

TRADE AREA: CONSTRUCTION INDUSTRY- PLUMBING:

Some possible workplace hazards and possible ways for Host employers and Apprentices/Trainees in controlling these hazards.

What are possible hazards?	What could be possible control measures?
Manual handling (bending, reaching, stretching, pulling, lifting, repetitive motions, awkward postures)	<ul style="list-style-type: none"> • Mechanical load shifting devices (e.g. hand trucks, pipe trolleys) used to move materials around the site or from the site • Mechanical devises used to lift and hold pipes in position • Smaller sizes of ordered materials (e.g. cement bags of 20kg instead of 40 kg) • Walkways are clear for barrows • Avoid working in front of face and always away from the body • Sharp edges of metal sheeting and strips are covered. • Protective caps fitted to the end of all thread droppers & exposed rebars • PPE suited to the task (e.g. long trousers, boots, knee protection pads, puncture/impact/resistant gloves) • Training provided in safe manual handling techniques
Using hand tools	<ul style="list-style-type: none"> • Power tools are lightweight, low vibration, noise restricted and fitted with clutches and suitable for the task • Rotate workers through a variety of tasks so workers are not undertaking the same task or holding the same postures for extended periods • Shovels etc. are suitable for the type of digging task, including long handles to minimize bent postures • Manual digging avoided by using mechanical excavation methods where possible • Pipe cutters used instead of hacksaws • Work gloves absorb impact energy , provide protection from sharp edges and are puncture resistant • A/T provided with instruction in safe use of hand tools
Slips, trips and falls	<ul style="list-style-type: none"> • Highest levels of falls protection (e.g. guard railing, scaffolds, physical barriers or elevated work platforms) • Excavations covered or temporary barriers installed to prevent falls into the excavation • Ensure all working areas and access ways are clean, level, well-lit, in good repair and clear of potential/actual tripping hazards • Unwanted material and construction waste regularly removed from the site so it does not accumulate • Construction materials, power leads, tools and equipment positioned to avoid creating tripping hazards.
Noise	<ul style="list-style-type: none"> • Hearing loss prevented by using noise insulated hired, subcontracted, directly owned) equipment (e.g. silence compressors) • Barriers and screens used to block the direct path of sound • Hearing protection provided and worn when using power tools • Warning signs placed in areas of excessive & continual noise • Employees are not exposed to noise that exceeds the national exposure standard • Source of the noise is eliminated • Noisy equipment positioned away from other work areas • Powered tools are maintained to reduce noise • A/T 's exposure to excessive noise is limited • A/T trained in how to use hearing protection correctly • Audiometric tests undertaken as required
Working at ground or floor level	<ul style="list-style-type: none"> • Tables, benches or stands used to bring work to waist height • Tools used with extension handles (e.g. nail guns etc.) to avoid bending • Personal protective equipment provided (e.g. knee pads etc.) • Workers rotated through a variety of tasks
Hot weather conditions	<ul style="list-style-type: none"> • Work re-scheduled when extreme weather conditions present risk

	<ul style="list-style-type: none"> • Regular rest breaks provided • Water facilities available • A/T dressed appropriately for the conditions
Fire	<ul style="list-style-type: none"> • Fire warden in place • Fire extinguisher regularly checked • Fire evacuation drills conducted annually/six monthly • Evacuation map and procedures displayed & staff instructed in correct evacuation procedure • Surveillance system in place to spot intruders
Electric shock	<ul style="list-style-type: none"> • Rubber –soled shoes worn • Check the power is off – never assume it is • Electrical source isolated with a lockout/tagout procedure • Circuits are tested before commencing work • Work avoided in damp conditions • A non-conductive (fiberglass) ladder is used when working with electricity • Testing & tagging is current
Open flame operations	<ul style="list-style-type: none"> • A/T adequately trained in use of blowtorch or plumber’s furnace • Devices not used in small, unventilated spaces • Explosive vapours or dust removed before work started • An appropriate fire extinguisher is on hand • All combustible material removed
Dangerous goods & Hazardous substances (e.g. natural gas, oxyacetylene, glues, solvents)	<ul style="list-style-type: none"> • Adequate ventilation provided • Splash guards in place where applicable • Written risk assessments conducted to identify hazardous substances and control the risks • MSDS sheets available for substances classified as hazardous/dangerous • Substances are stored safely and securely when not in use • A/T trained in the safe use of hazardous/dangerous substances and the required PPE • All hazardous/dangerous substances are labeled • First aid kits provided • First aid & emergency procedures in place and communicated to A/Ts
Poorly maintained heating, ventilation & air conditioning	<ul style="list-style-type: none"> • Regular maintenance undertaken to ensure heating, ventilation and air conditioning working efficiently at all times • Appropriate personal protective equipment provided to A/Ts
Bullying and harassment	<ul style="list-style-type: none"> • Bullying & harassment policy displayed in the workplace • Bullying & harassment policy & procedures explained to all employees • Procedures for reporting & resolving incidents in place and explained to all employees • Workers have received information, instruction and training in relation to dealing with bullying and harassment • Workers are trained in recognition of, communication for & management of bullying & harassment • Procedures in place to ensure timely and appropriate counseling is provided to workers following a workplace bullying/harassment/aggressive/violent incident
Working at Heights	<ul style="list-style-type: none"> • Perform the task on the ground if possible • Use of a passive fall prevention device (<i>passive fall prevention device</i> means material or equipment, or a combination, that is designed for the purpose of preventing a fall, and that, after initial installation, does not require any ongoing adjustment, alteration or operation by any person to ensure the integrity of the device to perform its function. Example: Temporary work platform, roof safety mesh or guard railing) • Use of a work positioning system to ensure employees work within a safe area (<i>work positioning system</i> means - An industrial rope access system; or A travel restraint system; or Any other equipment, other than a temporary work platform, that enables a person to be positioned and safely supported at a work location for the duration of the task being undertaken at height. • Install a fall arrest system to limit risk of injuries in the event of a fall (<i>fall arrest system</i> means equipment or material or a combination of equipment and material that is designed to arrest the fall of a person. Example: Industrial safety net, catch platform or safety

	<p>harness system (other than a travel restraint system).</p> <ul style="list-style-type: none"> • Ensure ladders are compliant with AS 1892 and are regularly checked and maintained in a safe condition • Inspect the work area prior to the commencement of work to ensure that all platforms & surfaces are stable and structurally sound • Specific risk areas clearly signposted • Develop and document safe work procedures to outline the way the hazard will be managed • Provide training to employees to provide them with the skills& knowledge to do their work safely such as training in the use of falls protection equipment etc. • Monitor the work at height practices of all employees to ensure they are working safely
Working overhead or above shoulders	<ul style="list-style-type: none"> • Mechanical devices used • Workers positioned at a height (e.g. scaffolds) which allows work to occur without reaching above the head
Trenches	<ul style="list-style-type: none"> • Competent person conducts daily inspection of the trench worksite prior to start of work and also where there is a change in conditions such as a rainstorm • Any heavy equipment and other soil impediments are kept as far back as possible from the edge of the trench • Wear and use all the PPE provided and required for the job (e.g. hard hats, high visibility clothing) • Vibration sources are minimized near the trench • Angle of the trench graded back to prevent the walls from collapsing
Working alone	<ul style="list-style-type: none"> • There is a system in place for communicating with workers working alone • The system ensures that workers have means of communicating in the event of emergency (e.g. mobile phones, duress alarms) • The system requires regular contact to be maintained with workers to ensure safety & supervision • The employer has knowledge of the location of all workers at all times during work shifts.