

MARKETPLACE

The ideal core material? Tony Beale describes a versatile and simple dentine replacement material

Defining the ideal core build-up material

Modern restorative dental techniques require materials that can be used successfully with predictable results. This is especially so when a core build-up material is to be utilised in conjunction with today's modern, reliable and well-proven bonding adhesives.

About Bisco Core - Flo DC

Bisco have introduced Core - Flo DC, a much-improved dual cure core material that fulfils, and surpasses all the above requirements, and is an ideal complimentary material when used with dental adhesive systems such as Bisco All - Bond Universal, Bisco One Step and One Step Plus. The product is now available from Optident Ltd.

Core - Flo DC is extremely versatile as it can be used for core build-ups, post cementation and dentine replacement, with practitioners requirements for bulk filling and the creation of tunnel preps also being accommodated.

Bisco have succeeded in producing a material that provides the right level of flow that adapts to the floor of a preparation but does not exhibit a tendency to 'slump' when being stacked or placed. It is sensitive to ambient light and will start to self - cure quickly, a further advantage being its fluoride release properties.

The dispensing of Core - Flo DC is made easier by its presentation in a dual barrel syringe that guarantees complete mixing, with little waste, and with the provision of narrow intra - oral and root canal applicator tips permitting accurate material extrusion and placement into smaller and more difficult to reach areas.

Core - Flo DC is produced in three different shades, with the blue shade offering the practitioner high visibility and definition in 'difficult to see' posterior sites. The natural/A1 and opaque shades are intended for situations when translucent, 'all - ceramic' restorations are to be fabricated over posts and cores, where aesthetics need to be considered.

Following completion of curing, Core - Flo DC will exhibit high strength, with minimal shrinkage. It can then be easily cut can be cut without effort, but care must be taken not to gouge surfaces with rotary cutting burs. Core - Flo DC enables dental practitioners to undertake simplified post and core build-ups in just one application, successfully fulfilling the requirements for both direct and indirect techniques.

Evaluation of CORE - FLO DC

Several independent evaluations of Core - Flo DC have been undertaken with Dental Advisor * reporting that 675 of



Figure 1: Typical restoration requiring post and core treatment



Figure 2: Application of Select HV or Uni-etch to the canal followed by application of one step universal dental adhesive



Figure 3: Insertion of light post into prepared canal



Figure 4: Bisco Core - Flo DC is easily and quickly manipulated to create a core form



Figure 5: Dentine-like' strength allows immediate preparation. One step compatibility guarantees a long lasting bond




Figure 6: Core - Flo DC Intro Kit

The ideal properties of a core material

- It must bond to tooth structures
- It should be a light cured, dual or self-cured material
- Cure times should allow crown preparations to begin immediately after placement
- Compatibility between adhesive and composite is necessary, to achieve a practical bond to a tooth
- It should be radiopaque
- The material must be capable of being cut or shaped easily
- Its level of viscosity should be relatively high

consultants would switch to Core - Flo DC, and 93% would recommend it. Dental Product Shopper ** stated that of 14 evaluators, when asked to comment about the product hardness, six rated it as excellent, seven as very good and one as good. In rating its handling, 10 rated it as excellent, three rated it very good and one rated it good.

The versatile nature of the material through its high shear strength properties to dentine, enamel and to fibre posts, and its ideal compatibility with dental adhesive systems offer many opportunities for its use in numerous restorative procedures. 

References

- * Source - Dental Advisor, March 2011, Volume 28, No. 02
 **Source - Dental Product Shopper, 2012: www.dentalproductshopper.com/core-flo-dc-core-build-material

The Bisco products described in this article are available in the UK from Optident Ltd, International Development Centre, Valley Drive, Ilkley LS29 8AL. Tel: 01943 605050; email: sales@optident.co.uk www.optident.co.uk