

Your New Cement: CemEZ™ Lives Up to its Name



If I told you there was a cement **compatible with your favorite adhesive** system; dual cure so it **bonds with or without light**; yet highly **color stable over time**; and also **cleans up incredibly easy**, would you believe it exists? It does! And it's called Cem EZ™. This new cement from Zest Dental Solutions (Danville Materials) is based on their innovative, proprietary IntelliTek™ Technology and can be used with crowns, inlays, onlays, and posts.

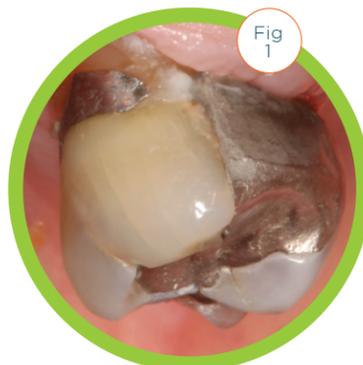


Figure 1
Tooth #3 has multiple large failing amalgam restorations.

BEFORE THE RESTORATION

Let me run you through a case so you can see how Zest (Danville Materials) has developed a nice system for bonding any type of indirect restoration: composite, porcelain, metal, or zirconia. This case involved tooth #3 in need of an e.max® crown (Figure 1) due to extensive amalgam restorations that were leaking, recurrent decay, and multiple fracture lines running through the tooth.

A CEREC e.max® crown was fabricated during the same visit the tooth was prepared—meaning there was no need for an impression or temporary—and within 30 minutes we were ready to bond the final restoration.



Figure 2
Application of S-Bond to the intaglio surface of the e.max crown.

PREPARING THE RESTORATION

The internal surface of the CEREC e.max crown was air abraded with 27 micron aluminum oxide particles using a MicroEtcher™ (Zest Dental Solutions, Danville Materials) at no more than 40 psi. Then the internal of the restoration was etched with 9% hydrofluoric acid for 60 seconds and rinsed thoroughly with water. After drying, the internal surface was coated with Danville's S-Bond™ which is a stable, prehydrolyzed silane (Figure 2) for 60 seconds and dried. Silane is the coupling agent which helps the e.max ceramic material bond to the resin cement.



Figure 3
Prelude One Universal Adhesive was brushed onto the preparation for 20 seconds.

ETCHING AND BONDING THE RESTORATION

The tooth was isolated during the tooth preparation and cementation with Dry Shield, which isolated the tooth from the cheeks, tongue, and contamination. The tooth was prepared with the selective etch approach. The remaining enamel was etched with Zest (Danville Materials) Sure Etch™, a 37% phosphoric acid gel, for 15 seconds trying to avoid getting any significant amounts on the deeper dentin, and rinsed with copious water. The excess water was plotted off the tooth with a clean applicator brush, leaving the dentin moist.

With its IntelliTek Technology, Cem EZ is compatible with a wide variety of bonding agents. In this case, Zest (Danville Materials) Prelude One™ Universal Adhesive was brushed onto the dentinal surface with a gentle brushing action for 20 seconds (Figure 3); blown with air for 10 seconds to thin the adhesive and evaporate the volatile ethanol solvent; and then the preparation was light cured for 10 seconds.

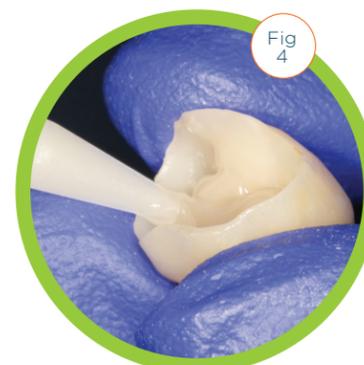


Figure 4
Filling the crown with Cem EZ.

SEATING THE RESTORATION

Cem EZ's color stable chemistry, simplified technique, and low film thickness makes it ideal for bonding any indirect restoration with dependable bond strengths. Cem EZ is delivered from a dual barrel syringe, so before placing the mixing tip onto the syringe it should be bled to ensure equal amounts of base and catalyst are extruded, and then I like to discard the first bit out of the mixing tip. Cem EZ is available in Translucent, Warm, and White Opaque shades. In this case, the Warm shade was used and the restoration was filled and seated with firm pressure (Figure 4).



Figure 5
The restoration is seated with firm pressure and the excess cement was tacked for 3-5 seconds.

CURING THE RESTORATION

After seating, the restoration was tack cured with a curing light on the buccal for 5 seconds so the restoration would not move (Figure 5).



Figure 6
The gelled Cem EZ is easily removed with a carver and additional curing is performed.

CLEANING THE RESTORATION

In most cases, floss would be run through the contacts at this point, but in this example the excess cement extruded from all sides and no flossing was done until all sides had been tacked with the light for 5 seconds. The excess gelled cement was easily removed with a carving instrument and just peeled away, making clean-up very quick (Figure 6).

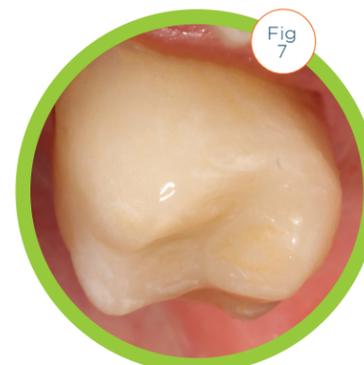


Figure 7
Completed restoration immediately after placement.

THE FINAL RESTORATION

The occlusion was checked and the case was complete (Figure 7).

The IntelliTek™ Technology utilized in Cem EZ is the same great innovation first seen in the Bulk EZ™ dual-cure flowable bulk fill composite. I have used this technology and product for a couple of years with great success, and trust it immensely. Once again, Zest Dental Solutions (Danville Materials) and IntelliTek have delivered a great product that is easy to use and provides great performance at an even greater value. This is indirect cementation made EZ!