

MARKETPLACE

Complete bonding

Direct placement technique



Figure 1a: Self etching techniques: prepare cavity, wash thoroughly with water, spray remove excess water (do not desiccate)



Figure 1b: Total-etching technique: prepare cavity, wash thoroughly with water spray, apply phosphoric acid etchant and rinse thoroughly, preparation should be visibly moist



Figure 1c: Selective enamel etching technique: prepare cavity, wash thoroughly with water spray, apply phosphoric acid etchant and rinse thoroughly, preparation should be visibly moist



Figure 2: Apply all-bond universal according to instructions



Figure 3: Evaporate excess solvent by air-drying thoroughly; light cure. Surface should have a uniform glossy appearance



Figure 4: The All-Bond Universal kit

The Bisco pedigree

The name of Bisco has long been associated with innovation in direct bonding techniques. Their 'All-Bond' and 'One Step' products have become familiar to dental professionals in the UK through the marketing and distribution of Optident Ltd, and are regarded by many practitioners as 'benchmark materials'. Their latest offering is 'All-Bond Universal'. This brings a truly universal dental adhesive to the market and succeeds in simplifying restorative procedures by combining etching, priming and bonding in a single bottle.

The product

'All-Bond Universal' is a hydrophobic (resin friendly), Ethanol/water-based adhesive that will bond to dentine and both 'cut' and 'un-cut' enamel. It is suitable for direct and indirect restorations, and will bond to all indirect substrates. Its universal adaptive capabilities enable its compatibility with all light-cured, self-cured and dual-cured composite and resin-bonded cements, without the need to use an additional activator. The pH level of 3 makes it mildly acidic, but contributes significantly to its universal compatibility.

Flexibility is definitely the key word in describing this product as it can be utilised in 'total-etch', 'self-etch', and other selective procedures, and users can choose to use the product either with or without a phosphoric acid etchant in direct bonding procedures.

It exhibits high bond strength and durability with all substrate materials (i.e. metal, glass ceramics, zirconia, alumina, silica-based porcelain and lithium disilicate), this being guaranteed through the addition of MDP monomers. Excellent surface wettability combined with a low film thickness of less than 10 microns allows thin spreading that will not affect cementation procedures even with tight fitting restorations. Its low viscosity level was also found to contribute to easier dispensing. 'All-Bond Universal' adhesive is also available with 'Select HV' etch, a high viscosity phosphoric acid etchant for use where selective etch or hybrid

Indirect placement technique



Figure 1: Maxillary right posterior teeth prepared for full-contoured zirconia restorations. Two coats of All-Bond Universal applied and light cured



Figure 2: Application of All-Bond Universal (or Z-Prime Plus) to inside surface of crowns



Figure 3: Restoration completed after cementation with Duo-Link



Figure 4: The 'All-Bond Universal'

techniques are preferred. Direct and indirect placement techniques are illustrated. The users preferred technique i.e. self-etching (Figure 1a) total etching (Figure 1b) or selective enamel etching (Figure 1c) are shown, and after etching. Figures 2-4 illustrate the recommended procedure using 'All-Bond Universal'.

Additional benefits

Indirect restoration placements can be successfully completed by applying either 'All-Bond Universal' or 'Bisco Z-Prime Plus**' to the inside surfaces of zirconia crowns, followed by cementation using 'Bisco Duo-Link**'. 'All-Bond Universal' has a recommended light curing time of only 10 seconds, and with virtually no post-operative sensitivity, this ensures minimal discomfort and better acceptance by patients. There

is no need to store the adhesive under refrigeration, as it can be kept at regular room temperature. The product is supplied in a 6ml bottle, offering better value for money, as most other adhesives come in smaller quantities, and as the material is so versatile, it reduces the need for the practitioner to keep an extensive inventory, thus contributing to an overall reduction in costs.

Feedback and evaluation results*

In evaluation tests carried out in the USA by Dental Advisor, it was found that 74% of evaluators would switch to 'All-Bond Universal' and that 90% of the evaluators would recommend the product to colleagues. It was also noted that the laminated technique card provided with the product proved useful as a chairside reference. **ID**

*Dental Advisor, November, 2012, Vol. 9, no. 09.

The introduction of 'All-Bond Universal' can be regarded as a significant advance in the simplification of adhesive techniques for virtually all direct and indirect bonding procedures.

**'All-Bond Universal' and all other Bisco products are available from Optident Ltd., International Development Centre, Valley Drive, Ilkley, LS29 8AL. Tel: 01943 605050, email: sales@optident.co.uk www.optident.co.uk