



Made in the U.S.A

## 2020 RESTORATION SELECTION GUIDE



The recommendations contained in this guide include both manufacturers' information and the opinion of Killian Dental Ceramics about the best indicated use for achieving optimal benefit from these restorative products when fabricated by Killian Dental Ceramics. This Guide should not be interpreted to contradict any manufacturers' literature.

### Photo Gallery

Patients of Dr. Margareta Gavrilă shown.  
Restorations by Killian Dental Ceramics







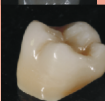

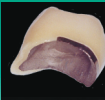
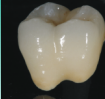



Close-up of above



All-Ceramic - Refractory (Powder Build-up)

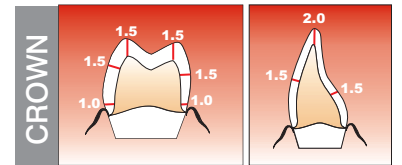


Visit [www.KillianDental.com](http://www.KillianDental.com)  
See "Photo Gallery"  
See "Sending a Case" section  
for RxForms & Due Date Calendars

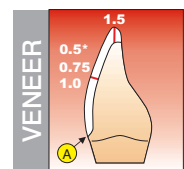
RESTORATION				RECOMMENDED APPLICATION						PREP.	CHAIRSIDE		COMMENTS
Type	Name	Pros	Cons	Antr/Post	Veneer	Inlay/Onlay	Crown	Bridge	Implants	Design	Cements	Bonding	Comments
ALL-CERAMIC	 <b>Porc Fused to Zirconia</b> InVizion® and Lava® type	• Crowns • High Strength Ceramic • No metal • Color matched core.	• Core is slightly more reflective than natural dentin.	Anterior & Posterior	No	No	✓	✓	✓	See Crown Prep	Resin-reinforced glass ionomer	Multilink Automix, RelyX-Ultimate, Panavia F5	Strongest Core Material. Esthetics are comparable to other All-Ceramic Systems
	 <b>Shofu Vintage Halo</b>	• Fabricated with accurate refractory die technique • Highly esthetic feldspathic porcelain • No metal • Etchable for strong bond.	• Crown is not as strong as other All-Ceramic restorations until bonded.	Anterior & Posterior	✓ Best Esthetics	✓ Best Esthetics	✓	No	No	See Labial Veneer Inlay, Onlay & Crown Prep	No	Insure (Cosmedent) Variolink II (Ivoclar Vivadent)	Compares with all high-fusing porcelain systems.
	 <b>e.max®</b> Full contour	• Fast turn-around • Low cost • High Performance Lithium Disilicate Ceramic • Flexural Strength: 360-400 Mpa • Bond or Cement.	• Externally stained (like Empress). • 0.8 mm minimum thickness.	Anterior & Posterior	✓	✓	✓	✓ 3 Units	✓	See Labial Veneer Inlay, Onlay & Crown Prep	Resin-reinforced glass ionomer	Multilink Automix, RelyX-Ultimate, Panavia F5	Compares with Empress esthetics, but is stronger than Empress.
	 <b>e.max®</b> with Layered incisal	Fast turn-around • Hand fabricated incisal • High Performance Lithium Disilicate Ceramic Cad-Cam Core • Flexural Strength: 360-400 Mpa • Minimal external staining.	• 0.8 mm minimum thickness.	Anterior & Posterior	✓	No	✓	No	No	See Labial Veneer Inlay, Onlay & Crown Prep	No	Multilink Automix, RelyX-Ultimate, Panavia F5	Compares with Empress esthetics, but is stronger than Empress.
	 <b>Ceramax™</b> and <b>Ceramax</b> ANTERIOR Full Contour Zirconia	• Most translucent full contour Zirconia currently available	• Hard material for cut-off removal.	Anterior & Posterior	No	✓	✓	✓	✓	Shldr. prep not needed, feather OK. Min 0.75 mm of occlusal space 1 mm is ideal.	Resin-reinforced glass ionomer	Multilink Automix, RelyX-Ultimate, Panavia F5	A great FGC replacement.
	 <b>Bruxzir®</b> and <b>Bruxzir</b> ANTERIOR Full Contour Zirconia	• Low Cost • Very Strong • Fast Delivery	• Hard material for cut-off removal.	Anterior & Posterior	No	✓	✓	✓	✓	Shldr. prep not needed, feather OK. Min 0.75 mm of occlusal space 1 mm is ideal.	Resin-reinforced glass ionomer	Multilink Automix, RelyX-Ultimate, Panavia F5	A great FGC replacement.
PFM	 <b>CeraPlus™</b> Shown with optional Porc Facial Margin	• Best esthetic PFM • Master Ceramics available • All types of custom fabrication designs available.	• More abrasive to natural dentition than low-fusing ceramics • Opaque Core.	Anterior & Posterior	No	No	✓	✓	✓	Standard PFM Prep	No special cementation requirements; use any cement	NA	Vita VMK Master Porc. Compares with all high-fusing porcelain systems.
	 <b>CeraTech™</b>	• Best price, flat-Rate Non-Precious PFM • Noble alloy available • Metal lingual, occlusal metal, and Porc Shoulder Margin designs available for extra charge.	• Maximum 3 units per case • Maximum 1 anterior unit per case • 3-unit bridge is available. • No complicated custom shading.	Anterior & Posterior	No	No	✓	✓	No	Standard PFM Prep	No special cementation requirements; use any cement	NA	Compares with all high-fusing porcelain systems.
POLYMER	 <b>PMMA</b> Long-Term Provisional	• Cad-Cam Produced. • High Strength Acrylic • 16 Vita Shades and Bleached • Available in multi-layered	• Multi-layered shades are limited to: A1, A2, A3, B2, and Bleached.	Anterior & Posterior	No	✓ Temp Only	✓ Temp Only	✓ Temp Only	✓ Temp Only	Any Prep design including Pre-Op No Prep for Shell Temps	Temp Cement	Spot Bond	Provisional Temporary Material Only
	 <b>Sinfony</b> Indirect Composite	• Non-abrasive. • Very kind to natural dentition • No Metal • Repairable in the mouth	• Preparation minimums are critical • Esthetics are not as natural as ceramics. • Erodes faster than enamel.	Anterior & Posterior	No	✓	✓	✓ Anterior Temp Only	✓ Temp Only	See Crown Inlay, Onlay Prep	No	Insure (Cosmedent) Variolink II (Ivoclar Vivadent)	
	 <b>Insta-Temp®</b> Long-Term Provisional	• Long-term provisionals Bisacrylic composite • Also, Shell Temps.	• Shades limited to: A1, A2, A3.5, B1, B0.	Anterior & Posterior	✓ Temp Only	✓ Temp Only	✓ Temp Only	✓ Temp Only	✓ Temp Only	Lab prepared models for shell temps are available.	Temp Cement	Spot Bond	Provisional Temporary Material Only

### PREPARATIONS

#### All-Ceramic



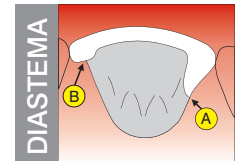
Subgingival (optional).  
360 degree shoulder/chamfer.  
Round inner angles and edges.



#### All-Ceramic LABIAL VENEER

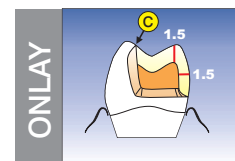
##### PREP DEPTH AFFECTS COLOR MATCH

Provide a shallow chamfer margin at the gingival **A** and proximal margins. The prep depth should be 0.75 - 1.0 mm to provide space to block-out tooth color that is too dark or too light.  
\*If the stump shade (prep) matches the desired restoration color, then only 0.5 mm reduction is needed.



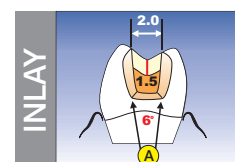
#### DIASTEMA CLOSURE

Increased proximal preparation **A** allows proper contour. Preparation **B** does not permit proper transitional contour after closure of diastema.



#### All-Ceramic or Indirect Composite ONLAY

Reduce occlusal surfaces at least 1.5 mm. A reduction of 2.0 mm is preferred.  
Round all internal line and point angles and avoid internal undercuts.  
Keep cavosurface margins **C** apart from opposing centric contact points during impressioning.



#### All-Ceramic or Indirect Composite INLAY

Reduce occlusal surfaces at least 1.5 mm. Isthmus width at least 2.0 mm. Round all internal line and point angles and avoid internal undercuts.  
Prepare cavity wall with slight divergence **A**.  
Keep cavosurface margins apart from opposing centric contact points during impressioning.