



**Australian Government**

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

# **LMTFD4016B Sew design prototypes**

**Revision Number: 1**

## **LMTFD4016B Sew design prototypes**

### **Modification History**

Not applicable.

### **Unit Descriptor**

**Unit descriptor** This unit covers the skills and knowledge to assemble a prototype garment using commercial machines.

## Application of the Unit

### Application of the Unit

The unit applies to assembling garments to produce a garment that is not designed to be worn but will be used for the purposes of confirming elements of design and production requirements.

This unit covers sewing and assembly skills only. Lay up, making marker and cutting skills to support the sewing of prototypes are covered in the unit LMTFD4011B Cut fabrics for prototype designs.

Completion of sewing units LMTCL2001B Use a sewing machine, LMTCL2004B Sew components and LMTCL3002B Prepare and produce sewn garment would result in a higher level sewing ability and could therefore be used as evidence of competency against this unit.

Work may be conducted in small to large scale enterprises and may involve individual and team-related activities.

The application of this unit is according to OHS practices of the enterprise and workplace practices, which may include:

- requirements prescribed by legislation, awards agreements and conditions of employment
- standard operating procedures
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control, and recycling

This unit requires the application of skills associated with planning and organising to prepare components and machine for sewing and assembly. Problem solving skills are required to ensure work conforms to requirements and identify any production problems. Communication skills are used to follow patterns and specifications. Self management skills are used to ensure safe use of technology and achievement of design concept.

## Licensing/Regulatory Information

Not applicable.

## **Pre-Requisites**

### **Prerequisites**

## **Employability Skills Information**

**Employability Skills** This unit contains employability skills.

## **Elements and Performance Criteria Pre-Content**

Not applicable.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare for garment assembly	<p>1.1 Relevant information on design elements is collected and organised.</p> <p>1.2 <i>Work pieces</i> are prepared according to design concept.</p> <p>1.3 Pattern pieces are laid out and <i>attached to the fabric</i> to match fabric pattern, nap and weave.</p> <p>1.4 Garment <i>components</i> are laid out according to sequence of assembly operations.</p> <p>1.5 Workbench and seating are set up according to <i>OHS practices</i>.</p> <p>1.6 <i>Machines</i> are <i>set up</i> and adjusted according to specifications for work.</p>
2 Assemble garment components	<p>2.1 Components are assembled according to OHS practices, and accepted <i>garment assembly techniques</i>.</p> <p>2.2 Garment is checked for sizing and appearance.</p> <p>2.3 Garment is adjusted to better display design characteristics and correct fabric alignment, garment fitting and other features.</p>
3 Complete work	<p>3.1 Required <i>hand sewing and finishing</i> is undertaken according to design concept requirements.</p> <p>3.2 Garment is pressed according to fabric requirements and garment construction details.</p> <p>3.3 Quality and impact of finished garment is checked against original design concept.</p> <p>3.4 <i>Assembly issues</i> are noted and communicated to <i>appropriate personnel</i>.</p>

## Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Demonstrates knowledge of:

- techniques in using and maintaining three thread overlocker and commercial sewing machines
- characteristics of a range of commercially available fabrics, including lace, woven and knitted fabrics and threads such as denim, single knits, tricot, gabardine
- safety and environmental aspects of relevant garment assembly processes
- sequence of operations for garment assembly
- the impact of adjustments to garment components or seams
- methods of assembling garment pieces for the purposes of prototype production
- embellishments that are used in garment assembly
- OHS practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- sew accurately using a commercial machine
- read, interpret and follow information on work specifications, standard operating procedures and work instructions, and other reference material
- maintain accurate records
- communicate within the workplace
- sequence operations
- meet specifications
- clarify and check task-related information
- carry out work according to OHS practice

## Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

<b>Critical aspects of evidence</b>	Demonstrates skills and knowledge to: <ul style="list-style-type: none"><li>• operate a commercial sewing and over locking machine to assemble a prototype garment</li><li>• make adjustments to enhance the design</li><li>• apply OHS practices in a simulated work operations</li></ul>
<b>Consistency in performance</b>	Consistently applies skills and knowledge when: <ul style="list-style-type: none"><li>• organising work</li><li>• completing tasks</li><li>• identifying improvements</li><li>• using workplace practices</li><li>• using OHS practices</li><li>• recording and reporting accidents and incidents</li><li>• assessing operational readiness of equipment used and work processes</li><li>• recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions</li><li>• completing work systematically with attention to detail without damage to goods and equipment</li></ul>
<b>Resource implications</b>	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
<b>Context for assessment</b>	Assessment may occur on the job or in an appropriately simulated environment.
<b>Interdependent assessment</b>	This unit may be assessed independently or in combination with other relevant units.

## 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. Add any 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.

Legislative/regulatory requirements	All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.
Work pieces includes	<ul style="list-style-type: none"> <li>• pieces of fabric which have been cut according to the pattern requirements and may include:</li> <li>• a range of fabric types, including cottons, woollens, synthetics, velvets, lace, stretch, knitted, etc.</li> <li>• single and multi-directional prints</li> <li>• interfacings and linings</li> </ul>
Attaching patterns to fabric includes:	<ul style="list-style-type: none"> <li>• pinning</li> <li>• tacking</li> </ul>
Components may include:	<ul style="list-style-type: none"> <li>• sleeves</li> <li>• waistbands - straight/shaped</li> <li>• collars</li> <li>• cuffs</li> <li>• plackets</li> <li>• facings - neck, armhole</li> <li>• binds</li> <li>• zips (dress, skirt, trouser, invisible)</li> <li>• buttons and buttonholes</li> </ul>
OHS practices	<p>OHS practices must include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit and may include:</p> <ul style="list-style-type: none"> <li>• manual handling techniques</li> <li>• standard operating procedures</li> <li>• personal protective equipment</li> <li>• safe materials handling</li> <li>• taking of rest breaks</li> <li>• ergonomic arrangement of workplaces</li> <li>• following marked walkways</li> <li>• safe storage of equipment</li> <li>• housekeeping</li> <li>• reporting accidents and incidents</li> <li>• other OHS practices relevant to the job and enterprise</li> </ul>



- Machines may include:
- commercial sewing machine
  - three thread overlocker
  - zigzag sewing machine
- Set-up includes:
- correct thread, needle size and type, needle guard, tension setting and attachments
  - checking for worn components that may impact on sewing operations
  - routine cleaning and oiling
- Garment assembly techniques includes:
- straight sewing using a range of hem types (double fold, rolled, blind, stitched hem)
  - sewing techniques where the positioning, feeding and handling of work pieces involves contouring, stopping or handling skills required to accommodate fabric variations
  - gathering, easing, tucking
  - gluing and bonding
- Hand sewing and finishing includes:
- attaching buttons and other closures
  - attaching embellishments such as trims, badges, etc.
  - hemming and overstitching
  - gluing and bonding trims, etc.
- Assembly issues may include:
- complex or time-consuming assembly
  - quality
  - difficulty in following pattern or design concepts
  - problems arising from material selection
  - issues relating to sizing or fabric cuts
- Appropriate personnel may include:
- patternmakers
  - designers
  - production personnel
  - sample machinists

## Unit Sector(s)

**Sector** Fashion Design