

## Simply the Best - Cosmetic Comparison Guide

Points of Comparison	<u>IPS Empress</u>	<u>IPS Eris</u>	<u>Reliance Captek</u>	<u>Reliance Golden Ceramic</u>	<u>Procera</u>	<u>Cerec inLab</u>	<u>Cristobal+</u>
Ideal Applications	When esthetics is the primary objective	When esthetics is the primary objective	When less than 1.0mm facial reduction can be achieved	Traditional Porcelain Fused Metal when strength is factor	Esthetically masks dark underlying tooth including metal posts & stains	Where esthetics and strength are necessary for 3 Unit Bridges	Posterior esthetics is the primary objective
Primary Applications	Veneers, crowns, inlays and onlays	Single units & 3 unit bridges when most distal abutment is 2nd bicuspid	*Single crowns *3 Unit bridges	Single Crowns through long span bridges	Single Crowns (Anterior and Posterior)	*Primarily 3 Unit bridges	*Inlays and Onlays
Preparation Requirements	*Shoulder margin design *1.0mm minimum at the margin *1.5-2.0mm reduction at incisal, facial	*Shoulder margin design *1.0mm minimum at the margin *1.5-2.0mm reduction at incisal, facial lingual	*Any margin design *0.6mm minimum at the margin *1.0-1.5mm axial wall reduction	*Any margin design *Traditional 1.5-2.0mm axial wall, incisal, occlusal	*Chamfer margin design *1.0mm minimum at the margin *1.5-2.0mm reduction at incisal, facial lingual	*Shoulder or Chamfer margin design *1.2mm minimum at the margin *1.5-2.0mm reduction at incisal, facial lingual	*Shoulder margin design *1.0mm minimum at the margin *1.5-2.0mm reduction at incisal, facial lingual

	lingual						
<b>Cementation Guidelines</b>	<b>Adhesive bonding with dual cure bonding agent</b>	Adhesive bonding with dual cure bonding agent	<b>Standard Cementation with any cement</b>	Standard cementation with any cement	<b>Standard cementation and can be bonded if desired</b>	Zinc Phosphate, Glass Ionomer or can be bonded if necessary	Adhesive bonding with dual cure agent
<b>Flexural Strength</b>	<b>700 Mpa after bonding</b>	<b>350-400 Mpa prior to seating</b>	<b>&gt;1000 Mpa</b>	<b>1200-1400 Mpa</b>	<b>687 Mpa</b>	<b>*750 Mpa - Zirconia</b> *525 Mpa - Alumina	<b>195.2 Mpa</b>
<b>Enamel Wear</b>	<b>Comparable to natural enamel</b>	<b>Comparable to natural enamel</b>	<b>Depends on type of porcelain</b>	<b>Depends on type of porcelain</b>	<b>Comparable to natural enamel</b>	<b>Comparable to natural enamel</b>	<b>Comparable to natural enamel (Self polishing)</b>
<b>Restoration Composition</b>	<b>Leucite reinforced core</b>	<b>Lithium disilicate core</b>	<b>88% Gold (22k) coping with layered porcelain</b>	<b>86% Hardened Gold with 7 layers of porcelain</b>	<b>Aluminous oxide core with layered porcelain</b>	<b>Zirconia or Alumina Cores</b>	<b>Barium Borosilicate (74%) Bis-GMA (26%)</b>
<b>Years of Clinical Success</b>	<b>15 Years</b>	<b>4 Years</b>	<b>10 Years</b>	<b>Standard PFM has been around for 40 plus years</b>	<b>9 Years</b>	<b>6 Years</b>	<b>7 Years</b>

## 4 STAGE ADHESIVE BONDING

This Checklist is designed to serve as a road map for the adhesive bonding of single and multiple units, regardless of the bonding system utilized.

### **Stage 1: Try-in Restoration**

- Remove the temporary and CLEAN the tooth (chlorohexidene wash.)
- CHECK for the etch (on the internal surfaces of the restoration.)
- TRY-IN DRY to check for fit and contour.
- STOP! DO NOT Check the occlusion at this time, nor allow the patient to bite- the restoration must be bonded first.

### **Stage 2: Treat the Restoration**

- CLEAN with water, etchant and more water.
- Apply a coat of SILANE and let air dry.
- Apply the UNFILLED RESIN and thin it with a brush.
- STORE the restoration in a light protective box.

### **Stage 3: Treat the Tooth**

- Place the RUBBER DAM
- ETCH the tooth (enamel for 15-seconds; dentin for 10-seconds.)
- Apply a WETTING AGENT (Chloroexidene wash) to the tooth.
- Apply multiple coats of PRIMER and air dry.
- Apply the BONDING AGENT and thin it with a brush.
- Apply the UNFILLED RESIN and thin it with a brush.

### **Stage 4: Lute Together**

- MIX the catalyst and base of the luting cement.
- SEAT the restoration.
- SPOT CURE (for 20 seconds) and thoroughly CLEAN away the excess.
- Apply GLYCERIN gel to the margins.

- Completely LIGHT CURE the restoration (2 minutes on each aspect).
- Occlusal adjustments and FINISHING.