



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **LMFAH4002A Prepare architectural door hardware schedules**

**Revision Number: 1**

## LMFAH4002A Prepare architectural door hardware schedules

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers examining and assessing door hardware and keying requirements across commercial, industrial and residential applications.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit requires the ability to source relevant information, determine client requirements and use appropriate assessment methods to ensure an accurate determination of architectural hardware equipment/system options to meet client needs. The unit also includes compiling equipment and system requirements keying into schedules for clients.</p> <p>Where estimates and quotes are required, <i>PRSTS317 Provide estimate and quote</i>, should also be selected.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<p>1. Obtain brief from clients</p>	<p>1.1. <b>Job requirements</b> are reviewed and clarified with <b>appropriate persons</b> in accordance with <b>organisational requirements</b></p> <p>1.2. Discussions with <b>customer/client</b> are conducted to establish and clarify <b>scope of work</b></p> <p>1.3. Effective <b>interpersonal techniques</b> are applied when interacting with clients</p> <p>1.4. <b>Specific site requirements</b> are identified and details are correctly documented</p> <p>1.5. <b>Architectural hardware</b> requirements are discussed and <b>applicable legislation, codes and national standards</b> are clarified and agreed upon</p> <p>1.6. Brief documents and architectural plans are arranged in accordance with organisational requirements or company policies</p>
<p>2. Gather, interpret and review information for preparation of hardware schedules</p>	<p>2.1. Site restrictions, regulations and requirements are identified and complied with in accordance with applicable legislation, codes and national standards, and organisational requirements</p> <p>2.2. <b>Information</b> is gathered from identified sources and is relevant to assignment requirements in accordance with applicable legislation, codes and national standards, client and organisational requirements</p> <p>2.3. An <b>assessment</b> is carried out to identify <b>door and frame types</b> and locations to facilitate the accurate determination of architectural hardware requirements</p> <p>2.4. Clients activities and existing architectural hardware arrangements are reviewed to ensure uniformity throughout project</p> <p>2.5. Inconsistency <b>and environmental factors</b> affecting the architectural hardware of the site are identified and assessed in accordance with organisational policies and procedures</p>
<p>3. Produce architectural door hardware schedules</p>	<p>3.1. Information is recorded and documented in accordance with <b>computer program</b> and/or <b>organisational template</b> requirements</p> <p>3.2. Architectural hardware is integrated to reflect building security and electronic requirements</p> <p>3.3. An architectural hardware schedule is prepared in accordance with industry and organisational standards of style, format and accuracy</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>3.4. Recommendations for architectural hardware and alternative options are made in accordance with organisational requirements</p> <p>3.5. <b>Documentation</b> is processed in accordance with applicable legislation, codes and national standards, assignment and organisational requirements</p> <p>3.6. A comprehensive assessment of client architectural hardware requirements is completed within designated timeframes and presented for review to appropriate person</p>
4. Prepare and review keying schedules	<p>4.1. Principles of master keying are applied in accordance with industry practice and organisational requirements</p> <p>4.2. Keying matrix is developed to client requirements, allowing for future system expansion and mechanical capabilities of system</p> <p>4.3. Client keying requirements are confirmed and clarified according to organisational procedures</p> <p>4.4. Appropriate levels of security/access are reviewed with respect to clients assets, activities and existing security arrangements</p> <p>4.5. Information is recorded and documented in accordance with computer program and/or organisational template requirements</p> <p>4.6. Clients requirements are matched to the mechanical possibilities and limitations of master key systems</p> <p>4.7. Options are identified and client is advised on options and alternatives</p> <p>4.8. Sources of assistance in assessing requirements for <b>key systems</b> and <b>master key systems</b> are identified and assistance is sought from appropriate person in accordance with organisational procedures</p>
5. Finalise documentation for submission to client	<p>5.1. Final architectural hardware and/or keying requirements are reviewed and confirmed with client in accordance with organisational requirements</p> <p>5.2. <b>Documentation</b> is accurately prepared and processed and stored in accordance with client, legislative and organisational requirements</p> <p>5.3. Architectural hardware and keying schedules and other documentation are prepared according to organisational procedures</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills include:

- identifying architectural hardware needs
- observing and assessing technical hardware and keying requirements
- reading and interpreting plans, designs and specifications
- applying basic numeracy techniques
- applying safe and efficient work practices
- communicating in a clear and concise manner
- relating to people from different social and cultural backgrounds
- presenting a professional image
- preparing schedules and other required documentation
- planning and sequencing work tasks
- entering data using basic keyboarding skills

#### Required knowledge

Required knowledge includes:

- risk assessment methods and procedures
- available architectural hardware/keying system options and basic requirements for installation
- types and functions of architectural hardware/keying system
- building construction methods and types
- organisational and client confidentiality requirements
- basic problem-solving strategies
- operational principles of information technology
- principles of effective communication
- documentation requirements and processes

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p><b>Overview of assessment</b></p>	<p>A person who demonstrates competency in this unit must be able to examine and assess architectural hardware and/or keying requirements as required in preparation of a brief for client.</p>
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>Critical aspects of assessment and evidence include:</p> <ul style="list-style-type: none"> <li>• identifying site requirements through inspection, discussion with clients and identification of relevant legislation, codes, and standards</li> <li>• accurately identifying door and frame locations, existing architectural hardware, current or future client use patterns and environmental considerations</li> <li>• ability to match architectural hardware products and systems to a client brief or specification and make recommendations, including alternative options</li> <li>• preparation of keying schedules that match to security, access, and current and future use requirements of client.</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<p>This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts. It should also be understood that not always will a keying brief be necessary but should form part of the assessment process.</p>
<p><b>Method of assessment</b></p>	<p>Assessors should gather a range of evidence that is valid,</p>

<b>EVIDENCE GUIDE</b>	
	sufficient, current and authentic. Evidence can be gathered through a variety of ways, including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
<b>Guidance information for assessment</b>	This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with assessing technical security requirements, or other units requiring the exercise of the skills and knowledge covered by this unit.



## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

#### Job requirements

Job requirements may include:

- instructions from supervisor/management
- work schedules and completion dates
- specific client requirements
- site requirements
- security clearance and access requirements
- reporting and documentation requirements
- budget allocations
- associated legislation which may include Building Code of Australia (BCA) and Australian standards

#### Appropriate person

Appropriate person may include:

- client
- site managers
- project managers
- engineers and technicians
- technical experts
- line managers/supervisors
- colleagues
- regulatory personnel
- security consultants
- locksmiths
- architects and interior designers

#### Organisational requirements

Organisational requirements may include:

- legal and organisational operational policies and procedures
- operations manuals
- induction and training materials
- insurance policy agreements
- client and organisational confidentiality requirements

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• organisational goals/objectives/plans/systems/processes</li> <li>• employer and employee rights and responsibilities</li> <li>• own role, responsibility and delegation</li> <li>• quality and continuous improvement processes and standards</li> <li>• client service standards</li> <li>• defined resource parameters</li> <li>• occupational health and safety (OHS) policies/procedures/programs</li> <li>• emergency and evacuation procedures</li> <li>• duty of care, code of conduct, code of ethics, access and equity policy, principles and practice</li> <li>• records and information systems and processes</li> <li>• communication channels</li> <li>• reporting procedures</li> </ul>
<b>Customer/client</b>	<p>Customer/client may include:</p> <ul style="list-style-type: none"> <li>• owner</li> <li>• property/other agent</li> <li>• tenant</li> <li>• building supervisor</li> <li>• manager</li> <li>• project manager</li> <li>• architects</li> <li>• interior designers</li> <li>• government and legal instruments/agencies</li> </ul>
<b>Scope of work</b>	<p>Scope of work may include:</p> <ul style="list-style-type: none"> <li>• personal protection</li> <li>• access requirements</li> <li>• property or assets</li> <li>• conformance with insurance</li> <li>• legislative or other requirements</li> </ul>
<b>Interpersonal techniques</b>	<p>Interpersonal techniques may include:</p> <ul style="list-style-type: none"> <li>• verbal or non-verbal language</li> <li>• two-way interaction</li> <li>• constructive feedback</li> <li>• active listening</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• questioning to clarify and confirm understanding</li> <li>• interpreting non-verbal and verbal messages</li> <li>• observation techniques</li> <li>• use of positive, confident and cooperative language</li> <li>• control of tone of voice and body language</li> <li>• use of language and concepts appropriate to cultural differences</li> <li>• use of clear presentations of options and consequences</li> <li>• demonstrating flexibility and willingness to compromise</li> </ul>
<b>Specific site requirements</b>	<p>Specific site requirements may relate to:</p> <ul style="list-style-type: none"> <li>• access and egress points</li> <li>• time of access</li> <li>• access codes</li> <li>• keys</li> <li>• passes</li> <li>• security clearances</li> <li>• union requirements</li> <li>• OHS requirements</li> <li>• building codes and regulations</li> <li>• heritage listings</li> <li>• noise control</li> </ul>
<b>Architectural hardware</b>	<p>Architectural hardware may include:</p> <ul style="list-style-type: none"> <li>• hinges</li> <li>• pivots</li> <li>• door track</li> <li>• locks</li> <li>• handles</li> <li>• door furniture</li> <li>• door closers</li> <li>• exit devices</li> <li>• sequence selectors</li> <li>• cylinders</li> <li>• keying and master keying</li> <li>• bolts</li> <li>• door stops</li> <li>• door seals</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• kick plates</li> <li>• door protection</li> <li>• sundry hardware</li> <li>• sanitary hardware</li> <li>• automatic operators</li> <li>• access control devices</li> <li>• disabled access hardware</li> </ul>
<b>Applicable legislation, codes and national standards</b>	<p>Applicable legislation, codes and national standards may include:</p> <ul style="list-style-type: none"> <li>• relevant commonwealth and state/territory legislation which affect organisational operation, such as: <ul style="list-style-type: none"> <li>• OHS</li> <li>• environmental issues</li> <li>• equal employment opportunity</li> <li>• industrial relations</li> <li>• anti-discrimination and diversity</li> <li>• licensing arrangements</li> <li>• Australian standards</li> <li>• quality assurance and certification requirements</li> <li>• relevant industry codes of practice</li> <li>• trade practices</li> <li>• award and enterprise agreements</li> <li>• privacy related legislation</li> </ul> </li> </ul>
<b>Information</b>	<p>Information may include:</p> <ul style="list-style-type: none"> <li>• value or importance of assets</li> <li>• insurance policy agreements</li> <li>• special rooms or areas requiring higher level of protection</li> <li>• current/proposed operating environments</li> <li>• assets and systems</li> <li>• activities and functions</li> <li>• existing security systems/equipment</li> <li>• existing management strategies</li> <li>• business and operational plans</li> <li>• incident history</li> </ul>
<b>Assessment may involve</b>	<p>Assessment may involve:</p>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• discussions with client</li> <li>• visual inspections</li> <li>• review of client floor plans and supporting documentation</li> <li>• questioning policy/insurance companies/other bodies</li> </ul>
<b>Site assessment</b>	<p>Site assessment may include:</p> <ul style="list-style-type: none"> <li>• type and condition of building structures</li> <li>• identification of risk areas/weak points</li> <li>• site restrictions, regulations and requirements</li> <li>• access and egress patterns</li> <li>• floor plan</li> <li>• existing security equipment/systems</li> </ul>
<b>Door types</b>	<p>Door types may include:</p> <ul style="list-style-type: none"> <li>• solid core doors</li> <li>• hollow core doors</li> <li>• fire rated doors</li> <li>• acoustic doors</li> <li>• glazed doors</li> <li>• sliding doors</li> <li>• folding doors</li> <li>• frameless doors</li> <li>• glass doors</li> <li>• automatic doors</li> <li>• blast doors</li> <li>• ballistic doors</li> <li>• security screens</li> <li>• other door types</li> </ul>
<b>Frame types</b>	<p>Frame types may include:</p> <ul style="list-style-type: none"> <li>• steel frames</li> <li>• aluminium frames</li> <li>• timber frames</li> <li>• frameless doors</li> <li>• cavity frames</li> <li>• sliding frames</li> <li>• other frames</li> </ul>
<b>Environmental factors</b>	<p>Environmental factors may include:</p> <ul style="list-style-type: none"> <li>• physical environment (e.g. climate proximity to</li> </ul>

<b>RANGE STATEMENT</b>	
	salt water, pools, chemical and dusty environments)
<b>Computer program</b>	Computer program may include: <ul style="list-style-type: none"> <li>• general and propriety software programs</li> </ul>
<b>Organisational template</b>	Organisational template may include: <ul style="list-style-type: none"> <li>• enterprise specific schedules</li> <li>• documents or proformas used to document or record schedules or information</li> </ul>
<b>Documentation</b>	Documentation may include: <ul style="list-style-type: none"> <li>• checklists</li> <li>• reports</li> <li>• floor plans</li> <li>• client briefs</li> <li>• specifications</li> <li>• schedules</li> <li>• site survey</li> </ul>
<b>Key systems</b>	Key systems may include: <ul style="list-style-type: none"> <li>• key to differ (KD)</li> <li>• key to alike (KA)</li> <li>• master keyed (MK)</li> <li>• grand master key (GMK)</li> <li>• great grand master key (GGMK)</li> </ul>
<b>Master key systems</b>	Master key systems is a generic term to describe a group of cylinders operated by more than one key, including: <ul style="list-style-type: none"> <li>• restricted, semi-restricted and non-restricted system numbers</li> <li>• manufacturer restricted</li> <li>• factory restricted</li> <li>• locksmith restricted/managed</li> <li>• association restricted</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

<b>Co-requisite units</b>		