Frequently asked questions about

Universal 4-Meta Bonding System

Q: Why should I consider the Brush&Bond Universal Bonding System for my office?

A: Five words: “Higher bond strength and versatility.” Adhesive dentistry has evolved to the point where it is now the most prevalent modality of restorative dentistry. One of the barriers to a successful treatment outcome can often be related to not having the right tools to complete the task. The Brush&Bond Universal Bonding System includes the tools needed when working with composites, ceramics and metals to promote a strong bond to all substrates in these categories.

Q: What are the uses for the Brush&Bond Universal System?

A: For direct placement restorations:
- Bonding light-cured resin-based restorative composites.
- Bonding self-cured resin-based restorative composites.
- Bonding dual-cured resin-based restorative composites.

For placement of indirect restorations:
- To promote adhesive cementation of light-cured, self-cured, and dual-cured resin-based cements to ceramic restorations.
- To promote adhesive cementation of light-cured, self-cured, and dual-cured resin-based cements to all-metal and porcelain-to-metal restorations.

Desensitization:
- Crown preps
- Cervical areas

Q: What is the difference between original Brush&Bond and Brush&Bond Universal?

A: There are four significant differences between original Brush&Bond and Brush&Bond Universal. The first is an increase in bond strength to the natural tooth of over 40%. The second is that the Brush&Bond Universal system offers the convenience of including in the box the additional component necessary for preparing the surface of today’s most cutting-edge ceramic restorations for adhesive cementation. The third is that when activated, the Brush&Bond Universal liquid can be used to prime sandblasted metal. The fourth is that Brush&Bond Universal provides a more durable, abrasion-resistant layer. (Especially important for desensitization.)

Q: Should I etch before using Brush&Bond Universal?

A: For cut enamel and dentin:
- As a truly universal bonding system, Brush&Bond Universal is compatible with all etching techniques for cut enamel and dentin. You can choose between selective-etch, self-etch and total-etch, depending on your preference, and the requirements of the specific case you are treating.

Uncut enamel:
- should always be etched for 15 seconds with phosphoric acid.
Q: Even though it is not necessary to etch cut enamel, will the bond strength be higher if I etch the cut enamel anyway?

A: Yes, our internal studies have shown that etching cut enamel will increase the strength of the bond.

Q: Can I use Brush&Bond Universal for pulp capping?

A: Pulp capping is not approved indication for use for the Brush&Bond Universal System, and therefore Brush&Bond Universal should not be used as a pulp capping material. For clinical situations where pulp capping is appropriate, Parkell’s C&B-Metabond or Amalgambond can be used.

Q: To prevent contamination of the zirconia surface by oral fluids, can I apply the Ea-Z-y Primer to the intaglio of a zirconia crown prior to trying the crown in the mouth?

A: Ea-Z-y Primer should be applied to the intaglio of the zirconia crown only after the crown has been tried in and adjusted. Prior to Ea-Z-y Primer application, the surface must be decontaminated for the removal of salivary contaminants. Methods used for decontamination vary depending on the zirconia manufacturer’s recommendations. IMPORTANT: Phosphoric acid should never be used to clean and decontaminate zirconia. Doing so will compromise the bond to the zirconia.

Q: Should I pre-treat the surface of my ceramic (porcelain and lithium disilicate) restorations prior to the application of Ea-Z-y Primer™?

A: If your restoration was fabricated by a lab, it has probably already been etched as per the specifications of the manufacturer. If you check with your lab and confirm that this pre-treatment was done, no additional etching should be required.

If you mill crowns in your office, you should etch the intaglio ceramic surface of your restoration as per manufacturer’s specifications for exposure time and HF concentration prior to the application of Ea-Z-y Primer.

Q: Can Brush&Bond Universal be used during cementation of all-metal or porcelain-to-metal restorations?

A: Absolutely. In addition to providing a strong bond to ceramic restorations, Brush&Bond Universal can also be used to enhance the adhesion of resin cements to porcelain-to-metal and all-metal crowns. The steps for increasing the adhesion to metals are:

1. Lightly sandblast the metal surface using a micro-etcher and 50 micron aluminum oxide powder. (Parkell AeroEtcher, Stock # D670, Parkell Aluminum Oxide, Stock # D675.)
2. Coat the metal surface with activated Brush&Bond Universal liquid.
3. Leave the activated liquid on the metal surface for 15 seconds.
4. Air-dry the surface to evaporate the solvent and prevent pooling of the Brush&Bond Universal liquid.
5. Light cure.

IMPORTANT: In order to use the Parkell Aeroetcher chairside, an additional 4-hole handpiece tubing adaptor is required. (Parkell AeroEtcher Adaptor, Stock # D678-4.)

Q: Will the Brush&Bond Universal film thickness prevent complete seating of the crown when used as a metal primer on the intaglio surface and light-cured?

A: When not over-applied, and thinned appropriately to prevent pooling prior to light-curing, the 3 to 8 micron film thickness of Brush&Bond Universal will allow for complete seating of your restoration.

Q: I don’t like the idea of light-curing anything inside a crown before cementation, even if it is less than 7 microns thick. Are there any other products I can use to prime a metal surface to increase adhesion of resin cements to it that do not require light-curing?

A: Yes. Parkell also offers a single-bottle metal primer that can also be applied to sandblasted metal that increases the adhesion of resin cements to the metal. This unique primer, (Parkell
MTL-V Primer, Stock #S413) which is not included in the Brush&Bond Universal System kit, does not require light-curing.

Q: Why does Brush&Bond Universal require the use of a separate primer for ceramics while other manufacturers claim their universal bonding agents do not?

A: It is clear you have spent some time researching the different Universal Bonding Agents available to you. If you hadn’t, you would not be looking to have this question answered. We congratulate you on your thoroughness.

The term “Universal” has come to mean different things to different manufacturers. Some manufacturers promote the concept of being able to use the liquid from a single bottle to prime ceramics and metal, in addition to it being used as a bonding agent on enamel and dentin. When you dig deeper into the instructions for use of these products, you find, as Paul Harvey used to say, “The rest of the story.” The instructions state that while it is possible to use the liquid from the bonding liquid bottle on a variety of surfaces to increase the adhesion to it, the preferred method is to use separate primers on ceramics, as these separate primers provide a far superior bond.

Today, ceramic restorations depend on adhesion more than ever before for their retention. With this in mind, Parkell’s Brush&Bond Universal Bonding System was developed to maximize the bond to all substrates, in the fewest number of steps possible, without compromising the strength of any of the bonds. With the Brush&Bond Universal Bonding System, dentists don’t mind taking a little extra time to apply a ceramic specific primer in order to decrease the possibility of their crowns falling out.

Q: I’m already a Brush&Bond user. Are the activator brushes for Brush&Bond Universal interchangeable with the activator brushes of original Brush&Bond which I still have in my office?

A: Absolutely. So that your transition from the original Brush&Bond to Brush&Bond Universal can be as seamless as possible, we have made both the Standard and Mini/Endo activator brushes interchangeable between the two products.

Q: I just transitioned from original Brush&Bond to Brush&Bond Universal and noticed that the liquid component of Brush&Bond Universal is slightly yellower in color. Is it supposed to be that way?

A: The chemical composition of Brush&Bond Universal required some modification in order to achieve its superior bond strength. These modifications resulted in a slightly yellower appearance of the Brush&Bond Universal liquid when it is first dispensed into the mixing well. Once activated, applied to the tooth surface, thinned out with air to evaporate the solvent, and light-cured, you will see that the yellowness noticed in the mixing well does not transfer to the tooth surface.

- **One note of caution:** When using Brush&Bond Universal for the cervical desensitization of bleached anterior teeth, avoid having the activated Brush&Bond Universal liquid run onto the bleached enamel. In this particular situation the Brush&Bond Universal may change the appearance of the bleached enamel.

Q: If I place Brush&Bond Universal into a post hole will it self-cure?

A: Brush&Bond Universal has a very slow self-cure which occurs over many hours. There is no special self-cure additive that will shorten the self-curing time.

Q: Will Brush&Bond Universal work with my curing light?

A: Brush&Bond Universal can be cured with all properly-functioning curing light that has a wavelength between 430-480nm and an intensity greater than 600mW/cm². Guidelines for curing times in the different light categories are:

- Light Emitting Diode (LED) - 10 seconds
- Halogen Light - 10 seconds
- Plasma Arc Curing (PAC) – 3 seconds
- Laser – 3 seconds
Q: I just got back from a CE course and a well-respected speaker stated that all bonding agents (including Brush&Bond Universal) should be scrubbed into the tooth surface. The Brush&Bond Universal instructions say otherwise. Who should I listen to?

A: Without exception, you should always follow the instructions of the product manufacturer. The instructions for Brush&Bond Universal simply state that you should apply the activated liquid to the entire prep surface and keep it wet for 20 seconds. That is what you must do!

There is no way speakers on the CE circuit can familiarize themselves with the IFU’s (Instructions For Use) of every product in every category. As a result they lump all the products together, assuming they should all be handled in the exact same manner. This can be a recipe for disaster as products from all dental manufacturers have their own unique handling properties. TO GET THE BEST RESULTS FROM DENTAL MATERIALS, ALWAYS FOLLOW THE MANUFACTURER’S INSTRUCTIONS.

Had you listened to the speaker, without questioning his method, you patients may have suffered the consequences of his scrubbing technique by experiencing post-operative sensitivity.

Q: Do I need to refrigerate Brush&Bond Universal?

A: While refrigeration is not required, refrigeration will maintain a stable, cooler storage environment, which can result in a prolonged shelf life. All of the components of Brush&Bond Universal should be brought to room temperature before use.

Q: What is the pH of Brush&Bond Universal?

A: Brush&Bond universal has an initial pH of 2.0.

Q: What is the film thickness of Brush&Bond Universal?

A: After applied, air-dried (to evaporate the solvent), and light-cured, a single coat of Brush&Bond Universal has a film thickness of 3 – 8 microns.

Q: I have a question about Brush&Bond Universal that I haven’t been able to find an answer to.

A: Give Parkell a call at 800-243-7446 for additional assistance.

Q: I noticed the Brush&Bond Universal System kit only contains one canister of brushes. Does this mean I should use these brushes for both the activation of the Brush&Bond Universal bonding liquid and for mixing the “A” and “B” components of Ea-Z-y Primer?

A: The purple activator brushes that come with the Brush&Bond Universal System kit contain a special chemical that was developed to be used ONLY with the Brush&Bond Universal bonding liquid. They should NOT be used to mix and apply Ea-Z-y Primer. For mixing the components of Ea-Z-y Primer, any conventional non-treated microbrush applicator can be used. If your office does not currently stock these brushes, they are available from Parkell. (Parkell Adjustable Precision Applicator Brushes, Stock # S379.)

Any other questions?
Contact our dentists at 1-800-243-7446, or via e-mail at info@parkell.com.
To learn more, visit Parkell.com