Australian Government

Department of Education, Employment and Workplace Relations

PRSTS202A Install security equipment/system

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This competency standard covers the skills and knowledge required to install a range of types of security equipment and systems. It requires the ability to select and use materials, tools and equipment appropriate to job requirements, effectively install security equipment/systems for the intended purpose, and complete documentation in an accurate and timely manner. This work applies in extra low voltage as defined through the Australian Standards AS 2201 (1986) environments. These work functions would be carried out under routine supervision within organisational guidelines.
Functional Area: Core, Technical Security
This competency standard covers the skills and knowledge required to install a range of types of security equipment and systems. It requires the ability to select and use materials, tools and equipment appropriate to job requirements, effectively install security equipment/systems for the intended purpose, and complete documentation in an accurate and timely manner. This work applies in extra low voltage as defined through the Australian Standards AS 2201 (1986) environments. These work functions would be carried out under routine supervision within organisational guidelines.
Functional Area: Core, Technical Security

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Prepare for installation	1.1 Work order and client requirements are reviewed and clarified with appropriate person(s) as required in accordance with organisational requirements
	1.2 Security equipment / system to be installed is identified and checked against work order in accordance with organisational procedures
	1.3 Tools, equipment and materials are selected appropriate to job requirements and checked for operational effectiveness in accordance with manufacturer's specifications and organisational procedures
	1.4 Suitable personal protective equipment is selected and maintained in accordance with OHS and organisational requirements
	1.5 Potential and existing risks and hazards in the work area are identified and controlled in accordance with OHS, legislative and organisational requirements
2 Install security equipment / system	2.1 All work is conducted using safe operating practices in accordance with OHS, legislative and organisational requirements
	2.2 Security equipment / system is installed in specified positions and locations to maximise security coverage in accordance with manufacturer's specifications and client requirements
	2.3 Security equipment / system is fixed securely and is terminated and connected to cable as required in accordance with manufacturer's specifications and relevant industry standards

		2.4 Security equipment / systems are installed without damage or distortion to the surrounding environment or services and in a manner that maximises safety of self and others
		2.5 Factors affecting the achievement of assignment instructions are promptly identified and recommendations for variation to installation plans are negotiated with and approved by appropriate person(s)
3	Complete installation	3.1 Final inspections are undertaken to ensure operational effectiveness of installed security equipment / system in accordance with industry, legislative and work order requirements
		3.2 Notification of work completion is made to appropriate person(s) in accordance with organisational procedures
		3.3 Work area, tools and equipment are cleaned and stored in accordance with OHS and organisational requirements
		3.4 Malfunctions, faults, wear or damage to tools is accurately documented and reported for repair or replacement in accordance with organisational policies and procedures
		3.5 Relevant documentation is completed in an accurate and timely manner in accordance with industry, legislative and organisational requirements

Required Skills and Knowledge

Not applicable.

Evidence Guide

The Evidence Guide identifies the requirements to be demonstrated to confirm competence for this unit. Assessment must confirm sufficient ability to use appropriate skills and knowledge to install security equipment and systems. Assessment of performance should be over a period of time covering all categories within the Range of Variables statements that are applicable in the learning environment.

What critical aspects are required for evidence of competency?

Select correct tools and equipment and apply appropriate methods and safe operating practices to install, locate and position security equipment/system to satisfy client job and organisational requirements.

Methodically organise own work tasks, safely and efficiently follow installation procedures and carry out checks to ensure integrity, security and safety of security equipment/systems.

Clean and safely store tools and equipment and reinstate work sites in a clear and tidy condition.

Interpret and comply with all applicable statutory and legislative guidelines and accurately complete all relevant documentation.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

building construction methods and types
technical terminology
types, functions and requirements of security equipment/systems
types, functions and uses of end-of-line devices and resistors
methods of equipment/system installation
installation hazards
methods of fixing equipment/systems
cable termination and connection
methods of sealing cable entries
electrical concepts, electrical connections
cable identification and handling requirements
earthing systems arrangements and requirements
confined space procedures
organisational and client confidentiality requirements
OHS requirements and safe work practices
requirements for compliance with Australian building codes and regulations and Australian Communications Authority cabling standards.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some specific skills are required. These include the ability to:

communicate in a clear and concise manner
read and interpret plans and specifications
use suitable tools and equipment, including hand and power tools
fit end-of-line devices
install and fix security equipment/systems
terminate and connect cable
identify cable

hand cable
solder, drill
carry out basic carpentry
conduct 'fix and make good' practices
methodically organise and prioritise work tasks
solve routine problems
work in confined spaces
apply safe and environmentally aware work practices.

What resources may be required for assessment?

Access to a suitable venue and equipment.
Access to plain English version of relevant statutes and procedures.
Assignment instructions, work plans and schedules, policy documents and duty statements.
Assessment instruments, including personal planner and assessment record book.
Access to a registered provider of assessment services.

What is required to achieve consistency of performance?

For valid and reliable assessment of this unit, the competency should be demonstrated over a period of time and observed by the assessor. The competency is to be demonstrated in a range of situations, which may include involvement in related activities normally experienced in the workplace.
Evidence of underpinning knowledge understanding of processes and principles can be gained through thorough questioning and by observation of previous work.

Assessment against this unit may involve the following:

Continuous assessment in a setting that simulates the conditions of performance described in the elements, performance criteria and range of variables statement that make up the unit.
Continuous assessment in the workplace, taking into account the range of variables affecting performance.
Self-assessment on the same terms as those described above.
Simulated assessment or critical incident assessment, provided that the critical incident involves assessment against performance criteria and an evaluation of underpinning knowledge and skill required to achieve the required performance outcomes.

Key competency levels

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. Information below highlights how these processes are applied in this competency standard.

1 - perform the process
2 - perform and administer the process
3 - perform, administer and design the process

How can **communication of ideas and information** be applied? (**1**)

Appropriate notification is made to relevant persons upon completion of installation work.

How can **information be collected**, **analysed and organised**? (**1**)

Client requirements and work order instructions may be reviewed to estimate and arrange materials, tools and equipment suitable to carry out installation of security equipment/systems.

How are **activities planned and organised**? (**1**)

Ongoing checks of the quality of the installation work are undertaken to ensure the installed security equipment/system conforms to work order and client requirements.

How can **team work** be applied? (**1**)

Additional information and advice may be sought from relevant persons to ensure the most efficient and effective procedures may be applied in the installation of security equipment/systems.

How can the use of **mathematical ideas and techniques** be applied? (**1**)

Mathematical techniques may be used to plan and schedule work tasks and arrange adequate tool and equipment provisioning.

How can **problem solving skills** be applied? (**1**)

Variations to installation plans may be negotiated and implemented in situations where unplanned events or conditions occur.

How can the **use of technology** be applied? (**1**)

Technology may be used to communicate, schedule and document information. It may also be used to carry out installation testing.

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To achieve the performance criteria, some specific skills are required. These include the ability to:
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Range Statement

The Range of Variables provides information about the context in which the unit of competency is carried out. It allows for different work practices and work and knowledge requirements as well as for differences between organisations and workplaces. The following variables may be present for this particular unit:

Work order information may include:
work schedules
completion dates
job requirements and tasks
specific client requirements
access to site and specific site requirements
resource requirements
OHS requirements
legislative requirements
budget allocations
warranties and service information.

Client requirements may relate to:
requirements as detailed in security assessment or client brief
system capabilities and functions
equipment and/or system type
equipment locations and positions
installation procedures and schedule
service and maintenance requirements
monitoring requirements
warranties/guarantees.

Appropriate persons may include:
clients
site managers, project managers
engineers and technicians
technical experts
line managers/supervisors
colleagues
regulatory personnel
security consultants.

Organisational requirements may relate to:
legal and organisational policies and procedures including personnel practices and guidelines
organisational goals, objectives, plans, systems and processes
employer and employee rights and responsibilities
policies and procedures relating to own role, responsibility and delegation
quality and continuous improvement processes and standards
client service standards
defined resource parameters
Occupational Health and Safety policies, procedures and programs
emergency and evacuation procedures
duty of care, code of conduct, code of ethics
access and equity policy, principles and practice.

Security equipment and systems may include:

detection devices, audible/visual warning devices
cameras, monitors and control equipment
control panels, intercoms
wireless equipment, car alarms
electronic readers, electronic recognition controls
electronic locks and locking systems
low voltage lighting, boom gates, turnstiles
bank pop-up screens
biometrics
electric/mechanical fire safety and fire locking systems
low voltage power supplies, batteries
security doors and door controls.

Security systems may be:
electronic
mechanical
computerised
procedural.

Tools and equipment may include:
multimeter, F-set, cable testing equipment
hand tools, power tools, fixing tools, crimp tools, IDS tools
flexible rods, fishing tools
strippers, router, file, followers, spirit level
soldering iron
ladder, scaffold, scissor lift, hoist, drop sheet, batteries
personal protective equipment
communications equipment.

Materials may include:
fixings:
saddles, conduit, loxins, girderclips, wall plugs, hollow wall anchors, silicon, screws, parts and components

wire and cable
solder, insulation tape
glue, paint, patch materials, sealing compounds
electronic components.

Personal protective clothing and equipment may include:
masks, safety glasses, head protection, ear muffs
safety boots, knee pads
gloves
witches hats, flashing lights
warning signs and tapes
fire extinguisher
first aid kit.

OHS policies and procedures may relate to:
hazardous and risk assessment mechanisms
implementation of safety regulations
safety training
safety systems incorporating:

work clearance procedures
isolation procedures
gas and vapour
monitoring/testing procedures
use of protective equipment and clothing

use of codes of practice.
Risks and hazards may include:
non-compliance with building codes and regulations
exposed electrical wiring
manual handling
chemical hazards (battery corrosion)
exposure to:
asbestos, dust, noise, live power, vermin, water, glass fibre, building debris, natural and other gas build-up.
Applicable legislation, **codes and national standards may relate to**:
relevant Commonwealth/State/Territory legislation which affect organisational operation:
Occupational Health and Safety and safe work practices
environmental issues
equal employment opportunity
industrial relations
anti-discrimination and diversity

Australian building codes and regulations
Australian Communications Authority cabling standards
licensing requirements
Australian Standards, quality assurance and certification requirements
relevant industry Codes of Practice
trade practices, award and enterprise agreements
privacy requirements.
Safe operating practices may relate to:
working with electrical wiring, cables and overhead power lines
working with tools and equipment
risk and hazard recognition
emergency procedures
following confined spaces procedures.
Environment may include:
atmosphere
soils
drains
underground water tables
the ecosystem.
Factors may include:
competing work demands
technology/equipment breakdowns
workplace hazards, risks and controls
environmental factors (time, weather)
non-availability of resource and materials

budget constraints.

Documentation may include:

records of security equipment/system positioning
section lists, zone lists, equipment lists
cable identification records, fixings, job card
records of any adjustments to original cable plan
records of faulty or malfunctioning tools and equipment
testing and inspection results
records of materials used.

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Unit Sector(s)

Not applicable.