The following pages contain a summary of information designed to assist you with the armamentarium, preparation, and placement of anterior and posterior aesthetic restorations. This will include preparation design, adhesives, and dental materials used to complete these aesthetic restorations.

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Henry Schein
<table>
<thead>
<tr>
<th><strong>Total Etch Technique</strong></th>
<th><strong>Self-Etch Adhesive Technique</strong></th>
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</thead>
<tbody>
<tr>
<td>Clean with chlorhexidine 15 seconds and rinse</td>
<td>Clean with chlorhexidine 15 seconds rinse and dry</td>
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<tr>
<td>Place 30%+ phosphoric acid on enamel first and then drop down to the dentin do not leave on dentin more than 15 seconds then rinse</td>
<td>Apply Xeno IV to the prepared enamel/dentin 15 seconds evaporate excess</td>
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<tr>
<td>Optional* place wetting agent now</td>
<td>Reapply a Xeno IV thin, light cure</td>
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<tr>
<td>Apply XP Bond or P&amp;B NT for 20 seconds, air thin, cure</td>
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<tr>
<td>Place Composite</td>
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Ten main causes of sensitivity

1.) Not using a rubber dam
2.) Over etching the dentin (10-15 sec.)
3.) Over drying the dentin
4.) Incomplete caries removal
5.) Improper curing (Check your lights)
6.) Improper use of bonding agent
7.) Not using an antibacterial agent BEFORE etching
8.) Using too large increment of composite
9.) Not using a wetting agent before placing an adhesive and/or puddling it on the tooth (Too much)
10.) Occlusion
Anterior Direct Composite

Gingival

Opaque Body

Body shade

Incisal Translucency

Incisal Halo

The following are just guidelines to what different shade segments to a tooth:

Gingival: Generally 1-3 shades lower in Value than the incisal. Unless there is decay or doing a full veneer this portion of the tooth is not usually affected.

Opaque Body: This portion is usually in the center of the tooth more in a gingival direction. There is usually replaced in a severe class IV. Clinician should use caution not to place too much of this or the tooth will look too bright. Usually there is a body shade and/or translucency that is layered over this.

Incisal Translucency: Generally younger people have more of this and as you age there is less. If doing a class IV this is determined what the surrounding teeth look like. Depending on the tooth there could be some body shade in “Lobes” with translucency layer over it.

Incisal Halo: In a small percent of the population there is a “halo” this is enhanced by the translucency especially in young people. Tints, or an incisal shade can be used in very small amounts usually encompassed with translucency.

Keep the above anatomical shades in mind when replacing anterior tooth structure. Also the facial surface anatomy or texture is very important. No matter how perfect of shade match that is done it is critical to match the surface anatomy.
Class I & II Composite (Total etch)

- Clean preparation with Chlorhexidene 15 seconds and rinse
- Etch with 30%+ phosphoric acid. Start with the enamel and then place on the dentin for a maximum of 15 seconds and rinse for 5 seconds
- Place wetting agent (optional) do not puddle (matte finish)
- Place adhesive like XP Bond, Prime and Bond NT
- Evaporate the excess solvent off and cure
- Depending on the depth place up to 4mm of a flowable SureFil SDR and cure.
- If the restoration is more than 4mm deep place a body composite in 2mm increments. (If Class II place a packable in the box area to maintain a tight contact) Cure each increment twenty seconds. Then place clear for the enamel layer
- If the restoration is 4 mm or less place the (Clear Enamel)) out of the Esthet X HD kit on top of the flowable. Place and contour buccal anatomy and light cure 10 seconds. Place Esthet X HD on the lingual. Create anatomy then cure.
- Use various polishing points and cups to polish (Enhance or PoGo)

Self-Etch Class I and Class II

- Clean the preparation with Chlorhexidine
- Apply self-etch adhesive like Xeno IV for 20 seconds scrubbing the preparation gently.
- Evaporate the solvent off the preparation
- Apply a second coat of self-etch adhesive Xeno IV
- Evaporate the solvent
- Light cure 10 seconds
- Place composite like total-etch like above

ChemFil Rock (Zinc-reinforced glass ionomer)

- No Cavity Conditioning, self-adhesion and self-cure
- Base/core build-up
- Class V
- Semi-permanent restorative for Class I and class II
- Deciduous teeth
Class I and Class II Composites

Class II

Palodent Plus *(Sectional matrix system)* for Class II
Cementation Options

Pressed Ceramics/Feldspathic Porcelain?

- Total Etch with Light cure resin cements
- Self-etch adhesives with light cure/dual cure resin cements (*Not recommended*)
- Self-etch adhesive resin luting cements (*Not recommended*)

Lithium Disilicate (E-Max)

- Total Etch with Light cure/dual cure resin cements (Calibra)
- Self-etch adhesives with light cure/dual cure resin cements (SmartCem)
- Self-etch adhesive luting cements (SmartCem)

Zirconia (Cercon, Lava)

- Total Etch with Light cure/dual cure resin cements (Calibra)
- Self-etch adhesives with light cure/dual cure resin cements (SmartCem)
- Self-etch adhesive luting cements

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