

Crown Quick Start Guide

3M™ Chairside Zirconia

Indications

- Single-unit crowns
- Three-unit bridges with one pontic supported on each side by a crown
- Inlays/onlays and veneers

Tooth Preparation

Follow the recommendations of professional associations when preparing all-ceramic restorations. A chamfer preparation is recommended.

Design Parameters

The following design specifications must be fulfilled for the finished restorations:

| | Wall thickness | Bridge connector cross section |
|-----------|----------------|--------------------------------|
| Anterior | ≥ 0.8 mm | ≥ 12 mm ² |
| Posterior | ≥ 0.8 mm | ≥ 14 mm ² |

Maintain **0.8 mm** minimum wall thickness!



Cementation

Depending on the requirements, 3M™ Chairside Zirconia restorations may be conventionally cemented with 3M™ RelyX™ Luting Plus Resin Modified Glass Ionomer Cement or 3M™ RelyX™ Unicem 2 Self-Adhesive Resin Cement.



Esthetics designed to match the VITA® classical shade guide



Each zirconia block comes pre-shaded in Bleach, A1, A2, A3, A3.5, B1, C1 and D2 shades designed to match VITA classical shades. The result? Easy matching of 3M Chairside Zirconia to each patient's tooth shade.

Pre-treatment of bonding surface

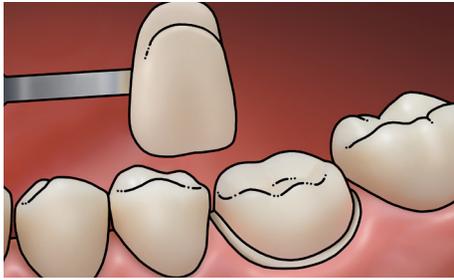


Sandblast with alumina, 30-50 μm grain size at 2 bars (30PSI) to create a matte appearance.

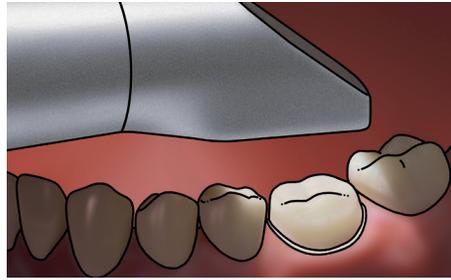


Clean with alcohol and dry with oil-free air.

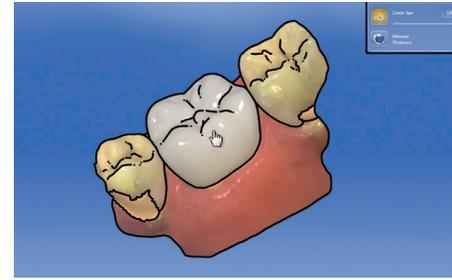
ⓘ **Tip:** After try-in, clean saliva contamination with NaOCl (ca.5%) and rinse with water. Do not use phosphoric acid for cleaning. If you prefer, sandblasting can be done after try-in to remove saliva contamination.



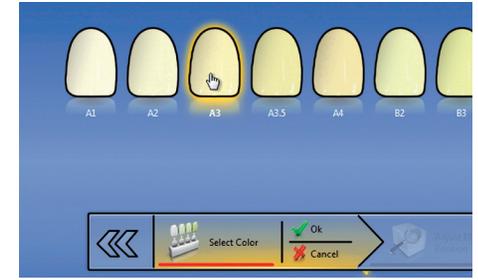
1. Prep the tooth and select the shade.



2. Scan preparation.



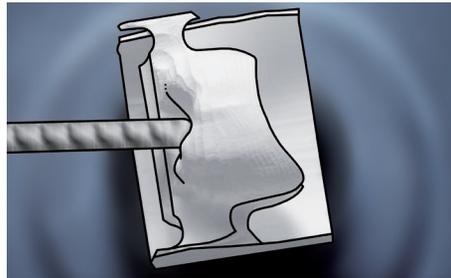
3. Design.



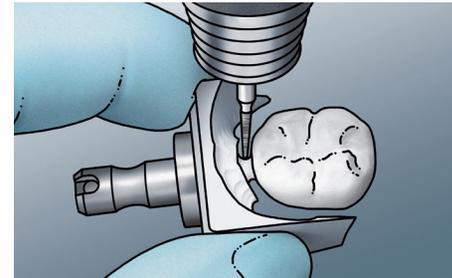
4. Color choice.



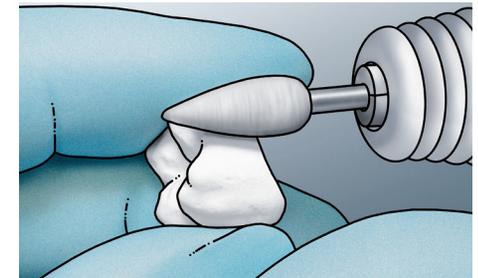
5. The scaling factor is shown on each block and must be entered into the system prior to milling.



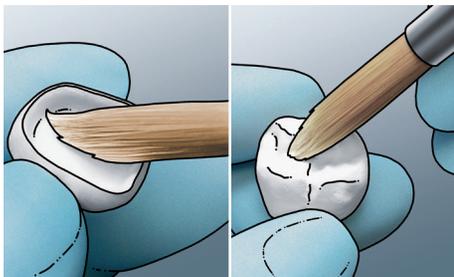
6. The material can be wet or dry milled. Dry milling is recommended. Clean milling chamber before processing 3M™ Chairside Zirconia to avoid contamination. When wet milling, use distilled or deionized water. Avoid contamination from other milling materials.



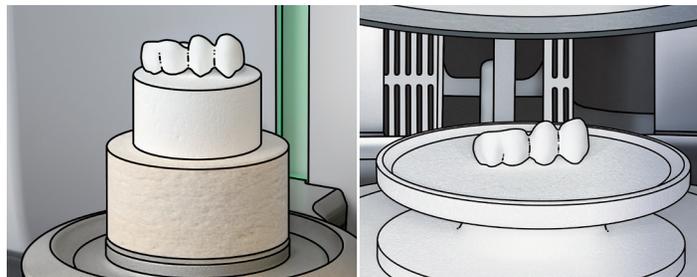
7. Use a diamond bur to separate the restoration from the mandrel.



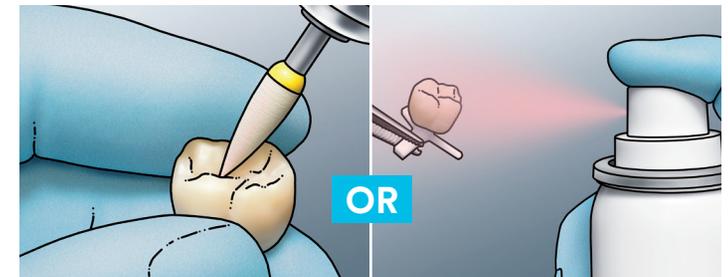
8. Carefully smooth the sprue area with rubber points and cups.



9. Remove all milling dust from all surfaces using a soft artificial hair brush.



10. Place the restoration in the furnace chamber with the occlusal or lingual surface facing down. 3M™ Chairside Zirconia can be fast fired in high temperature sintering furnaces, including the CEREC® SpeedFire furnace (Dentsply Sirona) and Programat® CS4 furnace (Ivoclar Vivadent). With the CEREC® SpeedFire furnace (compatible with CEREC® Software 4.6.0), 3M Chairside Zirconia has a fast sintering time of approximately 20 minutes for a thin-walled crown.^{1,2} Refer to sintering parameters in the 3M Chairside Zirconia Instructions for Use.



11. Use polishers suitable for zirconia restorations **-OR-** use a glaze specifically designed for zirconia restorations and suitable for use in the CEREC® SpeedFire sintering furnace. Be sure to protect the internal surface of the restoration with the required paste. Follow all manufacturers instructions for glazing. If restoration is adjusted after try-in, be sure to repolish the adjusted areas.

► Before using the products described, please refer to the instructions for use provided with the product packages.