



STACK ELECTRICAL

**HEALTH AND SAFETY
MANUAL**

Revision Number **11**
Date of Revision **10/10/2016**
Revision includes
Health and Safety at Work Act 2015

Manual Number **1**
Manual Belongs To: **Office**

A R STACK ELECTRICIANS (CHCH) LTD
P O Box 7693, Christchurch 8240
Tel: 03 3794062
Fax: 03 3794063

Health and Safety

MANAGEMENT STATEMENT

A.R Stack Electricians (Christchurch) Ltd is committed to the protection of its employees, its property, and other people from accidental injury or damage from work carried out by and on behalf of the company and adopts health, safety and welfare as a fundamental business objective.

The implementation of the company's formal quality system provides ongoing training for all staff. The training shall include the implementation of safe work practices, ensuring the safety of the company work environment.

Yours sincerely

AR Stack & DA Stack
Director's

TABLE OF CONTENTS

SECTION 1: INTRODUCTION & MANAGEMENT STATEMENT

How to use this manual	4
Management Statement	5
Over-view of the requirements of The Act	6

SECTION 2: RESPONSIBILITIES

Company Safety Responsibility	13
On Site Responsibility	14
Workers Responsibility	15
Training and Supervision First Aid & Fitness to Work	16
Consultation	17
Common Hazards on a Construction Site	18

SECTION 3: PROCEDURES AND STANDARD FORMS

Housekeeping	22
Personal Protection Equipment	23
Welding	24
Powder Powered Tools	25
Noise	26
Fall Protection/Working at Heights	27
Scaffolding	28
Ladders	30
Hand tools and Electrical Equipment	31
Excavations	32
Chemicals and Hazardous Substances	33
Alcoholic Drinks and Drugs on the Site	34
Complaints by Public or Instruction by a Statutory Officer	35
Complaint Report Form	36
Safety Action Required - Hazard Identification	37
Safety Action/Hazard Report Form	38
Accident/Incident Reporting	39
Accident/Incident Report	40
Risk Assessment Work Methods & Procedures	41
Job Safety Analysis	42
OHS Meetings	45
Corrective Action form for Complaints and Compliments	46

Appendix to this manual	
Reporting and Induction systems 1-1 to 8-3	

HOW TO USE THIS MANUAL

This Safety Manual is designed to be an easy to use reference document and we describe below the general layout in order to help you find what you need.

Each handbook is numbered and recorded in a register showing to whom a manual has been given, or on which site a manual is held.

This is manual number

Layout of the manual

There is a table of contents at the front of the manual. The manual is divided into sections which include:

1. Introduction and Management statement
2. Company and individual's responsibilities
Common hazards on a construction site
3. Site rules, procedures, practices and standard forms

Format of Procedures

Each procedure is titled as the following example shows, e.g.

Scaffolding

Where appropriate, an explanation may then be given outlining the purpose of the requirement, rule or procedure, e.g.

Purpose:

Falls from scaffold or injuries from materials that have fallen from scaffolds can be serious. Correct erection, use and maintenance of scaffolds is essential. Mobile scaffolds are widely used but they can easily become sub standard. Their erection must comply to the statutory requirements.

(The general requirements, rules or procedures are then set out)

MANGEMENT STATEMENT

A R Stack Electricians (Christchurch) Ltd is committed to the protection of its employees, its property, and other people from accidental injury or damage from work carried out by and on behalf of the company and adopts health, safety and welfare as a fundamental business objective.

All references in this manual, or on report sheets and the like, to the “Company” are taken to mean A R Stack Electricians (Christchurch) Ltd.

In meeting this commitment the management will comply with all legislative requirements and take all practicable steps to ensure they:

1. Provide a safe place of work, safe equipment and proper materials.
2. Establish and insist that safe work methods are practiced at all times.
3. Provide supervision and training.
4. Ensure Employees and other persons understand and accept their responsibility to promote a safe and healthy place of work.

HEALTH & SAFETY IN EMPLOYMENT ACT 1992
AND
HEALTH & SAFETY AT WORK ACT 2015
AN OVERVIEW OF THE REQUIREMENTS

GENERAL DUTY

Take ALL PRACTICABLE STEPS to ensure the safety of employees while at work.

ELECTRICALWORK

All registered electricians must hold a current practicing license in assisting or doing prescribed electrical works.

All workers undertaking electrical work must follow the procedures for safe electrical work as detailed in Stack Electrical Health & Safety Manual.

SPECIFIC DUTIES

Take ALL PRACTICABLE STEPS to:-

- Provide and maintain a safe working environment;
- Provide and maintain facilities for the safety and health of employees at work;
- Ensure that machinery and equipment in the place of work is designed, made, set up, and maintained to be safe for employees.
- Ensure that workers are not exposed to hazards in the course of their work; and
- Develop procedures for dealing with emergencies that may arise while workers are at work.

The term ALL PRACTICABLE STEPS is very important and is defined in the Act as:

“All practicable steps” in relation to achieving any result in any circumstances, means all steps to achieve the result that is reasonably practicable to take in the circumstances, having regard to:-

- (a) The nature and severity of the harm that maybe suffered if the result is not achieved: and
- (b) The current state of knowledge about the likelihood that harm of that nature and severity will be suffered if the result is not achieved; and
- (c) The current state of knowledge about the harm of that nature; and
- (d) The current state of knowledge about the means available to achieve the result, and about the likely efficacy of each; and
- (e) The availability and cost of each of these means

HAZARD MANAGEMENT

The Act sets out a specific approach that must be taken for the employer to meet his obligation in controlling HAZARDS in the place of work.

Identify Hazards

SYSTEMATICALLY identify existing hazards or new hazards (before they arise if possible) to employees at work.

A HAZARD is any activity, situation or substance that is an actual or potential cause of harm.

REGULARLY ASSESS each hazard identified, and determine whether or not it is a SIGNIFICANT HAZARD.

A SIGNIFICANT HAZARD means a hazard that is an actual or potential cause or source of:-

- (a) Serious harm; or
- (b) Harm (being harm that is more trivial) the severity of whose effects on any person depend (entirely or among other things) on the extent or frequency of the person's exposure to the hazard; or
- (c) Harm that does not usually occur, or usually is not easily detectable, until a significant time after exposure to the hazard.

SERIOUS HARM is also defined and includes a list of injuries that result in certain physical or medical conditions.

Significant Hazards

Once a Significant Hazard has been identified the following process must be followed:

- (1) Take ALL PRACTICABLE STEPS to ELIMINATE it.

If that is not PRACTICABLE;

- (2) Take ALL PRACTICABLE STEPS to ISOLATE the Significant Hazard from places of work or employees;

If that is not PRACTICABLE;

- (3) Take ALL PRACTICABLE STEPS to MINIMISE the likelihood that the hazard will be a source or harm to workers;
 - Provide, and ensure workers wear suitable protective clothing and equipment to protect workers from any harm that may arise from the hazard; and

- Monitor the worker exposure to the hazard (with the consent of the employee as far as possible);
- Obtain workers consent to monitor their health.

Summary

The process for the control of hazards at places of work:-

- Identify HAZARDS
- Determine if they are SERIOUS HAZARDS
- If YES, ELIMINATE
- If not practicable, ISOLATE from employees
- If not practicable, MINIMISE risks and monitor hazard.

SUPERVISION AND TRAINING

The employer is responsible to ensure workers do not work or use any plant or any substance until they have been given information about:-

- (1) What to do if an emergency arises while the employee is doing work or using plant or substance; and
- (2) All identified hazards to which the worker is or may be exposed and, the steps that can be taken to minimise the likelihood that the hazard will be of harm to the worker; and
- (3) All identified hazards the worker will or may create while doing work or using plant or a substance, and the steps that can be taken to minimise the likelihood that the hazard will be a source of harm to other people.

The employer is responsible to ensure that a worker has, or is supervised by a person who has the knowledge and experience of similar places, work, plant or substances (whichever is relevant) to ensure that they are not likely to cause harm to workers or other people: and

The employer is responsible to ensure that the worker is adequately trained in the safe use of all plant, objects, substances and protective clothing and equipment, that the worker is, or may be, required to use.

DEVELOPING HEALTH AND SAFETY PROCEDURES

Employers have an obligation under the Act to ensure that all workers have the opportunity to be fully involved in the development of procedures for dealing with, or reacting to emergencies or imminent dangers.

OTHER DUTIES UNDER THE ACT

Public

An employer must take all practicable steps to ensure that customers, visitors and the general public are not harmed at the place of work.

Self-Employed

All self-employed people have a duty to protect themselves and other people.

Principals

Principals who hire contractors are responsible for the safety of the contractor, subcontractor and their workers.

Employees

Workers must take all practicable steps to ensure their own safety and that of anyone else.

Control of Places of Work

To the extent a person owns, leases or is a possessor of a place of work (other than his home) they must take all practicable steps to ensure that people in the place of work and in the vicinity of the place of work are not harmed by a hazard that is, or arises, in the place of work.

HEAD CONTRACTORS

A contractor is likely to wear a number of different hats on a project and as such may have responsibilities for various people for different reasons.

Workers

A head contractor is usually an employer. An employer is always required to take all practicable steps to protect their workers from harm.

Subcontractors

A head contractor is a principal. As the principal, the head contractor must take all practicable steps to make sure their subcontractors and the subcontractors workers are not harmed while carrying out the subcontract work.

Other Contractors

A head contractor is usually in control of the work site. As such the head contractor must take all practicable steps to make sure all people at that place of work are safe from harm. That includes other workmen the employer may have contracted directly working on the work site.

INFORMATION

Workers are required to receive information on:-

- emergency procedures;
- hazards they may be exposed to or create;
- location of safety equipment;
- results of safety and health monitoring.

SPECIFIC OBLIGATION

Regulations

In addition to the obligations set out in the Act, employers and others must comply with regulations issued under the Act.

For the Building and Construction Industry the regulations will contain the specific rules contained in the Construction Act and the Construction Regulations.

Codes of Practice

OSH will issue Codes of Practice on various issues: (e.g.) Handling Asbestos, Noise, Scaffolding, etc.

These are not compulsory – they are one recommended means of compliance.

However, failure to follow the Codes of Practice may point to a failure with the other duties under the Act.

ACCIDENTS

Employers must keep a register of Accidents and must investigate, record and report where someone was or might have been harmed.

NOTE: NEAR MISSES MUST BE DOCUMENTED AND REPORTED.

Where serious harm occurs additional information will be required and the Secretary of Labour must be notified in writing within seven (7) days.

[OSH has prescribed forms for the recording the reporting of accidents.]

No Interference

Accident scenes where serious harm has occurred must be left undisturbed unless a person has to:-

- save a life or prevent suffering;
- maintain access for emergency services;
- prevent serious damage or loss of property.

GENERAL

Health and Safety Inspectors

The Inspectors have powers of inspection and entry to:-

- Conduct examinations, tests, take photos, measurements, etc;
- Bring other persons to assist;
- Copy documents;
- Remove samples;
- Require places to remain undisturbed;
- Require statements.

Inspectors are required to identify themselves

Employers may:-

- Obtain information as to the return of samples;
- Refuse to provide self-incriminating evidence.

NOTICES

Improvement Notices

Issued by Inspectors where there has been no-compliance and sets out remedial steps required to be implemented.

Prohibition Notice

Issued where failure has caused serious harm or is likely to cause serious harm.

All work must stop until hazard is removed.

Suspension Notice

Issued by department medical officer to suspend a worker from specific work.

OFFENCES

(1) Knowledge

Where a person knowingly takes action (or inaction) likely to cause death or serious harm.

Penalty One year prison
 Fine \$500,000 or both

(2) Non Compliance

Where a person causes death or serious harm (non-deliberate).

Penalty Fine \$50,000

(3) Non Compliance with Act
Generally

Penalty Fine \$25,000

Non Compliance offenses are strict liability offenses. This means a person does not need to have the intention to not comply, to be liable. The fact the person does not comply can make them liable.

However, they are not ABSOLUTE OFFENCES.

It is a defense to show that even if a person is in breach they exhibited due diligence or were without fault. The onus is on the person to establish the defense.

(4) Persons Liable

Officers, Directors and Agents of a company can be liable.

COMPANY SAFETY RESPONSIBILITY

To achieve the Company's commitment to promote Health and Safety in the workplace, the company has a Senior Manager as nominated Safety Officer who is responsible for ensuring the company has an appropriate Health and Safety procedure at all places of work, and that those procedures are complied with.

DUTIES

- Understand the legislative requirements for health and safety in the place of work.
- Develop the company's safety policy and procedures.
- Assign safety responsibility to specific staff.
- Involve workers in the development of the Safety Policy and procedures.
- Make supervisors accountable for safety and occupational health of the people working under their direction.
- Make sure that all staff and sub-contractors understand the company's approach to safety and are aware of their responsibilities.
- Promote training of employees to make sure that they are able to perform their work as safely as practicable, including training in the proper use of equipment, PPE and Hazard Identification.
- Prior to carrying out electrical works, the nominated Safety Officer must ensure that all equipment and PPE is checked prior to use.
- Where the nominated Safety Officer identifies a significant hazard to employees, the worker shall take all practicable steps to eliminate it. If the hazard cannot be eliminated, it must be isolated from all workers. If the hazard cannot be isolated or eliminated, no work is to be undertaken in the area of the identified hazard.

ON SITE RESPONSIBILITY

To achieve the Company's commitment to promote Health and Safety in the workplace the company will nominate a Safety Supervisor where needed on site.

DUTIES

- Understand the legislative requirements for health and safety in the workplace.
- Ensure that a safety check programme is established and maintained at the place of work.
- Carry out a regular Hazard Management Inspection.
- Make sure workers have the opportunity to comment on health and safety issues.
- Prepare, distribute and file all records, inspection reports, monitoring reports and accident reports for workers and subcontractors.
- Make sure that, where necessary, subcontractors establish their own health and safety procedures to an acceptable standard.
- Make sure that the person assigned to a task has the appropriate skill and experience to carry out that task or is properly supervised by a person who has the appropriate skill and experience.
- Make sure that staff has access to, and use, the safety equipment and protective clothing for the task.
- Make sure that all substances on the work site are clearly labelled and correctly stored.
- Make sure that there is sufficient information on site in respect to every substance used or stored that covers:-
 - how to handle the substance
 - what are the hazards in using the substance
 - what protective clothing, equipment or safety practice is required when handling the substance.
- Make sure all staff who handle or use any substance are aware of its hazards and the precautions that are to be taken.
- The Safety Supervisor will be permitted two day paid leave annually to attend Health & Safety Training programs.

WORKER'S RESPONSIBILITY

GENERAL DUTY

Take all practicable steps to ensure that you are safe at work and that you do not harm other people.

REPORT DANGERS

You must correct or report to your supervisor or employer every hazard or safety problem that you notice, IMMEDIATELY.

REPORT ACCIDENTS INJURIES AND INCIDENTS

If you witness an accident or an incident where someone could have been injured you MUST report it immediately. Your employer is obliged by law to keep a register of all accidents or near misses where someone could have been injured.

If you receive an injury while at work you MUST report it immediately to your supervisor and have it reported. If a work injury is not reported on the day the injury occurs, then it will not be accepted as a work related injury, and this may affect your right to Accident Compensation.

SOLVENTS/CHEMICALS

Always find out whether there are any dangers to your health before you use any solvents or chemicals.
IF IN DOUBT, ASK.

PROTECTIVE CLOTHING

Always use the correct protective clothing or equipment for the task.
IF IN DOUBT, ASK.

ELECTRICAL

Always check leads and equipment before use. Use a transformer or an earth leakage circuit breaker (E.L.C.B).
(If using an E.L.C.B, check it daily.)

HAND TOOLS

Keep all tools in good condition. Use the right tool for the right job.

TRAINING AND SUPERVISION

You must not carry out any unsupervised electrical task, or use any plant or equipment, or apply or use any chemical or substance unless you have trained in the safe use of all plant, objects, and protective clothing and equipment that you may be required to use or handle. If you are not sure, report to your supervisor.

MOST IMPORTANT RULE

IF YOU ARE UNCERTAIN ABOUT ANYTHING DO NOT PROCEED, ASK!

FIRST AID

1. The Company must ensure that adequate First Aid equipment is provided and made readily available for each worker to access whilst at the workplace.
2. An adequate number of workers must be trained and be available to administer First Aid in the workplace. This may include ensuring access to persons that have been trained to administer First Aid.
3. The following items must be considered when determining First Aid requirements at the workplace:
 - The nature of the work being carried out at the workplace.
 - The nature of the hazards at the workplace.
 - The size and location of the workplace.
 - The number and composition of the workers and other persons at the workplace.

FITNESS TO WORK

1. Workers must be fit to work and complete the assigned task.
2. Pre-employment and pre-placement medical assessments and exams (including hearing checks) are a requirement for workers job capability, based on the nature of activities that they are required to perform or to identify any pre-exempting conditions where they might be undertaking a high risk activity e.g working at heights. Some activities may require that workers are subject to ongoing periodic medical assessment to determine fitness to work e.g scheduled testing where there is an exposure to noise or lead.
3. The Company has implemented a process to identify workers health risks requiring monitoring e.g if exposed to noise, lead or air impurities. This process includes assessment, testing and monitoring and documentation.
4. Health (industrial hygiene) monitoring must be conducted (and recorded) for workers identified to have a health risk. These health monitoring records shall be maintained for a minimum of 30 years.

CONSULTATION

1. Where any matter relating to work Health and Safety arises, all workers who could be directly affected by this matter must be consulted with by the Company. In conjunction with this:
 - a. All relevant information about the matter must be shared with workers affected.
 - b. The views of the workers must be taken into account by the Company owners.
 - c. The workers must be advised of the outcome of the consultation in a timely manner.
2. The Company will ensure all workers have the opportunity to express their views and raise Health and Safety issues relevant to the consultation matter, and will be able to contribute to the decision-making process.
3. The Company will ensure workers are consulted when Hazard and Health and Safety risk identification is assessed in relation to work undertaken or to be undertaken. Consultation will also occur when decisions are being made regarding the process of eliminating or minimizing these risks.
4. Consultation will take place with workers when changes regarding Health and Safety of these workers are proposed. Consultation will take place when decisions are made in respect of:
 - The adequacy of facilities affecting workers welfare.
 - Consulting with workers.
 - Resolving work Health and Safety issues in the workplace.
 - Monitoring the health of workers and conditions in their workplace.
 - Providing information and training for workers.
5. The Company has implemented an issue resolution procedure where a Health and Safety issue arises in a workplace and is not resolved after discussion between the relevant parties, the parties must make reasonable efforts to achieve a timely effective and final resolution. If the issue is still not resolved a request may be sent to a regulator to appoint an inspection to attend the workplace to assist in resolving the issue.

COMMON HAZARDS ON A CONSTRUCTION SITE

1. ELECTRICAL HAZARDS

Hazards

- Unsafe equipment
- Underground electrical services
- Overhead wires

Golden Rules

- Examine equipment for defects before use.
- Use suitable electrical safeguards (Transformers)
- Locate all underground services
- Keep cranes & scaffolding 4 meters away from overhead power lines (unless authorized to operate closer)
- Make sure only Registered Electricians carry out electrical installations and maintenance.
- Portable power tools can be dangerous in the hands of inexperienced or careless operators. Make sure people are fully trained before using such tools as drills, pneumatic tools and portable circular saws.
- Before using power tools check for:-
 - Faulty leads and plugs;
 - Trailing leads; and
 - Inadequate earthing insulation.
- Use an isolating transformer or other safety device.
- Have all hand tools, especially power hand tools, examined by a competent person at regular intervals.
- Make sure all safety guards are attached and operational.
- NEVER LEAVE DEFECTIVE OR FAULTY HAND TOOLS ABOUT FOR OTHERS TO USE.

2. HEIGHTS

Hazards

- Falling off.
- Support collapsing.

Golden Rules

- Ladders – Make sure the ladder is in good condition
Sound rungs
Not badly twisted
Stand on a firm base
Set at the correct angle
Secure by lashing at the top and bottom
(Or have it firmly held by another person)
Make sure the ladder is long enough to do the job
- Use proper planks to stand on and not site materials
- Make sure that there are secure foot supports
- Where ever practical provide guardrails and toe boards
- Use warning signs
- Wear safety helmets
- Make sure temporary platforms are built to legal requirements.

3. EXCAVATIONS/TRENCHES

Hazards

- Falling in
- Objects falling on
- Trench collapse

Golden Rules

- Locate all underground services
- Provide guardrails and toe boards wherever practical
- Use warning signs
- Provide suitable access across and in and out of the trench
- Wear safety helmets
- Use approved timbering methods

4. HAND TOOLS

Hazards

- Misuse of hand tools
- Using the wrong tool for the job
- Using defective hand tools.

Resulting in serious personal injury

Golden Rules

- Make sure the RIGHT tool is used for the job and the RIGHT work method adopted.
- Defective or faulty hand tools should be repaired or replaced.
- Look out for:-
 - Spanners with splayed jaws;
 - Files with split handles or without handles;
 - Mushroom headed chisels;
 - Hammers with loose head or split handles;
 - Wrenches with worn threads.
- If using cutting tools, make sure they are kept sharp.
- NEVER LEAVE DEFECTIVE OR FAULTY HAND TOOLS ABOUT FOR OTHERS TO USE.

5. NOISE

People can suffer hearing loss due to noise made by machinery and equipment they operate or are exposed to, at work, home and at recreational activities. Short term exposure to noise levels above 85dBA may cause temporary hearing loss, but continued exposure over long periods can result in permanent hearing loss and stress related problems.

Approximate Noise Levels in Decibels (These vary with distance, etc)

- 0 – Acute threshold of hearing
- 15 – Average threshold of hearing
- 30 – Soft whisper
- 40 – Quiet office or home at night
- 60 – Normal speech
- 70 – Noisy office
- 80 – Busy street
- 85 – **Threshold of possible damage**

Below the 85 level an 8 hour day can be worked without using hearing protection devices, however protection is still desirable.

Ear Protection must be worn at Noise Level 85dBA and above.

- 85-100 – Power Tools
- 90 – Heavy Truck (Damage after 120mins)
- 95 – Lawn Mower (Damage after 60mins)
- 100 – Pneumatic Drill (Damage after 15mins)
- 110 – Rock Group, Trail bike (Damage after 2mins)
- 115 – Chainsaw (Damage after 30 secs)
- 120 – Car Horn (above 130dBA Noise may cause pain)
- 130 – Jet taking off
- 140 – Shot gun blast

Above 155dBA damage is instant.

PROTECTION

85-90dBA	Grade 1 Earmuffs
Up to 97 dBA	Grade 2 Earmuffs
Up to 103 dBA	Grade 3 Earmuffs
Up to 109 dBA	Grade 4 Earmuffs
Up to 115 dBA	Grade 6 Earmuffs

6. SOLVENTS

Solvents are one of the most commonly used chemicals in the building industry.

ALL SOLVENTS SHOULD BE CONSIDERED HAZARDOUS.

Solvents can enter the body by:-

- being inhaled
- being absorbed through the skin
- being swallowed.

Golden Rules

- If possible find another product that is less harmful
- Get a Materials Data Sheet on the product
- Make sure there is good ventilation
- Use the correct protective equipment
- Protect the skin with gloves, boots, aprons etc
- If the solvent vapor in the air cannot be reduced to an acceptable level use an approved respirator
- Label all containers clearly
- Use warning signs.

NOTIFIABLE WORK

Requirements under the Construction Act and the Construction Regulations will be preserved and incorporated in Regulations under the Health and Safety in Employment Act. The requirements for “Notifiable Work” and having a certified safety supervisor still exist.

Notifiable Work includes:-

- the construction or use of scaffolding more than 5m high;
- work where workers risk a fall of 5m or more (except for work from a ladder, minor maintenance work on residential buildings that are not higher than 2 stories);
- work in narrow trenches or pits deeper than 1.5m;
- work in steep sided pits or holes more than 5m deep;
- work in certain tunnels and drives;
- the use of explosives;
- the use of lifting appliances to lift 500kg or more to a height of 5m or more vertically, but excluding the use of mobile plant such as excavators, mobile cranes, forklifts and helicopters;
- work involving breathing or compressed air;
- work with asbestos, excepting asbestos cement products.

Such works must be notified to a Health and Safety Inspector 24 hours prior to work commencing.

Notifiable work must be supervised by a certified safety supervisor.

HOUSEKEEPING

PURPOSE:

Good housekeeping of the site minimizes tripping hazards and lessens the risk of fire. Less material is damaged and a clean site is a better place to work in.

1. Workers and subcontractors will be expected to carry out and maintain the highest possible standards of housekeeping on the site.
2. Work areas must be kept free of all slippery substances.
3. Access to workplaces must be kept clear of all obstruction.
4. Suitable receptacles must be provided for the collection of waste materials.
5. Subcontractors will be responsible for keeping their own work areas clean and tidy.
6. Where a subcontractor fails to keep their own work areas clean, and where AR Stack Electricians (ChCh) Ltd use their own staff or outside contractors to clean up, this cost will be charged to the subcontractor.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PURPOSE:

Personal Protective Equipment (PPE) is especially necessary on construction work as the site conditions are much harder to control than in a covered workplace. The conditions set out below are minimum standards for the hazards likely to be faced on various sites.

1. The Company is responsible for providing or ensuring their workers have the appropriate PPE according to the work required and in accordance with any hazard associated with the work. Workers will wear such clothing and equipment as instructed. Workers must be provided with training, information and instruction in the proper use, storage and maintenance of PPE.
2. The selected PPE must be of a suitable size and fit and must be of reasonable comfort in respect of the worker required to use it.
3. The PPE must be maintained in good working order. Any defective equipment must be repaired or replaced to minimize risk to workers who use it. This equipment must also be maintained in a clean and hygienic condition. Workers must report any damaged or defective equipment including equipment in need of cleaning or decontamination to the Company HSE representative and/or the Company Director
4. The Company will provide Safety Helmets to its workers. Safety Helmets must be worn at all times while working in areas or on sites designated 'hard hat' areas. All standard safety helmets must be fitted with a chin-strap when working in either high winds or aloft.
5. Footwear shall be heavy duty protective type, and shall be worn by all personnel while on the site.
6. Safety glasses, goggles or visors are to be worn in designated eye hazard areas, or while engaged in any task such as grinding, drilling, welding, skill sawing or bench operations, dusty conditions etc.
7. Workers and subcontractors shall be responsible for ensuring that protective clothing/equipment is worn on all relevant occasions as indicated by work permits, notices, instructions and in the case of chemical use as indicated in the material safety data sheet. No workers or subcontractors will intentionally misuse or damage any PPE provided to them by the Company. All workers are responsible for the correct use of PPE to ensure it is not damaged
8. Hearing protectors must be worn by persons working with or near machinery that exposes them to excessive noise.
9. Safety belts/harnesses must be worn when needed.

WELDING

1. INTRODUCTION

All welding operations are to be carried out by competent personnel.

2. GENERAL PRECAUTIONS

- a) Protective clothing and equipment to shield both skin and eyes shall be provided and worn.
- b) All work shall be effectively screened from other workers in the vicinity.
- c) All welding sets, cables, connectors and terminators shall be maintained in good condition, be of adequate capacity and used in accordance with both manufacturers and Health and Safety Guidance Standards.
- d) All supplies for welding equipment shall be made from approved cables and approved plug boxes and must be controlled from a circuit which includes protection sensitive to earth fault currents.
- e) Where stationary transformers or generator sets are being used, a suitable switch shall be mounted adjacent to the equipment in order that it may be isolated from the supply main.

POWDER POWERED TOOLS

1. GENERAL

Powder powered tools are very similar to firearms in both construction and operation. Operators of these tools must have been trained in their safe use and must be certificated or under the direct control of a certificated person.

The use of these type of tools is covered by the Construction Regulations 1961 Part X specifically 86-96 and employees or subcontractors are required to comply with them.

Important requirements (but not the only requirements) to observe are:-

- a) The operator only uses the type of tool they have a certificate for.
- b) The tool is overhauled every six months by a licensed person and the warrant is displayed in the box the tool is stored in.

2. PROCEDURES FOR USE

- a) Tools shall only be used in strict adherence with the maker's instructions.
- b) When not in use both tools and cartridges shall be kept in a secure box.
- c) Whenever practicable powered tool operations should not be used in the immediate vicinity of other workers and extra care should be taken to ensure that no person is sited in line with the "Flight of the Pin" when the tool is in use.
- d) Where an area can not be completely isolated the warning notices **MUST BE DISPLAYED**.
- e) Operators and assistants **SHALL WEAR** safety helmets, hearing protection and goggles or visors.
- f) Tools shall never be transported to work locations in a loaded condition.
- g) Tools shall never be left unattended.
- h) No adjustment shall ever be made to a loaded tool.

NOISE

PURPOSE:

Exposure to excessive noise can cause deafness, which may be severe if the exposure is continued for long periods, or if the noise is very loud, the period of exposure has to be short. Precautions must be taken to protect workers from excessive noise.

1. NOISE ON SITE.

All equipment and vehicles brought onto the site will be of a type designed so as to reduce the level of noise they emit to as low as practicable e.g. silenced portable compressor and silenced pneumatic breakers.

If any work to be carried out risks the likelihood that a passerby will be exposed to excessive noise from a powder powered tool, then the Contractor or Subcontractor is to ensure that signs are erected BEFORE commencing work to warn passersby of this likelihood.

If workers are exposed to noise greater than that allowed under the “Construction Act”, then the appropriate hearing protection must be provided by the employer, and worn by the workers.

FALL PROTECTION-WORKING AT HEIGHTS

PURPOSE:

Falls from heights can easily be prevented to avoid death, injury and lost time, by the use of fall protection and by giving due consideration to the relevant safe working surface which the work being undertaken on.

GENERAL RULES

- a) Risks to Health and Safety associated with a fall by a person from one level to another that is reasonable likely to cause injury to that person or another person will be managed. Any work that involves the risk of a fall will be carried out on the ground or on a solid construction. A solid construction means an area that has:
 1. A surface that is structurally capable of supporting all persons and things that's are located on it.
 2. Barriers around its perimeter and any openings to prevent a fall.
 3. An even and readily negotiable surface and gradient.
 4. A safe means of entry and exit.
- b) Control measures will be in place to provide protection against the risk of a fall from heights above 1.8m. Adequate control measures include:
 1. Providing a fall prevention device (secure fence, edge protection, working platforms, covers or any other protection device).
 2. Providing a work positioning system (plant or structure which safely positions a person).
 3. Providing a fall arrest system (industrial safety net, catch platform, safety harness system or any other protection device).Examples include:
 - Providing temporary work platforms.
 - Providing training in relation to the risks involved in working at the workplace.
 - Providing safe work procedures, safe sequencing of work, safe use of ladders, permit systems and appropriate signs.
- c) All anchorage or fall injury prevention systems will be designed, manufactured, constructed, selected, or installed to be capable of withstanding the force applied to them as a result of a person's fall at the workplace.
- d) Each component of the fall injury prevention system provided at the workplace must be inspected before it is used, at regular intervals and immediately after it has operated in relation to a person's free fall.
- e) Any equipment used to protect a worker whilst working at heights that is damaged or defective must be removed and tagged out of service immediately.
- f) The Company will require all workers, who may be at any time required to work at heights, to undertake the appropriate NZ Standard 'Working at Heights' training course. This training course includes:
 1. The hazards and risks associated with working at heights.
 2. Appropriate control methods.
 3. The safe use of fall arrest equipment.
- g) The Company will take all practicable steps to ensure, in relation to every place of work under the control of the company, that, where the worker is under any thing that has been raised or lifted by any means to enable any work to be done, supports or other devices are placed or used under the thing so that it cannot drop or be lowered while the worker is under it.

SCAFFOLDING

PURPOSE:

Falls from scaffolds or injuries from materials that have fallen from scaffolds can be serious. Correct erection, use and maintenance of scaffolds are essential. Mobile scaffolds are widely used, but they can easily become sub standard. Their erection must comply with the statutory requirements.

1. GENERAL

The erection and use of scaffolds on the site is controlled by the Construction Act, and the Construction Regulations 1961, more specifically, but not exclusively Part VI, Clauses 36-99.

All scaffolding over 5 meters in height becomes notifiable work.

Only authorized workers will be allowed to erect, alter or dismantle any scaffolding and if the scaffolding is above 8 meters high, its erection, alteration or dismantling shall be supervised by a certified scaffold, and shall not be used until given a clearance by him or her. The Contractor will supply to A R Stack Electricians (ChCh) Ltd Site Safety Supervisor, the name and the certificate number of a certified scaffold who erects or supervises the erection of any such scaffold on the site.

Guardrails shall be fitted to all working platforms. Toe boards must be installed and will be of such a height as to prevent articles stacked against it from falling.

All scaffolding materials, such as tubes, boards and fittings etc, must conform to their relevant New Zealand Standards and be erected in accordance with the statutory regulation and codes of practice.

2. GENERAL RULES

Rules for using scaffolds on the site include, but are not exclusively:-

- a) Access ladders to scaffold platforms must be pitched at a safe angle and extend the required distance above the landing place. Ladders should be of good construction and free from defects.
- b) Working platforms must be fully boarded out at least 4 boards wide.
- c) All working platforms must be fitted with toe boards.
- d) Boards should be secured in place to prevent accidental dislodgement by adverse weather conditions.
- e) Any scaffold that is incomplete, must have access/es removed/blocked off and prominent warning notices displayed at all possible access points.

3. MOBILE SCAFFOLDS

- a) People plus all unsecured tools and equipment shall be off and clear of the scaffold prior to moving. Riding a manually propelled scaffold when it is being moved is an offence.
- b) Access to and from mobile scaffolds is to be internal by ladders.
- c) Handrails are to comply with the Construction Act and any relevant Regulations.
- d) Wheels are to be locked and checked before ascending.
- e) Mobile scaffolds are not to be tied or connected to other mobiles or scaffolds.
- f) Mobile scaffolds are not to be erected and used over stairs, ramps, walkways or gantries.
- g) Damaged or defective equipment is not to be used.

LADDERS

PURPOSE:

Falls from ladders are a significant factor in injuries occurring on construction sites. Clear guidelines about the type of ladders used and practice of using ladders can lessen the risk of an accident occurring.

1. GENERAL

A temporary working platform or stage, where practicable is inherently much safer than a ladder, and its use will eliminate most of the factors which cause falls from ladders. The use of a proper working platform will often ensure that the job is done more quickly.

2. USE OF LADDERS

- a) Ladders shall be of a type approved by the New Zealand Standards Association and shall bear the “S” mark. Ladders complying with stricter requirements than these shall also be allowed on the site.
- b) Ladders shall be fixed securely top and bottom and extend 1m above the landing.
- c) Ladders shall have non-slip feet and the restraints on step ladders must be sound.
- d) Ladders should be faced when ascending and descending.
- e) Remember, when using a ladder, to:-
 - Stand the ladder on a firm level.
 - Set the ladder at the correct angle.
 - Secure the ladder by lashing it at the top and the bottom, or have someone hold the bottom steady.
 - Make sure the ladder is long enough for the job.
 - Don't use metal ladders near electricity.
 - NEVER reach sideways from the ladder – move it instead.

THE CORRECT ANGLE OF A LADDER IS 1 UNIT OF MEASURE OUT AT THE BASE FOR EVERY 4 UNITS OF HEIGHT.

- f) Ladders should be inspected before use.
ANY DEFECTIVE LADDER SHALL BE REMOVED FROM THE SITE OR DESTROYED.

HANDTOOLS & ELECTRICAL EQUIPMENT

1. HANDTOOLS

- a) The correct type, size and weight of tool should be selected for the job to be undertaken.
- b) Tools should be regularly inspected and defects reported.
- c) Worn/damaged tools should be properly repaired or discarded.
- d) Where there is a danger of tools falling and/or endangering people working below, use shall be made of an approved lanyard and/or wrist strap to secure the tool.

2. ELECTRICAL EQUIPMENT & MACHINERY

- a) Prior to connecting to a power source, check leads, plugs, joiners, guards, cases, accessories, switches etc, for damage or defect. If it is defective **DO NOT USE**.
- b) **DEFECTIVE ELECTRICAL EQUIPMENT IS NOT TO BE BROUGHT ONTO A SITE.**
- c) Protect leads going through doorways.
- d) All electrical equipment and appliances plugged or direct wired, shall be connected to an approved earth leakage device or isolating transformer.
- e) A documented process of reporting defective electrical equipment and machinery is held at AR Stack Electricians (ChCh) head office.
- f) Defective Electrical, and machinery that is faulty is to be tagged and labeled: **DANGER – FAULTY EQUIPMENT – DO NOT USE.**

EXCAVATIONS

PURPOSE:

Hazards from excavations must be identified and controlled.

1. GENERAL

- a) Any excavation that has a depth greater than 1.5m with the width less than the depth, is notifiable to the Department of Labour before work commences. It is the responsibility of the Contractor or Subcontractor to carry this out.
- b) Spoil must be kept back from the edge of the excavation at least 1 meter.
- c) Barricades shall be erected to keep people out, and from falling into the trench.
- d) Shoring shall extend at least 30cm above the top of the excavation.
- e) There shall be safe access/egress to all excavations. Ladders at 9 meter intervals as a minimum, and extending 1 meter above the ground.
- f) Walkways over trenches must be supported either side of the trench with approved handrails.
- g) A HIGH WATER TABLE CAN MAKE EXCAVATIONS UNSTABLE. In such cases THERE MAY BE A NEED TO TAKE GREATER PRECAUTIONS THAN LISTED HERE.

BE AWARE OF TOXIC GASES AND VOLATILE GASES IN TRENCHES.

Petrol or similar machinery in or near trenches can create a hazard. Exhausts and fumes heavier than air can fill the trench and create dangerous situations.

CHEMICALS AND HAZARDOUS SUBSTANCES

PURPOSE:

The incorrect use of chemicals and hazardous substances on construction sites can be a danger not only to the health of persons using them but to the site as a whole. The requirements below seek to minimize the chances of this occurring.

1 PROCEDURE

Every Contractor and Subcontractor shall draw up an inventory of all chemicals, solvents and hazardous substances used by them on the site. The inventory will be updated as new items are brought onto the site.

This inventory shall include:-

- a) The trade name of the chemical, solvent or substance.
- b) The chemical composition of the chemical or substance.
- c) A Material Safety Data Sheet for each identified chemical or hazardous substance.

All precautions detailed in the Material Safety Data Sheets shall be carried out.

Workers shall be instructed in the use of such chemicals and substances and instructed in the precautions outlined in the Material Safety Data Sheet.

ALCOHOLIC DRINKS AND DRUGS ON THE SITE

PURPOSE:

To control the use of drugs and alcohol on the site. Drugs and alcohol have been the cause of many serious accidents on construction sites. The procedure below is in place to reduce the chance of them being a factor on our sites.

1. Alcoholic liquor and unauthorized drugs are prohibited on all Company sites. AR Stack Electricians (ChCh) Ltd reserves the right to refuse entry to any person judged under the influence of alcohol or drugs, and require the employer of any such person not to allow them to commence work, or remove them from the site, should they have commenced work, until adjudged in a fit state by the Company Site Supervisor.
2. The employer reserves the right to request a pre-employment, random or for cause drugs test from the worker or prospective employee without any prior notification.

***COMPLAINTS BY THE PUBLIC
INSTRUCTION BY A STATUTORY OFFICER***

PURPOSE:

To record any complaints about site safety activities so they can be dealt with quickly and efficiently.

1. Any complaint about activities on the site which has been made, whether it be work related or not, or whether it was made by a representative of Government, Local Authority or a member of the Public, must be recorded. (See following complaint form). If the complaint is received by either a worker or subcontractor they **MUST** ensure that the Company Site Safety Supervisor is informed **IMMEDIATELY**.
2. Completed forms must be given to the Company Site Safety Supervisor.

COMPLAINT REPORT FORM

NAME OF COMPLAINANT

MR/MRS/MISS/MS.....

ADDRESS.....
.....

TELEPHONE NUMBER

BUSINESS.....HOME.....

Complaint Received by:

NAME.....

COMPANY.....

TYPE OF COMPLAINT (Circle One)

- | | | |
|----------------|---------------------------|----------------|
| Telephone Call | Job Site | Dept of Labour |
| Press | Letter | |
| Visit | Dangerous Goods Inspector | |

Date of Complaint.....Time.....

NATURE OF COMPLAINT (Add explanation if needed)

.....
.....
.....

ACTION TAKEN: ACTION DATE.....
.....
..... TIME.....

SAFETY ACTION REQUIRED – HAZARD IDENTIFICATION

INTRODUCTION

During regular site inspection Company Site Supervisors may sight potential hazards or substandard practices being carried out by Workers or Subcontractors. All of these must be actioned and recorded. There are two ways in which this may be achieved.

a) **NOT SERIOUS – NO SIGNIFICANT LOSS, INJURY OR DAMAGE POTENTIAL**

If either Class B or Class C hazard this can be noted and recorded on the site inspection sheet. Corrective action is to be taken as soon as practicable. Where the hazard involves a subcontractor, they will be notified and required to rectify the situation as soon as possible.

b) **SERIOUS – A CLASS A HAZARD**

ACTION MUST BE TAKEN IMMEDIATELY TO PREVENT SIGNIFICANT LOSS!

This must be recorded immediately, following verbal instruction to the appropriate person or Subcontractor, on the form:

“SAFETY ACTION REQUIRED – HAZARD IDENTIFICATION”

A copy of this form must be given to the party concerned who must comply with its instruction.

***SAFETY ACTION REQUIRED – HAZARDS IDENTIFICATION
FORM***

Subcontractors/Contractors

Name.....
.....

Location.....
.....
.....

Substandard Condition or Practice to Cease

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Date:..... **Time**:.....

Signed.....

Designation.....

ACCIDENT/INCIDENT REPORTING

INTRODUCTION

If you witness an accident or an incident where someone could have been injured you **MUST** report it immediately. Your Employer is obliged by law to keep a register of all accidents or near misses, where someone could have been injured.

If you receive an injury while at work you **MUST** report it immediately to your supervisor and have it reported. If a work injury is not reported on the day the injury occurs, this may affect your right to Accident Compensation.

An 'accident/incident report' must be filled out within 24 hours of the event, and handed to the Site Supervisor, who ultimately passes it to the Safety Supervisor. All reports are registered and any recommendation followed up.

Any 'accident/incident' which results in serious harm must be notified to the New Zealand Department of Labour within 7 days.

If any 'accident/incident' involves machinery, equipment or any other item related to the 'accident/incident', these items must not be disturbed or removed in any way, unless authorized by the Site or Safety Supervisor.

INCIDENT INVESTIGATION & REPORTING METHODOLOGY

The incident investigation and reporting methodology shall act as Stack Electrical's incident investigation document in association with the Accident/Incident Reporting (see above).

Incident Reporting will be classified under the following four categories:

1. Near Miss – (incident where no injury occurs).
2. Minor Injury – (injury occurs but no lost time is required).
3. Lost Time Injury – (injury where a staff member is unable to work for up to 1 week maximum).
4. Serious Harm Injury – (injury where a staff member is incapacitated for a week or more and full reporting to NZ Department of Labour is required).

All incidents involving injury of any kind (see Item 1 – 4 above) will have an Accident/Incident Report or Near Loss Report completed and a thorough investigation will be undertaken and documented by the Stack Electrical nominated Safety Officer. Where appropriate this report will include witness statements and interviews. The Safety Officer will then report to the Directors of Stack Electrical. This will be a formal, written report and it will address any corrective actions required and assign responsibilities for these, including tracking to closure.

At the discretion of the Directors of Stack Electrical, any relevant lessons learned following on from the incident investigation report will be communicated to all workers.

ACCIDENT/INCIDENT REPORT

Workers

Name:.....

Location:.....
.....

Description:.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Time:..... **Date:**.....

Signed:.....

Site Supervisor's Name:.....

**Site Supervisor's
Recommendation:**.....
.....

Register Number:..... **Safety Officer's Signature**.....

RISK ASSESSMENT: WORK METHODS & PROCEDURES

CLASS 1 ACCIDENTS:

Electrocutions:

The following will be observed:

1. Never work on live electrical equipment if it can possibly be avoided. Always reduce risk to a minimum.
2. When isolating electrical equipment, check to see that alternative circuits or automatic or interconnected switching arrangements cannot liven the equipment from some other source. Thermostats, time switches, pressure switches, light sensitive relays, and so on can operate by a changing condition without warning.

Special caution should be observed with solid state equipment fitted with overload protection. Before working on this equipment, the isolation switch should be operated to remove any chance of an electric shock by automatic restarting of the equipment.

3. If you remove a fuse carrier as a means of isolation, leave danger card at the fuse stating the reason for isolation. Take the fuse carrier away with you. When miniature circuit breakers are installed and are used for isolation, they should also be tagged with a danger card.
4. Any switch used for isolating equipment should preferably be locked, or at least provided with a danger notice. Each phase of the circuit or apparatus should then be tested to check isolation before any work is begun. Where the safety of a number of workers is involved, multiple locking devices with unique keys should be fitted, and a key retained by each worker.
5. Do not use Polyphase motor starters as a means of isolation as one phase may still be live without the motor operating. A separate isolating switch must be operated.
6. A tester is to be used to check for live conditions before working on any conductor or apparatus, including neutrals and other conductors thought to be earthed. In earthed neutral systems an open circuited neutral is live to earth when the appliance is switched on.
7. Wherever possible, after a fuse has cleared a fault, avoid replacing the rewired fuse carrier while the power is switched on. In some conditions, because of high fault currents, re-wireable fuses shall not be used. Appropriately rated High Rupturing Capacity (HRC) fuses or Miniature Circuit Breakers (MCB's) are much safer.
8. Installed wiring prior to terminal fitting installation shall be doubled back and taped to ensure that conductors cannot be touched.

JSA WORKSHEET PROCEDURE

Job Safety Analysis is a versatile tool, but not the answer to all risk problems.

Equipment and process design issues may be better handled by other methods.

1. PURPOSE

To identify and control risks in operational or maintenance tasks or jobs using the “Job Safety Analysis” method.

2. SCOPE & RESPONSIBILITIES

It is our responsibility to ensure Job Safety Analysis is performed for all new or changed Operations and Maintenance Procedures.

For non-routine tasks it is the responsibility of the person organizing the work to ensure JSA’s are prepared for all tasks that may present significant risk. As a rule of thumb, this includes any task that could expose a person or the environment to product, chemicals or damaging energy. Energy threats may come from height, moving parts, tools, vehicles, personal momentum etc. Refer to the JSA form for a guide to potential hazards.

Particular attention should be paid to:

- Designated “Higher Risk Operations”.
- Work carried out in a Confined Space.
- Hot work involving cutting, grinding, welding or naked flame where a permit is required.
- Work at heights including where fall protection equipment is employed.
- Crane lifts.
- Excavation.

3. DEFINITIONS

JSA: Job Safety Analysis.

4. PROCEDURE

4.1 JSA Steps

There are six basic steps to complete a JSA:

- 1) Select the task (or “Job”) and form a team to analyze.
- 2) Break the job down into a SEQUENCE OF STEPS.
- 3) IDENTIFY the hazards in each step.
- 4) ASSESS the LEVEL of each hazard.

- 5) Identify, and implement CONTROLS to reduce the level of the HAZARD.
- 6) RE-ASSESS the task.

4.1.1 Select the task and form a team to analyze.

As a minimum, the team should include a person trained and experienced in preparing JSA's as the "JSA Facilitator" and a person with experience doing the job or similar jobs. Consider who else may have relevant experience to contribute e.g. Engineers.

The JSA facilitator is also responsible to ensure the appropriate preparation material is available prior to the convening of the JSA Team. This material may include any relevant procedures and other supporting information.

4.1.2 Break the job down into a SEQUENCE OF STEPS.

A series of simple steps, each describing what is to be done. If there are more than 15 steps, consider breaking the job down further and perform multiple JSA's so that sufficient focus is achieved.

4.1.3 IDENTIFY the hazards in each step.

Identification of the hazards involved in each task is one of the main purposes of conducting a JSA. Hazards may be identified via the use of the Potential Hazard Checklist within the JSA Form. A visit to the job site must be conducted to ensure all hazards are identified.

4.1.4 ASSESS the LEVEL of each hazard.

For each hazard identified by the JSA Team, assess the level using the guidelines provided in the JSA Form. Completing this step will help the team to identify those tasks which are of higher hazard.

4.1.5 Identify and Implement CONTROLS

For each hazard identified by the JSA Team, identify and implement controls to ELIMINATE the hazard.

The control of hazards and reduction of risks is to be managed according to the 'hierarchy of controls' process which is based on the principle of a progression of controls in descending order of effectiveness and preference.

At the top of the hierarchy is the most effective controls:

1. Elimination

Is a permanent solution and eliminates hazards by:

- Modifying plant or equipment design
- Using alternative plant or equipment
- Removing hazardous materials

Substitution

Substituting hazardous materials with non-hazardous or less hazardous materials or replacing the work process, substance or plant with something safer.

2. Engineering controls

If hazards cannot be eliminated or materials substituted, hazards should be isolated by:

- Installation of process controls such as automatic pressure relief and shutdown valves.
- Installing machinery guards.
- Fencing off or barricading.
- Lock-out and tag-out.

3. Administrative (procedural) Controls

Where Elimination, Substitution or Engineering controls are not possible, exposure to a hazard should be reduced by changing work procedures/plans/processes, or developing measures to ensure work is performed safely through:

- Revised procedures and practices.
- Modified work hours or shifts to reduce exposure.
- Use of warning and instruction signs, colour coding.
- Use of checklists.
- Training and education.

4. Personal Protective Equipment (PPE)

If elimination, isolation and administrative controls are not viable, then, and only then should controls be instigated through the use of basic or enhanced PPE. PPE must be appropriately rated and suited to the type and intensity of hazard.

4.1.6 RE-ASSESS the Task

Once all the controls to eliminate the hazard have been identified and implemented, review each step of the JSA and assess the level of any remaining hazards.

If there are remaining hazards where the mitigated level remains HIGH, the task must be classified as a “Higher Risk Operation”.

If there are any remaining hazards where the mitigated level remains **MEDIUM**, the task may proceed but additional caution should be taken to review the JSA and task by the work crew/person prior to job commencement.

4.2 Use of JSA's

For regular tasks the Hazard controls are to be included into Operating or Maintenance Procedures as appropriate. A R Stack Electricians (ChCh) Ltd shall ensure personnel are competent in the procedures they use.

For one off/project tasks the JSA must be reviewed and signed by all employees and sub-contractors prior to commencing work. Any questions or concerns regarding the job or JSA must be addressed to everyone's satisfaction prior to the job starting or continuing. A review at the work site must include a review of current actual conditions.

The JSA should also be reviewed by the work crew in the event of the following changes in job conditions:

- Change in job scope which requires the use of different tools, work methods, equipment etc.
- Changes in physical environment (e.g. – weather, additional work in area).
- Crew or individual personnel are changed.
- After significant event (e.g. – evacuation/alarm, near-miss etc).

5. DOCUMENTATION

JSA Worksheet

6. QUALITY RECORDS

RECORD	RECORD KEEPER	RETENTION PERIOD
<i>Completed JSA</i>	<i>AR Stack Electricians Ltd</i>	<i>3 Years</i>

OCCUPATIONAL HEALTH & SAFETY MEETINGS

1. Workers holding the position of Field Supervisor must attend regular safety meetings.
2. Workers must attend regular safety meetings to receive and discuss OSH communications.
3. Any subcontractors must also attend regular safety meeting where OHS issues can be communicated to them.
4. The Company has a requirement for a daily toolbox/pre-job start meeting to take place. The documentation of these meetings may include daily toolbox meeting proforma's, sign on sheets, daily toolbox communication or documented processes requiring Field Supervisors to conduct these types of meetings. Workers can be consulted on any changes that may affect workplace OHS.
5. All OHS meetings will be minuted and a list of attendees recorded.
6. All workers holding the position of Manager must attend regular safety meetings and their job titles must be listed.
7. Scheduled worker/management OHS meetings must be conducted. Workers are to participate in team activities or on OHS committees to improve OHS performance. Details of OHS committees can be provided to all workers.

STACK ELECTRICAL

Corrective Action Form for Customer Complaints/Complements

Job No. **Date:** **Phone:**

Customer:

Customer/Area:

Description of Complaint/Complement:

.....

Immediate Action Taken (if possible):

.....

Investigate Nature of Complaint/Complement:

.....

Complaint/Corrective & Preventative Action/Complement Action:

.....

Feedback to Customer (circle one): Yes No

Follow up on Action and Closed off:

.....

Signed: **Date:**

STAFF TRAINING & COMPETENCY

PURPOSE:

All staff must be trained in OHS procedures to achieve a safe and competent working environment for themselves and others and to reduce the risk of death, injury and lost time.

1. The Company will provide a basic level of OHS training to all workers. The Company has developed a training policy in conjunction with Site Safe (OHS training provider) and the Master Electricians Training Program.
2. The Company Training Policy requires that all new workers employed undertake the Site Safe HSE program and also the Master Electricians Training Program. These training programs require for all workers to undertake refresher training every two years.
3. The Company Training Policy requires that all workers must hold one of the following qualifications as a requirement for carrying out their employment responsibilities within the Company:
 - Inspector (NZ Registered Electrical Inspector)
 - Supervising Electrician (NZ Registered Electrician with supervisor responsibility)
 - Electrician (NZ Registered Electrician)
 - Trainee Electrician (NZ Registered Trainee Electrician)

Note: Further detail regarding this is contained in the following Training & Competency Matrix.

4. The Company will ensure that all new workers undergo the required Site Safe and Master Electricians Training Program.
5. The Company shall provide all new workers with orientation training. This training will include the following policies in place within the Company:
 - Company Health & Safety Policy (New workers will receive a copy of the HSE Manual which must be read and signed).
 - Company Quality Plan and Safety Management Plan.
 - The safe and proper use of PPE equipment as provided by the Company.
6. The Company will ensure that all workers attend site specific induction and/or safety toolbox meetings before gaining access to clients work sites.
7. The Company will ensure that all new supervisors attend supervisor level specific OHS training and all existing supervisors will receive refresher training. This training is provided to the supervisors through Site Safe.
8. The Company ensures that all workers are trained and are competent in the completion of Tool Meeting checklists and JSA Worksheets which reference both regulatory and client requirements. These documents are completed prior to any work being undertaken.

Note: Samples of these documents follow the Training and Competency Matrix.

STACK ELECTRICAL LTD

Tool Box Meeting Check List

Doc: 53
Rev: A

Site (location): Job No.:
 Contract: Date:
 Time:

Persons Present

Site Foreman:
 Client Representative:

Name	Signature	Name	Signature

Items reviewed and/or discussed:-

- 1. Action points from previous meeting(s).
- 2. Accidents since the previous meeting.
- 3. General importance to Site Safety.
- 4. Specific importance to Stacks works site safety.
- 5. Hazards and hazardous materials on work site.
- 6. Nominated Safety Topic _____
- 7. Personal safety and protective equipment.
- 8. Electrical equipment and flexible leads.
- 9. Employer responsibilities.
- 10. Stack staff responsibilities.
- 11. Work (and other) permits.
- 12. House keeping.
- 13. Other (state) _____

STACK ELECTRICAL LTD
Tool Box Meeting Check List

Doc: 53
Rev: A

Summary of discussions:

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

List of Action Points:

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Date and time of next meeting:

Nominated Topic for next meeting:

Foreman's Signature: