Guide to All Ceramic Restorations

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NAME</th>
<th>ADVANTAGES</th>
<th>CONSIDERATIONS</th>
<th>IDEAL PLACEMENT</th>
<th>STRENGTH</th>
<th>CEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>POSTERIOR</td>
<td>1100 MPA</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>
| Full Contour Monolithic Zirconia | DSmz™ | • Very high strength  
• Provides solid, chip-resistant results  
• Minimal prep/adjustment needed | • Esthetics from surface staining  
• Cementation considerations  
• Minimal translucency | POSTERIOR | 1100 MPA | ✓ ✓ ✓        |
|      | DSez™ | • Mid strength  
• Natural looking esthetics  
• Shade matches for 16 Vita shades | • Stump shade needed  
• Occlusal clearance minimum 1.5mm | ANTERIOR | 765 MPA | ✓ ✓ ✓        |
|      | BruxZir® Esthetic | • Natural looking translucently  
• Lifelike zirconia  
• Minimal preparation | • Low strength due to higher translucency  
• Limited shade variations | ANTERIOR | 870 MPA | ✓ ✓ ✓        |
| Zirconia with Veneered Porcelain | DSz™ | • Highly esthetic  
• Reliable durability  
• Layering creates shade variation | • Porcelain compromises strength | ANTERIOR | 1200 MPA | ✓ ✓ ✓        |
|      | 3M ESPE Lava™ | • Highly esthetic  
• Reliable durability | • Porcelain compromises strength | ANTERIOR | 800 MPA | ✓ ✓ ✓        |
| Lithium Disilicate | IPS e.max® Full Contour | • Translucent and esthetic  
• Long term durability  
• Acid etches well | • Low strength  
• Deeper prep needed  
• Can wear opposing dentition | ANTERIOR & POSTERIOR | 500 MPA | ✓ ✓ ✓        |
|      | IPS e.max® Layered | • Very translucent  
• Highly esthetic | • Low strength  
• Porcelain interface | ANTERIOR & POSTERIOR | 160 MPA | ✓ ✓ ✓        |
| Feldspatic porcelain | Laminate Veneers | • Extremely esthetic  
• Very natural looking  
• Slight preparation | • Very low strength  
• Tooth substructure dictates outcome  
• Anterior only | ANTERIOR | 70-90 MPA | ✓ ✓ ✓        |
Ceramic Restorations Prep Guides

ALL CERAMIC PREPARATION

PREP SPECIFICATIONS
- Taper between 4° & 8°
- Occlusal reduction of at least 2.0 mm in contact area
- 360° Shoulder preparation of at least 1.0 mm proximal reduction
- Coronal Length at least 4.0 mm

LAMINATE VENEER PREP
- Incisal 1.0-1.5 mm
- Depth cuts of 0.6 mm to 0.8 mm

ANTERIOR CROWN PREPARATION
- Butt joint margin
- 1.0 mm reduction at gingival margin
- 1.0 mm to 1.5 mm facial reduction
- 1.5 mm lingual contact clearance
- 1.5 mm to 2.0 mm incisal reduction
- Football-shaped finishing bur
- Rounded internal line angles

POSTERIOR CROWN PREPARATION
- Butt joint margin
- 1.5 mm to 2.0 mm occlusal reduction
- 1.5 mm axial reduction
- 1.0 mm reduction at gingival margin
- Rounded internal line angles
- A flat-ended tapered diamond bur is utilized to establish a butt-joint margin

Contact Clearance: 1.5 mm lingual to 0.8 mm
Depth cuts of 0.6 mm to establish a butt joint margin

Incisal 1.0-1.5 mm

Butt joint margin
1.0 mm reduction at gingival margin
1.5 mm lingual contact clearance
1.5 mm to 2.0 mm incisal reduction
Football-shaped finishing bur
Rounded internal line angles

1.5 mm to 2.0 mm occlusal reduction
1.5 mm axial reduction
1.0 mm reduction at gingival margin
Rounded internal line angles
A flat-ended tapered diamond bur is utilized to establish a butt-joint margin

Coronal Length
1.5 mm axial reduction
1.0 mm reduction at gingival margin
Rounded internal line angles
1.5 mm to 2.0 mm occlusal reduction
1.5 mm axial reduction
1.0 mm reduction at gingival margin
Rounded internal line angles