

10 Commandments for Successful Glass Ionomer Placement

1. **Remove biofilm and pellicle** with pumice or defocused air abrasion or with cotton products if using microbial aerosol precautions in the surrounding area of the lesion to be treated (GIC has no chemical bond to biofilm or pellicle).
 2. **Clean the perimeter of the lesion** using selective caries removal and your preferred technique (rotary handpiece, air abrasion, or hand instruments such as handburs or spoon excavators).
 3. **Condition the lesion and surrounding areas with 20% polyacrylic acid** for **10 seconds** (removing the smear layer and activating the surface for ionic exchange).
 4. **Rinse with water for 10 seconds and blot dry (leaving a moist “glossy” surface).**
 5. **Place a matrix and wedge if needed.**
 6. **If any contamination occurs, rinse briefly again with water and blot dry with cotton (leave a moist “glossy” surface).**
 7. **Mix the GIC or (RMGI) *(for 10 seconds) and apply immediately to the cavitation to prevent voids.**
 8. **Work quickly to place *(10 seconds), shape, and remove excess *another 10 seconds = 30 second rule), since any increase in temperature will greatly decrease manufacturer’s stated working time. Avoid over-manipulating the GIC once initial gel crosslinking has begun *(30 seconds from start of mix) and the setting GIC begins to lose its gloss).**
 9. **Protect from water loss or water gain.** Do not allow the GIC to dry out or become diluted with water/saliva. Some options used for preventing excess water loss or water gain from or to the GIC include; turning suction isolation systems down or off during set, and/or coating the surface of the GIC with a microbrush dipped in unfilled resin, using a damp (not drenched) cotton-tip applicator, or gloved finger re-moisten with water/saliva.
 10. **Do not disturb the restorative material while it is setting (approximately 2.5-3.5 minutes for GIC or until RMGI is light cured).** Once set, if placing anatomy, or finishing and polishing, use water to prevent desiccation.
- **My personal goals**