



Australian Government

# **MSFFDT4006 Determine work health and safety (WHS) implications of designs**

Release: 1

# **MSFFDT4006 Determine work health and safety (WHS) implications of designs**

## **Modification History**

Release 1 - New unit of competency

## **Application**

This unit of competency covers identifying and assessing WHS implications of furniture designs, including accessories and materials, to determine potential hazards for a range of customer groups and those involved in their production. It includes identifying and acting upon hazards and risks within the workplace, and participating in WHS related training.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## **Pre-requisite Unit**

## **Competency Field**

## **Unit Sector**

Furniture design and technology

## **Elements and Performance Criteria**

Elements describe the essential outcomes.

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

- |   |                            |     |                                                                                                          |
|---|----------------------------|-----|----------------------------------------------------------------------------------------------------------|
| 1 | Identify principles of WHS | 1.1 | Duty of care and responsibilities of individuals and organisations are defined                           |
|   |                            | 1.2 | Concepts of hierarchy of control are identified and related to the workplace                             |
|   |                            | 1.3 | Codes of practice relating to specific workplace risks are identified                                    |
|   |                            | 1.4 | Importance of a systematic approach to WHS is understood                                                 |
|   |                            | 1.5 | Applicable WHS, legislative and organisational requirements relevant to furniture designs are identified |
|   |                            | 1.6 | The furnishing materials to be used and their key                                                        |

|   |                                                     |     |                                                                                                                                     |
|---|-----------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                     |     | characteristics are identified                                                                                                      |
| 2 | Assess WHS implications for furniture manufacturing | 2.1 | Hazards associated with materials used in the manufacture of furniture are identified                                               |
|   |                                                     | 2.2 | Hazards associated with production of furniture are identified                                                                      |
|   |                                                     | 2.3 | Safety measures implemented to control hazards to manufacturers are identified and implications for furniture designs evaluated     |
|   |                                                     | 2.4 | Information resources on safety aspects of materials and technology used in the production of furniture are identified and accessed |
| 3 | Assess WHS implications for customers               | 3.1 | Range of customers for furniture products are identified and potential hazards for users determined                                 |
|   |                                                     | 3.2 | Potential hazards associated with components and accessories are identified                                                         |
|   |                                                     | 3.3 | Safety measures implemented to control hazards to users are identified and implications for furniture designs evaluated             |
|   |                                                     | 3.4 | Information resources on safety aspects of furniture design are identified and accessed                                             |
| 4 | Assess risk                                         | 4.1 | Likelihood of hazards causing harm is considered and determined                                                                     |
|   |                                                     | 4.2 | Consequence if the event should occur is evaluated and determined                                                                   |
|   |                                                     | 4.3 | Risk level (likelihood and consequence combined) is considered and determined                                                       |
| 5 | Apply risk control measures to furniture design     | 5.1 | Designs are evaluated for WHS implications                                                                                          |
|   |                                                     | 5.2 | Range of treatments which may eliminate or minimise risks are identified                                                            |
|   |                                                     | 5.3 | Feasible options are subject to detailed analysis, including the identification of resource requirements                            |
|   |                                                     | 5.4 | Most appropriate treatment for addressing risk is selected and applied to design                                                    |

## 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:

- work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements
- work requires individuals to demonstrate conceptual and analytical ability, discretion, judgement and problem solving
- customers or suppliers may be internal or external

### Duty of care includes:

- everything ‘reasonably practicable’ to be done to protect the health and safety of others at the workplace. This duty is placed on:
  - all employers
  - their employees
  - any others who have an influence on the hazards in a workplace

### Hierarchy of control includes:

- the range of feasible options for managing the risk to health and safety. The hierarchy is:
  - elimination of the hazard
  - its substitution with a less harmful version
  - its redesign
  - engineering controls
  - isolation of the hazard from people at the workplace
  - safe work practices
  - redesigning work systems
  - the use of personal protective equipment by people at the workplace

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Systematic approach includes:</b>               | <ul style="list-style-type: none"><li>• hazard identification</li><li>• risk assessment</li><li>• risk control</li><li>• review</li></ul>                                                                                                                                                                                                                                                                                                                    |
| <b>WHS requirements include:</b>                   | <ul style="list-style-type: none"><li>• Commonwealth, state or territory legislation and regulations, organisational safety policies and procedures</li><li>• use of personal protective equipment and clothing</li><li>• firefighting equipment</li><li>• first aid equipment</li><li>• hazard and risk control and elimination</li><li>• control of hazardous materials and substances</li><li>• manual handling, including lifting and carrying</li></ul> |
| <b>Materials include:</b>                          | <ul style="list-style-type: none"><li>• fabrics</li><li>• finishes</li><li>• wood</li><li>• metal</li><li>• plastic</li><li>• paint</li><li>• foam</li><li>• oils</li><li>• animal skin</li><li>• adhesives</li><li>• nails</li><li>• staples</li></ul>                                                                                                                                                                                                      |
| <b>Hazards associated with materials include:</b>  | <ul style="list-style-type: none"><li>• chemical properties:<ul style="list-style-type: none"><li>• toxicity</li><li>• fumes</li><li>• combustibility</li></ul></li><li>• physical properties:<ul style="list-style-type: none"><li>• strength/weakness</li><li>• splintering</li><li>• breakage</li><li>• weight</li></ul></li><li>• components:<ul style="list-style-type: none"><li>• adhesives</li><li>• nails</li><li>• staples</li></ul></li></ul>     |
| <b>Hazards associated with production include:</b> | <ul style="list-style-type: none"><li>• manual handling</li><li>• finishing and production processes</li><li>• use of tools and machinery</li><li>• dust inhalation</li></ul>                                                                                                                                                                                                                                                                                |

|                                                |                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                | <ul style="list-style-type: none"><li>• power sources and leads</li><li>• flying debris</li><li>• fume inhalation</li><li>• trips</li><li>• falls</li><li>• lack of control during pouring</li><li>• machine safety and vibration (direct and indirect consequences)</li></ul>                                                                                                    |
| <b>Range of customers include:</b>             | <ul style="list-style-type: none"><li>• aged and the elderly</li><li>• people with disabilities</li><li>• children</li><li>• adults</li></ul>                                                                                                                                                                                                                                     |
| <b>Potential hazards for users include:</b>    | <ul style="list-style-type: none"><li>• allergies to materials</li><li>• injury from materials or components</li><li>• injury due to design faults</li><li>• lack of stability</li><li>• breakage</li><li>• difficult to handle or install</li></ul>                                                                                                                              |
| <b>Treatments include:</b>                     | <ul style="list-style-type: none"><li>• use of production safety strategies, such as dust and fumes extraction systems</li><li>• materials testing</li><li>• power source protection</li><li>• personal protective equipment</li><li>• use of tested materials and accessories</li><li>• use of specialised safety features and components</li></ul>                              |
| <b>Personal protective equipment includes:</b> | <ul style="list-style-type: none"><li>• that prescribed under legislation, regulations and enterprise policies and practices</li></ul>                                                                                                                                                                                                                                            |
| <b>Information and procedures include:</b>     | <ul style="list-style-type: none"><li>• work procedures/instructions</li><li>• manufacturer specifications and instructions</li><li>• standard forms of workplace process and procedures</li><li>• organisation work specifications and requirements</li><li>• legislation, regulations and codes of practice</li><li>• quality and Australian Standards and procedures</li></ul> |

## Unit Mapping Information

Supersedes and is equivalent to LMFFDT4008A Determine occupational health and safety implications of designs

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>