

# MATERIAL SELECTION GUIDE (METAL)

MATERIAL	INDICATIONS	FLEXURAL STRENGTH	ADHESION	PREPARATION	REDUCTION GUIDE	BUR REDUCTION GUIDE (BRASSLER)	PORCELAIN SYSTEMS
FULL CAST GOLD (WHITE)	anterior & posterior; singles & bridges	495 MPa	Cement: dual or self-cure luting cement, glass ionomer, zinc phosphate; Multilink <sup>®</sup> ; RelyX <sup>™</sup> Luting; Panavia <sup>™</sup> 21; GC Fuji PLUS <sup>®</sup> resin-reinforced, glass ionomer luting cement	feather/bevel	1.0-1.5 mm reduction	margins; upper incisor, cuspid & bi's-6878K-018; molar-6878K-021; lower incisor-6878K-014; lingual & occlusal-6368-023	
FULL CAST GOLD (YELLOW)	anterior & posterior; singles & bridges	425 MPa	Cement: dual or self-cure luting cement, glass ionomer, zinc phosphate; Multilink <sup>®</sup> ; RelyX <sup>™</sup> Luting; Panavia <sup>™</sup> 21; GC Fuji PLUS <sup>®</sup> resin-reinforced, glass ionomer luting cement	feather/bevel	1.0-1.5 mm reduction	margins; upper incisor; cuspid & bi's-6878K-018; molar-6878K-021; lower incisor-6878K-014; lingual & occlusal-6368-023	
PFM NOBLE	anterior & posterior; singles & bridges	80 ± 20 MPa	Cement: dual or self-cure luting cement, glass ionomer, zinc phosphate; Multilink <sup>®</sup> ; RelyX <sup>™</sup> Luting; Panavia <sup>™</sup> 21; GC Fuji PLUS <sup>®</sup> resin-reinforced, glass ionomer luting cement	chamfer/ shoulder for porcelain margins	1.5-2.0 mm reduction; axial walls; occlusal	margins; upper incisor; cuspid & bi's-6878K-018; molar-6878K-021; lower incisor-6878K-014; lingual & occlusal-6368-023	Ivoclar InLine <sup>®</sup>
High Nobel White	anterior & posterior; singles & bridges	80 ± 20 MPa	Cement: dual or self-cure luting cement, glass ionomer, zinc phosphate; Multilink <sup>®</sup> ; RelyX <sup>™</sup> Luting; Panavia <sup>™</sup> 21; GC Fuji PLUS <sup>®</sup> resin-reinforced, glass ionomer luting cement	chamfer/ shoulder for porcelain margins	1.5-2.0 mm reduction; axial walls; occlusal	margins; upper incisor; cuspid & bi's-6878K-018; molar-6878K-021; lower incisor-6878K-014; lingual & occlusal-6368-023	Ivoclar InLine <sup>®</sup>
High Nobel Yellow	anterior & posterior; singles & bridges; 3-unit bridges anywhere	80 ± 20 MPa	Cement: dual or self-cure luting cement, glass ionomer, zinc phosphate; Multilink <sup>®</sup> ; RelyX <sup>™</sup> Luting; Panavia <sup>™</sup> 21; GC Fuji PLUS <sup>®</sup> resin-reinforced, glass ionomer luting cement	chamfer/ shoulder for porcelain margins	1.5-2.0 mm reduction; axial walls; occlusal	margins; upper incisor, cuspid & bi's-6878K-018; molar-6878K-021; lower incisor-6878K-014; lingual & occlusal-6368-023	Ivoclar InLine <sup>®</sup>
Captak <sup>®</sup>	anterior (2nd bi forward); 3-unit bridges- anywhere	80 ± 20 MPa	Cement: dual or self-cure luting cement, glass ionomer, zinc phosphate; Multilink <sup>®</sup> ; RelyX <sup>™</sup> Luting; Panavia <sup>™</sup> 21; GC Fuji PLUS <sup>®</sup> resin-reinforced, glass ionomer luting cement	chamfer/ shoulder for porcelain margins	1.5-2.0 mm reduction; axial walls; occlusal	margins; upper incisor, cuspid & bi's-6878K-018; molar-6878K-021; lower incisor-6878K-014; lingual & occlusal-6368-023	Ivoclar InLine <sup>®</sup>

# MATERIAL SELECTION GUIDE (NON-METAL)

MATERIAL	INDICATIONS	FLEXURAL STRENGTH	ADHESION	PREPARATION	REDUCTION GUIDE	BUR REDUCTION GUIDE (BRASSLER)	PORCELAIN SYSTEMS
ZirCrown™ (monolithic)	anterior & posterior; bridges up to 2 pontic span	900 MPa	Cement: enamel-dentin adhesive bonding system; Variolink® II; RelyX™ Unicem Self Adhesive Universal Resin Cement	deep chamfer or rounded shoulder	1.0-1.5 mm chamfer or shoulder @ 90°-110° angle; 1.5 mm axial walls; 2.0 mm incisal or occlusal	margins; upper incisor, cuspid & bi's-6878K-018; molar-6878K-021; lower incisor-6878K-014; lingual & occlusal-6368-023	
Zir-Max® (stacked porcelain over zirconia)	anterior & posterior singles; bridges <38 mm, Maryland bridges	80 ± 20 MPa	Cement: dual or self-cure luting cement, glass ionomer, zinc phosphate, Multilink®; RelyX™ Luting; Panavia™ 21; GC Fuji PLUS® resin-reinforced, glass ionomer luting cement	deep chamfer or rounded shoulder	1.0-1.5 mm chamfer or shoulder @ 90°-110° angle; 1.5 mm axial walls; 2.0 mm incisal or occlusal	gross-1958; minimal-846KR-016 & 6847KR-016	e.max™ Ceram
Radiant™ (conservative prep veneer)	conservative prep veneer; facial & incisal reduction; little to no shade changes	65 MPa	Bond: purely light-curing adhesive luting composite, Variolink® Veneer; RelyX™ Veneer (less viscous material is most ideal for placing veneers)	shallow chamfer or rounded shoulder; rounded line angles	.4-1.0 mm facial; 1.0-2.0 mm incisal	gross incisal or occlusal-1958, drop shoulder-5856-018, finesse or finalize prep-5856-016 or 5856-014	Ivoclar InLine®
Empress®	anterior-crowns & veneers, posterior-crowns; inlay/onlay	120 MPa	Anterior-Bond (light cure); Variolink® Veneer; RelyX™ Veneer (less viscous material is most ideal for placing veneers)	deep chamfer or rounded shoulder, rounded line angles	1.0-1.5 mm chamfer or shoulder @ 90°-110° angle; 1.5 mm axial walls; 2.0 mm incisal or occlusal	drop shoulder-5856-018, finesse or finalize prep-5856-016 or 5856-014	Empress® Esthetic
e.max™ Press	anterior & posterior crowns; veneers; inlay/onlay	400 ± 40 MPa	Bond: any enamel-dentin adhesive bonding system; Variolink® II; RelyX™ Unicem; Calibra; Cement: any dual or self-cure luting cement, glass ionomer, zinc phosphate, Multilink®; RelyX Luting; Panavia 21; GC Fuji PLUS® resin-reinforced, glass ionomer luting cement	deep chamfer or rounded shoulder, rounded line angles	1.0-1.5 mm chamfer or shoulder @ 90°-110° angle; 1.5 mm axial walls; 2.0 mm incisal or occlusal	drop shoulder-5856-018, finesse or finalize prep-5856-016 or 5856-014	e.max™ Ceram
e.max™ CAD	cad fabricated lithium-disilicate	360 MPa	Bond: any enamel-dentin adhesive bonding system; Variolink® II; RelyX™ Unicem; Calibra; Cement: any dual or self-cure luting cement, glass ionomer, zinc phosphate, Multilink®; RelyX Luting; Panavia 21; GC Fuji PLUS® resin-reinforced, glass ionomer luting cement	deep chamfer or rounded shoulder, rounded line angles	1.0-1.5 mm chamfer or shoulder @ 90°-110° angle; 1.5 mm axial walls; 2.0 mm incisal or occlusal	drop shoulder-5856-018, finesse or finalize prep-5856-016 or 5856-014	