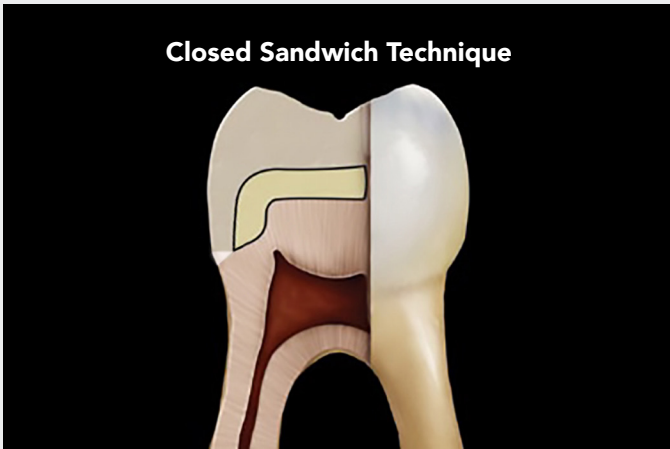


# The Sandwich Technique

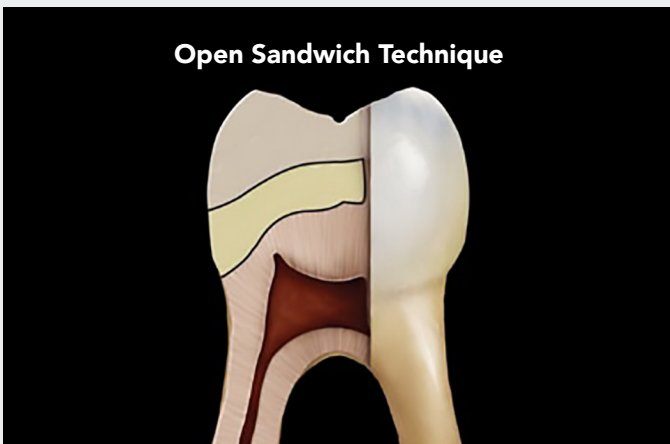
The Best of Both Worlds

**Closed Sandwich Technique**



The sandwich of glass ionomer cement or glass hybrid and composite resin is an effective technique that optimally combines the desirable properties of the restorative materials.<sup>1</sup>

**Open Sandwich Technique**



- Reduced post-operative sensitivity
- Pulpal protection from irritation<sup>2</sup>
- Fluoride release over time<sup>3</sup>
- Prevention of demineralization
- Remineralization of affected dentin
- Rapid placement and curing of a single bulk layer

The Sandwich Technique can be used in extensive Class I, Class II, Class III, Class V and subgingival cavities that are difficult to isolate.

## Leading Independent Reviews Confirm the Benefits of the Sandwich Technique:

- Placement of moisture tolerant glass ionomer restorative in subgingival interproximal boxes
- Reduced microleakage compared to composite-only techniques<sup>4</sup>
- Zone of inhibition adjacent to the glass ionomer<sup>5</sup>

1 Giachetti et al. A review of polymerization shrinkage stress: current techniques for posterior direct resin restorations. Journal of Contemporary Dental Practice, Volume 7, No. 4, 2006. 2 Suzuki et al. Glass ionomer composite sandwich technique. Journal of the American Dental Association, Volume 120, 1990. 3 Berg JH. Glass ionomer cements. Pediatric Dentistry, Volume 25, No. 5, 2002. 4 Hagge et al. Effect of four intermediate layer treatments on microleakage of Class II composite restorations. General Dentistry, Volume 49, No. 2, 2001. 5 Tantbirojn et al. Inhibition of dentin demineralization adjacent to a glass-ionomer/composite sandwich restoration. Quintessence International, Volume 40, No. 4, 2009.



# Clinical Step-by-Step Guide

The Sandwich Technique may be open or closed

## Indications of Open Sandwich:

- 1. Preparation margins are in dentin
- 2. Proper isolation is impossible
- 3. Managable/neutral oral pH

## Indications for Closed Sandwich:

- 1. Preparation margins in enamel
- 2. Proper isolation is possible
- 3. Acidic/uncontrollable pH



Class II preparation with deep subgingival box.



Class II preparation with shallow supragingival box.



Placement of GC Fuji II LC® in box to the gingival margin and occlusally.



Placement of EQUIA Forte® HT occlusally.



Light-curing of GC Fuji II LC®.



Self-curing of EQUIA Forte® HT.



Apply G-Premio BOND™, then place G-ænial™ A'CHORD composite, followed by light-curing.



Apply G-Premio BOND™, then place G-ænial™ A'CHORD composite, followed by light-curing.



Final, esthetic glass ionomer and composite sandwich technique restoration.



Final, esthetic glass hybrid and composite sandwich technique restoration.

GC Fuji IX GP® and GC Fuji LINING™ LC are also suitable for the sandwich technique.

|                                                                                                                                                                                |                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>G-ænial™ A'CHORD Unitip Refills (contains 15 unitips):</b> 952244 A1 952245 A2 952246 A3 952247 A3.5 952248 A4                                                              | <b>GC Fuji II LC® 24-Capsule Assorted Packages:</b> 436400 Light Shades (5 capsules each of A1, A2, A3, B2, and 4 C2).                                                                      |
| <b>G-ænial™ A'CHORD Syringe Refills (contains 1 syringe):</b> 952230 A1 952231 A2 952232 A3 952233 A3.5 952234 A4                                                              | <b>GC Fuji II LC® 48-Capsule Refills:</b> 000138 A1 000139 A2 000140 A3 000141 A3.5                                                                                                         |
| <b>G-ænial™ A'CHORD Core Kits:</b><br>952259 Syringe Core Kit (five syringes each of A1, A2, A3, A3.5, A4)<br>952264 Unitip Core Kit (15 unitips each of A1, A2, A3, A3.5, A4) | <b>EQUIA Forte® HT Fil 48-Capsule Refills:</b><br>453010 A1 453011 A2 453012 A3 453014 B1 453016 B3<br>453000 Assorted (10 capsules each of A2, A3, A3.5, and 9 capsules each of B1 and B3) |