

Pathway 1

Technical Assessment Guide

Plumber (General) (ANZSCO:334111)



Published by VETASSESS, 2024

Copyright © 2024 VETASSESS

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise



Contents

01	What is a Technical Assessment?	04
02	Who will assess me?	05
03	Where will the Technical Assessment be held?	05
04	What will happen on the day of my Technical Interview?	06
05	What will happen on the day of my Practical Assessment?	07
06	What do the practical assessment tasks involve?	08
07	What do I need to bring?	09
08	What are the rules of the assessment?	09
09	How can I prepare for my Technical Assessment?	10
10	What if I have a special need?	11
11	How will I get my results?	11
12	What can I do if I receive an unsuccessful result?	12
13	What can I do if I am not happy about the process?	13
14	How can I get more information?	13
Appendix A: Recommended hand tools		14
Appendix B: Suggested pre-assessment reading		15
Appendix C: Sample knowledge questions		16
Appendix D: Safe working practice		17-18
Appendix E: Work method statement (WMS) and SafeWork Instructions (SWI)		19-34

What is a Technical Assessment?



Technical assessment is an important part of the skills assessment process. It involves two stages – a technical interview and a practical assessment.

Technical Interview

- › The assessor will ask you questions about the knowledge required to work in your trade in Australia and how you apply that knowledge.
- › The interview will take about two hours. It will be conducted at one of our assessment venues, either over the internet or face-to-face.

Practical Assessment

- › You will complete a series of work-based tasks that demonstrate your trade skills.

- › Practical assessment takes 7-8 hours and is conducted in person at one of our assessment venues. An assessor will direct you through the assessment.

The practical assessment tasks and technical interview questions are based on the units of competency in the relevant Australian trade qualification. These units describe the skills and knowledge required to work in your trade in Australia. You can view the units of competency in the fact sheet for your trade available on our [website](#).

Your assessment will be conducted in English and no interpreter is allowed.



Who will assess me?



Your assessor will be:

- › A qualified tradesperson in your occupation. Your assessor has the qualification you are applying for, as well as many years of experience working in Australia in this occupation, and they are:
- › A qualified assessor. Your assessor holds a qualification to perform assessments. They also have experience explaining tasks and questioning and listening to candidates from all types of backgrounds.

Where will the technical assessment be held?



Your technical assessment will be held at a VETASSESS approved venue. You can select your preferred venue for the technical interview and practical assessment when you lodge your application. We have venues in many countries around the world. You can find the locations of the venues on our [website](#).

Note that technical interview venues are different from practical assessment venues. Please make sure you are able and willing to travel to an approved venue before you apply.

Once you have paid for your technical interview or practical assessment, we will confirm the venue, date and time of the assessment and send you an Admission Voucher with all the details. If you wish to change to a different approved venue, please email us at tradeassess@vetassess.com.au.

What will happen on the day of my Technical Interview?



Location



You will **arrive at the venue and time** stated on your Technical Interview Admission Voucher.



Admission



You will present your Technical Interview **Admission Voucher and passport** to the venue supervisor for checking.



Online Technical Interview



If you are completing an online Technical Interview:

The venue supervisor will take you to the technical interview room and will seat you in front of the computer. At the computer, you will meet your online host.

Your host will:

- Ask you to hold your passport up to the computer camera to confirm your identification.
- Ask you to agree to the interview being recorded (all interviews are recorded).
- Introduce you to your assessor.
- Provide assistance if there are any technical difficulties.

You will now be able to see and hear your assessor.

Your assessor will ask questions to check your knowledge and skills. The questions are also shown on the computer screen.

Listen carefully to the questions and, if you do not understand a question, ask your assessor to repeat it.

Answer the questions clearly and as best as you can.



Face-to-Face Technical Interview



If you are completing a face-to-face Technical Interview:

The venue supervisor will take you to the technical interview room.

Your assessor will ask questions to check your knowledge and skills.

Listen carefully to the questions and, if you do not understand a question, ask your assessor to repeat it.

Answer the questions clearly and as best as you can.

What will happen on the day of my Practical Assessment?



This is what will happen on the day of your assessment.

Arrival	10 mins
You will arrive at the time and location stated on your Admission Voucher. You will present your voucher and passport to the venue supervisor for checking.	
Introduction	30 mins
Your assessor will explain the tasks you are required to complete and will provide you with the Assessment Workbook.	
Practical tasks	Approx. 7 hrs (includes lunch break)
<p>You will complete a number of practical tasks as directed by your assessor (refer to Section 6 above for examples of tasks that you will be asked to complete).</p> <p>Some tasks may need to be completed in a certain time period.</p> <p>You will wear appropriate personal protective equipment (PPE) and follow all Workplace Health and Safety (WHS) requirements.</p> <p>Note: If WHS requirements are not followed, your assessor will stop your assessment.</p>	
Finish	10 mins
You will clean up your work area and submit your Assessment Workbook.	



What do the practical assessment tasks involve?



Here is an overview of the tasks you may be asked to perform during your practical assessment. Please note that this is an example only. Your assessor will provide you with details of the assessment activities on the day of your assessment.

- › Prepare and/or study plans and specifications to work out the layout of plumbing systems and materials needed
- › Find and mark position for connections, measure pipes and mark cutting or bending lines
- › Cut and bend pipes, assemble and install piping, valves and fittings, join pipe sections and secure pipes
- › Test lines as required by local plumbing regulations
- › Fabricate, install plumbing fixtures such as a continuous flow hot water system, basin, and gas meter connection
- › Install, disconnect, reconnect and commission type A gas appliances
- › Install, commission and adjust water heating systems, controls and devices
- › Fabricate and install roof components
- › Give written and verbal answers to technical questions to demonstrate your knowledge.



What do I need to bring?



You must bring the following to your practical assessment: All other equipment and materials necessary to complete the assessment tasks will be provided.

- › Your current passport.
- › Your Admission Voucher.
- › Personal protective equipment (PPE): Please refer to **Appendix D 'Safe working practice'** for more information about the PPE you should bring to your practical assessment.
- › Work Method Statement (WMS) and Safe Work Instructions (SWI) provided in **Appendix E**.

You are also encouraged to bring your own hand tools to the practical assessment. If you are unable to bring your own tools, VETASSESS will ensure tools are made available, but you may have to share these with other candidates. Refer to **Appendix A 'Recommended hand tools'** for more information.

Please note:

- › You must not bring any reference materials such as written notes, textbooks or manuals.
- › You will not be allowed to use a mobile phone or other electronic devices during the assessment.

What are the rules of the assessment?



To avoid cancellation of your assessment, you must follow these rules:

- › Arrive on time – your assessment will be cancelled if you arrive more than 30 minutes late.
- › Follow your assessor's instructions.
- › Follow workplace health and safety precautions.
- › Do not bring any reference materials including written notes, textbooks, manuals or devices with access to the internet.
- › Do not bring any electronic communication or recording devices including mobile phones, laptops or tablets.
- › Do not ask other candidates for assistance or interrupt them.

The venue supervisor or assessor may also cancel your assessment if you:

- › Cannot prove your identity
- › Cannot understand instructions and/or answer questions in English
- › Become extremely distressed or disturbed
- › Appear ill or physically unwell
- › Become angry or violent
- › Arrive at the assessment venue in an abnormal state, such as being intoxicated or drugged.

How can I prepare for my Technical Assessment?



Use the following checklist to help you prepare for your assessment.

Action	Completed
Download and read the factsheet for your occupation from our website .	
View each unit of competency in the qualification using the following website: https://training.gov.au/Search/Training This will help you to understand the knowledge and skill requirements for your occupation.	
Think about the required knowledge for each unit of competency and if you could answer questions about this knowledge. For example: <ul style="list-style-type: none"> › What are the main safety hazards at your work – how do you make sure you are safe? › Where do you get information from to help you do tasks at work? › Explain how a tool/piece of equipment you use works. › How do you work out what is wrong with a? › How would you fix a? Refer to the sample knowledge questions provided in Appendix C .	
Read the sample practical tasks provided in Section 6 above. Think about how you would complete these sample tasks by asking yourself: <ul style="list-style-type: none"> › What are the steps would I follow? › What tools and equipment would I use? › What safety precautions would I observe? 	
If you think there are areas/units where you are not very knowledgeable or skilled, take action to improve. This could include: <ul style="list-style-type: none"> › Searching for information online › Reading information in books › Asking questions of experts › Completing a training course › Asking others to show you how to perform a task › Practising performing practical tasks 	

What if I have a special need?



Candidates with special needs can request a reasonable adjustment to the assessment process.

Reasonable adjustment refers to actions taken to provide a candidate with a special need or disability the same opportunities as every other candidate, while maintaining the integrity of the assessment process and outcome.

If you wish to request a reasonable adjustment, contact us to discuss your individual situation.

Please note:

- › All assessments must be conducted in English. No translator is allowed during the assessment.
- › Reasonable adjustment does not mean that all candidates' requests are granted.

11. How will I get my results?



Your assessor cannot provide you with your result at the end of the assessment as it only forms part of the assessment process.

Your assessment results will be available on our online portal.

You will receive the following, depending on your result:

Successful candidates

If you successfully complete your practical assessment, you will receive:

- › A Skills Assessment result letter to support your visa application
- › An Offshore Technical Skills Record (OTSR) that lists the units of competency in which you have been assessed as having successfully demonstrated the required trade skills and knowledge. This entitles you to a provisional registration to work in your trade in Australia. You can find more information about the OTSR on our [website](#).

Unsuccessful candidates

If you are unsuccessful, you will receive:

- › A Skills Assessment Result Letter detailing the areas where you were not able to demonstrate the required trade skills and knowledge.

What can I do if I receive an unsuccessful result?



If you receive an unsuccessful result, there are two options available to you:

1. Undertake a Reassessment

If you undertake a reassessment, you will only be reassessed on the units of competency where you were unsuccessful. Before undertaking a reassessment, you are advised to increase your skills and knowledge in these units. You can do this through formal training and/or gaining practical experience.

You must apply for reassessment within 12 months of receiving an unsuccessful result letter and provide evidence of further training and/or work experience completed.

Reassessment is not available after this 12-month timeframe – after this time period, you must submit a new application.

2. Request a Review of the assessment decision

If you do not agree with the assessment decision and want your assessment decision reviewed, you can request a review.

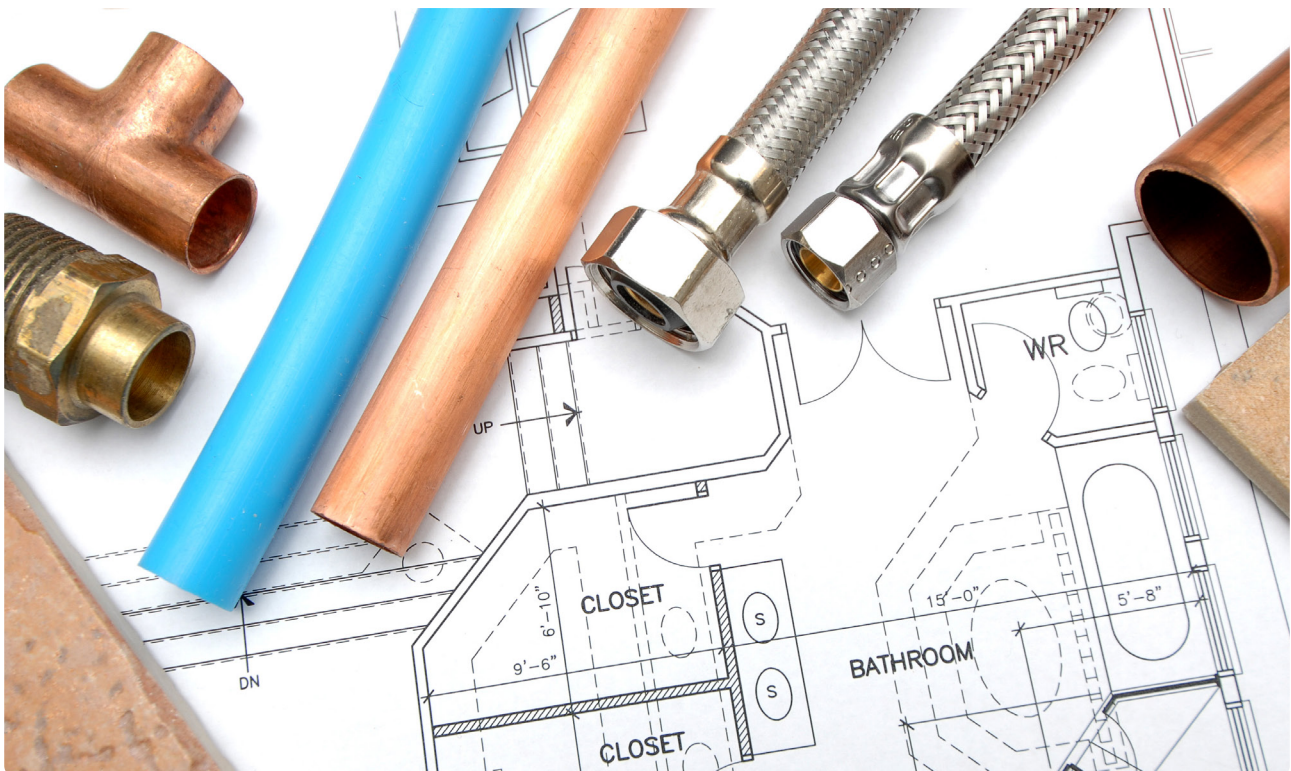
If you choose this option, a VETASSESS assessor who did not participate in your original assessment will review your assessment and confirm if the correct assessment outcome was made.

You must request a review within 7 business days of receiving an unsuccessful assessment outcome.

All fees are payable directly to Trades Recognition Australia.

PLEASE NOTE: There is only one reassessment or review available for each assessment stage.

For further information on reassessment and review visit our [website](#).



What can I do if I am not happy about the process?



If you are not happy with your assessment process, please contact us.

- › Email: tradeassess@vetassess.com.au
- › Phone: +61 3 9655 4801
- › Submit online at <https://www.vetassess.com.au/home/feedback>

How can I get more information?



If you require more information or have any questions about this guide, please contact us on:

- › Phone: +61 3 9655 4801
- › Email: tradeassess@vetassess.com.au
- › Website: www.vetassess.com.au

Appendix A

Recommended hand tools



Here is a list of the hand tools you are encouraged to bring to the practical assessment. If you are unable to bring your own tools, VETASSESS will ensure tools are made available, but you may have to share these with other candidates. You may also choose to bring other tools which are not listed below.

- › Copper tube cutter – 20mm
- › Hacksaw and blades 32 tooth
- › Measuring tape and rule
- › Pencils
- › Square – 200mm
- › Centre punch
- › Tin snips – left and right hand
- › Hammer – ball or cross pein
- › Footprints – 300mm
- › Multigrips – 250mm
- › Shifting spanners – 250mm & 300mm
- › 15mm copper tube bender
- › Polymer tube cutter (16mm)
- › 15mm & 20mm flaring tool (for assessments conducted in Australia only)
- › Battery drill with Philips head (for assessments conducted in Australia only)
- › Gas testing equipment (manometer)

Appendix B

Suggested pre-assessment reading

It is vital that before you attend your assessment you review your plumbing skills and knowledge. You will be assessed against an Australian qualification and the skills the Australian plumbing industry requires of all plumbers working in Australia.

If you do not have formal training and/or employment experience in all skill areas outlined in the factsheet, you may need to do some research in preparation for the assessment. A significant amount of Australian plumbing is concerned with new construction and installation work. All plumbing work is highly regulated across all states and territories.

Australian general plumbing consists of five plumbing streams – water, sanitary, drainage, gas and roofing. There are some plumbers who only have training and work experience in water, sanitary and drainage. If you have never worked in gas and/or roofing, it is a good idea to complete a short course or gain some employment experience in one of these areas before your assessment.

Below is the list of plumbing skills and relevant resources that might assist you in preparing for your assessment.

General plumbing skills

- › Cut and join sheet metal
- › Identify the components of welding mild steel using oxygen/acetylene
- › Identify the components of welding mild steel using arc welding (electricity)
- › Identify the components of cutting mild steel using oxygen/acetylene
- › Identify the components of fusion welding plastic pipes using electricity

Water supply

- › Correct operation of a centrifugal and piston type water pump
- › Purpose of an air gap in a storage tank supplying drinking water
- › Function of a back flow prevention device
- › How a washing machine/dishwasher works
- › Connecting a mains pressure storage hot water system

Sanitary plumbing and drainage

- › Sanitary fixtures classified as ‘Trade Waste Discharges’ in Australia – certain sanitary discharges require treatment before entering municipal sewerage systems
- › Design a system to connect two sink bowls (mounted in the same bench top) to a vertical stack, single lines only
- › Calculate the fall in a drainage pipe with a gradient of 1 in 60 or 1.65%
- › Operation of an in-ground septic tank

Roof plumbing

- › Sheet metal roof gutters and rain heads and/or box heads
- › Identify different types of sheet metal roof flashings
- › Install pre-cut and pre-bent curved sheet metal roof coverings

Gas services

- › Steps involved in commissioning a natural gas stove
- › Internal natural gas appliance flues
- › Typical faults in natural gas appliances
- › LPG electronic safety device components installed in marine craft (where the occupants sleep below deck)

The following books may assist you:

- › Basic Plumbing Services Skills (Cengage)
- › Basic Plumbing Services Skills – Water Supply (Cengage)
- › Basic Plumbing Services Skills – Sanitary Plumbing and Drainage (Cengage)
- › Basic Plumbing Services Skills – Roof Plumbing (Cengage)
- › Basic Plumbing Services Skills – Gas Services (Cengage)
- › Plumbing Services, Volume 2 (McGraw-Hill Book Company Australia)

There are also many general plumbing resources you can source from the web. When undertaking your research, you will need to insert ‘Australian’ before your chosen topic (e.g. ‘Australian septic tanks’) to obtain the relevant information.

Appendix C

Sample knowledge questions

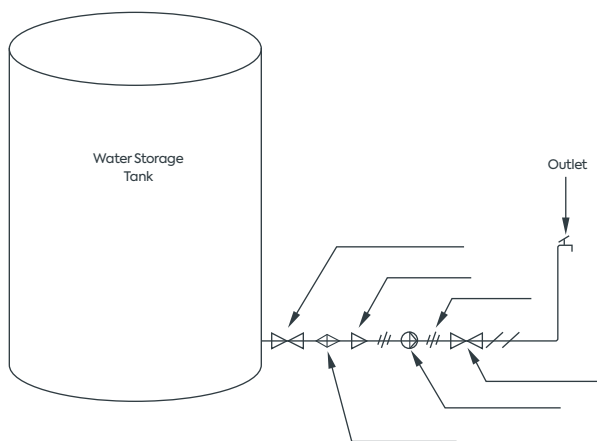
To help you prepare for assessment, below are examples of the questions you will be asked during the assessment. Note that these questions are not the same questions that will be used on the assessment day.

You will be asked questions related to water, sanitary and drainage plumbing, gas and roofing. You must answer all questions correctly.

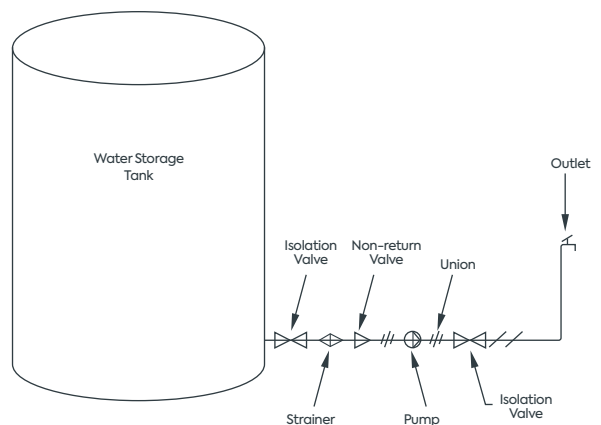
Example 1

Identify each part of the water storage tank on the diagram below using the list provided:

- > Isolation valve
- > Union
- > Non-return valve
- > Strainer
- > Pump



Suggested answer:



Example 2

You are conducting a risk assessment for transferring plumbing materials by hand to a roof. Identify TWO (2) other safety hazards.

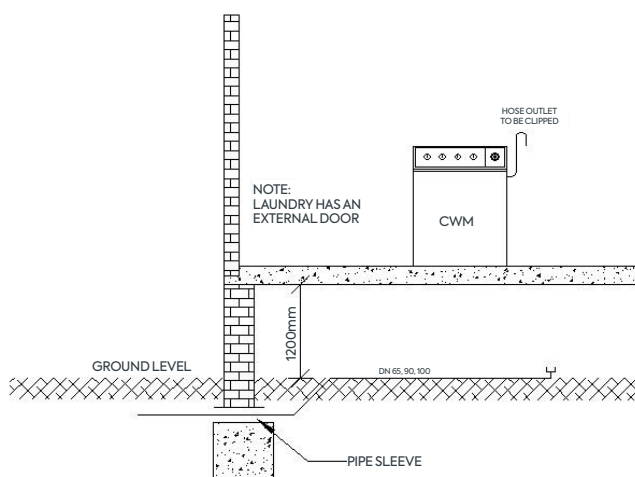
- > Material sliding back down the roof once placed on it
- > ?
- > ?

Suggested answers:

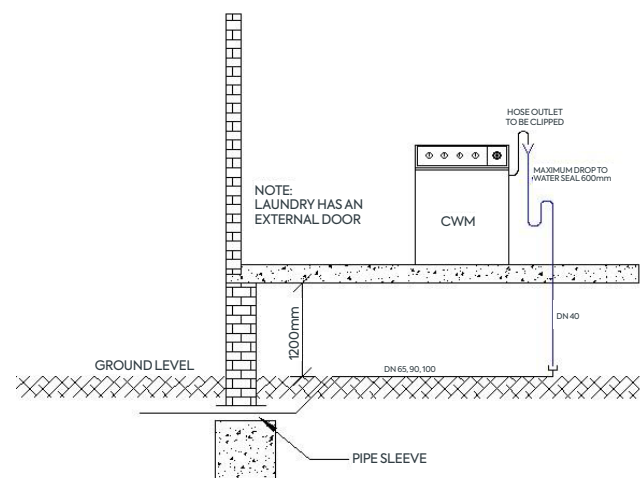
- > Back strain due to awkward manual handling
- > Cuts from edge of sheet
- > Gusts of wind snatching sheet from your grasp

Example 3

Using a single line drawing, show the correct method for connecting a clothes washing machine to the drainage point provided on the drawing below. Show all pipe sizes.



Suggested answer:



Appendix D

Safe working practice

During the assessment, you must follow safe work practices to protect yourself, the assessor and other applicants. You must not wilfully place any person, including yourself, at risk during the assessment.

You must:

- › wear PPE appropriate to the task being done
 - › follow correct workplace health and safety procedures when completing all assessment tasks
 - › follow safety procedures for:
 - welding
 - scaffolding
 - trench shoring
 - use of power tools
 - › use electrical safety switches for power points.
- › You are required to wear rated footwear, clothing and clear safety glasses at all times.
 - › PPE must be designed for the work being performed. For example, when soldering, brazing or welding, suitable gloves and eye protection must be worn for the work to be undertaken safely.
 - › Always inspect your tools and PPE before each use to make sure they are in good condition and will work properly. It is your responsibility to maintain your tools and PPE at all times.

Personal Protective Equipment

Any plumber can come into contact with potentially dangerous conditions and, therefore, must use appropriate personal protective equipment (PPE).

You must bring the following PPE to the assessment:

- › Clear safety glasses
- › Leather safety boots (steel cap)
- › Approved work wear
- › Hearing protection
- › Gloves for sheet metal work.

The following are basic guidelines for the proper use of PPE:

Appendix E

Work Method Statement (WMS) and Safe Work Instructions (SWI)

In preparation for the assessment, you must be familiar with the Australian safety standards.

The following Work Method Statement (WMS) and Safe Work Instructions (SWI) will need to be completed on the day of the practical assessment.

You must:

- Read the WMS and SWI documents before attending the assessment day.
- Bring these documents with you on the assessment day.



Appendix E

Work Method Statement (WMS)

To be completed progressively by candidates on the assessment day. Relevant parts of the WMS must be completed prior to undertaking assessment tasks.

Personal qualifications and experience:	Personal duties and responsibilities:	Training required to complete work:
Candidate name:	Work under supervision of work skills officials	Workcover General Induction for construction work in Australia
Engineering Details/Certificates/Workcover Approvals: Plant/Equipment: <ul style="list-style-type: none"> ➤ General plumbing hand tools ➤ Manual Handling ➤ Oxy acetylene equipment ➤ Non-ferrous pipe benders ➤ Pipe/Tube Cutters ➤ Hazardous Substances ➤ Flaring Tool ➤ Hacksaw. 		Legislation and Australian Standards: <ul style="list-style-type: none"> ➤ Occupational Health & Safety Act 2004 ➤ Occupational Health and Safety Regulations 2007 ➤ Australian Standard AS/NZS 3500 National Plumbing and Draining ➤ Australian Standard AS/NZS 5601 Gas Installations ➤ Hazardous manual tasks ➤ MSDS - Managing Noise - Managing Work Environment and Facilities ➤ Health and Safety Consultation.
<i>I have read and understand the safety requirements for this VETASSESS assessment.</i> Candidate signature:		Guides: Maintenance checks: In accordance with manufacturer's requirements.

Appendix E

Work Method Instructions (SWI)

Task Operation: Personal Protective Equipment (P.P.E)

Special Comments: This procedure is to be used with any operating manuals or training relevant to the tasks. Ensure all Personal Protective Equipment confirms to Australian Standards.

No:SW1001

Date issued on site:

Activity	Hazards	How to do it
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements
Providing P.P.E	Identify process to be carried out to ensure correct Personal Protective Equipment is worn.	<ul style="list-style-type: none"> ➤ Hard Hats ➤ Eye Protection ➤ Respiration Equipment ➤ Hand Protection ➤ Illuminating Safety ➤ Vest ➤ Hats ➤ Overalls (or equivalent) ➤ Safety Footwear ➤ Ear Protection ➤ Face Protection ➤ Safety Harness ➤ Sun Glasses ➤ Sun Screen ➤ Barrier Cream ➤ Wet Weather Gear <p>Special Note:</p> <ul style="list-style-type: none"> ➤ When selecting safety harness or inertia reel system, ensure compliance to CODE OF PRACTICES and AUSTRALIAN STANDARDS ➤ Highlight P.P.E. issued to site personnel

Appendix E

Risk Management Checklist Summary (RMC)

To be completed at time of work

Location:	VETASSESS OTSR Plumbing assessment
Job Description:	CPC32420 Certificate III in Plumbing
Candidate Name:	
Date:	
Time:	
Job No:	

1. a) General Hazards Identified				Risk Management Methodology
(<input checked="" type="checkbox"/> if identified)	6	Asbestos	6	Identify Hazards
Access/Egress	6	Confined Space	6	Assess Risks
		Demolition	6	Implement controls
Assess Risks	6	Host Environment	6	Consult
		Wet Environment	6	
Implement controls	6	Night Environment	6	
		Fire and Explosion	6	
Consult	6	Foul Air	6	
Biological	6	Hazardous Equipment	6	
Dangerous Goods	6	Hot Metal	6	
Dust	6	Hot Work	6	
Cold environment	6	Hydraulic Pressure	6	
Dark environment	6	Moving Machinery	6	
Excavation	6	Noise and Vibration	6	
Flooding and overflow	6	Overhead Hazards	6	
Fumes and Gas	6	Public	6	
Hazardous Substances	6	Remote Location	6	
Hot Surfaces	6	Traffic and Vehicles	6	
Uneven Walkways	6	Underground Services	6	
Manual Handling	6	Working at Heights	6	
Multiple Subcontractors	6	Working in Water	6	
Occupied Site	6	Working on Water	6	
Portable Tools	6	Other	6	

2. Risk Calculator/Circle Assessment

Severity of the Hazard? and Severity of the effect?		Almost certain	Possible	Remote
Class 1	Death or permanent disability	1	1	2
Class 1	Serious injury/Lost Time	1	2	3
Class 1	Minor Injury Resulting in no Lost Time	2	3	4
1. Do not proceed 2. Proceed with extreme caution 3. Proceed with caution 4. Proceed				
<p>If risk is assessed at:</p> <p>Level 1 or 2 do not proceed without consultation with your ASSESSOR.</p> <p>Level 3 or 4 proceed with caution under supervision or with ASSESSOR</p>				

3. Safe Work Method Statements

Other Safe Work Method Statements within this stream

<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

4. Risk Management Overview – Job Safety Analysis

Hazard identification	Risk Assessment	Safe Work Method Statement
<input type="checkbox"/> Completed	<input type="checkbox"/> Completed	<input type="checkbox"/> Standard <input type="checkbox"/> Other
Site Awareness <input type="checkbox"/> Candidate consulted on Risk Management Procedures <input type="checkbox"/> Other (if other complete on the next page) <input type="checkbox"/> Other actions required <input type="checkbox"/> Nil <input type="checkbox"/> Other (if other complete back of form)		

5. Candidate

Candidates' Signature: _____

Time: _____ Date: _____

6. Completion

Work completed and in accordance with Risk Management Checklist Summary

Candidates' Signature: _____

Name: _____ Time: _____ Date: _____

Appendix E

Hazards identified requiring control measures to be implemented

1	2	3
Hazard	Hazard	Hazard
Possible effect	Possible effect	Possible effect
Actions Required	Actions Required	Actions Required
6 Safe work Method Statement Required	6 Safe work Method Statement Required	6 Safe work Method Statement Required

Consultation

Notes on consultation with the VETASSESS assessor and/or information to be provided to candidate prior to or during the work being performed

Appendix E

Work Method Statement (WMS) and Safe Work Instructions (SWI)

Further Action

Actions to be taken prior to the commencement of work

Appendix E




Safe Work Instruction (SWI)

Task Operation: Safe Use of Hand Tools			
Special Comments: All hand tools should be inspected to ensure they are in good working order.			No: 37
Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> > Cuts and Abrasions > Fingers jammed 	<ul style="list-style-type: none"> > Inspect hand tools for any visual defects 	 <p>Wear Protective Clothing</p>   
Operation	<ul style="list-style-type: none"> > Cuts and Abrasions > Fingers jammed > Impact injury 	<ul style="list-style-type: none"> > Ensure correct hand tool is used for the task being performed > Ensure appropriate space is available to complete task > Ensure operation of hand tools is not likely to cause injury to others 	
After use Care	<ul style="list-style-type: none"> > Cuts and Abrasions > Fingers jammed 	<ul style="list-style-type: none"> > Ensure hand tools are returned to a safe condition > Tidy area, return aids and ensure site is left clean and tidy > Report any faults or rectify 	

Appendix E

Task Operation: Manual Handling

Special Comments: This procedure is to be used with any operating manuals or training relevant to the tasks. All persons involved in Manual Handling tasks must receive appropriate training and supervision.





Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation and Operation	<ul style="list-style-type: none"> ➤ Strain Injury ➤ Crushing Injury ➤ Injury by Falling Objects 	<p>A Risk Assessment must take into account the following factors:</p> <ul style="list-style-type: none"> ➤ The actions and movements involved in the Manual Handling. ➤ The Workplace and Workstation layout. ➤ The postures and positions that must be taken by each person involved in the Manual Handling. ➤ The duration and frequency of the Manual Handling. ➤ The location of the loads and the distances that they must be moved. ➤ The weights and forces involved. ➤ The characteristics of the loads and of any equipment that is used in the task. ➤ The organisation of work at the Workplace. ➤ The work environment . ➤ The skill and experience of each person who must carry out the Manual Handling. ➤ The personal characteristics of each person who must carry out the Manual Handling. ➤ The clothing that is worn during the Manual Handling. <p>Risk Control must be in place, when necessary by:</p> <ul style="list-style-type: none"> ➤ Redesign of the Manual Handling task or use one or a combination of the following measures: <ul style="list-style-type: none"> ➤ Provide Mechanical Aids. ➤ Provide Personal Protective Equipment . ➤ Arrange for Team Lifting. 	 <p>Wear Protective Clothing</p>   

Appendix E

Task Operation: Safe Use of MAP Gas

Special Comments: This procedure is to be used with any operating manuals or training relevant to the tasks. All persons involved in Manual Handling tasks must receive appropriate training and supervision.

No: SW1005




Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> › Explosion › Burns › Escaping Gas › Fire 	<ul style="list-style-type: none"> › Check plant for leaks with soapy water. › Physically check cylinder and attachments for damage › Check area for combustible materials e.g., petrol, oil, gas, grass, rags, carpet insulation etc. › Check equipment for correct operation. › Provide appropriate Fire Fighting Equipment appropriate for the task. › Ensure cylinder is upright and secure. 	 <p>Wear Protective Clothing</p>   
Flashback	<ul style="list-style-type: none"> › Explosion › Burns › Escaping Gas › Fire 	<p>Recognition:</p> <ul style="list-style-type: none"> › Shrill hissing or squeaking <p>In case of Flashback:</p> <ul style="list-style-type: none"> › Close cylinder valve › Smoke issuing from blowpipe tip 	
Backfire	<ul style="list-style-type: none"> › Explosion › Burns › Escaping Gas › Fire 	Where persistent backfire occurs, shut down and check for causes i.e., too close to work, dirty tip, loose nozzles, over heating tip.	
Shutdown	<ul style="list-style-type: none"> › Explosion › Burns › Escaping Gas › Fire 	<ul style="list-style-type: none"> › Close cylinder valve. › Check area from burning/smouldering material. 	

Appendix E

Task Operation: Safe use of Pipe Benders

Special Comments: All Pipe Benders should be inspected to ensure they are in good working order. To be used in conjunction with operating manuals or training relevant to the task.

No: 38




Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed 	<ul style="list-style-type: none"> ➤ Inspect Pipe Benders for any visual defects 	 <p>Wear Protective Clothing</p>  
Operation	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed ➤ Impact injury ➤ Back strain 	<ul style="list-style-type: none"> ➤ Ensure correct Pipe Bender is used for the task being performed ➤ Ensure appropriate space is available to complete task ➤ Ensure operation of Pipe Benders is not likely to cause injury to the operator or others 	
After use care	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed 	<ul style="list-style-type: none"> ➤ Ensure Pipe Benders are returned to a safe condition ➤ Tidy area, return aids and ensure site is left clean and tidy ➤ Report any faults or rectify 	

Appendix E

Task Operation: Safe use of Manual Pipe/Tube Cutters

Special Comments: All pipe/Tube Cutters should be inspected to ensure they are in good working order.





No:51

Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed 	<ul style="list-style-type: none"> ➤ Inspect Pipe/Tube Cutters for any visual defects 	 <p>Wear Protective Clothing</p>  
Operation	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed ➤ Impact injury 	<ul style="list-style-type: none"> ➤ Ensure correct hand tool is used for the task being performed ➤ Ensure appropriate space is available to complete task ➤ Ensure operation of Pipe/Tube Cutters is not likely to cause injury to others 	
After Use Care	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed 	<ul style="list-style-type: none"> ➤ Ensure Pipe/Tube Cutters are returned to a safe condition ➤ Tidy area, return aids and ensure site is left clean and tidy ➤ Report any faults or rectify 	

Appendix E

Task Operation: Use of Battery Drills




Special Comments: This procedure is to be used with any operating manuals or training relevant to the tasks.

Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> ➤ Electrocutation ➤ Cuts 	<ul style="list-style-type: none"> ➤ Do not operate electrical equipment (battery charger) in wet areas ➤ Ensure adequate lighting is provided at all times ➤ Ensure the Battery Drill is correctly sized for the purpose ➤ Isolate from power and check battery charger for damage. ➤ Ensure ELCB/RCD is connected and is at supply end of any extension lead/battery charger. ➤ Secure loose clothing and long hair ➤ Inspect bits (screwing attachment) for set and sharpness. ➤ Ensure battery charger has a current Inspection Tag. 	 <p>Wear Protective Clothing</p>   
Operation	<ul style="list-style-type: none"> ➤ Electrocutation ➤ Cuts ➤ Eye Damage ➤ Burns 	<ul style="list-style-type: none"> ➤ Keep hand and body parts clear of drill bit/screwing attachment. ➤ Do not exert undue force when drilling/screwing. ➤ Ensure drill stops before placing down <p>Note: Any faults or abnormal actions, stop use and or disconnect from power (battery charger), DANGERtag and report to supervisor.</p> <ul style="list-style-type: none"> ➤ Battery drill and charger should be kept away from water, including rain. 	
After Use Care		<ul style="list-style-type: none"> ➤ Pack drill, battery charger, and ELCB/RCD in their designated storage area. ➤ Battery drill and charger should be stored away from water, including rain. 	

Appendix E

Task Operation: Safe Use of Hacksaw





Special Comments: Hacksaws should be inspected to ensure they are in good working order.

Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed 	<ul style="list-style-type: none"> ➤ Inspect hacksaw for any visual defects. ➤ Ensure correct blade for material to be cut. ➤ Ensure “blade” is in good working order. ➤ Ensure the teeth on the blade are facing away from the handle. ➤ Ensure the material is properly secured before cutting. 	 <p>Wear Protective Clothing</p>  
Operation	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed ➤ Impact Injury 	<ul style="list-style-type: none"> ➤ Ensure both hands are used to guide the hacksaw. ➤ Ensure appropriate space is available to complete task. ➤ Ensure operation of hacksaw is not likely to cause injury to others. ➤ Ensure cut is completed on the “correct” side of the vice. ➤ Ensure the strokes are even and smooth without undue force or pressure. 	
After use care	<ul style="list-style-type: none"> ➤ Cuts and abrasions ➤ Fingers jammed 	<ul style="list-style-type: none"> ➤ Tidy area, return aids and ensure site is left clean and tidy. ➤ Report any faults or rectify. 	

Appendix E

Task Operation: Hazardous Substances

Special Comments: This procedure is to be used with any operating manuals or training relevant to the tasks. All persons involved in Manual Handling tasks must receive appropriate training and supervision.




Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> > Burns to > Skin > Eyes > Face - Inhalation 	<p>When working with Hazardous Substances ensure Hazardous Substance Register is maintained with M.S.D.S. (Material Safety Data Sheet).</p> <p>Carry out Hazardous Substance Risk Assessment e.g.</p> <ol style="list-style-type: none"> 1. Task(s) to be performed 2. Substance in Use 3. Health Hazards 4. Work Process 5. Controls in Use 6. Actions <p>Ensure compliance with Company Procedure control of Hazardous Substances is strictly adhered to.</p> <p>Do not use any Hazardous Substances you have not been trained to use.</p> <p>“SPECIAL NOTE: Approved Respirators to be worn as and when required</p>	<div style="text-align: center;">  <p>Wear Protective Clothing</p>    </div>

Appendix E

Task Operation: Safe use of Flaring Tool

Special Comments: This procedure is to be used in conjunction with any operating manuals or training relevant to the tasks.

No:SWI Flaring

Activity	Hazards	How to do it	PPE Required
Steps in order of performance	Applicable to each task:	Identify Equipment, Safety Quality and Performance Requirements	
Preparation	<ul style="list-style-type: none"> ➤ Flaring ends of non-ferrous pipes 	<ul style="list-style-type: none"> ➤ Ensure adequate lighting is provided at all times. ➤ Inspect flaring tool for damage. ➤ Ensure flaring tool is clean (free from oil/grease residue). ➤ Secure loose clothing and long hair. ➤ Ensure area adjacent to work area is clear of rubbish and debris (minimum of 1 metre). 	 <p>Wear Protective Clothing</p>  
Operation	<ul style="list-style-type: none"> ➤ Crush/impact injuries ➤ Cuts ➤ Eye Damage ➤ Dropping of tools/material. 	<ul style="list-style-type: none"> ➤ Ensure there are adequate clearances around the work area and aisle space is maintained. ➤ Keep all body parts clear of compression/mechanism area. ➤ Do not exert undue force on flaring tool screw down mechanism. ➤ Ensure the flaring tool and material is well supported. ➤ Ensure the correct wearing of personal protective equipment. <p>Note: Any faults or abnormal actions, stop work and report it to teacher/store personal.</p>	
After use care		<ul style="list-style-type: none"> ➤ Carry out general housekeeping. 	



Contact us

Australia

Melbourne (*Headquarters*)

Level 1, 85 Cremorne Street,
Cremorne VIC 3121

E info@vetassess.com.au

P +61 1300 VETASSESS
(1300 838 277)

China

Shanghai

C/o GLC
International Group
Suite 201 A-B
Zhongfu Building
288 Zhaojiabang Road
Shanghai, China

E china@vetassess.com.au

P +86 21 64731935

India

New Delhi

C/o EPR Solutions Pvt. Ltd
115, 1st Floor, Square One
C2-Saket Place
Saket District Centre
New Delhi – 110017

E india@vetassess.com.au

P +91 11 41009213

United Kingdom

London

E uk@vetassess.com.au

P +0808 234 9873