

## Overview

This standard describes designing and manufacturing, using manual or digital techniques, single tooth coloured restorations from ceramic, polymeric, composite and emerging materials. These restorations include inlays, onlays, veneers, facings, temporary restorations and crowns. You need to manufacture the single tooth coloured restorations which have been prescribed and finish them ready for fitting in the individual's mouth.

The term 'client' is used to mean the member of the oral health care team who has prescribed the custom-made dental device. Clients may be external to the organisation (such as other laboratories, dental practitioners, training schools) or internal (within a dental hospital). The individual is the one for whom the custom-made restoration is being made.

The design and manufacturing process may be carried out in a regulated dental laboratory within a variety of settings.

Users of this standard will need to ensure that practice reflects up to date information, policies and regulations.

## Performance criteria

### *You must be able to:*

1. communicate with relevant others at a pace, manner and level appropriate to their understanding, preferences and needs
2. collate and confirm accuracy of all specification information required for single tooth coloured restorations design and manufacture with relevant others
3. select the necessary components, materials and equipment and confirm that they are fit for purpose
4. set up and operate the manufacturing equipment in accordance with the specification
5. manufacture the single tooth coloured restorations using appropriate methods and techniques
6. monitor the manufacturing process and adjust as required
7. deinvest or retrieve the manufactured product using an appropriate method which releases the item without causing damage
8. ensure that the manufactured product matches the specification and make any necessary adjustments
9. clean and finish the restoration, prepare and package it safely for dispatch together with instructions for the individual and client
10. dispose of waste in accordance with all relevant legislation, guidelines, and workplace procedures
11. complete and store all documentation in accordance with relevant legislation, guidelines, and workplace procedures

## Knowledge and understanding

### *You need to know and understand:*

1. how to communicate with relevant others at a pace, manner and level appropriate to their understanding, preferences and needs
2. the importance of applying standard infection control precautions and the potential consequences of poor practice
3. the principles, uses, methods, techniques and equipment involved in both manual and digital design and manufacturing.
4. the skeletal anatomy, tooth morphology, orofacial musculature and temporomandibular joint function and movement
5. the physiological and pathological changes associated with ageing process and trauma related to the oral environment
6. the importance of retention of the periodontal ligament and the changes in proprioception due to loss of periodontal ligament
7. the principles and practice of:
  - articulation
  - aesthetics and phonetics
8. the principles of restoration design
9. the constituents of restorations (onlays, crowns, post and cores, inlays) and how they are made
10. the classification and sub-classification of materials on the basis of chemical composition and internal structure
11. the mechanical, physical, thermal, chemical and biological properties of materials
12. the purpose of different materials used in the manufacture of restorations
13. the relationship between chemical bonds and the properties of solid materials
14. legal and physical implications of modifying manufacturer products and ensuring quality assurance .
15. how to clean and finish the restoration, prepare and package it safely for dispatch together with instructions for the individual and client
16. different methods of waste disposal and how to apply these
17. the importance of updating documentation and storing individuals records safely and securely

SFH0H23

Design and manufacture single tooth coloured restorations



---

<b>Developed by</b>	Skills for Health
<b>Version Number</b>	4
<b>Date Approved</b>	20 Mar 2025
<b>Indicative Review Date</b>	20 Mar 2030
<b>Validity</b>	Current
<b>Status</b>	Original
<b>Originating Organisation</b>	Skills for Health
<b>Original URN</b>	SFH0H23
<b>Relevant Occupations</b>	Associate Professionals and Technical Occupations, Dental Technician
<b>Suite</b>	Dental Technology
<b>Keywords</b>	Single, tooth, coloured, restorations; digital

---