

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

| BRAND | MANUFACTURER | Restoration | Crowns | Veneers | Inlays/Onlays | Crowns & Bridges | Crowns & Bridges |
|---------------------------|-------------------------|-------------------------------------|----------------------|----------------------------|----------------------------|----------------------|-------------------|
| | | Restorative Material | IPS Empress® | IPS Empress® IPS e.max® | IPS Empress® IPS e.max® | IPS e.max® | IPS e.max® ZirCAD |
| 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 |
| Ultradond 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 |
| 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 Guidelines:

- 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 IVOCALAR VIVADENT.