

VU22673 Carry out basic network cabling for extra low voltage (ELV) equipment and devices

Element/Performance criteria	MHE text	Heading reference	Testbank	Quiz	Case	Worksheets	Interactives	Animations	YouTube playlist	PPTs
1. Prepare to connect equipment and devices										
1.1 Scope of the work and/or work instruction is clarified with the appropriate person	Hand, Telecommunications	1.5 Planning and understanding requirements	4, 17, 21, 22, 24, 26, 27, 33, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 61, 71	17, 31						1 - Telecommunications regulations and planning
1.2 Advice is sought from the appropriate person to ensure the work is coordinated effectively with others			14, 22, 25, 26, 57, 58, 61, 71	35		20				
1.3 Network cabling, testing equipment and tools needed to carry out the work are obtained and checked	Hand, Telecommunications	1.6 Materials, tools and equipment	8, 15, 23, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 63, 64, 70, 71	1, 2, 3, 4, 6, 7, 8, 24, 38, 40, 41, 47, 48, 50, 56		18				1 - Telecommunications regulations and planning
1.4 Relevant work health and safety/occupational health and safety (WHS/OHS) procedures for work area are identified	Hand, Telecommunications	1.4 Work health and safety procedures	1, 7, 13, 18, 22, 24, 26, 28, 34, 52, 53, 54, 55, 56, 57, 58, 62	19, 33, 36, 51, 52	1.4, 3.3, 3.4	8, 13, 21			4	1 - Telecommunications regulations and planning
2. Make connections and terminations in-line with work instructions										
2.1 Cabling is run according to work instructions without damage or distortion to itself, surrounding environment or services	Hand, Telecommunications	2 - Preparing and maintaining cabling	5, 14, 20, 34, 64, 68, 69, 70, 71	23, 29, 30, 32, 55		12				2 - Telecommunications regulations and planning
2.2 Network equipment or ELV devices are installed inline with work practices that satisfy electrical principles for safety and functionality and manufacturer's instructions	Hand, Telecommunications	2 - Preparing and maintaining cabling	3, 6, 9, 11, 18, 19, 21, 28, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 63, 65, 66, 67, 68, 69	5, 9, 10, 13, 14, 18, 19, 25, 26, 29, 30, 34, 37, 43, 44, 49, 53, 54, 55		5, 6, 7, 9, 11			1, 2	2 - Telecommunications regulations and planning
2.3 Cabling connections and terminations are completed in accordance with work instructions and safe work practices	Hand, Telecommunications	2 - Preparing and maintaining cabling	9, 12, 16, 20, 21, 23, 24, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 70, 71	9, 10, 11, 12, 15, 16, 18, 20, 27, 39, 45, 46, 53, 54	2.1	4, 14, 15, 16, 17				2 - Telecommunications regulations and planning
2.4 Unexpected events or conditions are referred to the appropriate person for advice and directions			22, 62							
3. Complete cabling work task										
3.1 Test equipment is connected in accordance with manufacturer's instructions and connections and termination are tested to ensure compliance and safe working order	Hand, Telecommunications	3 - Terminating and testing cables and earth wires	10, 21, 29, 30, 31, 32, 33, 34, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 63, 65, 66, 67, 68, 69, 70, 71	28, 50, 56		22, 23			3	3 - Terminating and testing cables and earth wires
3.2 Work area is cleaned and made safe in accordance with established procedure			71	42						
3.3 Tools and equipment are cleaned, checked and returned to storage			15, 41, 42, 43, 44, 45, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 71	56						
3.4 Appropriate person is notified of the completion of the cabling work task in accordance with established procedure			2, 13, 16, 17, 23, 59, 60	21, 22		1, 2, 3, 10, 19, 24				
Required Skills										
Apply ELV cabling skills in accordance to job instructions and separation requirements			5, 11, 15, 18, 20, 40, 47, 63, 70	11, 12, 29, 30, 43, 44, 47, 48, 53, 54		4				
Connect network equipment and devices using standard cable termination techniques			3, 9, 35, 37, 38, 43, 44, 45	18, 37, 39		5, 16				
Connect and use test equipment to test for correct operation of cable connections and terminations			10, 53, 54, 57, 63	28, 50, 56	3.1, 3.2, 3.5	18, 22, 23				
Demonstrate work practices that satisfy electrical principles for safety and functionality			6, 12, 18, 19, 23, 24, 25, 26, 27, 29, 30, 31, 51, 52, 56, 57, 58, 65, 66, 67	1, 2, 3, 4, 6, 7, 19, 20, 23, 33, 34, 40, 41, 43, 44, 51, 52, 55		6, 7, 10, 11				
Required Knowledge										
Types of ELV cables including but limited to: structured pair; figure 8; co-axial	Hand, Telecommunications	2.2.7 Cabling types	20, 36, 37, 50	24, 38, 53, 54		17	4			
Relevant WHS/OHS regulations and safe work practices in the electrotechnology industry	Hand, Telecommunications	1 - Telecommunications regulations and planning	7, 13, 34, 62	19, 20, 34, 36, 42, 55	1.4	8, 13, 21				
Cabling rules, principles and techniques	Hand, Telecommunications	1 - Telecommunications regulations and planning	1, 2, 4, 16, 17, 21, 39, 55, 70	15, 16, 17, 23, 25, 26, 29, 30, 33, 45, 46, 55	1.1, 1.2, 2.1, 2.2, 2.3, 2.4	4, 9	1, 2, 3	1, 3		

Networking equipment and devices	Hand, Telecommunications	2 - Preparing and maintaining cabling	3, 32, 41, 42, 68, 69	5, 8, 9, 10, 13, 14, 25, 45, 46, 56	2.5, 3.1					
Procedures for dealing with unexpected situation when working with ELV cables			11, 61	31, 35		20				
Cabling regulations	Hand, Telecommunications	1 - Telecommunications regulations and planning	1, 2, 8, 14, 22, 28, 33, 46, 48, 49, 50, 58, 59, 60, 64, 71	21, 22, 27, 32, 45, 46, 49		1, 2, 3, 12, 14, 16, 19, 24				