electric shock if a live wire is touched by a tool. - Effective 3) CRITICAL - Administrative: Hot Air gun not to be Left in a location where others could inadvertently touch the nozzle. - Effective 4) CRITICAL - Administrative: Care to be taken when using not to point nozzle at others in the vicinity - Effective 5) CRITICAL - PPE: Gloves and overalls to be worn - Effective	1 x 2 = 2 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	2	1) Administrative: Consider training in the safe use of hot air guns. - Effective	1 x 2 = 2 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	2	n/a



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Type	Hazard Cause	Persons Affected	Control Measures	L Overall	S	T	Additional Control Measures	L Overall	S	T	Owner/Action
Health and Safety	Small Fire Inadvertent Ignition of combustible material such as sawdust or plastic	Volunteers & Staff	1) CRITICAL - Administrative: Work Areas to be Visually Inspected Before and After a Hot Air Gun is Used for flammable materials and/or smoke etc - Effective 2) CRITICAL - Administrative: Ensure a fire extinguisher is always available. - Effective	1 x	4 =	4	None	1 x	4 =	4	n/a
				Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.				Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.			

Using Staple Guns

Type	Hazard Cause	Persons Affected	Control Measures	L Overall	S	T	Additional Control Measures	L Overall	S	T	Owner/Action
Health and Safety	Eye Injury Inadvertent Firing of the Gun towards the face.	Volunteers & Staff	1) CRITICAL - Administrative: Staple Gun Only to be Fired when in contact with the surface to be attached - Effective 2) CRITICAL - Administrative: Staple guns only to be used on wood and upholstery - Effective 3) CRITICAL - PPE: Goggles to be worn for this activity - Effective	1 x	3 =	3	1) Administrative: Consider training staff in the safe use of staple guns. - Effective	1 x	2 =	2	n/a
				Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.				Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.			
Health and Safety	Hand Injury Staple not penetrating the substrate properly, then coming into contact with the hands of the operator	Volunteers & Staff	1) CRITICAL - Administrative: The risk can be reduced by limiting the use of equipment to the exposure limit EAV value. All equipment is tagged. Green 8 hours a day, Amber 2 hours a day and Red 30 mins a day. - Effective 2) CRITICAL - PPE: Gloves to be worn to reduce the risk of injury to hands - Effective	2 x	1 =	2	1) Administrative: Consider training in the safe use of staple guns. - Effective	2 x	1 =	2	n/a
				Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.				Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.			

COSHH Assessments

There are no COSHH assessments associated with this risk assessment.

Reference Documents

- HAVS_C&W_12_02_21 - HAV Limits - Recommendations for Power Tools Used in C&W

Ends