

Stage 2 assessment guide

Electrician

(General)

(ANZSCO: 341111)



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1 What is a Stage 2 assessment?

Your Stage 2 assessment is an important part of the assessment process.

The Stage 2 assessment takes 7-8 hours and involves you completing:

- A Practical Assessment: series of practical work-based tasks that demonstrate your skills as an Electrician
- A Technical Interview: an interview and/or written assessment designed to find out the depth of your trade knowledge and how you apply that knowledge.

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

The practical tasks and interview questions asked by the assessor are based on the units listed on the **Fact Sheet** for your trade. These units describe the skills and knowledge expected in your trade by industry in Australia.

Download the Electrician Fact Sheet here: <https://www.vetassess.com.au/skills-assessment-for-migration/trade-occupations/guides-and-factsheets>

2 Who will assess me?

You will be assessed by an assessor who is:

- A qualified electrician: Your assessor has the qualification you are applying for, as well as many years of experience working in Australia as an electrician.
- A qualified assessor: Your assessor also holds a qualification as an assessor. They have experience questioning and listening to candidates from all types of backgrounds.

3 Where will my assessment be held?

Your assessment will be held at a VETASSESS approved venue. Approved venues are located in certain countries around the world.

When you apply and pay for your Stage 2 assessment, we will schedule it to occur at the approved venue closest to your location. If you wish to change this location to a different approved venue, please send a request via email to: tradeassess@vetassess.com.au

When payment for your Stage 2 assessment is confirmed, we will email you your Admission Voucher. Your voucher will contain the venue address, date and time.

4 What do the assessment tasks involve?

An overview of the types of activities you may be asked to perform during your assessment is provided below. Please note that this is SAMPLE ONLY. This is not a complete list and may change from time to time. Your assessor will provide you with details of the assessment activities on the day of your assessment.

- From a given specification design, carry out and complete a functioning light and power installation within a specified time frame using safe working techniques including:
 - Complete a Job Safety Analysis (JSA)
 - Switchboard design and protection
 - After completing the installation wiring task, you will be required to carry out the compliance tests and record results to verify compliance or non-compliance using a variety of test equipment. If this test is not carried out as required, you will need to be reassessed for compliance testing at another time and date.
 - Know the maximum allowable value of the Earthing System Resistance by your local standards or codes.
(For example, Australian Standards states the maximum allowable value of the Main Earth is 2 ohm)
 - Know the minimum allowable value of Insulation Resistance of the Wiring by your local standards or codes.
(For example, Australia Standards states the minimum allowable value is 1 Meg-ohm)
- From circuit components symbols design, connect and fault find a Direct on Line (DOL) starter and three phase motor circuit including:
 - Stop/start station, thermal overload, star-delta configuration, overload setting
 - As you complete the activities, your assessor may ask you questions.
- Perform a disconnect/reconnect of electrical equipment using safe working procedures in a logical manner and test the disconnected equipment before reconnection. Please refer to **Appendix C 'Safe isolation procedure for tagout/lockout'** for detailed information about the steps you should follow during this task.
- Give written and verbal answers to questions on a variety of topics including, but not limited to:
 - Electrical units and symbols
 - Ohm's Law calculations
 - Single and three phase motors
 - Impedance, inductive reactance, capacitive reactance calculations
 - Power factor
 - RMS values
 - Magnetism, electromagnetism and transformer
 - Calculating current, wattage, resistance and voltage in an ELV and LV single and three phases

- Electric circuit
- Lighting
- Batteries
- Fire and Smoke detectors.

5 What do I need to bring?

You **must** bring the following to your assessment:

- Your current passport
- Your Admission Voucher: Receiving the Admission Voucher can take up to 3 weeks from the time of your payment. If you are concerned you have not received your Admission Voucher email us at: www.tradeassess@vetassess.com.au
- Practical Experience and Elective Summary (PEES): You **must** download the PEES document from <https://www.vetassess.com.au/skills-assessment-for-migration/trade-occupations/guides-and-factsheets> and complete it prior to your assessment. This document must show your employment experience over the last 5 years and the variety of work that you have undertaken in that time. You can do this by providing additional supporting material that you have not submitted previously.
- Personal protective equipment (PPE): Please refer to **Appendix A 'Safe working practice'** for more information about the PPE you should bring
- Pen and calculator

You are also encouraged to bring your own hand tools to the 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. Please refer to **Appendix B 'Recommended hand tools'** for more information about the tools you should bring

All other equipment and materials necessary to complete the assessment tasks will be provided.

Please note:

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

6 What will happen on the day of my 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. You will give your completed PEES document to the assessor.	
Introduction	30 mins
Your assessor will explain the tasks you are required to complete and will provide you with the Assessment Workbook for your occupation.	
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 4 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><i>Note: If WHS requirements are not followed your assessor will stop your assessment.</i></p>	
Technical interview	Throughout day
<p>Your assessor will ask you questions to gather evidence of your knowledge.</p> <p>You may also be required to read questions and provide written answers to provide evidence.</p>	
Finish	10 mins
<p>You will clean up your work area and submit your Assessment Workbook.</p> <p>Note: Your assessor will not be able to tell you your result.</p>	

7 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, text books, manuals or devices with access to the internet.
- Do not bring any electronic communication or recording devices including mobile phones, laptops, tablets or MP3 players.
- 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 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.

8 How can I prepare for my assessment?

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

Action	Completed
Download and read the Fact Sheet for your occupation: http://www.vetassess.com.au/skills-assessment-for-migration/trade-occupations/guides-and-factsheets	
View each unit in your qualification using the following website: https://training.gov.au/Search/Training This will help you to understand the knowledge and skill requirements for each unit.	
Read the sample practical tasks stated in Section 4. Think about how you would complete these sample tasks by asking yourself: <ul style="list-style-type: none"> • what are the steps I would follow? • what tools and equipment I would use? • what safety precautions I would I observe? 	
Think about the required knowledge for each unit and if you could answer questions about this knowledge.	
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. 	

9 What if I have a special need?

Candidates with special needs can request reasonable adjustments 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 outcome.

If you wish to request a reasonable adjustment, please contact and discuss your individual situation with VETASSESS.

Please note:

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

10 How will I get my results?

Your assessor **cannot** provide you with your result at the end of the Stage 2 assessment. This assessment only forms part of the assessment process.

Your assessment results will be available online. Your results will also be sent to the address that you nominated on your application form.

You will receive the following depending on your result:

Successful candidates

If you successfully complete your assessment, you will receive:

- a migration outcome letter if the assessment is to support your visa application
- an Offshore Technical Skills Record (OTSR) that lists the units of competency in which you are assessed as having the required technical skills. This entitles you to gain provisional licensing in your trade in Australia. It is not a formal qualification and you will be required to undertake further training specific to the Australian context once you arrive in Australia.

Unsuccessful candidates

If you are unsuccessful, you will receive:

- an unsuccessful outcome letter detailing the areas where you were not able to demonstrate your competency.

11 What can I do if I receive an unsuccessful result?

If you receive an unsuccessful result you can choose to be re-assessed. If you choose this option, you will only be re-assessed on units listed as NYC (not yet competent).

Before applying for re-assessment, you are advised to undertake training and/or gain more experience performing the skills required in the units listed as NYC.

For information on the re-assessment process please visit our website.

12 What can I do if I disagree with the result?

If you disagree with your assessment outcome you can request a Review. For more information about Reviews, please visit our website.

13 What can I do if I have a complaint?

If you are dissatisfied with your assessment process, please contact VETASSESS to register your complaint. You can email your complaint to tradeassess@vetassess.com.au or ring +61 3 9655 4801.

14 How can I get more information?

If you require more information or would like to clarify information contained in this guide please contact us on:

Phone: +61 3 9655 4801

Fax: +61 3 9655 4899

Email: tradeassess@vetassess.com.au

Web: www.vetassess.com.au

Appendix A: Safe working practice

The purpose of this document is to provide basic procedures and guidance concerning proper personal protective equipment and the process for working on electrical systems. Ultimately, this Code of Practice attempts to reduce the number of accidents and losses associated with the operation, maintenance and repair of electrical equipment.

A Code of Practice is a document made under the Australian Electrical Safety Act 2002. It gives practical advice on ways to discharge electrical safety obligations. Included in the Code are ways to identify and manage exposure to risks of injury and property damage caused, directly or indirectly, by electricity.

At a place where electrical equipment is located, the Act imposes an obligation on an electrical worker:

- to comply with instructions for the electrical safety of persons and property at the place given:
 - to the extent the instructions are consistent with instructions given by the person in control of the electrical equipment;
- to use personal protective equipment, if:
 - the equipment is provided by the person in control of the electrical equipment for electrical safety purposes; and
 - the worker is properly instructed in the use of the equipment provided;
- not to wilfully or recklessly interfere with or misuse anything provided for electrical safety at the place; and
- not to wilfully place any person, including yourself, at the place in electrical risk.

Personal Protective Equipment

Any electrical worker who works in/around energized equipment and has the potential to come into contact with "live" exposed parts must be provided and use Personal Protective Equipment (PPE). The following are basic guidelines for the proper use of electrical PPE.

- PPE should be used whenever you could come into contact with exposed electrical parts.
- Electrical Workers are required to wear electrically rated footwear at all times.
- PPE must be designed for the work being performed. You must make sure that electrical gloves, insulated tools, etc. are rated for the voltage levels they will be used around.
- Always inspect your electrical tools and PPE before each use to make sure they are in good condition and will work properly. If you find that a tool has been damaged, or that PPE has tears or holes, you need to replace the item before conducting the assigned work.
- You must wear eye and face PPE, such as face shield and safety glasses, whenever there is a possibility of electrical arcs or explosion.
- All test instruments and equipment (volt, ammeters, ohm meters) and associated leads, cables, power cords, probes, and connectors must be visually inspected for external defects and damage before the equipment is used.

Appendix B: Recommended hand tools

Provided below 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.

HAND TOOLS	OPTIONAL TOOLS	METERS
Pliers	Long nose pliers	IR Tester and leads
Screwdrivers (Phillips Head and Flat Shank)	Battery operated drill	Approved multi-meter and leads
Side cutters	Drill set	EQUIPMENT
Wire strippers or knife	Screwdriver bits	Tag out / Lock out kit
Tape measure or ruler	Bending spring for 20mm PVC conduit	
Small spirit level		
Hacksaw or PVC conduit cutters		
Claw Hammer		

Please note

The following types of voltage tester are not allowed to be used during your practical assessment:

- Neon test pencil
- Non-contact voltage tester
- Touch voltage tester
- Voltage stick

Appendix C: Safe isolation procedure for tagout/lockout

Reading and practising this safe isolation procedure will give you a better understanding of what is required during your Practical Assessment.

The following table outlines the steps required to carry out the Safe Work Practice task on an item of electrical equipment.

Each step has points allocated and, to satisfactorily complete the task, you must not lose more than 25 points. You will satisfactorily complete the task if you achieve 75 or more points. Some steps are **critical** and **must** be carried out in order to satisfactorily complete the task.

Testing the voltmeter/voltage tester for correct operation after use is **CRITICAL**. This must be done when the voltmeter/voltage tester indicates a no voltage reading.

If you realise that you have missed a step or made an error while completing this task during your Practical Assessment, please inform the assessor.

NOTE: The following types of voltage tester are **not allowed** to be used during your practical assessment:

- Neon test pencil
- Non-contact voltage tester
- Touch voltage tester
- Voltage stick

WARNING: All electrical conductors and parts, including neutral and earthing conductors, shall be treated as live until proven dead.

STEP	POINTS / COMMENTS
DISCONNECTION/DE-ENERGISATION	
Complete a JSA	5 points
Check if removal of protective devices will affect essential services.	1 point
Test voltage tester at known LIVE/PROVEN source for correct operation before use.	2 points
Ensure the frame of the equipment is not 'LIVE' by testing between frame/ chassis and the known earth/ground point. NOTE This test must be performed at least two (2) times whilst the motor is stationery and when running.	Critical: If this step is not carried out, you will not satisfactorily complete the task
Test voltage tester at known LIVE/PROVEN source for correct operation after use.	Critical: If this step is not carried out, you will not satisfactorily complete the task

STEP	POINTS / COMMENTS
Carry out continuity test between the Known/Proven Earth and equipment frame.	15 points
Record electrical ratings details of appliance (e.g. kW and voltage).	3 points
Note and record direction of rotation (DOR) of motor (if applicable)	3 points
Complete details on danger tags (e.g. Name, Signature, Date, Phone on the front of the tag and details of the fault on the back of the tag).	5 points
The equipment must also be tested for LIVE by either testing between all conductors including the protective earthing conductor or if a motor by starting it prior to isolating circuit conductors	Critical: If this step is not carried out, you will not satisfactorily complete the task
Affix danger tags to isolation points (e.g. appliance, isolating switch, switchboard, etc.).	3 points
Determine location of appropriate protective device.	2 points
Do not leave exposed LIVE terminals/conductors at switchboard or equipment.	Critical: If this step is not carried out, you will not satisfactorily complete the task
Test voltage tester at known LIVE/PROVEN source for correct operation before use.	2 points
<p>Before touching equipment conductors, test for LIVE:</p> <ul style="list-style-type: none"> • Test between—all conductors and known earth/ground point. <i>(This test also includes testing for LIVE between the protective earthing conductor and the known earth).</i> <p>AND</p> <ul style="list-style-type: none"> • Test between—all conductors at the equipment end. 	Critical: If these 2 steps are not carried out, you will not satisfactorily complete the task
<p>Test Voltage Tester for correct operation on known LIVE/PROVEN source after using it.</p> <p><i>(Fail only occurs when previous test indicated terminals/conductors were de-energised).</i></p>	Critical: If this step is not carried out, you will not satisfactorily complete the task
Note and record the details of the protective device.	1 point
<p>Isolating the protective device by applying lock-dog, danger tag and lock you</p> <p><i>(the key must be removed from the lock)</i></p>	Critical: If this step is not carried out, you will not satisfactorily complete the task
Test voltage tester at known LIVE/PROVEN source for correct operation before use.	2 points
Before touching equipment conductors, test for LIVE:	Critical: If this step is not carried out, you will not

STEP	POINTS / COMMENTS
<ul style="list-style-type: none"> • Test between—all conductors and the known earth/ground point AND • Test between—all conductors at the equipment end. 	satisfactorily complete the task
Test Voltage Tester for correct operation on known LIVE/PROVEN source after using it.	Critical: If this step is not carried out, you will not satisfactorily complete the task
Note and record the terminal connection details of the equipment	1 point
Terminate conductors in approved manner and enclose in junction box. Cable ends must be fully insulated.	2 points
Affix Danger Tag to terminated conductors enclosed in junction box.	3 points
Ensure terminated conductors are protected against mechanical damage.	2 points
Clean-up work area and notify personnel.	1 point
TESTING THE EQUIPMENT FOR COMPLIANCE	
Test Insulation Resistance and Continuity tester on both Meg Ohm and Ohm scales for correct operation.	3 points for each test
Carry out the Earth Continuity test of the equipment. Test- the resistance of the equipment frame to its earth facility. Note: Ensure you know MAXIMUM ALLOWABLE VALUE of earthing resistance of the equipment by your LOCAL STANDARDS <i>(For example, Australian Standards states the maximum allowable value for equipment is 0.5 ohm)</i>	15 points
Carry out the Insulation Resistance test of the equipment. Test between each live conductor to its earth facility. Note: A neutral conductor is deemed to be a live conductor. Note: Ensure you know the MINIMUM ALLOWABLE VALUE of insulation resistance of the equipment by LOCAL STANDARDS. <i>(For example, Australia Standards states the minimum allowable value is 1 Meg-ohm)</i>	15 points
RECONNECTION/RE-ENERGIZATION	
Notify personnel of return to work site.	1 point
Ensure the appliance to be reconnected is of the same electrical ratings details (e.g. kW, amperes, voltage, etc.).	2 points
Test voltage tester at known LIVE/PROVEN source for correct operation before use.	2 points

<p>Before touching equipment conductors, test for LIVE:</p> <ul style="list-style-type: none"> • Test between - all conductors and known earth/ground. <i>(This test also includes testing for LIVE between the protective earthing conductor and the known/Proven earth.)</i> <p>AND</p> <ul style="list-style-type: none"> • Test between—all conductors at the equipment end. <i>(Ensure that bare conductors are not touched while testing.)</i> 	<p>Critical: If these 2 steps are not carried out, you will not satisfactorily complete the task</p>
<p>Test voltage tester at known LIVE/PROVEN source for correct operation after use.</p>	<p>Critical: If this step is not carried out, you will not satisfactorily complete the task</p>
<p>Reconnect final sub-circuit wiring to appliance terminals.</p>	<p>1 point</p>
<p>Carry out continuity test on final sub-circuit protective earthing conductor from effective earth to frame of appliance. <i>(This test should be carried out after the circuit conductors have been connected to the equipment's terminals and before the power has been restored).</i></p>	<p>15 points</p>
<p>Notify personnel of restoration of power.</p>	<p>2 points</p>
<p>Do not leave exposed LIVE terminals/conductors at switchboard or appliance.</p>	<p>3 points</p>
<p>Remove lock, lock-dog and switch on circuit breaker or insert correct fuse wedge to restore power.</p>	<p>1 point</p>
<p>Check appliance for correct operation (e.g. DOR [Direction of Rotation])</p>	<p>3 points</p>
<p>Clean-up work area and notify personnel.</p>	<p>2 points</p>