

3D Printed Clean Base Clinical Bonding Guide

Materials and Supplies		
Cotton Tweezer	Scaler and Band Pusher	Curing Light (2400 Milliwatts per square centimeter)
High Volume Suction	Cheek Retractors (NOLA™ if available)	Dry Angles
Cotton Rolls	Pumice and Applicator Cups	Etch (35% to 37%)
Primer	Adhesive	Micro Brushes

Recommended Bonding Materials:

- **Bond Enhancer:**
 - Assure Plus (Reliance Orthodontics)
- **Adhesives:**
 - LCR (Reliance)
 - GoTo (Reliance)
 - Brace Paste (American Orthodontics)
 - Connect (GC)
 - Transbond XT (3M)

*Adhesives used for direct bond typically work

Getting Ready for Bonding Appointment

1. Identify trays for patient. Trays are identified by upper, lower and quadrant.
2. Lay IDB trays out for easy placement in the mouth. Prep delivery for all materials and supplies needed. (Listed above)
3. Make sure the brackets are completely seated in the bracket channels. Brackets should be completely secured in the bracket channels. Reseat with tweezers if not.
4. Add Adhesive to bracket bases in a horizontal fashion. (From Mesial to Distal or vice versa). Vertically distributing may dislodge the bracket from the bracket channel in the tray.

**You can use micro-brushes if needed for heavier body bonding adhesives. (Try to be careful to not add too much adhesive as this will cause flash.)*

**Avoid getting excessive bonding materials on the trays. Remove immediately with micro brush if this occurs. This may cause issues on removal.*

Bonding Appointment

1. Compare the trays to the patient's dentition. Make sure all brackets are completely seated in the trays. Reseat with tweezers or instrument if needed.
2. Set up patient delivery tray with indirect bonding trays, adhesive, primer, etch, and all tools needed for delivery.

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3. Check patient for any irregular anatomy that may require extra bonding adhesive. Indicate on tray as needed. Check manufacturer's instructions if crowns or other restorations for proper bonding techniques. (Porcelain, Zirconia, Metal, etc.)
4. Pumice all teeth to be bonded on both arches. Rinse and evacuate excess.
5. Etch: If bonding both arches, begin applying etch to the lower posterior teeth on one side and work around the arch until the entire lower arch has been etched. Be sure to only apply etch to teeth in the area that the bracket will be bonded.
 - a. If using a self-etching primer, only allow etch to sit for 15-20 seconds. Otherwise, let etch sit for 30-50 seconds.
 - b. Fully bond brackets on lower arch before prepping upper arch.
6. Rinse etch from teeth in the order it was applied, evacuate water and saliva, and dry teeth until you see a flat white appearance. It is crucial that from this point until brackets on prepped teeth have been cured, the teeth remain completely dry.
 - a. Use dry angles in the posterior and cotton rolls in the anterior to minimize contamination of isolated area.
7. Apply a conservative amount of primer to teeth only where the brackets will be bonded. Lightly apply air to each tooth to spread across tooth.
 - a. Self-Etching Primer: Use a micro-brush to gently scrub primer on teeth.
 - b. Traditional Primer: Use a brush to lightly paint the primer on teeth.
8. Light cure slowly to ensure complete curing of the primer.
9. Add adhesive to the bracket bases.
10. Completely seat the trays. Apply light finger pressure or use a band pushing instrument to occlusal while curing.
11. Cure each section individually. Each bracket will generally need 10-15 seconds of curing. (See bonding materials instructions for details.)
12. Once section is cured, use a scaler to remove tray from mesial/buccal pulling tray away from the brackets. Once started, the tray should peel away.
13. Check brackets with instrument or fingers to ensure good bond strength.
14. Repeat process starting with step 5 on the opposing arch when applicable.

Notes:

- Do not apply etch or primer to any teeth that will not be bonded.
- If you see excessive flash, use a white stone to remove as needed.
- If there is contact with bracket from the opposing arch, add bite turbos to prevent bond failures.
- Trouble with first or second molar bond failures? - Trays can be sectioned with Fiskars 96137097 utility scissors, a heating scalpel or an exacto knife. Remove bonding adhesive and redo bonding procedure. Moisture is most commonly the issue.
- If you have issues with bracket placement or bonding procedure, please contact technical support at Specialty Appliances (800.522.4636).