



Australian Government

Department of Education, Employment and Workplace Relations

LMFID5004A Specify structural elements, systems and services for interior spaces

Revision Number: 1

LMFID5004A Specify structural elements, systems and services for interior spaces

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit specifies the skills and knowledge required to specify structural elements, systems and services for interior spaces in order to achieve design requirements.
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Application of the Unit

Application of the unit	<p>This unit supports the attainment of skills and knowledge required to determine structural elements, systems and services required to implement interior designs. It includes the production of drawings that include layout specifications using computer aided design programs. Structural elements may include walls, flooring and ceiling components, and services may include plumbing, drainage, electrics, gas and air conditioning. Interior designs may relate to residential or small to medium scale commercial spaces and may include new or existing buildings.</p> <p>This unit requires employability skills in initiative and enterprise, planning and organising and problem solving in order to determine design specifications.</p> <p>Communication skills are used to interpret and document design information. Self management and learning skills are applied to gain additional information to support design skills.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	<i>LMFID5003A</i>	<i>Evaluate site for interior design brief</i>

Employability Skills Information

Employability skills	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
1. Conduct project evaluation	1.1. Applicable <i>OHS, legislative</i> and <i>organisational</i> requirements relevant to conducting site visits and preparing design specifications are verified and complied with 1.2. <i>Project brief</i> is reviewed and <i>parameters</i> for the project are assessed and confirmed 1.3. Site measurements and drawings are analysed and information on structures and services confirmed 1.4. Construction methods used are identified and implications for design determined
2. Design <i>structural aspects</i> of design	2.1. Location and features of walls are determined and documented 2.2. Location and features of flooring are determined and documented 2.3. Location and features of ceilings are determined and documented 2.4. Location and features of other structures are determined and documented 2.5. Implications of structural designs are identified and addressed 2.6. Costs associated with making structural changes are calculated 2.7. <i>Environmental considerations</i> and <i>access implications</i> for structural ideas are identified and integrated into the design
3. Design service aspects	3.1. Location and features of plumbing are determined and documented 3.2. Location and features of air conditioning, if applicable, are determined and documented 3.3. Location and features of electricity outlets are determined and documented 3.4. Location and features of other service aspects, if applicable, are determined and documented 3.5. Implications of service designs are identified and addressed 3.6. Costs associated with making service changes are calculated 3.7. Environmental considerations and access implications for service ideas are identified and integrated into the design
4. Liaise with specialist professionals	4.1. <i>Specialist professionals</i> are sought out and contacted to assess viability of design 4.2. Costs and work requirements are confirmed with

ELEMENT	PERFORMANCE CRITERIA
	specialist professionals 4.3. Work schedule is developed and tested with industry professionals
5. Prepare design documentation	5.1. Design drawings are completed with layout and specifications for structural, non-structural and service information 5.2. Budget and project implementation schedule is developed 5.3. Design documentation is prepared for client 5.4. Design is presented to client and reviewed for further improvement

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- measurement
- observation
- researching
- ability to resource information
- accessing and applying the Building Code of Australia
- ability to resource information appropriate to interior construction
- documentation skills/ report writing
- mathematical skills for estimating quantities
- ability to establish drawing requirements
- ability to document construction details in a range of scales
- notation of materials, techniques and finishes
- apply safety procedures

Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to the full range of processes for designing structural and service aspects of an interior space
- organisational and site standards, requirements, policies and procedures
- the role of Australian Standards and the Building Code of Australia
- elements and principles of design
- characteristics of materials, products and defects
- procedures for documenting workplace records and information
- appropriate mathematical procedures for estimation and measurement
- environmental protection requirements
- established communication channels and protocols
- problem identification and resolution techniques
- basic building and architectural terminology
- common structural and non-structural methods and technologies used in a residential or small to medium commercial building
- types of services and their structural implications
- materials and methods involved in interior construction
- local regulations/councils etc
- statutory planning regulations affecting interior design
- sub-contractor roles

Evidence Guide

EVIDENCE GUIDE	
<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>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<ul style="list-style-type: none"> • Effectively assess structural and non-structural elements of a site to determine implications for interior design • Design structural aspects of interior space • Identify service aspects of interior space • Complete drawings and specifications for interior design incorporating structural elements and services • Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures • Communicate effectively and work safely with others involved in the project
Context of and specific resources for assessment	<ul style="list-style-type: none"> • The application of competency is to be assessed in the workplace or realistically simulated workplace • Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints • Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context • Assessment is to comply with relevant regulatory or Australian Standards requirements • The following resources should be made available: <ul style="list-style-type: none"> • workplace location or simulated workplace • materials and equipment relevant to assessing viability of structures for domestic properties • specifications and work instructions
Method of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed assessment guidelines of the Furnishing Industry Training Package • Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge • Assessment methods must be by direct observation of tasks and include questioning on underpinning

EVIDENCE GUIDE	
	<p>knowledge to ensure its correct interpretation and application</p> <ul style="list-style-type: none">• Assessment may be applied under project related conditions (real or simulated) and require evidence of process• Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances• Assessment may be in conjunction with assessment of other units of competency
Guidance information for assessment	

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.

OHS requirements

- are to be in accordance with Commonwealth, State or Territory legislation and regulations, organisational safety policies and procedures. Requirements may include but not be limited to the use of personal protective equipment and clothing, fire fighting equipment, first aid equipment, hazard and risk control and elimination of hazardous materials and substances, manual handling including lifting and carrying

Legislative requirements

- are to be in accordance with applicable legislation from all levels of government that affect organisational operation. Requirements may include but not be limited to award and enterprise agreements, industrial relations, Australian Standards, confidentiality and privacy, OHS, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice, duty of care and heritage

Organisational requirements

- may include but not be limited to legal, organisational and site guidelines, policies and procedures relating to own role and responsibility, quality assurance, procedural manuals, quality and continuous improvement processes and standards, OHS, emergency and evacuation, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)

Project brief

- may include but not be limited to client needs and objectives, client aims and objectives and criteria for evaluation, milestones, organisational or personal profiles and aims, image requirements and function, target

RANGE STATEMENT	
	market, budget, timeline, consultation requirements and colour requirements
Parameters	<ul style="list-style-type: none"> may include but not be limited to scope of brief, approval to make changes (legislative and planning), effect or feel trying to be achieved, functionality (short and long term), budget restrictions and established timelines
Structural aspects	<ul style="list-style-type: none"> may include but not be limited to walls, ceilings, flooring, columns, posts, poles, windows, door, beams, cables and trusses
Environmental considerations	<ul style="list-style-type: none"> may include but not be limited to design sustainability, how the use of raw materials effects the ecology and environment and how its continued use will effect the area it has been sourced from, energy consumption in achieving the material, greenhouse gases created, waste levels, resource utilisation and transport effects. Similarly what impact will be felt by reducing or stopping material from the source
Access implications	<ul style="list-style-type: none"> may include but not be limited to implications for people with disabilities and the aged
Specialist professionals	<ul style="list-style-type: none"> may include but not be limited to engineers, plumbers, electricians, communications consultants, licensed builders and architects

Unit Sector(s)

Unit sector	Interior decoration and design.
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		