

Risk	Use of Electrical equipment	Prepared by:	H&S Co-ordinator– S.L & V.D
Assessment		Assessed by SLT:	
for:			
Location:	ROSEWOOD FREE SCHOOL & AVENUES SITE	Date of Assessment	Dec 2022
		Review Date:	Dec 2023

Hazard	Who might be harmed?	Hazards Identified which may cause harm – consequence	Existing Level of Risk	Control Measure and Precautions Taken	Additional Control Measures or Further Action Required	Remaining level of Risk
Use of faulty portable / transportable electrical equipment eg kettle, fans, heaters,	Staff, Learners, third parties	Plug, lead or the item itself may be damaged leading to exposed live wires causing electrical fires or electrical shock from direct contact with an electrical current which may cause pain, skin burns, headache, and damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest when higher voltage present. Falling or impact injury after contact with electricity	High-30	Portable appliance testing (PAT Testing) undertaken by trained IT manager is be carried out at predetermined intervals, normally at least annually by a competent person. Regular visual examinations by staff member using item should also be made by ensuring that flexible mains cable has no damage to insulation, severing to outer casing, or lose connections. Check each time that the plug has no live terminals on show and ensure that the pins are present and in good condition. Any piece of electrical equipment that sustains damage, becomes worn, or where there is any reason at all to suspect its safety, should be taken out of use immediately by staff member, clearly labelled do not use and tested before being used again. All faults should be reported immediately on discovery the equipment should not be used. RCD's (Residual current device) that switches	Staff must NEVER attempt any DIY fix to any item. Only trained competent persons to carry out repairs Always follow manufacturers safety instructions 5 year electrical checks organised by Estates manager/ Operations manager	Low-6



				off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school	First aiders in school are aware of treatment to give in event of an electric shock	
Item used with faulty electrical cords/leads/ cables	Staff, Learners, third parties	Frayed or damaged cords damages insulation and exposes the live wire causing electrical fires or electrical shock from direct contact with an electrical current which may cause pain, skin burns, headache, and damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest when higher voltage present. Falling or impact injury after contact with electricity	High-30	Regular visual examinations for cracks, cuts, abrasions, any sign of damage by staff member using item should also be made by ensuring that flexible mains cable has no damage to insulation, severing to outer casing, or lose connections. Any that sustains damage, becomes worn, or where there is any reason at all to suspect its safety, should be taken out of use immediately by staff member, clearly labelled do not use and tested before being used again. RCD's (Residual current device) that switches off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school	Staff must NEVER attempt any DIY fix to any item. Only trained competent persons to carry out repairs First aiders in school are aware of treatment to give in event of an electric shock	Low-6
Trailing cables/cords/ leads from static equipment and whilst using portable electrical	Staff, Learners, third parties	Cables cords or leads on the floor or hanging from a plug socket causing a trip or fall leading to varying Muscular Skeletal Disorders and varying impact injuries.	Med-15	Cables permanently in place are secured with cable ties or other fixing/cover/cable run. Portable item with a trialling cable/cord/lead will have a mat or other suitable item placed over it to visually alert people to the hazard.		Low -5



equipment.						
Overloaded power-points/ Extension cords	Staff, Learners, third parties	Power point or extension lead is overloaded, exceeding the maximum amperage of the circuit causing it to overheat in turn leading to an electrical fire causing burns, smoke inhalation and other heat related injuries.	High -20	School design has ensured sufficient power points are in place for requirements. Staff will plug one device in to one socket. If an extension cord is needed it should not be overloaded – all staff to know this and act accordingly RCD's (Residual current device) that switches off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school	Staff must be aware to <b>never</b> plug an extension lead into an extension lead. We do not have any multi plug adaptors in school Extension leads to be purchased with surge protection. First aiders in school are aware of treatment to give in event of an electric shock	Low-5
Use of new electrical item in school	Staff, Learners, third parties	New item could have left factory with a fault causing electric shock on use which may cause pain, skin burns, headache, damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest. Falling or impact injury after contact with electricity	High -20	Any new item MUST be PAT tested by Rosewood school IT manager before first use. RCD's (Residual current device) that switches off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school	First aiders in school are aware of treatment to give in event of an electric shock	Low -5



Electric shock from faulty electrics/ power points	Staff, Learners, third parties	Electrical shock from direct contact with an electrical current which may cause pain, skin burns, headache, damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest. Falling or impact injury after contact with electricity	High- 20	All above precautions should have been followed to ensure all cables sockets and fittings are safe to use. RCD's (Residual current device) that switches off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school	5 year electrical checks organised by Estates manager/ Operations manager First aiders in school are aware of treatment to give in event of an electric shock	Low-5
Learners using electrical items	Learners	Electrical item used by Learner is faulty causing electric shock on use which may cause pain, skin burns, headache, damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest.	High -20	Any electrical item, latch box, plug in switch toy etc purchased for Learner use will be subject to the same tests and checks as all other electrical items. Learners are fully supervised throughout. Our Learner population at present are not plugging items in to the mains or other sockets/adapters as this is not appropriate to support their learning at this time. RCD's (Residual current device) that switches off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school	First aiders in school are aware of treatment to give in event of an electric shock. School nurse on site at all times for Learners	Low-5



Using electrical items eg hairdryer, water cooler in hydro pool area	Staff, Learners, third parties	Water conducts electricity allowing current to flow more easily in wet conditions, through water, along wet surfaces and through wet skin increasing the risk of electric shock causing pain, skin burns, headache, damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest	High -40	No plug sockets are fitted in the hydro pool room. Plant room is locked and accessible only to estates manager/maintenance. Separate RCD (residual current device) in place as per electrical regulations Sockets in main hydro room/changing areas are covered with waterproof covers and the covers kept closed when not in use. Staff MUST follow good housekeeping at all times in this area and ensure their hands and the floor/surfaces are dry before using electrical item. Design of hydro pool compliant with current electrical regulations as checked by estates manager	Staff member who has been in the water will not operate electrical items at any point. Learners hair dried in class by preference 5 year electrical checks organised by Estates manager/ Operations manager	Low- 6
Using electrical equipment outside in wet conditions	Staff, Learners, third parties	Water conducts electricity allowing current to flow more easily in wet conditions, through water, along wet surfaces and through wet skin increasing the risk of electric shock causing pain, skin burns, headache damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest	High 40	Electrical items purchased for use outside to be properly insulated and approved. Maintenance and Estate manager would be the only members of team using these items. In severe environmental conditions the use of electrical equipment will be avoided.		Low-6
Installing new electrics or higher risk/higher voltage maintenance works	External electrical engineer	Electrical shock from direct contact with an electrical current during installation which may cause pain, skin burns, headache, and damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest due to high voltage present. Falling or impact injury after contact with electricity Arc flashes from work at high voltage with	High-40	Only competent trained electrical engineers permitted to work on electrical equipment. A permit to work should be used in any situation where the work is of high risk to either the operator or to anyone else. Use a safe system of work. Preferably work out of hours but avoid lone working. If in normal hours use appropriate	Refer to school "Contractors on Site" Risk Assessment.	Med-10



		live parts, equipment failure or damage which may cause severe skin burns, internal burns, damage from inhaling vaporised meatal, hearing and eye damage		signage. Isolate area of work. Contractor to wear appropriate PPE as specified by their company and SSOW/Risk assessment RCD's (Residual current device) that switches off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school		
Electrical work at height	Ladder trained staff member, staff, Learner third party	Person using ladder/stepladder may fall after receiving an electric shock from varying causes leading to fatality, major injury, impact injury, broken bones, sprains & strains plus above-mentioned injuries from electric shock Injury to bystander.	High-24	All above mentioned visual checks to be carried out before commencing work If any electrical work requires working at height, ensure adequate training for work at height has been received. Only work at height if there is no alternative method of work that can be used. Ensure an adequate risk assessment specific to work at height is carried out. RCD's (Residual current device) that switches off electricity if there is a fault and provides additional protection against electric shock and reduces the risk of death from electric shock in place throughout school	Refer to school "Working at Height" risk assessment	Medium -8
Fire caused by an electrical fault at outlet/worn out	Staff, Learners, third parties	Person may experience Electrical shock from direct contact with an electrical current which may cause pain, skin burns, headache, damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory	High -20	All above mentioned visual checks to be carried out. All appropriate testing and maintenance will be carried out. Staff informed and trained to carry out charging of specific items eg batteries at set	5 year electrical checks organised by Estates manager/	Low-5



socket/faulty appliance etc		arrest. Falling or impact injury after contact with electricity or consequences from fire spreading -smoke inhalation, burns, fatal injury		times in the week and not to leave them on prolonged charge to overheat. All items not in use must be switched off at wall socket and /or unplugged. Never use a socket, lead or appliance with any signs of damage. Staff to be particularly aware to look for signs of scorch marks or item heating up when in use	Operations manager. Always follow school fire procedures in the event of an electrical fire occurring. Building complies with fire regulations, those requiring a PEEP have one written by H&S team/teachers	
Use of electrical items in school kitchen	Kitchen Staff, staff, third party	Kitchen appliance, sockets, leads may be faulty or used incorrectly leading to Electrical shock from direct contact with an electrical current which may cause pain, skin burns, headache, damage to internal organs and other soft tissues, cardiac arrhythmias, and respiratory arrest. Falling or impact injury after contact with electricity or consequences from fire spreading -smoke inhalation, burns, fatal injury	High -20	All above mentioned visual checks to be carried out. All appropriate testing and maintenance will be carried out. Separate RCD (residual current device) in place in kitchen as per electrical regulations Design of kitchen eg sockets fitted at safe distance from the sink is compliant with electrical regulations and managed by Estates manager/ Operations manager. Adequate plug sockets are installed to prevent overloading. Kitchen staff clean thoroughly on a recorded schedule to prevent build up of fat/grease, defrost freezers etc which if not in place could lead to a fire.	5 year electrical checks organised by Estates manager/ Operations manager Kitchen staff to practice good housekeeping and hands to be thoroughly dried each time before operating electrical equipment	Low -5



				Lunch trolleys set at temperature by kitchen staff and switched off prior to serving food SSOW's in place for all kitchen appliances	
Use of damaged iPad or any other device with a screen	Staff, Learners, third parties	Cut to fingers, small pieces of glass in fingers possibly turning into an infection.	Low 3	Put damaged ipad/ item out of action. Inform IT manager of the damage so he can repair or replace the iPad/item.	0
<b>High</b> likelihood of risk – Likely to occur immediately or in the near future <b>Medium</b> likelihood of risk – will occur in time if no preventative action is taken <b>Low</b> likelihood of risk – Remote or unlikely to occur					

Date Reviewed	Comments
	Initial assessment Dec 2022