Australian Government

MSFID4008 Assess interior light and recommend light fittings

Release: 1

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Modification History

Release 1 - New unit of competency

Application

This unit of competency covers assessing natural and artificial light sources of an interior space and making recommendations for light fittings as part of an integrated decorative solution.

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

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.
1 Interpret lighting requirements from project brief	1.1 Applicable work health and safety (WHS), legislative and organisational requirements relevant to researching and recommending light fittings are verified and complied with
	1.2 Project brief is reviewed and clarified with client to determine lighting requirements
	1.3 Parameters for the project are assessed and confirmed
	1.4 Resources are selected appropriate to work requirements and checked for operational effectiveness
	1.5 Communication with others is established and maintained

		1.6	Available budget for lighting is verified
2	Assess natural light sources	2.1	Site analysis is conducted to assess the natural light and ultraviolet (UV) penetration
		2.2	Project brief and building plans are acquired to assess aspect and orientation
		2.3	Window treatments and placement are examined to analyse their efficiency in controlling light
		2.4	Selection of colours for walls, ceilings, furnishings and wall hangings are reviewed in their effect on raising or lowering the effect of light into the space
		2.5	Characteristics of natural light are researched and reported in accordance with the project brief goals
		2.6	Methods of light control and light control devices are assessed for their affect on natural light
3	Assess artificial light sources	3.1	Artificial light sources and their properties are assessed for adequacy in achieving desired lighting effects
		3.2	Environmental impact of artificial lighting devices are researched and assessed and current technologies identified
		3.3	Location of artificial lights are identified and required changes to location to meet desired effects are determined
		3.4	Affect of artificial lighting on the colour spectrum is analysed
		3.5	Technical terms associated with artificial lighting are used to communicate lighting requirements
		3.6	Special effects that can be achieved using artificial lighting are identified
		3.7	Industry standards and requirements for artificial lighting are researched and identified
4	Select light fittings	4.1	Research is conducted to determine cost and energy efficient light fittings to meet the requirements of an integrated decoration solution
		4.2	Required locations of light fittings are identified
		4.3	Light fittings are selected and specifications documented

	4.4	Electricity board is assessed to determine potential complications with selected light fittings
	4.5	Electrician is consulted to confirm costing and installation requirements to implement lighting schedule
5 Draw and present lighting layouts for an interior space	5.1	Lighting layout is documented using industry symbols and conventions
	5.2	Selection of light fittings are related to layout, including furniture, ceiling forms and natural light
	5.3	Formats for schedules of light fittings are researched
	5.4	Lighting schedule is completed
	5.5	Costing are determined and documented
	5.6	Lighting layout is presented to client

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

Light fittings include:

- lamps
- ceiling lights
- wall lights
- spot lights
- flood lights

Project brief includes:

- client needs and objectives
- client aims and objectives, and criteria for evaluation
- milestones
- organisational or personal profiles and aims
- image requirements and function
- target market
- budget
- timeline
- consultation requirements
- colour requirements

Clients include:

- suppliers
- manufacturers
- private clients
- colleagues
- retailers
- the public

Parameters include:

- scope of brief
- approval to make changes
- effect or feel trying to be achieved

	• functionality (short and long term) • budget restrictions • established timelines
Resources include:	• computers • computer software • design software • computer-aided design (CAD) software • colour boards • storyboards • swatches • product based colour systems, such as Munsell or similar • colour matching system, such as Pantone Matching System (PMS) • journals (directions magazines) • artistic equipment and products • model making equipment
Site analysis includes:	• a visit to the building (home, office or other) to achieve a feel for the intention of the project brief and how natural light may effect it, to assess the level of radiation from the sun into the space and the angles and obstructions caused by other buildings, vegetation or man-made objects. It includes recording information and taking photos
Natural light includes:	• light emitted directly by the sun or reflected from it
UV light includes:	• light that is so blue humans cannot see it. A band of the electromagnetic spectrum between the visible and the X-ray. Photons of UV light are more energetic than photons of visible light
Aspect and orientation include:	• the direction in which a building or space is facing (e.g. north, east, south, west or any variation of this)
Window treatments include:	• blinds • curtains • awnings • shutters • shades • window tinting
Colours include:	• colour principles • psychology • fundamentals • coordination • perception • language

- tonal
- translucent
- contrast
- harmony
- effects on space
- formulas
- colour wheels

Wall hangings include:

- mirrors
- paintings
- etchings
- framed memorabilia
- certificates

Spaces include:

- commercial or domestic spaces
- rooms, such as:
  - bedrooms
  - bathrooms
  - kitchens
  - laundries
  - living spaces
  - multi-purpose rooms
  - storage rooms
  - studies
  - offices
  - garages
  - rumpus rooms
  - media rooms
  - toilets
  - pantries
- entertainment areas
- halls
- workstations

Characteristics include:

- energy efficiency
- glare
- reflection
- intensity
- dynamic (not constant value)

Methods of light control include:

- window treatments
- sails
- building extensions
- patios
- motorised or automated devices

Light control devices include:	• motorised or automated mechanisms linked to window treatments
Artificial lighting devices include:	• dimmers • wall lights • light-emitting diode (LED) • energy efficient globes • incandescent • halogen • fluorescent • discharge lamps
Special effects include:	• dimming • spotlighting • flooding • brightness • creating space • creating focus
Electricity board assessment includes:	• identification of approximate age of board • number of circuits • safety switches • signs of rewiring
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 LMFID4008A Assess interior light and recommend light fittings.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73