

Course outline: 114 Fixings E105A
UEENEEE105A - Fix and secure electrotechnology equipment

Qualification:	Certificate III in Electrotechnology Electrician - UEE30811
Applicable to:	Learners, industry/employers, governments, community and Global Energy Training Solutions as the provider
Unit of competency:	Accessible from: http://training.gov.au/Training/Details/UEENEEE105A
Related policies:	<p>Policy & Procedure 1 – Enrolment Policy</p> <p>Policy & Procedure 2 – Credit Transfer & Recognition of Prior Learning</p> <p>Policy & Procedure 3 – Learner Support</p> <p>Policy & Procedure 4 – Assessment</p> <p>Policy & Procedure 5 – Academic Misconduct</p> <p>Policy & Procedure 6 – Alcohol & Other Drugs</p> <p>Policy & Procedure 7 – Access, Equity & Diversity</p> <p>Policy & Procedure 8 – Vulnerable People</p> <p>Policy & Procedure 9 – Work, Health & Safety</p> <p>Policy & Procedure 10 – Incident, Injury & Rehabilitation</p> <p>Policy & Procedure 11 – Competency, & Qualification Assessment Decisions</p> <p>Policy & Procedure 12 – Complaints & Appeals</p> <p>Policy & Procedure 13 – Privacy</p> <p>Policy & Procedure 14 – Fees</p> <p>Policy & Procedure 15 – Industry & Employer Engagement</p> <p>Policy & Procedure 16 – Trainers & Assessors</p> <p>Policy & Procedure 17 – Administration & Other Staff</p> <p>Policy & Procedure 18 – Quality Assurance</p> <p>Policy & Procedure 19 – Business & Financial Risk Management</p> <p>Policy & Procedure 20 – Changes to Qualifications or Business</p> <p>Policy & Procedure 21 – Conflict of Interest</p> <p>Policy & Procedure 22 – Records Management</p> <p>Policy & Procedure 23 – Marketing & Advertising</p>
Monitor and review:	Policy & Procedure 18 – Quality Assurance
Responsibility:	Ben Murphy – as Proprietor
Questions/queries:	Feedback and suggestions welcomed: office@gets.com.au (+61) 02 6262 0077

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1. Material requirements

- AS/NZS 3000:2007 incorporating amendment 1 and 2
- Scientific calculator, ruler, pens and pencils
- Note book
- Hand tools
- Covered footwear
- Internet access (provided)

2. Session summary

Day 1	
Required Skills and Knowledge	<p>T1. Device for securing and mounting electrical/electronic/instrumentation/refrigeration/ air-conditioning/telecommunications accessories for supporting, fixing and protecting wiring/cabling/piping and functional accessories to hollow walls encompassing:</p> <ul style="list-style-type: none"> • types and safe application of devices for hollow wall fixing and support • methods/techniques used to fix/support to wood, hollow wall, masonry blocks, plasterboard, panelling • types and safe application of fixing devices used in the electrotechnology industry for wood and hollow wall structures (wood screws, coach bolts, self-tappers, self drilling, metal thread, hollow wall anchors, behind plaster brackets, stud brackets, plasterboard devices, toggle devices) • types of tools used for hollow wall fixing and supporting. • using various fixing methods to fix/support to hollow walls. <p>T2. Device for securing and mounting electrical/electronic/instrumentation/refrigeration/ air-conditioning/telecommunications accessories for supporting, fixing and protecting wiring/cabling/piping and functional accessories to solid walls encompassing:</p> <ul style="list-style-type: none"> • types and safe application of devices used for solid wall fixing and support • methods/techniques used in to fix to masonry and concrete structures • fixing devices used in the electrotechnology industry for solid wall structures (wall-plugs, expanding concrete fixing devices, gas powered fixing tools, powder actuated fixing tools, loxins, dynabolts, chemical devices) • regulatory requirements for use of powder fixing tools. • hand and power tools used in fixing and supporting accessories • using various fixing methods to fix/support to solid walls <p>T3. Device for securing and mounting electrical/electronic/instrumentation/refrigeration/ air-conditioning/telecommunications accessories for supporting, fixing and protecting wiring/cabling/piping and functional accessories to metal fixing encompassing:</p> <ul style="list-style-type: none"> • accessories that may be fixed to metal (saddle clips, conduits, brackets, switches)

	<ul style="list-style-type: none"> techniques for fixing to metal fixing devices: coach bolts, self-tappers, metal thread bolts, hollow wall anchors, rivets fixing tools - spanners, screwdrivers, power screw drivers, pop riveters, files, reamers OH&S issues related to drilling, cutting, eye protection, metal filings, swarf, noise Using power drills, drill bits, change drill speeds. Install a fixing device and accessory capable of supporting up to 20 kg on the metal plate. <p>T4. Securing and mounting electrical/electronic/instrumentation/refrigeration/ air-conditioning/telecommunications accessories for supporting, fixing and protecting wiring/cabling/piping and functional accessories using fixing adhesives and tapes encompassing:</p> <ul style="list-style-type: none"> types and safe application of using adhesives and tapes as fixing devices (load limits of different commercial products) accessories that may be fixed using adhesives and tapes techniques for the application of adhesives and tapes tools used to apply and cut adhesives and tapes hazards and safety measures when working with adhesives and chemical fixing devices (fumes, cutting, eye protection, physical contact, hand protection, ingestion)
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3. Elements and Performance Criteria

Elements and Performance Criteria require practice and demonstration in the work place.

Element		Performance Criteria	Work Performance
1:Prepare to fix and secure equipment	1.1	OHS procedures for a given work area are identified, obtained and understood.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	1.2	OHS risk control work preparation measures and procedures are followed.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	1.3	The scope of work to be undertaken is obtained from documentation or from work supervisor.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	1.4	Advice is sought from the work supervisor to ensure the work is coordinated effectively with others.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	1.5	Sources of materials that may be required for the work are identified and accessed in accordance with established procedures.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	1.6	Fixing devices are selected for their suitable ability for the environment, the load they are to support and substratum's into which they are to be installed.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	1.7	Supporting accessories/equipment is selected for suitability for the environment and ability to support and protect from damage that which they are intended to support.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	1.8	Tools, equipment and testing devices needed to carry out the work are obtained and checked for correct operation and safety.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
2:Install fixing and	2.1	Electrical isolation is arranged where work is within arm's reach of exposed conductive parts, plant or machinery in strict accordance OHS requirements and procedures.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	2.2	Other OHS risk control measures relevant to the work site are	<input type="checkbox"/> Satisfactory

support devices		followed.	<input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	2.3	Fixing devices are installed in accordance with manufacturer instructions.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	2.4	Support accessories/equipment is install accurately and to comply with technical standards and job specifications.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	2.5	Work is carried out efficiently without waste of materials or damage to apparatus, circuits, the surrounding environment or services and using sustainable energy principles.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
3:Complete fixing and support work	3.1	OHS risk control work completion measures and procedures are followed.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	3.2	Work site is tidied and tools and equipment cleaned and securely stored.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed
	3.3	Appropriate personnel are notified of the work completion.	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Needs improvement <input type="checkbox"/> Not performed

4. Assessments

Assessment	When	Satisfactory mark/outcome
Theory assessment 1	Day 1	70%
Practical assessment 1	Day 1	100%
Workplace Observation	After theory and practical assessments	Must be valid, sufficient, authentic and current
Employer Competency report		
Structured workplace experience interview		
Note: Once all theory, practical and on-site assessments are complete, competency assessment decisions can be made in conjunction with the learner, employer and registered training organisation.		

5. Version control

Version	Date of release	Author	Authorised by	Position	Rational for change
V1	5/10/2015	Ben Murphy	Ben Murphy	Proprietor	Initial release
V2	7/2/2017	Ben Murphy	Ben Murphy	Proprietor	Added Elements and Performance Criteria