



Australian Government

MSFFDT3001 Install low-voltage technology, automation, and intelligent management systems in furnishing

Release: 1

MSFFDT3001 Install low-voltage technology, automation, and intelligent management systems in furnishing

Modification History

Release 1. New unit of competency.

Application

This unit of competency describes the skills and knowledge required to identify job requirements and then select, fit and install low-voltage technology, automation and intelligent management systems in furnishing products. The unit involves taking measurements to support the accurate fit of the items; and correctly using and applying adhesives and concealment methods suited to the installation design, product being installed, and furnishing product material. It also involves understanding quality and compliance indicators and requirements so that the installation complies with industry-accepted standards.

This unit applies to unlicensed installers working in all sectors of the furnishing industry using low voltage (24 volts or less) technology, automation, or intelligent management systems. The furnishing products involved are diverse, and may include kitchen and bathroom cabinetry, fitted furniture and window furnishings. The items installed are also diverse and may include docking stations, and sound and visual devices.

No licensing, legislative or certification requirements apply to this unit at the time of publication. Where installation involves wiring to be connected to mains power, electrical work must be completed by a qualified licensed electrician

Pre-requisite Unit

Not applicable.

Unit Sector

Furniture design and technology

Elements and Performance Criteria

Elements	Performance Criteria	
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
1. Prepare for installation of low-voltage technology, automation, and intelligent management system item	1.1	Identify job and product requirements from work order and visual representations of installation design
	1.2	Identify work health and safety (WHS) and personal protection requirements of installation according to

Elements Elements describe the essential outcomes.	Performance Criteria Performance criteria describe the performance needed to demonstrate achievement of the element.	
into furnishing		workplace procedures
	1.3	Identify and select required installation items based on the work order
	1.4	Identify and select tools, equipment and accessories to be used during installation and check their safe and effective operation
	1.5	Clean and prepare furnishing product surfaces to enable accurate fitting
2. Install low-voltage technology, automation and intelligent management system item into furnishing	2.1	Take accurate measurements and fit item according to design requirements
	2.2	Secure item using fitting tools according to supplier instructions and workplace procedures
	2.3	Apply adhesives according to supplier instructions and workplace procedures
	2.4	Test installed item against expected performance and troubleshoot performance problems in line with own level of responsibility
	2.5	Place cabling concealments according to installation design
3. Finalise installation	3.1	Check that completed work complies with quality and work order requirements, and rectify identified deficiencies
	3.2	Clean work area and surfaces, and dispose of waste safely and sustainably according to workplace procedures
	3.3	Check tools and equipment, and tag and report faulty items according to workplace procedures
	3.4	Clean and store remaining tools and equipment according to workplace procedures
	3.5	Identify and store surplus unused items for re-use and recycling according to workplace procedures
	3.6	Complete required workplace documentation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria of this unit of competency.

Numeracy skills to:

- interpret, discuss and use mathematical information in work orders and design specifications
- use a blend of ‘in the head’ and formal methods and tools to correctly complete measurements
- estimate and measure installation items

Reading skills to:

- interpret routine workplace documentation, including work orders, WHS requirements, and workplace installation procedures

Unit Mapping Information

Release 1. New unit of competency. No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

Assessment Requirements for MSFFDT3001 Install low-voltage technology, automation, and intelligent management systems in furnishing

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements, performance criteria, and foundation skills of this unit, which must include the ability to:

- safely and correctly install in furnishing a minimum of the following items in line with job requirements and workplace procedures:
 - one low-voltage hardware item
 - one item requiring automation
 - one item from an intelligent management system.

In the course of each of the above installations, the person must:

- interpret work order and design specifications relating to the installation
- apply safe lifting and handling procedures
- follow work instructions and safe operating procedures to:
 - minimise risk of injury to self and others
 - prevent damage to surface, tools, equipment and materials
 - maintain required production output and quality
 - use hand and power tools safely
 - use personal protective equipment (PPE)
- use and dispose of waste sustainably
- avoid backtracking, work flow interruptions and wastage
- identify and resolve routine problems and faults encountered

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- features of installation work orders and visual representations of designs, and how to identify and interpret key information
- emerging trends in installing low-voltage technology, automation and intelligent management systems in furnishing products
- work health and safety (WHS) procedures, practices and regulations specific to installations described in performance evidence
- workplace procedures relating to:

- manual handling, including lifting and carrying
- safely installing, securing and concealing installation items
- tagging and reporting faulty tools and equipment
- disposing of waste safely and in an environmentally sustainable manner
- cleaning and storing tools and equipment
- storing surplus unused items
- recording and reporting fitting and installation information
- work order requirements, and industry-accepted quality indicators and requirements, relating to installations described in performance evidence:
 - boundaries of work for unlicensed personnel
 - key requirements of Australian standards for individual installers
 - safety considerations and potential dangers associated with incorrect installation
- techniques for installing, securing, and concealing items described in performance evidence
- mathematical methods for estimating and measuring installation items
- types of common problems that occur during installation, and how to avoid and respond
- types, characteristics, uses, expected performance benchmarks, and limitations of low-voltage technology, automation, intelligent management system items and after-market serviceability:
 - cabinet hardware
 - charging devices
 - docking stations
 - lighting
 - sound
 - visual devices
- types, characteristics, uses, maintenance and limitations of the following items required for the installations described in performance evidence:
 - adhesives and their suitability for different material types
 - hand tools
 - power tools
- documentation requirements for installation work described in performance evidence

Assessment Conditions

Assessment must occur in the workplace, or in a simulated environment that reflects workplace conditions and contingencies.

Access is required to tools, materials, equipment and specifications for the installation described in the performance evidence above, including:

- work orders and design specifications
- workplace and WHS procedures specified in knowledge evidence
- supplier instructions and manufacturer specifications

- furnishing items requiring installation of low-voltage technology, automation, and intelligent management systems
- low-voltage technology, automation and intelligent management system items, and associated required hand and power tools, equipment, materials and accessories
- PPE applicable to job requirements.

Assessors of this unit must satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards.

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