

Z Core® Preparation Guide

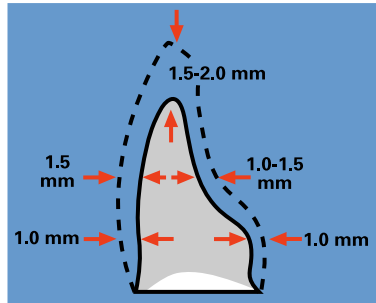
Z Core is a porcelain-fused-to-zirconia restoration. It is created utilizing a computer-aided design (CAD) system, which optically scans a die, creates a digital file, and then mills a zirconia coping from the digital file. The "green state" coping is then transformed during a 12-hour sintering process into a high-strength zirconia core to which porcelain is ultimately applied.

Preparation Techniques The ideal preparation for a Z Core restoration is a chamfer margin, utilizing rounded internal and external line angles as shown. These smoothly flowing angles result in the most accurate scan and assure the most accurate fit. **DO NOT use a 90-degree shoulder nor a trough shoulder preparation.**

Preparation of Anterior and Posterior Crowns

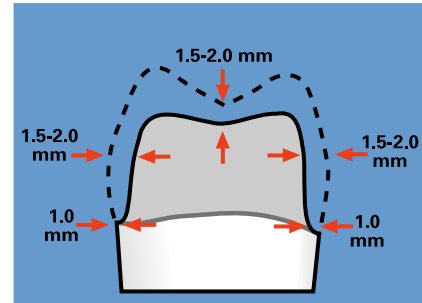
Anterior Crowns

- 1.5 – 2.0 mm incisal reduction
- 1.5 mm labial reduction
- 1.0 – 1.5 mm lingual reduction
- Round the internal line angles
- Chamfer margin



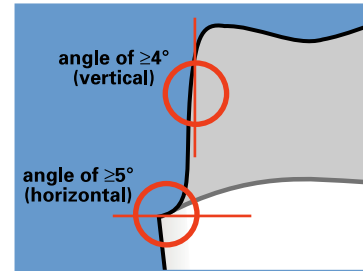
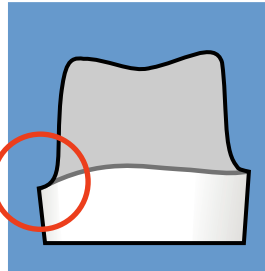
Posterior Crowns

- 1.5 – 2.0 mm occlusal/incisal reduction
- 1.0 – 2.0 mm axial reduction
- Round the internal line angles
- Chamfer margin



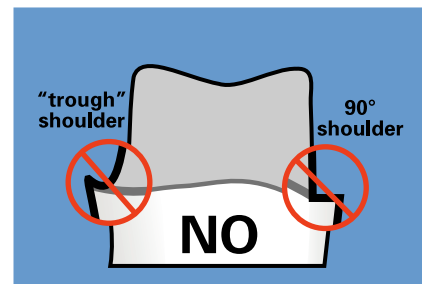
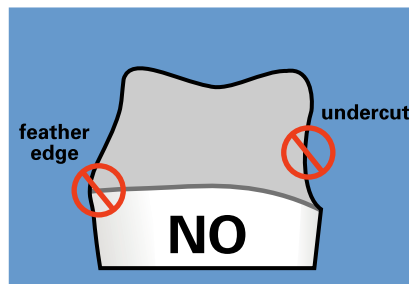
Preparation

Chamfered Preparation



Contraindication

We do not recommend a feather edge, as it does not provide adequate reduction for the porcelain buildup. Do not utilize the trough (or gutter) shoulder or 90° shoulder because the outer most edge may not be detected when scanned.



Most Frequently Asked Questions

Shall I cement or bond? The choice is yours! For cementation, the manufacturer recommends 3M™RelyX™ luting cement, a resin modified glass ionomer. You may however use whichever crown and bridge cement you prefer. In most cases a non-opaque, translucent cement allows for more vitality in the cemented restoration.

How do I make adjustments? When making adjustments to veneering porcelain, use proper care and the same precautions as with any other standard porcelain. Before occlusal adjustment, measure occlusal thickness with calipers so as not to come in contact with the core. Cement the crown before making occlusal adjustments. Should the crown require light internal adjustment for proper seating, we strongly recommend it be made to the tooth rather than the inside of the crown.

Do I need to etch the core? No. Zirconium oxide does not need to be (nor can it be) etched. You will find that the surface texture is already adequate.

I have another question... For any other guidance or information, feel free to call our Customer Technical Advisor, Tony Megale. (800) 445-5941 or (541) 754-1238 Monday – Friday 7am until 5pm.

O'Brien Dental Lab, Inc. 4311 SW Research Way, Corvallis, OR 97333

