



Australian Government

HLTOPD010 Edge and fit optical appliances

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Modification History

Release	Comments
1	This unit of competency was first released in HLT Health Release 10.0.

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 and 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.

Licensing/Regulatory Information

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

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

Technology

Unit sector(s)

Optical Dispensing

Elements and Performance Criteria

Element	Performance criteria
<i>Elements define the essential outcomes</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for edging and fitting	1.1 Access and interpret prescription order requirements to identify optical appliance specification

	1.2 Select edging and fitting equipment, technology and software applications as per task requirements 1.3 Adjust workspace, furniture and equipment to control the risk of injury 1.4 Check and prepare edging and fitting equipment according to organisational procedures and manufacturer instructions 1.5 Select and wear personal protective equipment according to organisational procedures
2. Perform edging and fitting	2.1 Use edging and fitting equipment and technology according to manufacturer instructions and organisational requirements 2.2 Edge and fit spectacle lenses to full rimmed frames according to Australian/New Zealand standards tolerances 2.3 Edge, groove and fit spectacle lenses to nyl-tag frames according to Australian/New Zealand standards tolerances 2.4 Edge, drill and mount spectacle lenses to 3-piece rimless frames according to Australian/New Zealand standards tolerances 2.5 Tint lenses according to order requirements 2.6 Use hand-edging techniques to modify lenses for changeovers and centring corrections 2.7 Complete standard alignment of frames to meet required optical appliance specification
3. Conduct final checking procedures	3.1 Use telescopic focimeter and digital lensometer to verify spectacle powers, axes and centration 3.2 Determine axis and centring errors and verify compliance with Australian/New Zealand standards 3.3 Inspect lens surfaces for scratching and aberrations 3.4 Adjust frame to standard alignment 3.5 Check framed spectacles for strain and make adjustments to comply with Australian/New Zealand standards 3.6 Use cleaning products to clean spectacles according to organisational procedures and manufacturer instructions 3.7 Clean, maintain and store edging and fitting equipment according to manufacturer instructions and organisational disinfection procedures 3.8 Identify equipment faults within scope of own job role and take action according to manufacturer's instructions 3.9 Report equipment faults outside of scope of own job role to designated person according to organisational procedures

	3.10 Document edging and fitting work performed according to organisational procedures
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Foundation skills

The foundation skills essential to performance of this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

Skill	Description
Reading	· interprets and analyses prescription orders, organisational procedures and manufacturer instructions.
Numeracy	· uses charts and calculations to determine the minimum size of uncut lenses to allow for pupillary distance (PD) and decentration for prism. · calculates and verifies compliance with tolerances specified in Australian/New Zealand standards.
Writing	· uses formal and professional optical dispensing terminology. · records work performed, including equipment used and adjustments made.

Digital literacy outcomes are included in the Companion Volume Implementation Guide.

Range of conditions

N/A

Assessment Requirements for HLTOPD010 Edge and fit optical appliances

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/New Zealand standards, including completing each of the following at least once:

- handled the following types of frames and materials:
 - nyl-tag rimless
 - 3-piece rimless
 - metal full rim
 - plastic full rim
- automatically edged lenses, using:
 - frame tracing
 - blocking and chucking systems
 - patternless edging
 - drilling
 - grooving
- hand-edged lenses, using:
 - hand bevelling techniques
 - safety chamfering
 - changeovers
- identified and rectified off-axis lenses
- modified spectacle frames, including:
 - alignment
 - refitting nylon
 - undertake digital frame tracing
- used telescopic focimeter and digital lensometer for the following:
 - neutralisation
 - determination of additions
 - determination of axes

- determination of centration
 - determination of powers
 - determination of prism
- calculated minimum size uncut (MSU) using centration chart and by calculation to allow for pupillary distance (PD) and decentration for prism
- eliminated sizing errors using hand edging techniques
- tinted lenses to match tint samples
- fitted and 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/New Zealand 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/New Zealand standards for both general purpose and industrial use
 - evaluation of materials including glass, CR-39, Trivex, higher index resins, polycarbonate and laminates
 - impact testing requirements, conditions and procedures
 - problems with impact resistant safety lenses and special lens requirements
- filter and tinted lens processes, including:
 - Australian/New Zealand standards requirements
 - resin lens tinting including dyes and tint types, equipment, preparation, problems and solutions
 - Interpretation of transmission data, including types and limitations of equipment and instrumentation used
- 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
- effects of surface reflections and ghost images on lenses
- edging and fitting techniques including milling process
- frame measurement systems including boxing system
- features of frames and rims and how to work with them, including:
 - frame materials and their scope of use
 - techniques for working with frames and rims, including heating, manipulation, adjusting, handling and repair
 - 3-piece rimless types
 - nyl-tag
- nasal cut and nasal add techniques
- features and functions of edging and fitting equipment, including:
 - automatic edgers
 - blocking devices
 - calibration and checking tools
 - edging wheel designs
 - frame alignment tools
 - hand edging equipment
 - marking and centration devices
 - patternless edger designs
 - telescopic focimeter and digital lensometer
- current and emerging software applications used in the optical dispensing environment for edging, fitting and repair processes

Assessment Conditions

The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - adhesive and protection pads and films
 - Australian/New Zealand standards
 - automatic edgers

- blocking devices
- calibration and checking tools
- drill
- dyes
- frame alignment tools
- frame heater
- hand edging equipment
- marking and centration devices
- nylon groover
- optical ruler
- parallel rules
- spectacle frames
- spectacle lenses
- telescopic focimeter and digital lensometer
- tint bath
- modelling of industry operating conditions, including:
 - integration of time constraints
 - integration of problem solving activities

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

Mandatory Workplace Requirements

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
HLTOPD004 Edge and fit ophthalmic appliances	Equivalent	Changes to elements, performance criteria, performance evidence, knowledge evidence, and assessment conditions.

Links

Companion volumes, including implementation guides, are found on the national training register - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>.