

Guide to All Ceramic Restorations



TYPE	NAME	ADVANTAGES	CONSIDERATIONS	IDEAL PLACEMENT	STRENGTH	CEMENTATION	
						Conventional	Bonded
Full Contour Monolithic Zirconia Precision-milled from a shade specific monolithic/full-contour disc using CAD/CAM technology. These restorations provide solid chip-resistant results without porcelain veneering. Ideal for long span cases, bruxing patients, increased bite forces, and a tooth shaded alternative to full-cast crown restorations.	DSmz™	<ul style="list-style-type: none"> • Very high strength • Provides solid, chip-resistant results • Minimal prep/adjustment needed 	<ul style="list-style-type: none"> • Esthetics from surface staining • Cementation considerations • Minimal translucency 	POSTERIOR	1100 MPA	✓	✓
	DSez™	<ul style="list-style-type: none"> • Mid strength • Natural looking esthetics • Shade matches for 16 Vita shades 	<ul style="list-style-type: none"> • Stump shade needed • Occlusal clearance minimum 1.5mm 	ANTERIOR	765 MPA	✓	✓
	BruXZir®	<ul style="list-style-type: none"> • Popular/well known • Glazed to smooth surface • Resistant to wear 	<ul style="list-style-type: none"> • Glaze degrades at occlusal contacts • Cannot acid etch • Time consuming to remove 	POSTERIOR	1100-1250 MPA	✓	✓
	BruXZir® Esthetic	<ul style="list-style-type: none"> • Natural looking translucently • Lifelike zirconia • Minimal preparation 	<ul style="list-style-type: none"> • Low strength due to higher translucency • Limited shade variations 	ANTERIOR	870 MPA	✓	✓
	IPS e.max® ZirCAD® Prime	<ul style="list-style-type: none"> • High in esthetics and strength • Utilizes gradient technology • Full arch restorations 	<ul style="list-style-type: none"> • Stump shade needed 	ANTERIOR & POSTERIOR	1200 MPA	✓	✓
Zirconia with Veneered Porcelain The combination of a CAD/CAM zirconium oxide substructure with veneered porcelain provides a translucent, natural-looking tooth with excellent durability, allowing full porcelain coverage or layered in the esthetic zone to maintain maximum strength.	DSz™	<ul style="list-style-type: none"> • Highly esthetic • Reliable durability • Layering creates shade variation 	<ul style="list-style-type: none"> • Porcelain compromises strength 	ANTERIOR	1200 MPA	✓	✓
	3M ESPE Lava™	<ul style="list-style-type: none"> • Highly esthetic • Reliable durability 	<ul style="list-style-type: none"> • Porcelain compromises strength 	ANTERIOR	800 MPA	✓	✓
Lithium Disilicate These restorations provide a combination of rich esthetics and added strength and can be stained or layered to resemble natural dentition.	IPS e.max® Full Contour	<ul style="list-style-type: none"> • Translucent and esthetic • Long term durability • Acid etches well 	<ul style="list-style-type: none"> • Low strength • Deeper prep needed • Can wear opposing dentition 	ANTERIOR & POSTERIOR	500 MPA		✓
	IPS e.max® Layered	<ul style="list-style-type: none"> • Very translucent • Highly esthetic 	<ul style="list-style-type: none"> • Low strength • Porcelain interface 	ANTERIOR & POSTERIOR	160 MPA		✓
Feldspathic porcelain Built over platinum foil and refractory dies these provide true shading and natural esthetics.	Laminate Veneers	<ul style="list-style-type: none"> • Extremely esthetic • Very natural looking • Slight preparation 	<ul style="list-style-type: none"> • Very low strength • Tooth substructure dictates outcome • Anterior only 	ANTERIOR	70-90 MPA		✓

Cement Selection Guide

800.259.3717
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TYPE OF CERAMIC	TYPE OF RESTORATION	BONDED VENEERS	CEMENTATION PROTOCOL	SUGGESTED CEMENTS
ZIRCONIA DSz, DSzm, DSez (DSG) BruXZir, BruXZir Esthetic (Gidewell) LAVA (3M ESPE) ZirCAD Prime (Ivoclar Vivadent) CERCON (DENTSPLY Ceramco) EVEREST (KaVo) IPS e.ZirCad (Ivoclar Vivadent) Procera (Nobel Biocare) ZENO (Wieland)	<ul style="list-style-type: none"> • Anterior & Posterior Crowns • 3-6 Unit Bridges • Implants 	Cement	No etching or bonding. Use selfadhesive resin cement, resin-modified glass ionomer cement, or traditional Crown & Bridge cement.	<ul style="list-style-type: none"> • 3M ESPE DURELON • 3M ESPE Rely X Unicem Self- Adhesive Universal Resin Cement • G-CEM (GC America) • GC Fuji Plus (GC America) • Maxcem Elite (Kerr Corp) • SMARTCEM 2 (DENTSPLY Caulk) • seT (SDI North America, Inc.) • Panavia
FELDSPATHIC Porcelain Veneers Cerec Bloc (Sirona) Vitablocs (VITA)	<ul style="list-style-type: none"> • Inlays • Onlays • Crowns • Veneers (excluding 2nd molar crowns) 	Bond, then resin cement	TOOTH SURFACE: 1. Etch with phosphoric acid 2. Rinse 3. Apply bonding agent (4th and 5th generation) CERAMIC INTERNAL SURFACE: 4. Etch with HF at lab 5. Silanate chairside 6. Cement with light-cure or dual-cure cement	<ul style="list-style-type: none"> • 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus • Calibra with Prime and Bond NT (DENTSPLY Caulk) • Multilink Automix (Ivoclar Vivadent) • NX3 with Optibond Solo Plus (Kerr Corp) • Variolink II with ExciTE (Ivoclar Vivadent)
HIGH LEUCITE Authentic (Jensen Industries) Avante (Pentron Ceramics) Cerpress SL (Leach and Dillon) Creation CP (Jensen Industries) Finesse All-Ceramic (DENTSPLY) HD17 CAM Blocks (Benco) IPS Empress (Ivoclar Vivadent) IPS Empress CAD (Ivoclar Vivadent) Luminesse Pressable Porcelain (Talladium) OPC (Pentron Ceramics) Paradigm C (3M ESPE)	<ul style="list-style-type: none"> • Inlays • Onlays • Crowns • Veneers (excluding 2nd molar crowns) 	Bond, then resin cement	TOOTH SURFACE: 1. Etch with phosphoric acid 2. Rinse 3. Apply bonding agent (4th and 5th generation) CERAMIC INTERNAL SURFACE: 4. Etch with HF at lab 5. Silanate chairside 6. Cement with light-cure or dual-cure cement	<ul style="list-style-type: none"> • 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus • Calibra with Prime and Bond NT (DENTSPLY Caulk) • Multilink Automix (Ivoclar Vivadent) • NX3 with Optibond Solo Plus (Kerr Corp) • Variolink II with ExciTE (Ivoclar Vivadent)
LITHIUM DISILICATE e.max CAD or Pressed (Ivoclar Vivadent) 3G (Pentron Ceramics)	<ul style="list-style-type: none"> • Anterior & Posterior Crowns • 3 Unit Bridges up to 2nd bicuspid 	Bond, then resin cement	TOOTH SURFACE: 1. Etch with phosphoric acid 2. Rinse 3. Apply bonding agent (4th and 5th generation) CERAMIC INTERNAL SURFACE: 4. Etch with HF at lab 5. Silanate chairside 6. Cement with light-cure or dual-cure cement OR 1. Use self-adhesive resin cement	<ul style="list-style-type: none"> • 3M ESPE Rely X Veneer Cement with 3M ESPE Adper Single Bond Plus • Calibra with Prime and Bond NT (DENTSPLY Caulk) • Linkmax (GC America) • Multilink Automix (Ivoclar Vivadent) • NX3 with Optibond Solo Plus (Kerr Corp) • Panavia F 2.0 (Kuraray America) • Variolink II with ExciTE (Ivoclar Vivadent) OR <ul style="list-style-type: none"> • 3M ESPE Rely X Unicem Self- Adhesive Universal Resin Cement • G-CEM (GC America) • Maxcem Elite (Kerr Corp) • SMARTCEM 2 (DENTSPLY Caulk) • seT (SDI North America, Inc.)
ALUMINA Procera (Nobel Biocare) In-Ceram ALUMINA (Vident)	<ul style="list-style-type: none"> • Anterior & Posterior Crowns • 3-6 Unit Bridges 	Cement (Good retention cases)	No etching or bonding. Use selfadhesive resin cement, resin-modified glass ionomer cement, or traditional Crown & Bridge cement.	<ul style="list-style-type: none"> • 3M ESPE DURELON • 3M ESPE Rely X ARC adhesive Resin Cement • 3M ESPE Rely X Unicem Self- Adhesive Universal Resin Cement • G-CEM (GC America) • GC Fuji Plus (GC America) • Multilink Automix (Ivoclar Vivadent)