

Preparation Requirements

cubeX² and cubeONE require less tooth preparation than is required for lithium disilicate. Ideally, a .8 mm chamfer or rounded shoulder prep is preferred, however a feather-edge margin is acceptable with 1.0 - 1.5 mm occlusal reduction.

For BioZ², a shoulder preparation is not required and a feather edge is okay. It is a conservative preparation similar to full-cast gold so any preparation with at least 0.5 mm of occlusal space is accepted; however, 1.0 mm is ideal.

Cementation

Recent research has shown that saliva contamination can hinder the bonding of zirconia based products. When a zirconia crown or bridge is tried in the patient's mouth and comes in contact with saliva, the phosphate groups in the saliva bind to the zirconia oxide and cannot be rinsed out with water. Attempting to use phosphoric acid (which is full of phosphate groups) to 'clean out' the saliva only makes the problem worse.

To successfully remove saliva, it is now suggested that after try-in and before priming, the crown should be cleaned with Ivoclean, a zirconia oxide solution from Ivoclar Vivadent. This zirconia oxide solution is placed inside the restoration for 20 seconds and then rinsed out. Due to the large concentration of free zirconia oxide in the Ivoclean, it acts as a sponge and binds to the phosphate groups that were previously bonded to the restoration.

Suggested Cementation Protocol:

1. Try-in zirconia-based restoration
2. Rinse saliva out of restoration with water
3. Place Ivoclean in restoration for 20 seconds, rinse and dry
4. Apply primer and then cement with product of your choice

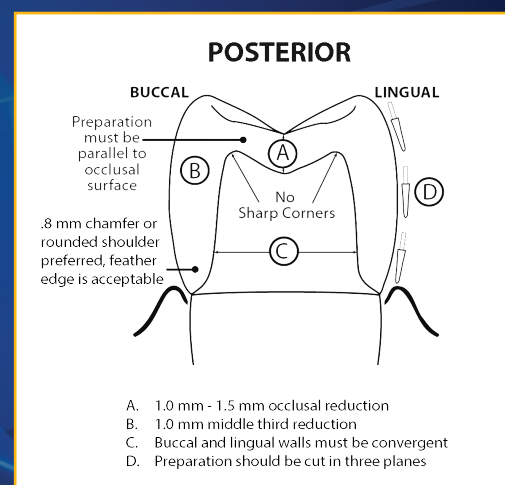
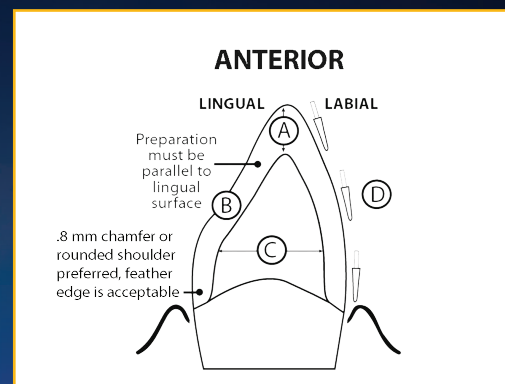
Cementation Recommendations:

- Ceramir® Crown & Bridge (Doxa Dental) or a resin-reinforced glass ionomer cement such as RelyX™ Luting Cement (3M ESPE) or GC Fuji Plus™ (GC America)
- For short or over-tapered preparations, use a resin cement such as RelyX Unicem (3M ESPE) or Panavia™ F2.0 (Kuraray)

Finishing and Polishing

We recommend the Brasseler USA® Dialite® ZR Kit for finishing and polishing zirconia products. This two-step system allows you to quickly achieve maximum surface smoothness, enhancing your restoration's longevity and minimizing wear to opposing dentition.

Important: Be sure to use adequate water when adjusting.



Ivoclean cleaning paste from Ivoclar Vivadent

Brasseler USA Dialite ZR Kit for Zirconia Restorations



Adjustment of occlusion using football-shaped red-band Dialite finishing diamond (8369DF)
Recommended speed: 100K rpm



Dialite ZR green medium polishing cup (W17MZR) for pre-polishing
Recommended speed: 5K-7K rpm



Dialite ZR orange fine polishing cup (W17FZR) for high shine
Recommended speed: 5K rpm



Zirconia crown polished with Dialite ZR



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