



LuxaCore Z

Core build-ups and
post cementation.



Closer to nature: LuxaCore Z.

When it comes to core build-up, build-up filling and post cementation, LuxaCore Z is one of the world's front runners. No wonder – the mechanical properties of LuxaCore Z are closer to those of natural teeth than any other material in its category. Outstanding characteristics: LuxaCore Z cuts like dentine. This allows particularly simple and precise preparation free from grooves.

Thanks to genuine nanotechnology patented by DMG and the addition of zirconium dioxide, new top values for compressive strength and cutting characteristics have been achieved.

The high compressive strength gives stability under the crown. The right partners allow quality care to be provided perfectly: The LuxaPost composite post and the LuxaBond-Total Etch adhesive system give the dentist the best possible assistance.

Good reasons:

- cuts like dentine
- extremely high compressive strength
- excellent flow properties
- reliable curing
- one material for core build-up and cementation



With zirconium dioxide and nanotechnology for the best results.

Why all nanotechnology isn't the same.

The use of nanotechnology generally involves particle agglomeration. In other words, the particles within the resin matrix form »lumps«.

This, however, adversely affects desired and beneficial properties such as the compressive strength and the good grinding characteristics.

The special nanotechnology in LuxaCore Z that has been patented by DMG prevents this particle agglomeration. The particles remain separated from each other and the material can then exploit the full potential of nanotechnology.

Superior values.

LuxaCore Z-Dual is closer to natural dentine than the competition in terms of cutability.

Moreover, the proportion of zirconia gives excellent compressive strength.

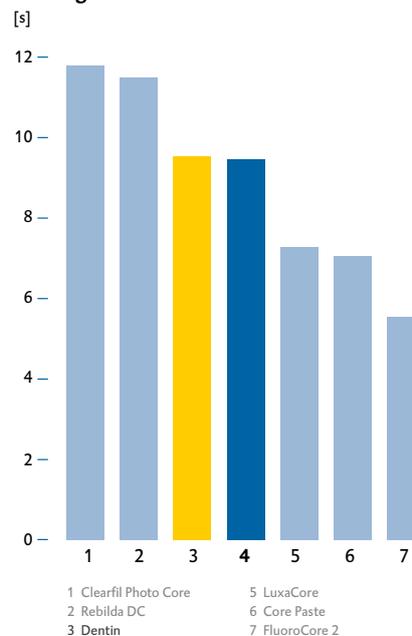
This ensures top-quality, natural restorations – and this has been confirmed in figures as well, as shown in the graphs on the right.

Excellent flow properties.

The material's outstanding flow properties guarantee optimum adaptation to the shape of cavity walls and posts.

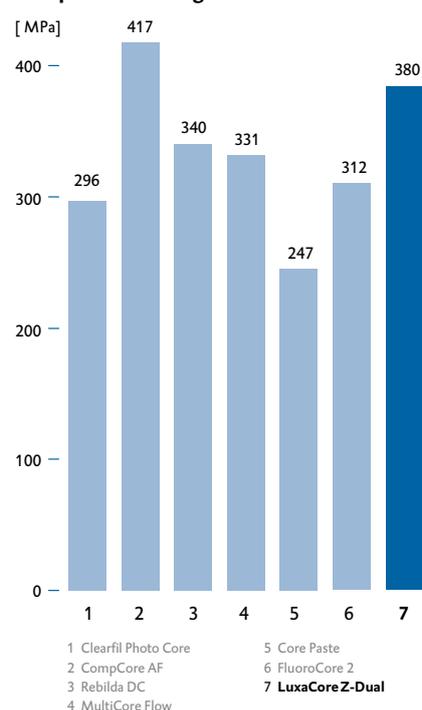
When used as a post cement, the thin film thickness of just 20 µm is beneficial (the limit for precision cement according to ISO 4049 is 25 µm).

Cutting characteristics



Cachovan G. et al.: In vitro cuttability comparison of various different core build-up materials, DZZ (62), 2007, p. D10.

Compressive strength



Internal measurements, data on file, DMG, Hamburg (Germany), 2007

Fewer materials means a more reliable solution.

Monoblock = Stability.

More haste less speed. Just a single material for core build-up and post cementation – that simplifies the work and creates reliable restorations.

LuxaCore Z can be used with any pre-silanized post. DMG's LuxaPost is recommended as the perfect partner.

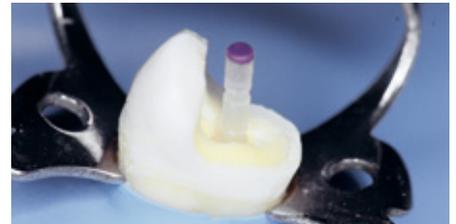
This glass fiber reinforced composite post has a similar flexural modulus to LuxaCore Z and natural dentine.

Using just a small number of matched materials gives a very stable monoblock. Stresses can be avoided in the sensitive system comprising tooth, post, cement, and core build-up material.

LuxaCore Z
as a core build-up material

LuxaPost

LuxaCore Z
as post cement



Placing the LuxaPost with LuxaCore Z-Dual as the cement.



Core build-up with LuxaCore Z-Dual.



Simple and precise preparation thanks to the dentine-like cutting characteristics of LuxaCore Z-Dual.



Monoblock.

The partnership principle.

Nothing beats a well-matched team.

The perfect partner to LuxaCore Z-Dual is LuxaPost, DMG's high-quality glass fiber reinforced composite post. The system is completed by the LuxaBond-Total Etch dual-curing adhesive system.

Together, these specialist products are a finely-tuned system for professional post-endodontic restorations. All are also available together in a practical system pack.

Post & bonding agent from the same family.

DMG's radiopaque, pre-silanized LuxaPost can be cemented perfectly with LuxaCore Z. Its flexural modulus is similar to that of LuxaCore Z – and to dentine as well.

For simple handling it is available in a convenient package that makes it easy to remove and refill the LuxaPost boxes.

The LuxaBond-Total Etch dual-curing adhesive system is particularly suitable for adhesive cementation of posts, core build-ups, inlays, onlays, crowns, and bridges.

Specially shaped Endobrushes simplify application in the root canal. LuxaBond-Total Etch is compatible with all commercially available self-curing and dual-curing materials such as LuxaCore, Vitique, and PermaCem.

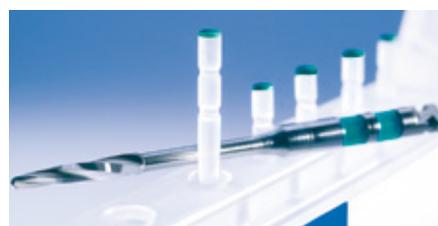
You can read more about LuxaPost and LuxaBond in the following pages.



LuxaCore Z-Dual: Premium Composite with DMG patented nanotechnology and zirconium dioxide.



LuxaCore Z-Dual: Easy application in the narrowest channels using the new Endo-Tip.



LuxaPost: The practical LuxaPost box allows easy access for the post and the drill head.



LuxaPost: Post and drill are available in three different color-coded sizes.



LuxaBond-Total Etch: New symbols make it easy to see which bottles are for which process steps.



■ LuxaPost

Glass fiber reinforced composite post with a similar flexural modulus to dentine

True-to-life properties

As with LuxaCore Z, the properties of the material in LuxaPost are also based on the model of a natural tooth.

LuxaPost's low flexural modulus (a measure of the elasticity or stiffness) corresponds closely to that of natural dentine. This minimizes peak stresses in the post-cement-root system and lowers the risk of root fractures.

The high degree of transparency prevents the post from shining through the tooth. It is therefore no barrier to esthetic restorations.

Pre-silanzed and radiopaque

To meet the needs of your practice in full, the new generation of LuxaPost is radiopaque and already pre-silanzed. This simplifies the handling and reduces the treatment cost. Additional silane is no longer needed.

For all dentists who don't want to do without the extra silanization step, DMG still offers the DMG silane system as a reliable two-bottle system.

Features	Benefits
Dentine-like flexural modulus	Reduced risk of root fractures
Unidirectionally fibers	High compressive strength
Radiopaque	Safe working
Pre-silanzed	Shorter treatment time
Tarpered form	Preparation gentle on the tooth substance
One effective drill head for each size No pre-drilling required	Easy preparation



Initial situation with root filling.



Preparing the root canal.



LuxaPost try-in.



Shortening of the LuxaPost.



Competitor A Competitor B **LuxaPost**
Radiopacity comparison.

■ LuxaBond-Total Etch

Dual-curing adhesive system

Flexible range of applications

LuxaBond-Total Etch is the final component in DMG's product range for post-endodontic restorations. The adhesive system is also suitable for fixing inlays. Self-curing does more than just allow it to be used in areas that the light does not reach. Even the unwanted premature curing of pools on the floor of the cavity (the »pooling effect«) can be avoided, as the curing can also be done entirely after insertion of the post.

LuxaBond-Total Etch can generally be used with LuxaCoreZ-Dual for core build-up or for adhesive cementation of crowns and bridges with Vitique or PermaCem. In these cases, there is the option of curing it with light.

Reliable bond

The pre-bonding that facilitates the superior bonding properties of the system is applied after separate etching of the enamel and the dentine. It ensures that the bonding mixture (consisting of components A and B) hardens very quickly after application to the tooth material. It means that a ready-made anchor layer is present even before the introduction of the restoration material. In addition, the pre-bonding allows a longer processing time for the bonding mixture, as its curing is only accelerated when it comes into contact with the pre-bond.

For easy handling, the order of application is specified on the bottles, with color codes to indicate the bond components.

Features	Benefits
Self-curing	Cure even without light No premature polymerization of bonding »pools«
Compatible with self-curing and dual-curing materials	Suitable for all applications with LuxaCore
Pre-Bond for rapid curing of the bond mixture on the dentine	Longer working time of bonding mixture. Superior retention
Specially shaped endobrushes	Easier root canal application



Conditioning of the cavity and canal (enamel: 20 to 60 seconds, dentine: max. 15 s).



Cleaning and drying.



Applying the Pre-Bond with a specially shaped endobrush.



Mixing Bond A and Bond B.



Bonding the cavity with the mixture of components Bond A and Bond B.

LuxaCore Z-Dual

Packaging

- 1 Cartridge @ 48 g
- 30 Automix-Tips
- 20 Intraoral-Tips
- 10 Endo-Tips Yellow
- Shade Light opaque REF 213332
- Shade A3 REF 213330
- Shade Blue REF 213331

Packaging

- 2 Smartmix-syringes @ 9 g
- 20 Smartmix-Tips
- 10 Intraoral-Tips
- 10 Endo-Tips
- Shade Light opaque REF 213336
- Shade A3 REF 213334
- Shade Blue REF 213335

LuxaCore Z-Post System

LuxaPost

- 5 Posts ø 1.25 mm
- 1 Drill ø 1.25 mm

LuxaBond-Total Etch

- 1 Bottle @ 5 ml Pre-Bond
- 1 Bottle @ 5 ml Bond A
- 1 Bottle @ 5 ml Bond B
- 1 Syringe @ 2 ml Etching Gel, medium viscosity
- 25 Endobrushes Red
- 25 Endobrushes Black
- 3 Luer-Lock-Tips
- 1 Mixing palette

LuxaCore Z-Dual

- 1 Syringe @ 9 g paste, Shade A3
- 10 Smartmix-Tips
- 10 Endo-Tips REF 110862

LuxaBond-Total Etch

Packaging

- 1 Bottle @ 5 ml Pre-Bond
- 1 Bottle @ 5 ml Bond A
- 1 Bottle @ 5 ml Bond B
- 1 Syringe @ 2 ml Etching Gel, medium viscosity
- 25 Endobrushes Red
- 25 Endobrushes Black
- 3 Luer-Lock-Tips
- 1 Mixing palette REF 212384

LuxaCore

Packaging

- 1 Cartridge @ 50 g
- 35 Automix-Tips
- 35 Intraoral-Tips
- Shade A3 REF 110422
- Shade Blue REF 110421

LuxaPost

Starter pack

- 5 Posts ø 1.25 mm
- 5 Posts ø 1.375 mm
- 5 Posts ø 1.5 mm
- 1 Drill ø 1.25 mm
- 1 Drill ø 1.375 mm
- 1 Drill ø 1.5 mm
- 30 Depth markers
- 1 Measurement card REF 110780

Refill packs

- 5 Posts ø 1.25 mm REF 110781
- ø 1.375 mm REF 110782
- ø 1.5 mm REF 110783
- 1 Drill ø 1.25 mm REF 110734
- ø 1.375 mm REF 110735
- ø 1.5 mm REF 110736
- 30 Depth markers REF 110737

Silane

Packaging

- 1 Bottle @ 3 ml Adhesive silane
- 1 Bottle @ 3 ml Activator
- 50 Single-use brushes
- 1 Brushholder REF 213118

Accessories

- 1 Automix-Dispenser Type 25 1:1 REF 110253
- 50 Automix-Tips Yellow 1:1 REF 909200
- 50 Intraoral-Tips Yellow REF 909201
- 50 Smartmix-Tips Combi REF 212042
- 50 Smartmix-Tips Endo REF 212041
- 50 Endo-Tips Yellow REF 212280
- 25 Endobrushes Red REF 212385
- 25 Endobrushes Black REF 212386



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