



Australian Government

HLTDET005 Construct thermoformed bases and appliances

Release: 1

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Modification History

Release	Comments
Release 1	This version was released in <i>HLT Health Training Package release 3.0</i> and meets the requirements of the 2012 Standards for Training Packages. Minimal changes to the elements and performance criteria. New evidence requirements for assessment including volume and frequency requirements. Removal of pre-requisites Supersedes HLTDT315D

Application

This unit of competency describes the skills and knowledge required to construct thermoformed bases and appliances such as mouthguards, bleaching trays and orthodontic retainers.

This unit applies to work in dental technology.

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 model

1.1 Interpret work order

1.2 Mark outline and scribe finishing lines where applicable

1.3 Apply block-out material as required

2. Thermo-form appliance or base from blank

2.1 Select thermo-forming material in accordance with the work order and appliance to be constructed

2.2 Select thermo-forming equipment according to material

2.3 Apply heat to material to ensure that blank has been

ELEMENT**PERFORMANCE CRITERIA**

Elements define the essential outcomes

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

uniformly softened

2.4 Adapt softened material to model ensuring adaptation is uniform with constant thickness as specified by manufacturer's instructions

2.5 Allow material to cool

2.6 Verify adaptation

3. Trim, shape and finish appliances or bases

3.1 Remove thermo-formed blank

3.2 Trim to outline and fit to model

3.3 Refine outline

3.4 Smooth and finish appliance or base

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 HLTDET005 Construct thermoformed bases and 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:

- read and correctly interpreted work orders and constructed the following 3 appliances:
 - mouthguard
 - bleaching tray
 - splint
- used standard precautions and safe work practices to trim, polish and finish 2 thermo-formed appliances suitable for insertion in the mouth
- critically evaluated the 2 different types of thermo-formed appliances produced to meet technical laboratory and clinician requirements.

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, workplace health and safety (WHS) policies, Dental Board of Australia guidelines on infection control, Commonwealth and State/Territory legislation and organisation policies relating to dental laboratory work
- fundamental oral anatomy including:
 - articulation and occlusion
 - dentition – arrangement of the teeth, naming and coding of teeth

- structures of the oral cavity – hard and soft palate, lateral and posterior borders of the oral cavity, tongue and floor of the mouth
- teeth form and function
- polymer science
- relevant material science for carrying out procedures
- thermoforming technology.

Assessment Conditions

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

- use of suitable facilities, equipment and resources, including:
 - access to work orders
 - Dental Board of Australia guidelines on infection control on which the candidate bases the planning process
 - laboratory safety manuals and procedures in line with relevant Commonwealth and State/Territory legislation
 - WHS policies on which the candidate bases the planning process.

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

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