

Composi-Tight Sectional Matrix Technique overview for Class 2 Restorations

1. Place rubber dam. As with many dental procedures, aspiration of small parts is a valid concern.

2. Prepare tooth with conservative Class 2 preparation. (Extension for prevention and retentive grooves are unnecessary when using composite restorations with 3rd or 4th generation bonding agents). Very Important: Make sure that the contact with the adjacent tooth has been completely broken. Note: Although one may be reluctant to fully break this contact on a standard composite restoration, this step is essential in the placement of the contoured band. Your contacts will be exceptional and you will not leave unsupported enamel.

3. Place contoured sectional matrix band. Over-approximate tooth curvature by rolling contoured band with finger. (Figure 1) Slide band in place from top and wedge in place. Use smallest wedge that will approximate the cervical cavo surface margin of the restoration (the wedge is not intended to separate the teeth). Remember, a high viscosity resin packed into the preparation will be trying to displace the band away from the tooth. (Figure 2)

4. Apply G-Ring retainers. Spread G-Ring with Garrison Ring Placement Forceps or rubber dam clamp forceps and place over the band. Place tines of G-Rings adjacent to the band when-ever possible; however, tines can be placed on the opposite side of the wedge in restorations with large buccal or lingual extensions. (Figures 3a & 3b)

5. Burnish band against adjacent tooth. Very Important: burnish the band against the adjacent tooth with a ball burnisher to make sure there is no spring-back of the band. This will ensure excellent contacts.

6. Etch and disinfect the preparation. Totally etch both the dentine and enamel for 15 seconds with 35% phosphoric acid and rinse. Garrison Dental Solutions recommends applying a disinfecting agent with a small cotton pledget to the preparation. Dry, but do not desiccate the preparation.

7. Apply bonding agent and composite resin. Apply and cure a 4th generation bonding agent or better per manufacturers' instructions (4th generation bonding agents are essential to eliminate micro leakage and post-operative sensitivity). Incrementally apply and cure the composite resin in 2mm thick applications to assure a full cure of the restoration.

8. Remove G-Ring and band. Remove G-Ring with Garrison Ring Placement Forceps or rubber dam clamp forceps. Remove wedge and matrix band. Because of the superior contact achieved with the Composi-Tight system, removal of the bands requires a Howe Pliers or high-quality dressing forceps.

9. Contour and polish the restoration.

Technique for MOD Restorations:

1. Prepare tooth as in steps 1 and 2 above.

2. Place and wedge two bands on both sides of tooth being restored.

3. Apply G-Rings. Place ring with standard length tines on the mesial interproximal area. Secondly place the ring with long tines on the distal interproximal area. (Figure 4)

4. Complete procedure as outlined in steps 5-9 for Class 2 restorations above.

Notes for Multiple-tooth Restorations:

- G-Rings with differing length tines may be used as outlined above for MOD restorations.
- If multiple-tooth restorations are performed on adjacent teeth, one must be filled and cured first. Subsequently, the adjacent band may be burnished against the now hardened restoration and remaining band to provide a tight contact. (Figure 5)

