

UoC: UEENEEE105A - Fix and secure electrotechnology equipment CIII-Core and CII-Elective

Essential Performance Capabilities (from the 55 EPC's specified by ERAC for an Electrical license) that relate to UEENEEE105A include:

34 Demonstrate the knowledge and skills for selection and attachment of electrical accessories, using appropriate fixing devices, tools and methods.

35 Demonstrate the knowledge and skills to install and terminate a variety of electrical cables in a wide range of applications (including final subcircuits) to AS/NZS3000

36 Demonstrate the knowledge and skills for the installation of wiring support systems.

Wiring Rules reference and regulations	Required skills and knowledge	McGraw Hill Text	Chapter/Heading reference	Test Bank	Quizzes	Cases	Worksheets	PPTs	Interactives	Animations	Prac Manual
Clause 1.7. Selection and installation of electrical equipment	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:										
Clause 1.7.1 (a) and (b)	types and safe application of devices for hollow wall fixing and support	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q12, Q13, Q14	Q1, 2, 3		Q1, Q2	Slide 2,3,4,5,6,15,7,8,9,10,11,12	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 1
Clause 1.7.2 (d)	methods/techniques used to fix/support to wood, hollow wall, masonry blocks, plasterboard, panelling	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support				Q1, Q2	Slide 2,3,4,5,6,15,7,8,9,10,11,12	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 1
Clause 1.7.1 (a), and (b) Clause 1.7.2 (a), (b) and (d)	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)	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q1, Q2, Q9, Q22, Q23, Q39			Q1, Q2	Slide 2,3,4,5,6,15,7,8,9,10,11,12	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 1
WHS regulation regarding training for work undertaken (WHS Regulation 39)	types of tools used for hollow wall fixing and supporting.	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support				Q1, Q2	Slide 2,3,4,5,6,15,7,8,9,10,11,12	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 1
Clause 1.7.2 (b) and (d)	using various fixing methods to fix/support to hollow walls.	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support				Q1, Q2	Slide 2,3,4,5,6,15,7,8,9,10,11,12	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 1
Clause 1.7. Selection and installation of electrical equipment	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:										
Clause 1.7.1 (a) and(b)	types and safe application of devices used for solid wall fixing and support	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q7, Q10, Q11	Q8, 9	Q2	Q3, Q4, Q5, Q6, Q7		Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 2
Clause 1.7.2 (a), (b) and (d)	methods/techniques used in to fix to masonry and concrete structures	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q31, Q32, Q33, Q34		Q2	Q3, Q4, Q5, Q6, Q7	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 2
	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	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q3, Q4, Q35, Q36, Q37, Q38		Q2	Q3, Q4, Q5, Q6, Q7	Slide 2,3,4,5,6,15,13,14	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 2
WHS regulation regarding training for work undertaken (WHS Regulation 39)	regulatory requirements for use of powder fixing tools	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q28		Q2	Q3, Q4, Q5, Q6, Q7	Slide 2,3,4,5,6,15,13,14	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 2
WHS regulation regarding training for work undertaken (WHS Regulation 39)	hand and power tools used in fixing and supporting accessories	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q24, Q25, Q26, Q27	Q4	Q2	Q3, Q4, Q5, Q6, Q7	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 2
Clause 1.7.2 (b) and (d)	using various fixing methods to fix/support to solid walls	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q5,Q6	Q5	Q2	Q3, Q4, Q5, Q6, Q7	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below	Setting a plastic anchor in masonry Setting a stud anchor in masonry	Practical Task 2
Clause 1.7. Selection and installation of electrical equipment	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:										
Clause 1.7.2 (a)	accessories that may be fixed to metal (saddle clips, conduits, brackets, switches)	Pethebridge, Electrical Wiring Practice 8e	5.2 Mounting brackets, plates and boxes	Q8, Q30		Q3	Q8, Q9, Q10	Slide 21,22,23,24	Identify the fixing accessories pictured below		Practical Task 2
Clause 1.7.2 (b) and (d)	techniques for fixing to metal	Pethebridge, Electrical Wiring Practice 8e	5.2 Mounting brackets, plates and boxes	Q15, Q16	Q6	Q3	Q8, Q9, Q10	Slide 21,22,23,24	Identify the fixing accessories pictured below		Practical Task 2
Clause 1.7.2 (a), (b) and (d)	fixing devices: coach bolts, self-tappers, metal thread bolts, hollow wall anchors, rivets	Pethebridge, Electrical Wiring Practice 8e	5.2 Mounting brackets, plates and boxes	Q17, Q18, Q19, Q20, Q21		Q3	Q8, Q9, Q10	Slide 21,22,23,24	Identify the fixing accessories pictured below		Practical Task 2
WHS regulation regarding training for work undertaken (WHS Regulation 39)	fixing tools - spanners, screwdrivers, power screw drivers, pop riveters, files, reamers	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support 18.1 Workshop safety practices 18.2 Tools used in electrical work 18.6 Drills and drilling			Q3	Q8, Q9, Q10	Slide 2,3,4,5,6	Identify the fixing accessories pictured below		Practical Task 2

WHS regulation regarding training for work undertaken (WHS Regulation 39)	OH&S issues related to drilling, cutting, eye protection, metal filings, swarf, noise	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support 18.1 Workshop safety practices 18.2 Tools used in electrical work 18.6 Drills and drilling			Q3	Q8, Q9, Q10	Slide 2,3,4,5,6,16,17,18,19	Identify the fixing accessories pictured below		Practical Task 2
WHS regulation regarding training for work undertaken (WHS Regulation 39)	Using power drills, drill bits, change drill speeds	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support 18.1 Workshop safety practices 18.2 Tools used in electrical work 18.6 Drills and drilling			Q3	Q8, Q9, Q10	Slide 2,3,4,5,6,16,17,18,19	Identify the fixing accessories pictured below		Practical Task 2
WHS regulation regarding training for work undertaken (WHS Regulation 39)	Install a fixing device and accessory capable of supporting up to 20 kg on the metal plate.	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support 18.1 Workshop safety practices 18.2 Tools used in electrical work 18.6 Drills and drilling			Q3	Q8, Q9, Q10		Identify the fixing accessories pictured below		Practical Task 2
<b>Clause 1.7. Selection and installation of electrical equipment</b>	<b>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:</b>										
Clause 1.7.1 (a) and (b)	types and safe application of using adhesives and tapes as fixing devices (load limits of different commercial products)	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support		Q7		Q11, Q12	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below		Practical Task 2
Clause 1.7.2 (d)	accessories that may be fixed using adhesives and tapes	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support				Q11, Q12	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below		Practical Task 2
Clause 1.7.1 (a), and (b) Clause 1.7.2 (a) and(d)	techniques for the application of adhesives and tapes	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support				Q11, Q12	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below		Practical Task 2
WHS regulation regarding training for work undertaken (WHS Regulation 39)	tools used to apply and cut adhesives and tapes	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support				Q11, Q12	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below		Practical Task 2
WHS regulation regarding training for work undertaken (WHS Regulation 39)	hazards and safety measures when working with adhesives and chemical fixing devices (fumes, cutting, eye protection, physical contact, hand protection, ingestion)	Pethebridge, Electrical Wiring Practice 8e	5.1 Accessories for fixing and support	Q29			Q11, Q12	Slide 2,3,4,5,6,15	Identify the fixing accessories pictured below		Practical Task 2