



Australian Government

MSFID5004 Specify structural elements, systems and services for interior spaces

Release: 1

MSFID5004 Specify structural elements, systems and services for interior spaces

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers specifying structural elements, systems and services for interior spaces in order to achieve design requirements and includes the production of drawings that have layout specifications using computer-aided design (CAD) programs. Interior designs may relate to residential or small to medium scale commercial spaces and may include new or existing buildings.

Licensing, legislative or certification requirements may apply to this unit and relevant state/territory and local government agencies should be consulted to determine any necessary certification or licensing for undertaking interior decoration and design work. Access to construction sites requires certification of general induction training specified by the *National Code of Practice for Induction for Construction Work* (ASCC 2007).

Pre-requisite Unit

MSFID5003 Evaluate site for interior design brief

Competency Field

Unit Sector

Interior Decoration and Design

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| 1 Conduct project evaluation | 1.1 Applicable work health and safety (WHS), legislative and organisational requirements relevant to conducting site visits and preparing design specifications are verified and complied with |
| | 1.2 Project brief is reviewed and parameters for the project are assessed and confirmed |

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| | 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 structural aspects 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 | Environmental considerations and access implications 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	Specialist professionals are sought out and contacted to assess viability of design
		4.2	Costs and work requirements are confirmed with 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

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. Detail on appropriate performance levels for each furnishing unit of competency in reading, writing, oral communication and numeracy utilising the Australian Core Skills Framework (ACSF) are provided in the Furnishing Training Package Implementation Guide.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit context includes:

- WHS requirements, including legislation, building codes, material safety management systems, hazardous and dangerous goods codes, and local safe operating procedures or equivalent
- work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures, Liveable and Accessible Housing Design guidelines, and organisation insurance requirements
- work requires individual to demonstrate discretion,

	judgement and problem solving, plus self-management and learning skills
Scope of brief includes:	• aims • objectives • milestones for the project • organisational or personal profiles • target audience • budget • timeline • consultation requirements • colour requirements • image requirements • function
Structural elements include:	• walls • flooring • ceiling components
Services include:	• plumbing • drainage • electrics • gas • air conditioning
Parameters include:	• scope of brief • approval to make changes (legislative and planning) • effect or feel trying to be achieved • functionality (short and long term) • budget restrictions • established timelines
Structural aspects include:	• walls • ceilings • flooring • columns • posts • poles • windows • doors • beams • cables • trusses
Environmental considerations include:	• design sustainability • how the use of raw materials affects the ecology and environment and how its continued use will affect the area it has been sourced from

	• energy consumption in achieving the material • greenhouse gases created • waste levels • resource utilisation and transport effects • what impact will be felt by reducing or stopping material from the source
Access implications include:	• implications for people with disabilities • the aged
Specialist professionals include:	• engineers • plumbers • electricians • communications consultants • licensed builders • architects
Personal protective equipment includes:	• that prescribed under legislation, regulations and enterprise policies and practices
Information and procedures include:	• work instructions, including plans, drawings and designs • workplace procedures relating to reporting and communication • manufacturer specifications and operational procedures

Unit Mapping Information

Supersedes and is equivalent to LMFID5004A Specify structural elements, systems and services for interior spaces.

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 MSFID5004 Specify structural elements, systems and services for interior spaces

Modification History

Release 1 - New unit of competency

Performance Evidence

- Interpret work orders and locate and apply relevant information
- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Identify materials used in the work process
- Follow work instructions, operating procedures and inspection processes to:
 - minimise the risk of injury to self or others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- Assess structural and non-structural elements of a site to determine implications for interior design and design structural aspects of interior space
- Identify service aspects of interior space to complete drawings and specifications for interior design incorporating structural elements and services
- Access and apply the Building Code of Australia (BCA) and resource information appropriate to interior construction
- Establish drawing requirements and document construction details in a range of scales using correct notation of materials, techniques and finishes, and draft specifications for interior space structural elements and services
- Use mathematical ideas and techniques to correctly complete measurements, calculate area/volume and estimate material requirements
- Communicate ideas and information to enable confirmation of work requirements and specifications, presentation of design/colour concepts, the reporting of work outcomes and problems
- Initiate new ideas and work techniques in specification as necessary
- Avoid backtracking, work flow interruptions or wastage
- Work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity

Knowledge Evidence

- State or territory WHS 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
- Role of Australian Standards and the BCA
- Elements and principles of design, including liveability and accessibility
- 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
- Relevant 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 and councils
- Statutory planning regulations affecting interior design
- Subcontractor roles

Assessment Conditions

- Assessors must:
 - hold training and assessment competencies as determined by the National Skills Standards Council (NSSC) or its successors
 - have vocational competency in the furnishing industry at least to the level being assessed with broad industry knowledge and experience, usually combined with a relevant industry qualification
 - be familiar with the current skills and knowledge used and have relevant, current experience in the furnishing industry.
- Assessment methods must confirm consistency of performance over time rather than a single assessment event and in a range of workplace relevant contexts.
- Assessment must be by observation of relevant tasks with questioning on underpinning knowledge and, where applicable, multimedia evidence, supervisor's reports, projects and work samples.
- Assessment is to be conducted on single units of competency or in conjunction with other related units of competency. Foundation skills are integral to competent performance in the unit and should not be assessed separately.
- Assessment must occur on the job or in a workplace simulated facility with relevant process, equipment, materials, work instructions and deadlines.
- Access is required to materials, equipment and specifications relevant to specifying structural elements, systems and services for interior spaces.

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