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General Risk Assessment

Risk Rating & Evaluation Model

Likelihood of exposure to hazard (L) (taking account of duration & frequency of activity, likelihood of occurrence of hazard, number of people at risk, and risk controls)	**Potential Severity of Injury/ ill health (S)** (taking account of protective measures)				
	1. Minor injury/ ill health, but not reportable to the Hsa.	2. Injury/ill health reportable to the Authority, but not long term (e.g., sprain, minor fracture)	3. Long term/ permanent, but not seriously life-changing, injury/ ill health	4. Permanent life-changing injury/ ill health.	5. Fatality
5. Almost Certain	5	10	15	20	25
4. Highly likely	4	8	12	16	20
3. Likely	3	6	9	12	15
2. Unlikely	2	4	6	8	10
1. Very unlikely	1	2	3	4	5

L = Likelihood **S = Severity** **R = Risk Rating**

Hazard (Activity, other)	**Potential Injury/ill health**	**People Affected**	**Risk Rating before control**			**Control Measures**	**Responsible**	**Risk Rating with controls**		
			L	**S**	**R**			**L**	**S**	**R**
Human Factor.	• Personal Injury. • Injury to Colleague. • Causing an accident. • Causing an Incident. • Damage to Equipment.	• All Operators.	4	4	16	• All Operatives must have proof of training. Safe Pass and manual handling are minimum requirements. • All operatives will receive a site induction. • Operatives will only use equipment they are trained and competent to use. • Ensure RAMs are understood and signed prior to work commencing. • Suitable training must be provided. • Regular supervisory monitoring. • Supervisor / Foreman to ensure operatives have thorough understanding of the task to be carried out.	• Supervisor.	1	4	4

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			L	S	R			L	S	R
Slips Trips & Falls.	• Personal Injury. • Fracture. • Concussion. • Limb, Spinal, Head injury. • Muscular Injury. • Equipment Damage.	• All personnel.	3	4	12	• All operatives must clean as they go. • Maintain good housekeeping. • All walkways and pedestrian access routes to be free of obstruction. • Adequate lighting to illuminate the work location. • Remove waste generated from site as work is completed. • All electric extension or trailing leads and cables to run overhead where possible. • Cable ramps or cover cable on the ground. Signage where trailing leads are exposed on the ground.	• All Personnel.	1	4	4
Lone Working.	• Personnel Injury. • Lack of contact.	• Operative.	3	4	12	• Lone working check in procedures must be adhered to, supervisors must be aware of locations of lone workers. • Periodic check ins undertaken by supervisor. • Operative to carry charged radio or mobile phone at all times. **Lone working at height is not Permitted.**	• Supervisor.	1	4	4

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Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Grinders / Abrasive wheel	• Serious injury. • Cuts. • Laceration. • Abrasions. • Eye Injury.	• Operatives. • Other site operatives.	3	4	12	• Only operatives with valid Abrasive Wheel training will operate grinders. • Guards will always be in place. • Tool will be in good condition. • Only compliant & in-date cutting wheels will be used. • Correct Disc for task will be selected. • PPE, Gloves & Eye protection must be worn.	• Operative. • Supervisor.	1	4	4
Dust / Silica Dust.	• Silicosis. • Benign Pneumoconiosis. • Asthma / Bronchitis. • Cancer. • Eye Irritation.	• All persons on site.	4	5	20	• Dust suppression will be utilised where possible. • Dust masks and eye protection will be worn when cutting or drilling. • Masks will be worn when entering attics or other potential dusty environments.	• Operative. • Supervisor.	1	5	5
Excavations	• Death • Crushing • Asphyxiation • Serious Physical injury from contact with Excavators or Dumpers. • Manual handling injuries. • Wiel's and other diseases.	• All operatives involved with the work	4	5	20	• Only suitably qualified and experienced operatives will operate excavation equipment and machinery. • Good manual handling practice will be adhered to. • TTMP and site speed limits will be observed. • All plans, surveys, and past work must be reviewed before planning excavations. "Dial before you dig" where utilities are suspected.		1	5	5

Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Excavations (Continued)						• All excavation's area's must be surveyed prior to excavation with a "CAT" scanner by competent person with sketch drawing and notes recorded in "Cat Scan Book". • Trench boxes will be installed where a trench exceeds 1.5m deep and ladder access provided to any trench exceeding 1.2m deep. • Excavated material will not be placed within 600mm of the edge of trench and edge protection maybe required. • Hand digging only will be carried out around and near underground services. • All excavations / trenches will be protected with fence or barrier and good signage erected. • Overhead services will be protected from tipper wagons or excavators with "**Goal Post"** and a specific risks assessment drawn up with control measures. • Excavation will be inspected daily, and "Thorough Examinations" will be conducted weekly or after an event, and recorded on AF3 when excavation is more than 1m deep. • Good hand hygiene will be practiced.				

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Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Objects/Tools falling from height.	• Head injury. • Fracture. • Impact Injury. • Lacerations.	• All personnel in the workplace.	3	4	12	• Secure materials and hand tools in suitable containment. • Keep tools and materials away from edges of building. • Use Tool lanyards for tools whilst in use. • Ensure that items are not thrown to height or bombed down at any time to avoid impact injury to operatives and others.	• Operatives. • Supervisor.	1	4	4
Working on Rooves	• Death. • Falls from height injuries. • Electrocution from contact. with overhead power lines. • Slips trips falls. • Weill's and other Disease. Manual handling injuries.	• All Personnel.	5	5	25	• All roof lights will have fall protection installed prior to arrival on site. • Scaffold will be erected to provide edge protection. • Compliant Harness and lanyards will be used in the absence of edge protection. • All overhead cables to be insulated by ESB if near operator works area. • Hard hats, Hi-Viz & safety footwear will be worn. • Gloves will be worn, and good hygiene practice will be practiced. • Good Manual Handling practices and T.I.L.E. will be observed.	• Operatives. • Supervisor.	1	5	5

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			L	S	R			L	S	R
Working at Height. • Scaffold • Mobile scaffold • Ladders	• Death • Major life changing Injury. • Serious personal injury • Head injuries • Broken Bones. • Fractures. • Impact injuries.	• All Personnel.	5	5	25	• MEWP, Scaffolding, Work platforms, Mobile Towers and Podium Ladders will be considered and used in accordance with regulations, **as first option**. • Only operatives with valid Working at Height Training will be permitted to work at height. • Pre-use check must be completed before operating a MEWP and weekly inspection recorded on GA2. 6 monthly GA1 must be valid. • Ensure harness is fitted correctly. • Steps / Ladders / Towers must be visually inspected prior to use. • Scaffold Towers must only be assembled by trained competent operatives (CSCS) with updated valid tag. • Ensure area around steps/ladders is clear and free of debris. • Only use compliant ladder/steps that meet regulatory compliance (EN131). • All ladders, Towers and steps must be inspected, have tags updated and recorded in weekly GA3. • Ladders and scaffold towers must be placed on secure level ground.	• Operative • Supervisor.	1	5	5

General Risk Assessment

Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Working at Height. • Scaffold • Mobile scaffold • Ladders (Continued)						• Handover cert must be provided for all erected scaffolds. Inspections are recorded on GA3 every 7 days and scaf tag updated by competent scaffolder or inspector. • Ladders must be erected at 75° angle (1 in 4) and have over-hang of a least 1m. ladders must be footed and se-cure. • Ensure fall arrest equipment is fit for purpose and is inspected prior to use. • Quarantine and remove defective or non-compliant equipment.				
Teleporter / Telehandler.	• Risk of overturning or collapsing of plant. • Crushing of operatives. • Materials falling from load.	• All Personnel.	4	4	16	• Operators must hold CSCS card. • Pre-use check must be completed. • GA2 must be completed weekly. • PPE to be worn at all times.	• Operator	2	2	8
Working in Attic	• Dust & inhalation of fine Insulation fibre. • Insulation allergy causing respiratory difficulty. • Dermatitis. • Weil's and other Disease from Bats, vermin etc. • Poor lighting. • Falls through attic.	• Operative. • Other. Operatives.	4	3	12	• Use Task lighting where lighting is inadequate. • PPE such as head protection, Gloves, Mask, Glasses must be worn. • Wash hands after being in attic. • Walking boards to be used if no floor-ing exists.	• Operatives.	1	3	3

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			L	S	R			L	S	R
Working off podium ladders	• Fall from height. • Contact with other equipment, falling objects.	• All Personnel.	3	3	12	• Training / Instruction • Podium ladders are inspected before every use and defects reported, damaged ladders removed from site and replaced. • All operatives will be experienced, trained and competent to work from ladders. • Young/inexperienced staff are trained and closely supervised during ladder work. • GA3 forms will be completed, and ladder tags updated weekly. • Manual handling techniques will be employed when moving or carrying podium ladders.	• Operatives.	1	3	3
Noise	• Hearing loss. • Damage to Hearing. • Tinnitus.	• Operatives.	2	4	8	• Hearing protection must be worn when there is a noise level is above 80dBA. • Earmuffs to be worn when operators are using tool/plant that have a high noise level. • Operators are not to be exposed to • excessively loud noises for extended periods.	• Operative	1	4	4

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Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Use of Tools, Equipment & Knives	• Cuts. • Laceration. • Abrasions. • Entrapment or Impact. • Eye Injury. • Dust. • Vibration white finger when drilling.	• Operatives.	3	4	12	• Training / Instruction. • Select the correct tool for the job. • Ensure visual inspection of all tools is undertaken before use. • Knives must have retractable blades. • Appropriate gloves must be worn. • Always cut away from your body. • Suitable Eye protection will be worn in any situation where there is a risk. • Operatives must be trained to use equipment and tools. • Ensure all power tools/chargers have a current PAT testing. • Equipment must be 110v or battery operated. • Carry out cutting in open area where possible, sweep up created dust immediately.	• Operatives. • Supervisor.	1	4	4

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Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Operating Site Plant (Excavators & Dumpers)	• Dangers to other operatives on site • Overturning of plant • Overloading Injury to driver and others including death	• All Personnel.	4	4	16	• Operators must be CSCS card. • Safety signage measures must be in place if working off crossing public roads. • No passengers permitted on plant. • All plant must have flashing beacons and roll over protection bars in place. • Care to be taken when reversing and a lookout used where possible. • Unattended vehicles must have their engines switched off, gear in neutral and keys out. • Do not overload machinery to their stated capacity. • Safe system of work in place documented and signed by all involved in the works.	• Operator.	2	4	8
Poor Hygiene / Disease	• Weil's Disease. • Salmonella. • Infections. • Gastroenteritis.	• Operatives.	4	4	16	• Suitable gloves to be Worn. • Wash hands frequently with anti-bacterial soap or use anti-bacterial wipes, especially before eating Drinking or Smoking. • All breaks should be taken away from potential contaminated areas, rooves, bird droppings, etc.	• Operatives.	1	4	4

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Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Farmyards & Animals	• Farm animals, (Misc Physical Injury). • Slurry Tanks (Drowning). • Slurry agitation / Fumes, (Toxic Hydrogen sulphate). • Falls from structures, (Misc Physical Injury). • Slippy surfaces, (Misc Physical Injury). • Mechanical Equipment, (Misc Physical Injury). • Electrical Equipment, (Electrocution).	• All personnel.	4	5	20	• No animals will be permitted in the work area for the duration of works, testing or commissioning. Ensure animals are well fenced out of work area. • Work areas will be well ventilated. • Yards and work areas to be scraped and free from dung. • All slats must be secured in place over slurry tanks. • No work will be carried out within 2m of an open dung pit without Edge protection installed or well anchored inertia lanyard and harness worn. • No Slurry agitation permitted during or 48 Hrs prior to installation. • Keep clear of all mechanical farm equipment. • Keep away from all electrical Equipment that is not interacted with PV system.	• Farmer. • Project Manager. • Supervisor • Operative.	1	5	5

General Risk Assessment

Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Asbestos **Asbestos Containing Materials (A C M's)**	• Asbestosis. • Mesothelioma. • Lung Cancer. • Pleural Plaques / Effusions. • Other Asbestos related. lung diseases.	• Operatives.	3	5	15	• All operatives have basic Asbestos Awareness training, Electrical, Surveyors and Designers. • Roofers and operatives engaged in removal of ACM's have enhanced training appropriate to task. • Only low-grade low risk ACM works are permitted which have exposure levels below .01fibre/cm3. • ACM roofing slates will be removed "intact" as much as possible and placed in double bagged specific Asbestos Waste Bags, labelled, client notified, and left on site. • No drilling or cutting of asbestos or ACM's is permitted. • If other ACM or asbestos is suspected or found in works area, report to site lead, confirm what it is, or assume it is asbestos and carry out a risk assessment to determine safe course of action.	• Operatives. • Supervisor.	1	5	5

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			L	S	R			L	S	R
Lifting operations	• Death. • Major Injury. • Loss of limb. • Minor Injury.	• Operator. • All persons on site.	4	5	20	• Lift plan will be forwarded for review and acceptance prior to any lifting. • A SSWP or RAMS will be communicated to all operatives involved with the lifting operations. • All Lifting operations will be carried out by competent operatives with relevant certification. • Spotter / Banksmen will be in place for all lifts and in direct communication with the lift operator.	• Operator.	1	5	5
Sharp edges	• Physical harm • Lacerations • Infections	• Operatives.	3	4	12	• Examine and inspect all loads for Potential sharp hazards on arrival on site. • Tape up ends of trunking lids to Prevent movement and potential laceration from sharp corners. • Cover all sharp or potentially Sharp edges. • Use of Handles or handling devices. • Cut proof Gloves. • Enforcement of PPE	• Operatives. • Supervisor.	1	4	4

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			L	S	R			L	S	R

Manual Handling.	• Improper lifting techniques.
	• Lifting heavy loads.
	• Lifting objects with rough.
	• Back injury.
	• Hernia.
	• Lacerations or crush injury to hands or feet
	Muscular strains; Sprains.
		• Operatives.	3	4	12	• All staff will be given training in the correct methods of handling and lifting loads as part of their normal safety training.
						• The Site Supervisor will ensure that materials are handled, as far as reasonably possible, by mechanical means. Where the use of a machine is impracticable, sufficient labour must be available to handle any heavy or awkward loads, and instructions must be issued on-site on the handling of these loads.
						• Check the area you will be lifting in has adequate lighting.
						• Check the weight of the load before trying to lift.
						• Always assess a load before deciding to lift: By using **TILE**
						  • Task
						  • Individual
						  • Load
						  • Environment
						• Wear gloves to protect your hands from cuts and punctures.
						• Always wear safety boots to protect from falling loads.
							• Operatives.
							• Supervisor.
								1	4	4

Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Manual Handling. (Continued)						• Hand trucks or trolleys are used for heavier loads. • Ideal storage height for heavy items is between knee and elbow level. • Alternate repetitive tasks, to avoid repetitive strain.				
Moving vehicles	• Physical harm from being hit by moving vehicles.	• Operatives. • All persons on Site.	4	4	16	• Approved or designated areas for pedestrians. Only suitability qualified competent persons or with valid certification will operate vehicles. • High visibility clothing to be provided and worn on all sites. Adherence to designated pedestrian areas. **Keep alert.**	• Operator.	1	4	4
Electricity	• Electric Shock. • Electrocution. • Arc flash. • Burns. • Loss of Sight. • Serious secondary Injury • Death	• Operative. • Other persons on Site.	4	5	15	• Only **testing** by qualified electricians is permitted on completed live electrical circuitry, appliances, or equipment with calibrated compliant equipment, and verified on known voltage before use. • Lock out / Tag out procedures will be observed. • Compliant Insulated hand tools will be used.	• Operator. • Supervisor.	1	5	4

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Hazard (Activity, other)	Potential Injury/ill health	People Affected	Risk Rating before control			Control Measures	Responsible	Risk Rating with controls		
			L	S	R			L	S	R
Electricity Continued)						• No bare ends will be left on installed DC cables to avoid short circuit, arch flash, and electrical shock. • Cables from PV Panels are crimped with straight Connectors before being routed by roofer. This circuit maybe then be tested to verify robust connections by the roofer, safely with a compliant mustimeter. • Electricity will always be isolated in circuits before commencement of electrical work. • Electrical work will only be performed after circuit is proved dead. • Mains power cables suspended across roofs or attached to building and in or near work zones will be assessed with the ESB. These lines will be isolated or shrouded for safety prior to installation works.				