



# CEMENTATION GUIDE

Type of Ceramic	Type of Restoration	Bonded or Cemented	Cementation Protocol	Suggested Cements
<b>Feldspathic</b> Cerec Bloc (Sirona) Vitablocs (VITA)	Inlays, Onlays, Crowns, Veneers (excluding 2nd molar crowns)	Adhesively Bond	<b>Tooth Surface:</b> 1. Etch with phosphoric acid. 2. Rinse. 3. Apply bonding agent (4th or 5th generation) <b>Ceramic Internal Surface:</b> 4. Etch with HF at lab. 5. Silanate chairside. 6. Cement with light-cure or dual-cure cement.	<ul style="list-style-type: none"> <li>• 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus.</li> <li>• Calibra with Prime and Bont NT (DENTSPLY Caulk).</li> <li>• Multilink Automix (Ivoclar Vivadent).</li> <li>• NX3 with OptiBond Solo Plus (Kerr Corp).</li> <li>• Variolink II with Excite (Ivoclar Vivadent).</li> </ul>
<b>High Leucite</b> Authentic (Jensen Industries) Avante (Pentron Ceramics) Cerpress SL (Leach and Dillon) Creation CP (Jensen Industries) Finesse All-Ceramic (DENTSPLY Ceramco) HD17 CAM Blocks (Benco Dental) IPS Empress (Ivoclar Vivadent) IPS Empress CAD (Ivoclar Vivadent) Luminesse Pressable Porcelain (Talladium) OPC (Pentron Ceramics)	Inlays, Onlays, Crowns, Veneers (excluding 2nd molar crowns)	Adhesively Cement	<b>Tooth Surface:</b> 1. Etch with phosphoric acid. 2. Rinse. 3. Apply bonding agent (4th or 5th generation) <b>Ceramic Internal Surface:</b> 4. Etch with HF at lab. 5. Silanate chairside. 6. Cement with light-cure or dual-cure cement.	<ul style="list-style-type: none"> <li>• 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus.</li> <li>• Calibra with Prime and Bont NT (DENTSPLY Caulk).</li> <li>• Multilink Automix (Ivoclar Vivadent).</li> <li>• NX3 with OptiBond Solo Plus (Kerr Corp).</li> <li>• Variolink II with Excite (Ivoclar Vivadent).</li> </ul>
<b>Lithium Disilicate</b> 3G (pentron Ceramics) IPS e.max® Press (Ivoclar Vivadent) IPS e.max® CAD (Ivoclar Vivadent)	Anterior & Posterior crowns, 3-unit Bridge up to 2nd bicuspid.	Cement Adhesively, Self-Adhesively, or Conventionally	<b>Tooth Surface:</b> 1. Etch with phosphoric acid. 2. Rinse. 3. Apply bonding agent (4th or 5th generation) <b>Ceramic Internal Surface:</b> 4. Etch with HF at lab. 5. Silanate chairside. 6. Cement with light-cure or dual-cure cement. <b>Or:</b> 1. Use self-adhesive resin cement	<ul style="list-style-type: none"> <li>• 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus.</li> <li>• Calibra with Prime and Bont NT (DENTSPLY Caulk).</li> <li>• Multilink Automix (Ivoclar Vivadent).</li> <li>• NX3 with OptiBond Solo Plus (Kerr Corp).</li> <li>• Variolink II with Excite (Ivoclar Vivadent).</li> <li>Or: 3M ESPE Rely X Unicem Self-Adhesive Universal Resin Cement.</li> <li>• G-Cem (GC America)</li> <li>• Maxcem Elite (Kerr Corp.)</li> <li>• SMARTCEM 2 (DENTSPLY Caulk) -seT (SDI North Americ, INC.)</li> </ul>

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<b>Lithium Silicate</b> Celtra® Press (Dentsply Sirona) Celtra® Duo (Dentsply Sirona)	Inlays, Onlays, Crowns, Veneers, 3-Unit Anterior Bridges.	Cemented or Bonded	<b>Ceramic Internal Surface:</b> 1. Etch with hydrofluoric acid. 2. Dry in an air stream. 3. Silanate etched surface immediately. 4. Apply silane chairside (optional). 5. Soak 60 seconds. 6. Cement with light-cure or dual-cure cement. <b>Or:</b> 1. Use self-adhesive resin cement.	<ul style="list-style-type: none"> <li>• 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus.</li> <li>• Calibra with Prime and Bont NT (DENTSPLY Caulk).</li> <li>• Multilink Automix (Ivoclar Vivadent).</li> <li>• NX3 with OptiBond Solo Plus (Kerr Corp).</li> <li>• Variolink II with ExcITE (Ivoclar Vivadent).</li> </ul> Or: 3M ESPE Rely X Unicem Self-Adhesive Universal Resin Cement. <ul style="list-style-type: none"> <li>• G-Cem (GC America) -Maxcem Elite (Kerr Corp.) • SMARTCEM 2 (DENTSPLY Caulk)</li> <li>• seT (SDI North Americ, INC.)</li> </ul>
<b>Nano-Ceramic</b> Crystal® Ultra	Anterior Crowns, Inlays, Onlays, Veneers, Posterior & Anterior Implants.	Cement	Do not etch with hydrofluoric acid. Use a dual-cure or light-cure resin cement.	<ul style="list-style-type: none"> <li>• 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus.</li> <li>• Calibra with Prime and Bont NT (DENTSPLY Caulk).</li> <li>• Multilink Automix (Ivoclar Vivadent).</li> <li>• NX3 with OptiBond Solo Plus (Kerr Corp).</li> <li>• Variolink II with ExcITE (Ivoclar Vivadent).</li> </ul>
<b>Zirconia</b> Cercon (Dentsply Sirona) IPS e.ZirCad (Ivoclar Vivadent) Lava (3M ESPE) Procera (Nobel Biocare) BruxZir® Katana™ (Kurary Noritake Dental Inc) ZirLux 16+ Zolid (Amann Girrbach)	Anterior & Posterior crowns, 3-unit Bridges, Implants, Maryland Bridges.	Cement	No etching or bonding. Use a self-adhesive resin cement, resin-modified glass ionomer cement, or traditional C&B cement.	<ul style="list-style-type: none"> <li>• 3M ESPE Durelon</li> <li>• 3M ESPE Rely X ARC adhesive Resin Cement.</li> <li>• 3M ESPE Rely X Unicem Self-Adhesive Universal Resin Cement. G CEM (GC America)</li> <li>• GC Fuji Plus (GC America)</li> <li>• Maxcem Elite (Kerr Corp.)</li> <li>• SMARTCEM 2 (DENTSPLY Caulk)</li> <li>• seT (SDI North America, INC.).</li> </ul>