



Australian Government

Department of Education, Employment and Workplace Relations

HLTART408C Adapt, install and construct postural seating

Release: 1

HLTART408C Adapt, install and construct postural seating

Modification History

HLT07 Version 4	HLT07 Version 5	Comments
HLTART408B Adapt, install and construct postural seating	HLTART408C - Adapt, install and construct postural seating	Unit updated in V5. ISC upgrade changes to remove references to old OHS legislation and replace with references to new WHS legislation. No change to competency outcome.

Unit Descriptor

Descriptor

This unit of competency describes the skills and knowledge required to adapt, install and construct postural seating

Application of the Unit

Application

This unit applies to workers within a rehabilitation environment which involves the application of solutions to effectively seat a client so as to allow them to achieve desired posture, perform required functions and maintain tissue integrity

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills

This unit contains Employability Skills

Elements and Performance Criteria Pre-Content

Elements define the essential outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. Terms in italics are elaborated in the Range Statement.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1. Determine postural seating requirements

1.1 Consider *prescription or instruction* provided by *relevant health professionals* to confirm that all required technical information has been provided

1.2 Discuss and agree upon technical requirements with client and *relevant health professionals*

1.3 Discuss and agree upon technical aspects of postural seating and seating options and attachments to meet client requirements

2. Select postural seating methods

2.1 *Assess* technical aspects of *seating systems* in terms of applicability for specified functional requirements, effectiveness of pressure management and compliance with applicable guidelines

2.2 *Select, manufacture* and/or *modify* custom seating system and/or postural control accessories to meet client requirements in conjunction with *relevant health professional*

2.3 Document specifications for construction and selection in accordance with organisation policies and procedures

ELEMENT	PERFORMANCE CRITERIA
3. Manufacture postural seating systems	<p>3.1 Select appropriate method and/or accessories for postural control</p> <p>3.2 <i>Fabricate</i> the seating system in accordance with WHS requirements, relevant standards and with organisation procedures</p>
4. Install postural seating and/or postural seating components	<p>4.1 <i>Install</i> the seating system in accordance with WHS requirements, relevant standards and with organisation procedures</p> <p>4.2 Instruct client and relevant others in the correct operation, servicing and maintenance of the seating system</p>
5. Evaluate postural seating system	<p>5.1 Measure soft tissue pressures and skin condition at support surfaces</p> <p>5.2 Establish, maintain and store client files in accordance with organisation policies and procedures</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Essential knowledge:

The candidate must be able to demonstrate essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes:

- Awareness of safety and environmental aspects of relevant organisation activities
- Awareness of workplace procedures including:
 - recording/documentation processes/techniques

REQUIRED SKILLS AND KNOWLEDGE

- relevant WHS standards/legislation
- regulatory requirements
- health funds/policies
- codes of practice
- Awareness of organisation policies in relation to the scope of the role of the Assistive/Rehabilitation Technology Technician
- Awareness of the range and characteristics of commercially available seating systems and/or components and how they can be used to meet specified client requirements
- Awareness of relative clinical, practical and other advantages/disadvantages of commercially available seating systems and/or components
- Knowledge of terminology related to postural seating
- Awareness of the biomechanics of postural seating
- Awareness of the effects of the client's postural positioning on the physiological conditions
- Awareness of the anatomy of the musculo-skeletal system
- Awareness of the range and characteristics of diagnoses for clients requiring postural seating
- Awareness of the range and characteristics of postural containment strategies including:
 - pelvic straps
 - shoulder retractors
- Awareness of the aetiology of pressure sores
- Awareness of assessment methods for, interface pressure in soft tissues

Essential skills:

It is critical that the candidate demonstrate the ability to:

- Communicate with clients and relevant others in order to provide clear and precise information about the proper maintenance and function of the seating system and/or its modifications
- Consider the mounting of the seating system and/or components to a mobility device
- Identify problems and bring them to the attention of the appropriate person
- Maintain accurate records
- Make and read engineering drawings and sketches
- Measure fundamental angles, masses and lengths
- Measure interface pressures
- Provide technical support in selection of seating systems and/or postural control components to meet client requirements
- Select appropriate materials and techniques for postural seating
- Use design skills in the appropriate selection of materials for seating system manufacture, repair and/or modification
- Use hand tools and machinery to undertake adjustments and modifications as required

REQUIRED SKILLS AND KNOWLEDGE

In addition, the candidate must be able to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes the ability to:

- Apply procedures and processes including reporting requirements
- Communicate with work colleagues, associates and clients including:
 - teamwork
 - client confidentiality
 - interpersonal skills
- Manage time and workload
- Use literacy skills required to fulfil job role in a safe manner
- Use numeracy skills required to fulfil job role

Evidence Guide

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 this Training Package.

Critical aspects for assessment and evidence required to demonstrate this competency unit:

- The individual being assessed must provide evidence of specified essential knowledge as well as skills
- Observation of workplace performance is essential for assessment of this unit
- Consistency of performance should be demonstrated over the required range of situations relevant to the workplace
- Where, for reasons of safety, space, or access to equipment and resources, assessment takes place away from the workplace, the assessment environment should represent workplace conditions as closely as possible

EVIDENCE GUIDE

- Access and equity considerations:*
- All workers in the health industry should be aware of access and equity issues in relation to their own area of work
 - All workers should develop their ability to work in a culturally diverse environment
 - In recognition of particular health issues facing Aboriginal and Torres Strait Islander communities, workers should be aware of cultural, historical and current issues impacting on health of Aboriginal and Torres Strait Islander people
 - Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on health of Aboriginal and/or Torres Strait Islander clients and communities
- Context of and specific resources for assessment:*
- Assessment should replicate workplace conditions as far as possible.
 - Simulations may be used to represent workplace conditions as closely as possible.
 - Where, for reasons of safety, access to equipment and resources and space, assessment takes place away from the workplace, simulations should be used to represent workplace conditions as closely as possible.
 - Resources essential for assessment include:
 - access to appropriate workplace where assessment can take place
 - access to relevant supporting health professionals
- Method of assessment:*
- Observation in the work place
 - Written assignments/projects
 - Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice.
 - Questioning
 - Role play simulation

EVIDENCE GUIDE

Related units:

This unit should be assessed in conjunction with the following related unit:

- HLTART401B Work effectively in the rehabilitation environment

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. 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.

Seating system may include:

- Commercially available postural support devices
- Postural restraints
- Commercially available seating systems
- Custom made seating solutions

Relevant health professionals may include:

- Rehabilitation engineer
- Medical practitioner
- Occupational therapist
- Physiotherapist
- Nurse
- Speech pathologist

Prescription or instruction may include:

- Technical history of previous devices
- Technical assessments
- Technical requirements to meet assessed therapy goals
- Basic measurements of seating system components

RANGE STATEMENT

Selection may include:

- Interfacing the seating systems to the mobility device
- Selection of appropriate fabrication materials
- Tolerance for error in manufacture
- Service life of the seating system
- Seating system cost benefit
- Available manufacturing resources
- Seating system availability
- Properties of polymer foams
- Personal transportation requirements
- Continence issues

Assessment may include:

- Discussion with relevant health professionals

Installation may include:

- Wheelchair modifications to accept seating components and systems
- Support systems for ancillary devices including:
 - trays
 - ADLs
 - AACs
 - ECUs
- Power supply for ancillary devices

Manufacture may include:

- Adaptation of commercially available therapeutic components for use on the wheelchair
- Design and manufacture of unique components and/or devices for use on the wheelchair
- Adaptation of alternative manufacturer's components to the wheelchair
- Manufacture of custom support surfaces using various techniques

RANGE STATEMENT

Modification processes may include:

- Use of hand tools, power tools and machinery
- Welding: MIG, TIG, brazing
- Sewing
- Positive and negative mould lay up
- Thermoplastic fabrication and forming
- Composite material fabrication
- Thermoset foam moulding
- CAD_CAM shaping of foam

Seating systems may include:

- Postural support components attached to the wheelchair, wheelchair seat or backrest including:
 - lateral thoracic supports
 - hip blocks
 - thigh adductor blocks
 - pommels
 - lumbar supports
 - foot positioners
- Commercially available seat cushions and backrests
- Commercially available seating systems
- Custom made positional seating components
- Custom made seating systems
- Postural restraints

Unit Sector(s)

Not Applicable