Suggested Cementation Options for IPS Empress® & IPS e.max® Restorations

		Restoration	Crowns	Veneers IPS Empress®	Inlays/Onlays IPS Empress®	Crowns & Bridges	Crowns & Bridges
		Restorative Material	IPS Empress®	IPS e.max®	IPS e.max®	IPS e.max®	IPS e.max® ZirCAD
BRAND	MANUFACTURER	CEMENT CATEGORY					
Variolink® II	Ivoclar Vivadent	Total Etch	Yes	Yes	Yes	Yes	Yes
Other Options:							
RelyX ARC	3M ESPE	Total Etch	Yes	Yes	Yes	Yes	Yes
C&B Luting Cement	Bisco	Total Etch	Yes	Yes	Yes	Yes	Yes
Choice	Bisco	Total Etch	Yes	Yes	Yes	Yes	Yes
Duo-Link	Bisco	Total Etch	Yes	Yes	Yes	Yes	Yes
Insure/Insure Lite	Cosmedent	Total Etch	Yes	Yes	Yes	Yes	Yes
Ultrabond Plus	Denmat	Total Etch	Yes	Yes	Yes	Yes	Yes
Calibra	Dentsply Caulk	Total Etch	Yes	Yes	Yes	Yes	Yes
NX3 w/Optibond Solo Plus	Kerr	Total Etch	Yes	Yes	Yes	Yes	Yes
Clearfil DC	Kuraray	Total Etch	Yes	Yes	Yes	Yes	Yes
Cement-It	Pentron	Total Etch	Yes	Yes	Yes	Yes	Yes
Lute-It	Pentron	Total Etch	Yes	Yes	Yes	Yes	Yes
Variolink® Veneer	Ivoclar Vivadent	Total Etch - Light Cure Only	*See 2) below	Yes	*See 2) below	*See 2) below	No
Other Options:							
Choice 2	Bisco	Total Etch - Light Cure Only	*See 2) below	Yes	*See 2) below	*See 2) below	No
RelyX Veneer	3M ESPE	Total Etch - Light Cure Only	*See 2) below	Yes	*See 2) below	*See 2) below	No
·			ŕ		,	,	
Multilink® Automix	Ivoclar Vivadent	Self Etch	Yes	No	Yes	Yes	Yes
Other Options							
Panavia F 2.0	Kuraray	Self Etch	Yes	No	Yes	Yes	Yes
NX3 w/Optibond All-in-One	Kerr	Self Etch	Yes	No	Yes	Yes	Yes
Panavia 21	Kuraray	Self Etch	Yes	No	Yes	Yes	Yes
C&B Metabond	Parkell	Self Etch	Yes	No	Yes	Yes	Yes
SpeedCEM®	Ivoclar Vivadent	Self Adhesive	No	No	No	Yes	Yes
Other Options:							
RelyX Unicem	3M ESPE	Self Adhesive	No	No	No	Yes	Yes
BisCem	Bisco	Self Adhesive	No	No	No	Yes	Yes
SmartCem2	Dentsply Caulk	Self Adhesive	No	No	No	Yes	Yes
G-Cem	GC	Self Adhesive	No	No	No	Yes	Yes
Maxcem Elite	Kerr	Self Adhesive	No	No	No	Yes	Yes
Breeze	Pentron	Self Adhesive	No	No	No	Yes	Yes
Clearfil SA	Kuraray	Self Adhesive	No	No	No	Yes	Yes
RelyX Luting Plus	3M ESPE	Resin Modified Glass Ionomer	No	No	No	Yes	Yes
Infinity Syringeable	Denmat	Resin Modified Glass Ionomer	No	No	No	Yes	Yes
FujiCEM Automix	GC	Resin Modified Glass Ionomer	No	No	No	Yes	Yes
Fuji Plus	GC	Resin Modified Glass Ionomer	No	No	No	Yes	Yes
Fuji I	GC	Conventional Glass Ionomer	No	No	No	Yes	Yes
Ketac CEM	3M ESPE	Conventional Glass Ionomer	No	No	No	Yes	Yes

General Guidlines:

- 1) Dual Cure resin cements with Total-Etch adhesives will provide stronger bonds to enamel. (e.g. Variolink II)
- 2) Light cure only cements are designed for restorations with less than 2mm in thickness and high translucency (e.g. IPS Empress®, IPS e.maxCAD® and IPS e.maxPress®). The absence of self-or dual-cure amines eliminate shade shift and provide the highest level of shade stability. (e.g. Variolink Veneer)
- 3) Resin cements with Self-Etching adhesives will provide strong bonds to dentin and prepared enamel and offer reduced post-op sensitivity. These systems are excellent for crowns and bridges. (e.g. Multilink Automix)
- 4) Self Adhesive cements and Glass Ionomer cements are indicated for high-strength restorative materials only (e.g. Lithium-disilicate, Zirconia, Metal) and often have lower bond strengths.

 Resistance form in preparation design is critical to retain restorations (e.g. minimum height of 4mm and a taper of less than 8 degrees.) They are easier to use than true adhesive systems and offer reduced post-operative sensitivity.
- 5) Glass based ceramics (e.g. IPS Empress®, IPS e.max®) require proper etching and priming to establish adequate bonding.
- 6) Disclaimer: For maximum performance and esthetics, Ivoclar Vivadent recommends the use of Ivoclar Vivadent brands of cements for the placement of all IPS Empress® and IPS e.max® restorations. This is because the cements were developed to be compatible with the ceramic identified. Ivoclar Vivadent provides no assurances that the non-Ivoclar Vivadent brands mentioned in this document will perform as indicated and review of the cement manufacturer's Indications and Instructions for Use is highly recommended.

©2009 Ivoclar Vivadent, Inc.

Empress, e.max, Variolink, SpeedCEM and Multilink are registered trademarks of Ivoclar Vivadent, Inc. All other brands are not registered trademarks of Ivoclar Vivadent. Competitive information was obtained from publically available resources. THIS INFORMATION IS DEEMED RELIABLE BUT NOT GUARANTEED BY IVOCLAR VIVADENT.