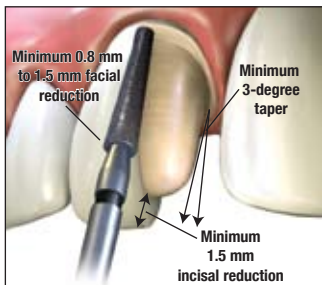


# CERCON® zirconia

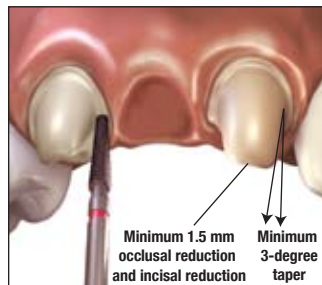
## Clinical Recommendations

### Preparation Guidelines:

- Preparation Type: Shoulder or Deep Chamfer
- Proximal Reduction: 1.0-1.5mm
- Incisal/Occlusal Reduction: 1.5-2.0mm
- Prep Angles: Taper of 6-8°, and a flat occlusal opening angle (~ 140°)
- Other: Line angles should be rounded, and undercuts are to be avoided



- Preparation for an anterior crown is performed with a coarse diamond bur; facial reduction of 0.8 mm to 1.5 mm must be achieved.



- The multiunit anterior bridge should also have at least 1.5 mm of occlusal and incisal reduction, and it should have rounded internal line angles.



- Posterior bridgework for CERCON® Zirconia also requires at least 0.8 mm to 1.5 mm of buccal and lingual reduction.

### Cementation/Bonding:

CERCON® restorations have a clinical history of success, with both bonding and conventional cementation. This offers the practitioner a wide variety of choices in placing the final restoration.

- **Conventional Cementation:** The use of resin modified glass-ionomer cements, and glass-ionomer cements have been clinically proven. We recommend SmartCem™ 2 self-adhesive cement (DENTSPLY Caulk).
- **Adhesive Bonding:** Adhesive bonding has also been clinically proven. We recommend Calibra® Esthetic Resin Cement with Prime and Bond NT® Dual-Cure bonding agent (DENTSPLY Caulk).
- **Microetching:** CERCON® certified laboratories are trained to microetch the cementation surface of the restoration before it is delivered, for mechanical retention of cements. This can also be accomplished chairside with 50 micron alumina, at a 2-3 bar pressure.



# CERCON® zirconia

## Clinical Recommendations

### Grinding and Polishing:

- **Adjusting the Zirconia Core:** Use fine diamonds (20–40 microns) and water spray at 300,000 rpm
- **Porcelain Adjustments:** Use medium, fine and extra-fine sandpaper disks or fine (< 15 microns) diamonds, followed by polishing with diamond paste (e.g. Dialite, Brasseler USA, Savannah, Ga.)

### Post Placement Treatments:

- **Endo Access:** Use a coarse (>125 micron) grit diamond tool such as the Midwest KS3 diamond bur for initial access. Remove only the coronal porcelain of the crown creating a wide access cavity using copious amounts of water. This is followed by a narrower high speed coarse round diamond bur to minimize contact with surrounding porcelain and penetrate the thin zirconia core. Complete the endo access preparation with the Midwest KS3. (DENTSPLY Professional)
- **Removal of a Restoration:** To remove a Cercon restoration, it must be slit along the axial wall as far as the middle of the occlusal surface or the incisal edge. The restoration is then bent with a suitable instrument and thus fractured. With adhesively luted restorations, cement remnants on the surface can be removed with an ultrasound instrument.

Occlusal adjustments and polishing, and a radiograph of Cercon® restorations.



### Recommended Cercon Chairside Products:

- Custom Trays: Triad® VLC custom trays (DENTSPLY Trubyte)
- Diagnostic Restoration: Radica® Provisional/Diagnostic System (DENTSPLY Ceramco)
- Impression Material: Aquasil Ultra® VPS (DENTSPLY Caulk), Genie® VPS (Sultan HC)
- Anesthetic: DENTSPLY Benzocaine® Oral Anesthetic Gel, 2% Xylocaine® DENTAL with epinephrine, 1:50,000, 3% Polocaine® for longer procedures (DENTSPLY Professional)
- Prep Kit: Midwest Carbide 2158 Carbide, Midwest Diamonds: KSO Cylinder, KS3 Cylinder, KS5 Teardrop, 878K Taper Modified Bevel, 858 Needle, 392 UltraNeedle Interproximal (DENTSPLY Professional). Alternatively: Depth Cutter #834 (471443), Cylinder Flat #837 (471092), Tissue Protective, end-cutting Cylinder Bevel #899 (10839), and Taper Round #856 (471210) form a heavy chamfer prep kit.
- Cords: Ultrapak (Ultradent), SulPak™, Ultrax™ (Sultan HC)
- Desensitization: Calm-it™ densitizer (DENTSPLY Caulk) or Gluma densitizer (Hereaus Kulzer)
- Provisional Restoration: Lab-Radica® Provisional/ Diagnostic System (DENTSPLY Ceramco), Chairside- Integrity® Temporary C&B (DENTSPLY Caulk), or VersaTemp™ (Sultan HC)
- Provisional Cementation: Integrity® Temp-Grip™ (DENTSPLY Caulk), or SensiTemp® NEZO (Sultan HC)
- Porcelain: Ceramco® PFZ or Cercon® Ceram KISS (DENTSPLY Ceramco)
- Press Ceramic: Ceramco® PFZ Press or Cercon® Ceram Press (DENTSPLY Ceramco)
- Conventional Cementation: SmartCem™ 2 (DENTSPLY Caulk)
- Adhesive Bonding: Prime and Bond® NT unit dose, Calibra® Esthetic LC resin cement
- Curing Light: SmartLite® PS (DENTSPLY Caulk)
- Polishing: Dialite (Brasseler USA)
- Endodontic Treatment Access: Midwest KS3 diamond bur, Ultracourse 2801 round diamond bur (DENTSPLY Professional)

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CERAMCO

DENTSPLY International Inc.  
570 West College Ave.  
York, PA 17405-0872  
717-699-4190, Fax: 717-849-4543  
www.allceramiccrowns.com

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