



Australian Government

HLTOPD004 Edge and fit ophthalmic appliances

Release: 1

HLTOPD004 Edge and fit ophthalmic appliances

Modification History

Release	Comments
Release 1	This version was released in <i>HLT Health Training Package release 2.0</i> and meets the requirements of the 2012 Standards for Training Packages. Significant changes to the elements and performance criteria. New evidence requirements for assessment, including volume and frequency requirements. Significant change to knowledge evidence.

Application

This unit describes the skills and knowledge required to perform edging and fitting of spectacle lenses and to apply techniques, treatments and processes to finish or repair spectacle frames and lenses.

This unit applies to optical dispensers who work according to prescriptions provided by optometrists or ophthalmologists.

The skills in this unit must be applied in accordance with Commonwealth and State/Territory legislation, Australian/New Zealand standards and industry codes of practice.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements define the essential outcomes

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

1. Prepare for edging and fitting

- 1.1 Access and correctly interpret required information and prescriptions
- 1.2 Prepare and check equipment and instruments for operational readiness
- 1.3 Select and prepare personal protective equipment as required

2. Perform edging and fitting

2.1 Edge lenses following the tolerances allowed by

ELEMENT**PERFORMANCE CRITERIA**

Elements define the essential outcomes

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

Australian standards

2.2 Produce accurate formers

2.3 Use special hand-edging techniques to modify lenses for change-overs and centring corrections

2.4 Edge, drill, groove and mount spectacle lenses to frames

2.5 Edge, drill and mount spectacle lenses to rimless frames

3. Adjust and repair frames and lenses

3.1 Repair and modify spectacle frames to meet client needs

3.2 Complete standard alignment of frames to required standards

3.3 Produce tinted lenses to required standards

4. Utilise computer technology

4.1 Select appropriate technology and software applications to achieve the requirements of the task

4.2 Adjust workspace, furniture and equipment to suit the ergonomic requirements of the user

4.3 Use technology according to organisation requirements and in a way which promotes a safe work environment

4.4 Carry out or arrange routine maintenance in order to ensure that equipment is maintained in accordance with manufacturer's instructions and organisation requirements

4.5 Identify equipment faults and take action in accordance with manufacturer's instructions or by reporting fault to designated person

5. Conduct final checking procedures against Australian standards

5.1 Determine any axis or centring error and apply Australian standards tolerances.

5.2 Verify powers, axes and centration by checking the spectacles on the focimeter

5.3 Check lens surface for scratching and aberrations

5.4 Adjust the frame to standard alignment

ELEMENT**PERFORMANCE CRITERIA**

Elements define the essential outcomes

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

5.5 Check metal framed spectacles for strain and reduce as required

5.6 Clean spectacles using appropriate cleaners

5.7 Clean, maintain and store equipment in accordance with manufacturers requirements and infection control procedures

5.8 Accurately document procedures undertaken according to organisation procedure

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTOPD004 Edge and fit ophthalmic appliances

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Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role. There must be evidence that the candidate has:

- edged and fitted at least 10 pairs of spectacles to Australian standards, demonstrating the appropriate handling of the following types of frames and materials:
 - nylon (nyl-tag) rimless
 - metal full rim
 - plastic full rim
- automatically edged lenses using:
 - former cutting
 - blocking/chucking systems
 - machine operation
 - drilling
 - grooving
- hand edged lenses using:
 - hand bevelling techniques
 - safety chamfering
 - changeovers
- addressed common lens problems:
 - rectifying off-axis lenses
 - reducing unwanted vertical and/or horizontal prism
- repaired and modified spectacle frames, including:

- alignment
- refitting nylon
- re-pinning and riveting joints
- sink joints
- soldering metal frames
- undertaking frame part replacements
- undertake digital frame tracing
- used the features of a manual focimeter for the following tasks:
 - correct neutralisation
 - determination of additions
 - determination of axes
 - determination of centration
 - determination of powers
 - determination of prism
- accurately calculated minimum size uncut (MSU) using centration chart and by calculation to allow for papillary distance (PD) and decentration for prism
- made templates and eliminated errors using:
 - hand techniques
 - machine techniques
- tinted lenses to match tint samples
- mounted lenses

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- Australian standards tolerances
- transmission and absorption data and its role in edging and fitting
- properties of lenses, including:
 - refractive index
 - abbe value
 - specific gravity
 - impact resistance
 - transmission and absorption
- features and use of impact resistant safety lenses including:
 - advantages and disadvantages
 - Australian standards for both general purpose and industrial use
 - evaluation of materials including glass, CR-39 (allyl diglycol carbonate), trivex, higher index plastics, polycarbonate and laminates
 - impact resistance

- impact testing requirements, conditions and procedures
- principles and processing of chemical toughening
- problems and special lens requirements
- filter and tinted lens processes including:
 - Australian standards requirements
 - plastic lens tinting including dyes and tint types, equipment, preparation, problems and solutions
 - transmission testing including equipment and instrumentation, equipment limitations and Australian standards
- vacuum coatings and their use, including:
 - absorptive (tinted) coatings
 - handling, cleaning and care of coatings
 - manufacturing processes
 - multiple layer antireflection (AR) coatings
 - single AR coating
- the effects of surface reflections and ghost images on lenses
- edging and fitting glazing techniques
- frame measurement systems including boxing and datum
- features of different frames and rims and how to work with them:
 - different frame materials and their scope of use
 - techniques for working with frames and rims heating, manipulation, adjusting, handling and repair
 - rimless types
 - drilled rimless frames
 - standard nylon rims
- nasal cut and nasal add techniques
- features and functions of edging and fitting equipment:
 - automatic edgers
 - calibration and checking tools
 - focimeters (lensmeters)
 - frame alignment tools
 - hand edging equipment
 - marking/centration devices
 - edging wheel designs and characteristics
 - machine designs
- current and emerging software applications used in the optical dispensing environment

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - automatic edgers
 - hand edgers
 - blockers
 - markers
 - focimeters (lensmeters)
 - nylon groover
 - drill
 - clavulus
 - parallel rules
 - millimetre (PD) rules
 - frame tools
 - frames
 - lenses
 - adhesive and protection pads/films
 - formers
 - frame heater
 - soldering unit
 - tint bath
 - dyes
- modelling of industry operating conditions, including:
 - integration of time constraints
 - integration of problem solving activities

Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors.

Links

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