

Cementation Recommendations

- *Ceramir® Crown & Bridge (Doxa Dental; Newport Beach, Calif.) or a resin-reinforced glass ionomer cement such as RelyX™ Luting Cement (3M ESPE; St. Paul, Minn.) or GC Fuji Plus™ (GC America; Alsip, Ill.)*
- *For short or over-tapered preparations, use a resin cement such as RelyX™ Unicem (3M ESPE) or Panavia™ F2.0 (Kuraray; New York, N.Y.)*



Cementing & Bonding



www.BruxZir.ca

Ask for BruxZir® Solid Zirconia restorations fabricated by:

PROTEC
DENTAL LABORATORIES LTD.
Crown & Bridge • Dentures • Orthodontics



BruxZir®

Clinical Instructions



What is BruxZir?

BruxZir® Solid Zirconia is a monolithic zirconia restoration with no porcelain overlay. The class-leading strength and durability of BruxZir restorations make them the ideal restorative solution for bruxers, implant restorations and areas with limited occlusal space. Designed and milled using CAD/CAM technology, BruxZir Solid Zirconia has over 1400MPa of flexural strength, and is nearly chip-proof.



Indications

BruxZir Solid Zirconia is indicated for crowns, bridges, screw-retained implant crowns, inlays and onlays. It is an esthetic alternative to PFM metal occlusal/lingual or full-metal restorations. The durability of BruxZir restorations makes it ideal for bruxers who have broken their natural teeth or previous restorations.

Preparation

A chamfer margin preparation is preferred. BruxZir preparation is similar to full-metal restoration, so a preparation with at least 1.0mm of occlusal space is recommended.

Adjustment & Polishing

Adjust BruxZir restorations using water and air spray to keep the restoration cool and to avoid micro-fractures with a fine grit diamond. If using air only, use the lightest touch possible when making adjustments. A football-shaped bur is the most effective for occlusal and lingual surfaces (on anterior teeth); a tapered bur is the ideal choice for buccal and lingual surfaces.

Polish BruxZir restorations with the porcelain polishing system of your choice. Or, purchase the Axis Dental BruxZir Adjustment & Polishing Set (LS-7579) through your dental dealer.

- *Begin by pre-polishing using light pressure and no water with the brown polishing cup. This will remove abrasions left by the diamonds during adjustment. The brown cup may also be used alone for minor adjustments.*
- *Use the blue cup to create the initial high shine. Using light to medium pressure and enough water to create a slurry, you will see the glossy look reappear on the restoration.*
- *Finally, use the yellow cup at medium to light pressure to achieve a “wet” shine. The edge of the cup may also be used to polish the marginal ridges of the BruxZir restoration.*



Adjusting Guide

Seating Instructions

Bruxzir restorations are fabricated from solid zirconia oxide material, much like the zirconia oxide coping found in restorations. Like most metals, zirconia exhibits a strong affinity for phosphate groups, and zirconia oxide is no different. We can take advantage of this fact with phosphate containing primers, such as Monobond Plus (Ivoclar Vivadent) and Z-Prime™ Plus (Bisco) or cements such as Ceramir® Crown & Bridge (Doxa Dental). Unfortunately, saliva also contains phosphates in the form of phospholipids, so when a Bruxzir restoration is tried in the patient’s mouth and comes in contact with saliva, the phosphate groups in the saliva and binds to the zirconia oxide. Attempting to rinse with water or “clean out” saliva only makes the problem worse.

The best way to remove these phosphate groups from the interior of a Bruxzir restoration is with the use of Ivoclean (Ivoclar Vivadent). This is a zirconia oxide solution 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 bound to the Bruxzir restoration. Once the Ivoclean is rinsed out, you will have a fresh bonding surface for the Monobond Plus, Z-Prime Plus or Ceramir to bond to.

The NEW protocol would be:

- *Try in BruxZir or zirconia-based restoration.*
- *Rinse saliva out of restoration.*
- *Place Ivoclean in restoration for 20 seconds and rinse.*
- *Cement restoration with Ceramir; or prime restoration with Monobond Plus or Z-Prime Plus, air dry, and cement with material of your choice.*