One of the most frustrating aspects of orthodontic bonding has been the process of consistently bonding to non-enamel and atypical enamel surfaces with adequate strength. Over time, products have been developed to allow bonding to various substrates, such as atypical enamel, porcelain, metal, plastic and even dentin. Unfortunately, these products were specific to one surface. For example, 4-META was used as a metal conditioner. Plastic surfaces were treated with a combination of methylmethacrylate, amine and resin. Porcelain crowns required a silane treatment in addition to a caustic hydrofluoric acid etching agent.

Confusion often arose as to the various products and protocols needed for each individual substrate. This confusion was due to a lack of frequent repetition with these special bonding procedures. In 1998, Reliance Orthodontic Products introduced Assure™ Universal Bond Resin to the orthodontic profession. Assure allowed clinicians to successfully bond to metal, composite and enamel (wet or dry, normal or atypical) with no additional primers. Furthermore, Assure is compatible with any light cure, dual cure or chemical cure paste — regardless of manufacturer. Finally, Assure’s hydrophilic properties bond very well to contaminated surfaces, making it a solid fixture in most orthodontic practices.

This year, Reliance Orthodontic Products introduced Assure Plus All Surface Bonding Resin. It is now possible to bond directly to every intraoral surface using one bonding primer and any bonding paste — chemical or light cured. Proper preparation of the surfaces is still imperative to achieve maximum shear bond strength. For example, metal, zirconia and porcelain* should be micro-etched (sandblasted) prior to the application of Assure Plus. Composite restorations and acrylic temporary pontic teeth should be roughened with a medium diamond bur. Next, simply apply one generous coat of Assure Plus, air dry and proceed with the bracket placement.

Bonding to enamel? Assure Plus has the same adhesion improvement properties as the original Assure. Simply acid etch the enamel surface, apply one coat of Assure Plus, air dry and proceed with bracket placement.

If the enamel is atypical in any way (fluorosed, hypocalcified, aprismatic, etc.) or has been contaminated, using Assure Plus as your primer will eliminate those variables and negate any damage done by contamination. The treatment of adults creates a need to bond to dentin. Assure Plus is an excellent dentin bonding agent. Simply acid etch the dentin for 30 seconds, then rinse and dry. Do not desiccate, leave the dentin moist. Then apply two coats of Assure Plus, lightly dry, light cure and place bracket with the adhesive of your choice.

There is finally one primer that will bond to any surface, every time, with a significant reduction in chair time. Assure Plus offers innovation and a product of bonding excellence, according to Reliance Orthodontic Products.

For more information, please visit www.RelianceOrthodontics.com or call (800) 323-4348.

* Porcelain benefits from the addition of silane before the application of Assure Plus for highest strengths.