
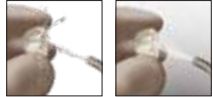




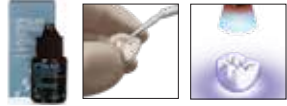






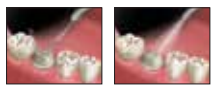
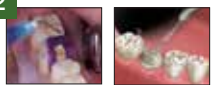

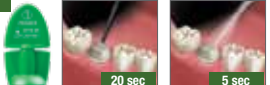
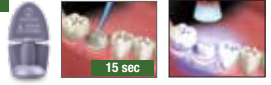
Extraoral Polishing

<p>1</p>  <p>Sprue Removal. Use a fine diamond bur to finish the sprue area.</p>	<p>2</p>  <p>Cleaning. Clean using pressurized water with a 3-way syringe. Use gentle air pressure to dry. • Optional: Sonicating in water for 2 minutes.</p>	<p>3</p>  <p>Trial Fit. Trial fit the restoration to the preparation and check proximal and occlusal contacts.</p>	<p>4</p>  <p>Adjustments. Adjust contacts and occlusion with a fine diamond bud bur.</p>
<p>5</p>  <p>Polishing. To achieve high gloss, use a fine and extra-fine rubber polisher. • Apply with a low-speed handpiece and polish with feather-light pressure. • Do not use polishing paste.</p>	<p>6</p>  <p>Optional Staining. Stain/characterize restorations with methacrylate-based, light-curable stains.</p>	<p>7</p>  <p>Optional Glaze. Apply a light-curable coating agent. • Recommended: OPTIGLAZE™</p>	

Pre-Treatment of Restorations





<p>1</p>  <p>Sandblast with MicroEtcher™ using 50 µm alumina at 30–40 psi for 10 seconds.</p>	<p>2</p>  <p>Clean using pressurized water with a 3-way syringe. Thoroughly air dry. • Optional: Sonicating clean in water for 2 minutes.</p>	<p>3</p>  <p>Using a new applicator, apply a coat of OptiBond™ XTR Adhesive to the internal surface.</p>	<p>4</p>  <ul style="list-style-type: none"> • Air-thin with gentle pressure followed by strong pressure for 10 seconds. • Light-cure for 10 seconds.
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Pre-Treatment for Tooth Preparation

<p>1</p>  <p>Cleaning. Clean the cavity or stump, rinse with water, and lightly air dry. (Pumice slurry optional.)</p>	<p>2</p>  <p>Etching. Inlay and onlay restorations only. • Etch with 37% phosphoric acid for 15 seconds with medium scrub pressure. • Rinse with water for 10 seconds, lightly air-dry or blot, and leave tooth moist.</p>	<p>3</p>  <p>Gluma® Application. For inlay, onlay, and crown cases. ⚠ Ensure application does not contact soft tissue. • Using a new applicator, apply smallest amount of Gluma needed and leave for 30–60 seconds. Apply a stream of compressed air until surface is no longer shiny. • Repeat step above once more. • Rinse thoroughly with water.</p>
<p>4</p>  <p>Primer Application • Use a new applicator and apply a coat of OptiBond XTR Primer with medium scrub pressure to enamel/dentin for 20 seconds. • Air-thin with medium pressure for 5 seconds. ⚠ Do not mix applicator tips. Always discard applicator after each application.</p>	<p>5</p>  <p>Adhesive Application • Shake OptiBond XTR Adhesive. • Use a new applicator and apply a coat with medium scrub pressure to enamel/dentin for 15 seconds. • Air-thin with gentle pressure followed by strong pressure for at least 5 seconds. • Light-cure for 10 seconds. ⚠ Do not mix applicator tips. Always discard applicator after each application.</p>	

Cementation

⚠ Avoid any kind of saliva or blood contamination for optimal bonding.

<p>1</p>  <ul style="list-style-type: none"> • Before the first use of Maxcem Elite™ cement, remove syringe cap and bleed the syringe to equalize the pastes. • Secure the appropriate automix tip. 	<p>2</p>  <p>Dispense a uniform layer of Maxcem Elite cement into the restoration.</p>	<p>3</p>  <p>Seat the restoration with moderate pressure; allow excess to flow. Maintain pressure and complete only one of the following: • Recommended: Self-cure for 2–3 minutes to achieve gel state, then remove all excess around the margins. • Tack-cure for 2–3 seconds, then remove all excess around the margins.</p>	<p>4</p>  <ul style="list-style-type: none"> • Light-cure all surfaces for 10 seconds each. • Allow cement to set for a total of 4 minutes after seating of the restoration (steps 3 and 4).
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ATTENTION

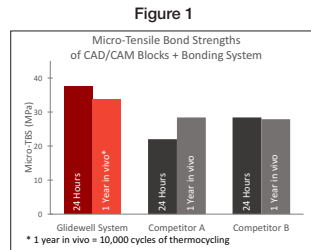
Glidewell R&D recommends a specific bonding system as outlined below.

Technical FAQs

What are the benefits of CAMouflage® NOW with the bonding kit?

CAMouflage® NOW and the bonding kit has been developed and selected based on rigorous testing to ensure clinical success for adequate preps.

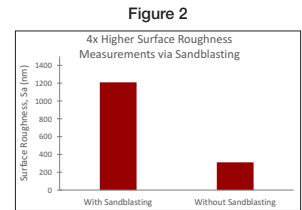
When CAMouflage NOW and its bonding system was tested against industry competitors, the bond strength results were compelling at both 24 hours and 1 year in vivo (Figure 1).



Is sandblasting the intaglio surface of the restoration necessary?

Yes. It is important to sandblast the internal surface of the milled restoration using a MicroEtcher and 50 µm alumina at 30–40 psi.

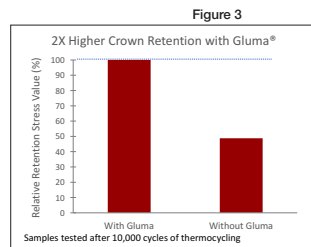
Our studies have shown that sandblasting produces surfaces with four times the irregularity of non-sandblasted surfaces. This is a crucial step for adhesion as it improves the bond strength at the restoration-cement interface via micromechanical interlocking (Figure 2).



How is Gluma Desensitizer beneficial for bonding?

Gluma also improves the strength and durability of the dentin-restoration bond when it is used with the recommended bonding procedure.

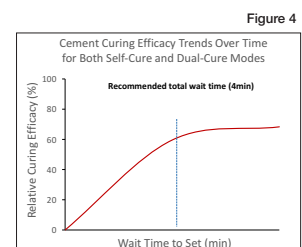
Gluma has been shown to maintain the crown retention strength even after thermocycling equivalent to 1 year in vivo. In the absence of Gluma, retention strength was decreased by about 50 percent (Figure 3).



Why is the set time of the cement important?

Maxcem Elite cement has a total set time of 4 to 5 minutes starting from the time it is seated in the oral environment. Allow Maxcem Elite to fully cure before making any intraoral adjustments.

Our studies have shown that Maxcem Elite cement demonstrates excellent fast-curing potential at 4–5 minutes for both self-cure and dual-cure modes (Figure 4).

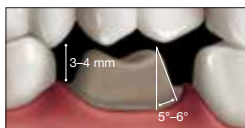


All data sourced by the Research & Development department at Glidewell Dental.

Preparation Guidelines

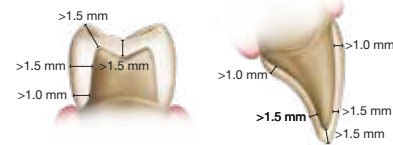
Tooth Preparation

- Preserve axial wall height; ≥ 3 mm preferred.
- Employ an established path of insertion.



Crown Restoration Design

- Wall thickness should be at least 1.5 mm, 1.0 mm at margins.
- Prepare margins with a deep chamfer or a rounded shoulder.



Inlay/Onlay Restoration Design

- Prepare cavity walls with tapered 5–6° to the long axis.
- Wall thickness should be ≥ 1.5 mm.
- Isthmus thickness should be ≥ 1.5 mm.

