



Product Change

UltraCem Resin-Reinforced Glass Ionomer Cement is now FDA approved to use with zirconia restorations.

Clinical Indications

UltraCem is used as a luting material for indirect restorations (include inlays, onlays, crowns, and bridges) made of metal, porcelain fused to metal, **zirconia**, and resin to natural teeth.

Directions for Zirconia

Apply Peak Universal Bond to the preparation using a scrubbing motion for 10 seconds. (No etchant required.) Aggressively air thin until surface appears dull and light cure for 10-seconds with VALO on standard mode. For best results, sandblast the inside of the prosthesis; clean with an air/water spray and dry. Mix and deliver UltraCem directly into prosthesis and seat. Once UltraCem has reached the “rubbery” stage, clean off excess material.

Note:

- *Never use phosphoric acid to clean zirconia as it will significantly reduce bond strengths.*
- *Do not use a zirconia primer with UltraCem as it will significantly reduce bond strengths.*

Features & Benefits

The combination of UltraCem and Peak Universal Bond yields bond strengths that are significantly higher to zirconia than any other RRG/IRMG/ or self-adhesive resin cement.

About Zirconia

A recent surge in interest in metal-free alternatives in esthetic/restorative dentistry has led to the increased use of zirconia-based restorative materials due to the material’s high strength, versatility of clinical indications, and ability to be produced using CAD/CAM technology. Additionally, zirconia is virtually indestructible, can be made very thin, and is ideal for bruxers. Zirconia also has good opacity, which may be an advantage when trying to block out underlying discolored teeth or restorative materials. However, it may also be a disadvantage when trying to develop a more translucent appearance. To achieve a balance of strength and esthetics, a layered crown design is commonly used. The zirconia coping (core) provides strength to the internal structure while a layer of porcelain or pressed ceramic fused to the zirconia will produce a more natural, esthetic look.



These crowns are made of porcelain layered over a zirconia core



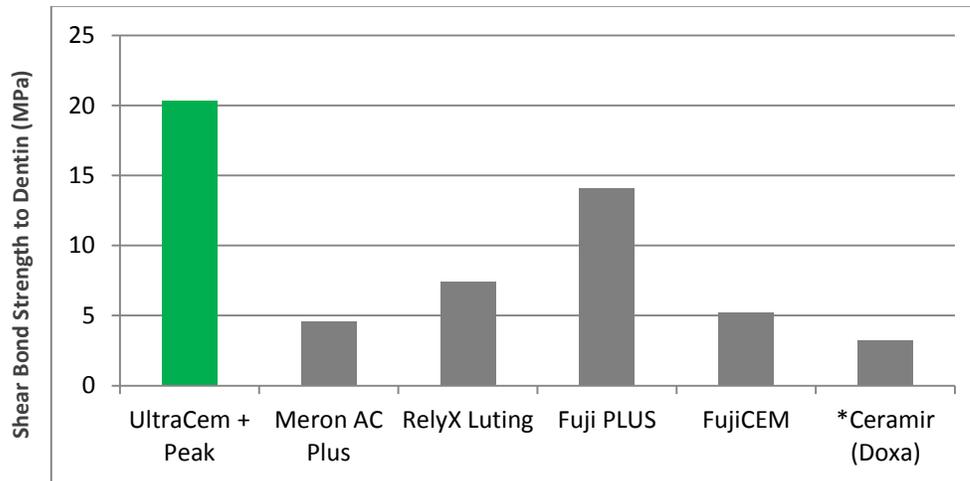
BruxZir restorations are milled from monolithic zirconia blocks

Frequently Asked Questions

Q: Why does Ultradent instruct to use Peak on the tooth when using UltraCem with zirconia restorations while competitor products do not?

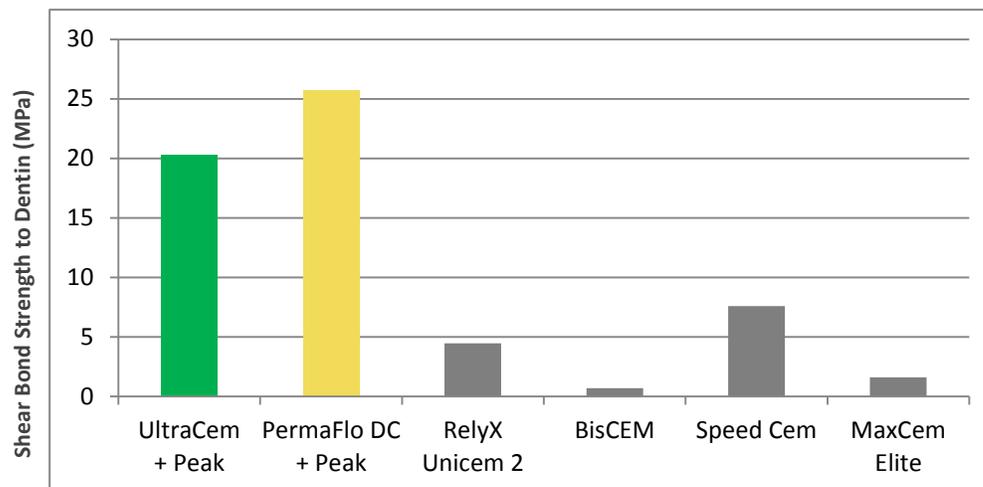
A: During our testing, we found that the use of Peak Universal Bond on the prep provides the superior bond strengths that UltraCem is known for. Without the use of Peak, the bond strengths are not within what we consider to be an acceptable range. The graphs below illustrate the exceptionally high bond strengths achieved by using UltraCem + Peak as compared to competitor materials. Note the significant difference in adhesion achieved with Peak & UltraCem as compared to competitor products.

Zirconia: RRG1 / RMGI Cements



*Ceramir is technically a calcium aluminate glass ionomer

Zirconia: Self-Adhesive Resin Cements v. Hydrophobic Bonding



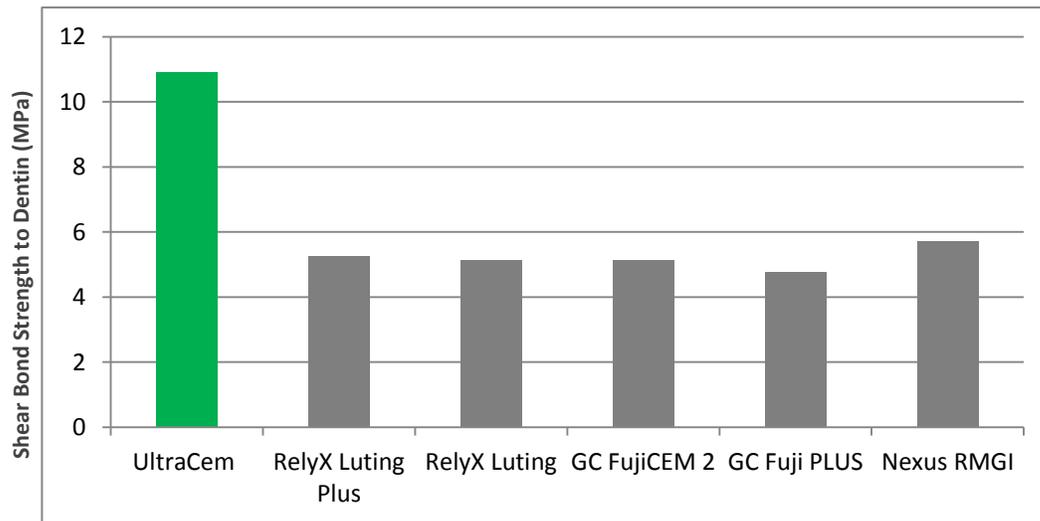
Q: Why shouldn't a zirconia primer be used in conjunction with UltraCem?

A: A zirconia primer is used for increasing adhesion between the zirconia surface and the resin luting material. Zirconia primers are formulated for use with resin cements (like PermaFlo DC), not RRGi cements. The phosphates in a zirconia primer actually work against the chemistry of RRGi/RMGI cements, which ends up decreasing the bond strengths to zirconia.

Q: Did the instructions change for luting metal, PFM, or resin restorations with UltraCem?

A: No, for these types of restorations the instructions are the same: no additional bonding steps are needed. Since UltraCem launched in 2012, two new competitors came to the market: GC FujiCEM 2 and Nexus RMGI. Neither of these cements compare to UltraCem's shear bond strength to metal as seen below:

Metal: RRGi / RMGI Cements



Instructions: Apply Peak Universal Bond to the preparation using a scrubbing motion for 10 seconds. (No etchant required.) Aggressively air thin until surface appears dull and light cure for 10-seconds with VALO on standard mode. For best results, sandblast the inside of the prosthesis; clean with an air/water spray and dry. Mix and deliver UltraCem directly into prosthesis and seat. Once UltraCem has reached the "rubbery" stage, clean off excess material.

Note:

- Never use phosphoric acid to clean zirconia as it will significantly reduce bond strengths.
- Do not use a zirconia primer with UltraCem as it will significantly reduce bond strengths.