



Technical Bulletin

Maxcem Elite

Maxcem Elite™ is Kerr's newest innovation in the self-adhesive cement space. The market, while continuing to embrace the technology of this relatively new category, still harbors concerns about the bonding capabilities of cements that bypass the bonding step. Maxcem Elite is formulated to ease this concern by taking the science behind self-adhesive cements and evolving the chemistry to ultimately provide bond strengths and superb esthetics that surpass competitive claims.

***“Super convenient!
Easy clean-up too at gel state.”***

Dr. Michael DiTolla,
Newport Beach

“I have used Maxcem Elite for restorations including inlays, onlays, and crowns. The set time is perfect—as soon as I seat the restoration, I tack-cure the margins to gel state and clean them up. I then run floss through the contacts and have my assistant cure away if it is an all-ceramic. If it is a PFM we keep it isolated from moisture for 4 minutes, and I am either out of the room or adjusting the occlusion. My favorite part is the variety of tips I get, especially the curved tips that I use for inlays, some onlays and post spaces... Super convenient! Easy clean-up too at gel state. I have to give it a 10 out of 10 especially because it comes in 5 shades, with one of them being a clear shade.”

Dr. Michael DiTolla,
Newport Beach

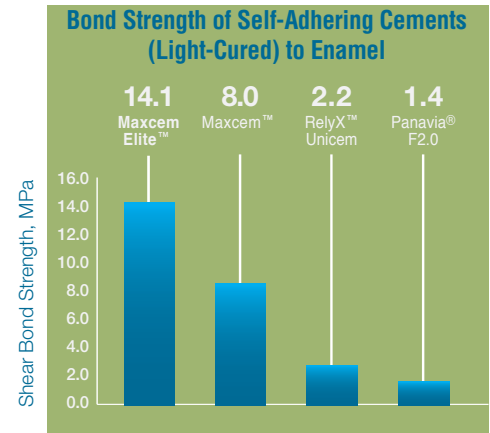


Your practice is *our* inspiration.™

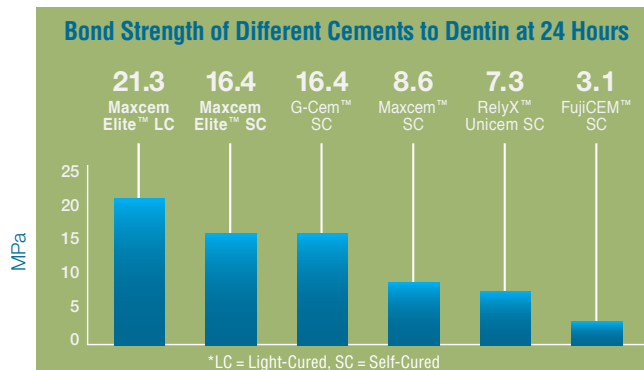
Superior Bond Strengths and Compatibility To All Common Dental Substrates

Maxcem Elite is indicated for cementation of anterior or posterior composites, ceramics, PFMs and metal restorations, CAD/CAM materials, zirconia-based restorations, posts, and cementing crowns to implants. Maxcem Elite's enhanced bond strengths are achieved as follows:

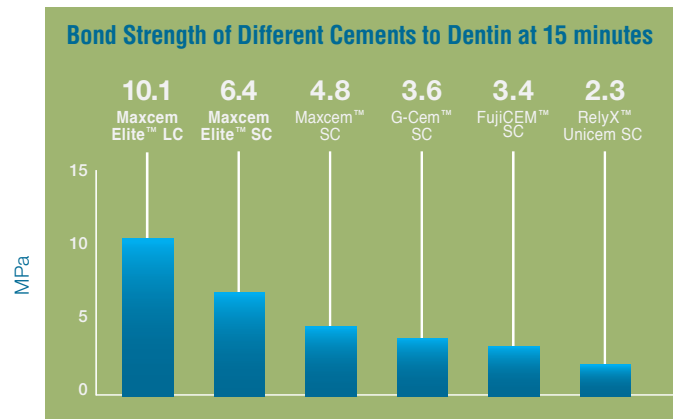
- Optimized amount of GPDM and other adhesive monomers to improve wettability
- Modified resin matrix system to reduce surface tension to etch more effectively, hence eliminating the 90-second wait of previous generation of Maxcem, in addition to enhancing shelf life so no refrigeration is needed
- Re-designed filler system to promote a more intimate contact with tooth



24-hour Bond Strength. Dr. W. de Rijk, Dr. W. Hollis, and N. Pecora, University of Tennessee. Data available upon request.



24-hour Bond Strength. Dr. Carlos Muñoz, SUNY(Buffalo). Data available upon request.



15-minute Bond Strength. Dr. Carlos Muñoz, SUNY(Buffalo). Data available upon request.

Simplicity Refined

"I have often struggled with the sensitivity that is sometimes the by-product of adhesive systems. It is great to have a cement that is not technique sensitive. Maxcem Elite eliminates the worries about bonding by using the same unique adhesive used in Kerr's OptiBond family of adhesives. The optimized resin matrix and filler systems improve wettability, resulting in greater adhesion and allowing for immediate tack curing and better shelf-life stability. Maxcem Elite is a self-etch, self-adhesive resin cement for indirect restorations (anterior or posterior ceramics, PFMs and metal restorations, and CAD/CAM materials) with higher bond strengths and ease of use. It offers easy cleanup and no refrigeration is required. New intraoral and root-canal tips allow for dispensing of cement into hard-to-reach places."

Dr. Joe Blaes

As seen in "Pearls For Your Practice" column in the April 2008 Dental Economics Magazine.

Maxcem was the first in the self-adhesive cement category to offer what is truly the easiest to use and fastest procedure on the market with the dual-syringe delivery system. Maxcem Elite continues this legacy with automix tips that now come with optional curved tips—intraoral tips for inlays/onlays, and root-canal tips for post cementation—to dispense cement in those hard-to-reach places in the mouth. No hand mixing, and no separate activation, mixing or dispensing device required. Maxcem was famous for its cleanup. Now, Maxcem Elite's cleanup is just as fast as excess cement is easily removed after reaching a gel state. Maxcem Elite comes with a technique guide that summarizes the full instructions for use, making the cementation process an easy and user-friendly experience.

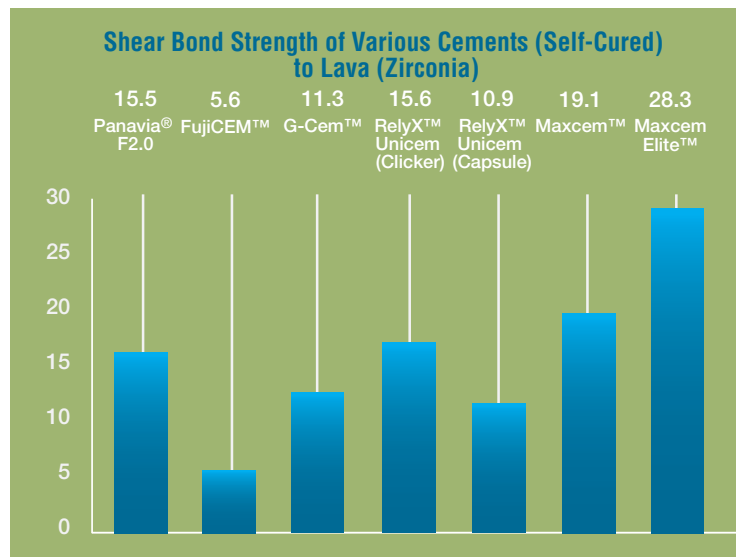
Using Maxcem Elite To Cement Zirconia Restorations

“Zirconium-based porcelain crowns represent an alternative restorative material that enhances the dentist’s and technician’s ability to provide durable, aesthetic and functional restorations in the anterior or posterior region of the mouth especially when metal-free restorations are a primary desire of the patient. I recently used Maxcem Elite to cement Lava crowns for a patient. Excess cement was easily removed from the margins and accomplished within a short amount of time before final curing with the DEMI curing light for 10 seconds. No finishing of the cement was necessary along the margins.”



Dr. Ara Nazarian

In the wake of the fast-rising market growth of zirconia-based restorations, some of which can debond quickly due to insufficient bond strength of material used, Kerr acknowledges and addresses the need for a cement that performs well with the likes of Lava™ and Procera™ by introducing Maxcem Elite. Maxcem Elite utilizes the same GDPM adhesive monomer found in the OptiBond family of adhesives, whose long-standing clinical history speaks for itself. Maxcem Elite’s mechanical strengths rival those of traditional resin cement, and far exceed those of resin-modified glass ionomer/ glass ionomer cements. Maxcem Elite brings peace of mind for the dentist and achieves patient trust with its solid performance with all common dental substrates, especially with zirconia.



24-hour Kerr R&D Bond Strength. Data available upon request.

Shear Bond Strength, MPa

Actual patient case pictures courtesy of Dr. Ara Nazarian



Patient's original smile



Patient's original restorations with fracture lines and failing margins



Patient's teeth prepped with Expasyl for gingival retraction before taking impressions



Cementing Lava crown using Maxcem Elite



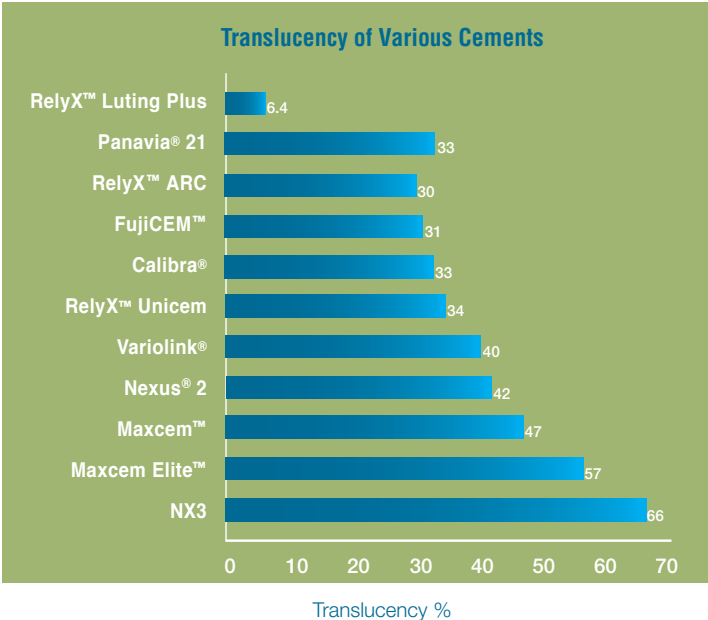
Final zirconia restorations seated using Maxcem Elite



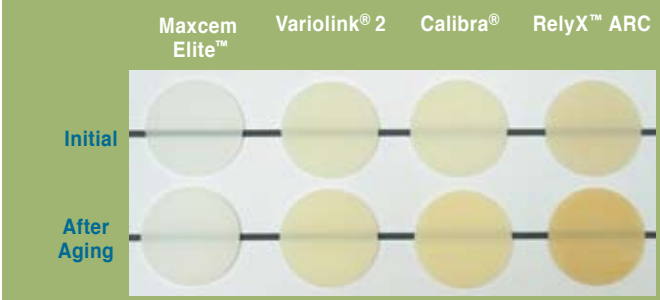
Patient pleased with final results of her smile

The Proprietary Redox Advantage

Most self-cure or dual-cure resin cements use a benzoyl peroxide (BPO) and tertiary amine pair to initiate polymerization and curing, resulting in discoloration over time due to oxidation of amine. Now with an amine-free redox initiator system and optimized resin matrix, Maxcem Elite, together with NX3, Kerr's traditional resin cement, are the first truly color-stable resin cements in the market. Maxcem Elite's color stability and high translucency enable esthetic integrity and allow for cementation of both anterior and posterior restorations, making it a universal cement that helps simplify and minimize the office inventory.



Color Stability of Maxcem Elite vs. Traditional Resin Cements (Clear Shade, Dual-Cured) after Aging for 28 weeks in 37°C Water



Color Stability of Self-Adhesive Resin Cements (Clear Shade, Dual-Cured) after Aging for 28 weeks in 37°C Water

