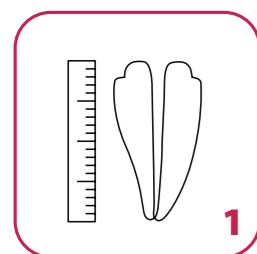
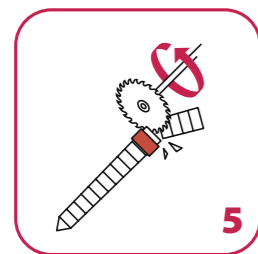


## QUICK USER GUIDE «STEP BY STEP»

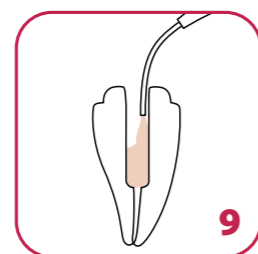
Endodontically prepare the canal in the usual manner, clean and dry. Obsolete the apical portion.



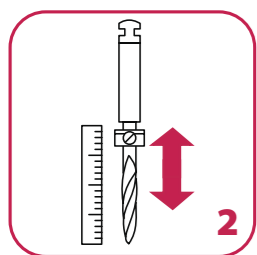
1 Choose the post size and measure the length of the canal



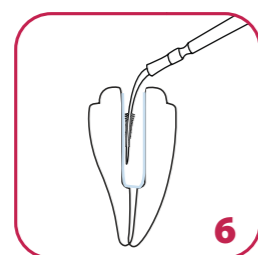
5 Excess in length may be adjusted with a diamond disc. Carry it out outside of the mouth, under aspiration. Clean the post with alcohol. No need to silanize (FIBRAPOST PLUS are pre-silanized)



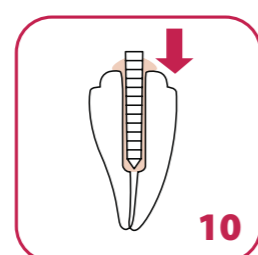
9 Apply SEALACORE DC Composite directly into the root canal using thin intraoral tips. **Note: Do not light cure at that stage!**



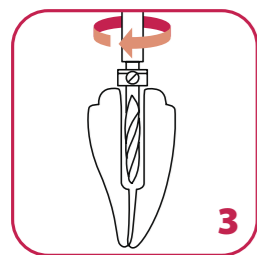
2-3 Drill the canal with the corresponding "Drill-A-Post" (800-1'200 RPM), blocking its depth stopper at the required length.



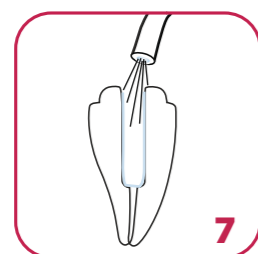
6 **SEALACORE DC Nano-reinforced Self-Etch Bond:**  
Mix 1 drop of Liquid A and 1 drop of Liquid B on a mixing pad with the application brush for approximately 2 s. Avoid exposure to intensive light. Apply a layer with the application brush to the enamel/dentine and rub into the tooth surface for 20 s.



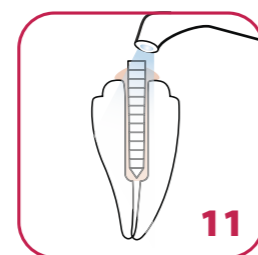
10 Insert the FIBRAPOST making sure to leave a slight coronal excess for further anchorage of the core.



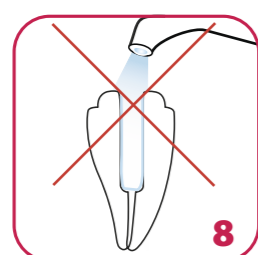
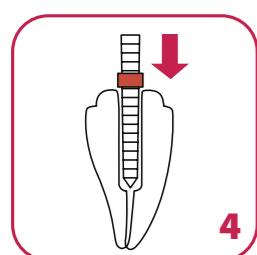
4 Check the size of the post and its position in the canal.



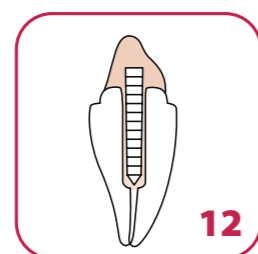
7 Dry the adhesive layer for at least 5 s with an air syringe.



11 Light-cure for at least 40 s.



8 Do not light cure at this step of the procedure.



12 **Core build up**

Place a matrix around the prepared tooth and apply SEALACORE DC Composite directly from the cartridge/double-barrel syringe. Place the tip of the polymerization lamp as close as possible to the surface of the composite and polymerize with halogen light for 40 s. In case of a larger core build-up, generally apply in layers of 2 mm and cure each layer for 10s. Final Polymerisation: Light cure 40s or wait 5min. After curing, the composite can be worked immediately.

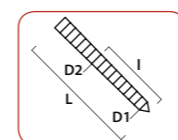
## PACKAGING

### ALL-IN-ONE BUILD UP KIT

REF 10475

#### FIBRAPOST PLUS

4 x 4 glass fiber composite posts (sizes 1, 2, 3 & 4)  
4 x drill with adjustable depth stopper  
1 x screw driver



Sizes	N°1	N°2	N°3	N°4
Total length (L)	19 mm	19 mm	19 mm	19 mm
Length of the tapered part (l)	11 mm	11 mm	11 mm	11 mm
Ø (mm) at the tip (D1)	0.85	1.06	1.26	1.47
Ø (mm) at 11 mm (D2)	1.30	1.50	1.70	1.90

#### SEALACORE DC

1 x dual-cure nano-reinforced self-etch bond (liquid A 4ml + liquid B 4ml)  
1 x dual-cure composite (syringe 5 ml)  
10 x mixer  
10 x tip  
25 x minibrush  
1 x mixing plate



# FIBRAPOST & SEALACORE

# FIBRAPOST & SEALACORE

Improved composition  
Optimized adhesion



#### FIBRAPOST PLUS

Glass Fiber Composite Posts  
Improved composition (Urethane Dimethacrylate instead of bis-Phenol A) with pre-silanisation, higher radiopacity, optimized adhesion to sealing composite and improved mechanical resistance and flexural strength.

The SEALACORE family consists in a nano-reinforced self-etch bond and a dual-cure composite cement that are used for cementation of posts and core build-ups.

Thanks to their excellent adhesive properties, SEALACORE products have proved to be particularly suitable in association with FIBRAPOST PLUS.



Produits Dentaires SA  
Vevey . Switzerland



# FIBRAPOST PLUS

## Product description

Until recently, due to a lack of other suitable materials, most post systems were manufactured from metals like stainless steel, gold-plated brass, tantalum, titanium and others. Metal posts, which offered no natural retention for cement or core material, were provided with screw threads to create mechanical retention.

This, however, was no stronger than the resistance of the thin film of cement between the post and the wall of the root-canal. As a result, the posts could still loosen despite having screw threads.

Metal posts are harder and less resilient than dentine. This means that they are not flexible when under pressure and the softer dentine has to give way which could lead to root fractures.

Another element to be considered is the fact that metals are not always well tolerated by the human body and as a number of metals, particularly in the dental sector, are incompatible with each other, hence damage may occur due to corrosion or electrolytic effects.

These various considerations have led to research into alternative solutions. The development and introduction of Composite Posts reinforced with glass fibre or metal-free restorations have now become a viable option. These posts are just as strong as those manufactured from stainless steel or titanium and they offer a resilience which is practically the same as the dentine itself.

Our Fibrapost PLUS and Fibrapost LUX are medical devices designed to give safe retention for the corono-radicular reconstruction of endodontically devitalized teeth. They are strong, resilient bundles of glass fibres bound with methacrylate based resin matrix.

The glass fibres prevent the post from breaking and makes it very resilient and it will not, like a hard metal post, transmit stress and shock to the dentine. It will work together with the dentine to absorb any stress or shock as it has about the same elasticity as the dentine itself. They further are radiopaque and light conducting (Fibrapost LUX).

“Fibrapost” are available in 4 different selected diameters to match the sizes of most root canals and in a cylindrical tapered shape, consistent with the shape of the root canal. They exactly match the corresponding calibrated reamers (“Drill-A-Post”). They further have a grooved surface for optimal retention, as well as lateral light transmission (Fibrapost LUX)



# SEALACORE

## Product description

SEALACORE is a dual cure, flowable and adhesive sealing and core build up composite system. It is indicated for the core build up of devitalized tooth as well as for the sealing of fiber glass posts in the root canal. SEALACORE is therefore particularly adapted to the seal (or cementation), with one only material, of the Fibrapost (PLUS and LUX) in the root canal followed by the core building up.

Additionally it offers the following benefits:

- Fast hardening by light-curing
- Secure and complete polymerization due to additional chemical curing
- Material savings through optimized mixing syringe
- Low heat development even in voluminous build ups
- Flowable – no plugging
- High adhesion due to self-etch bonding system
- Handy use through application by application tips

## ADHESION REPORT

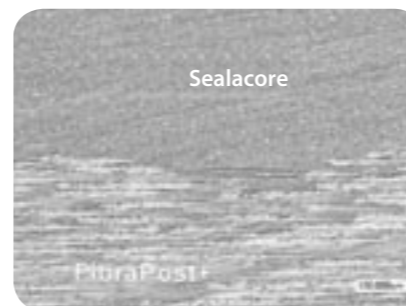
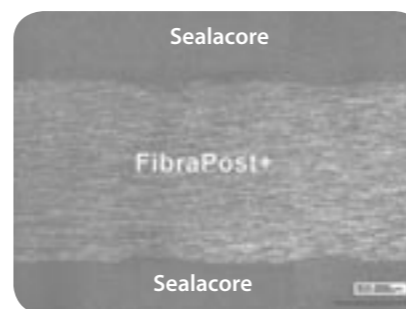
### Sealing of FIBRAPOST PLUS with SEALACORE DC COMPOSITE

To investigate the bond between FibraPost Plus and Lux and Sealacore DC Composite, the post was embedded in Sealacore. Longitudinal sections were prepared and examined at different magnifications on a laser scanning microscope.

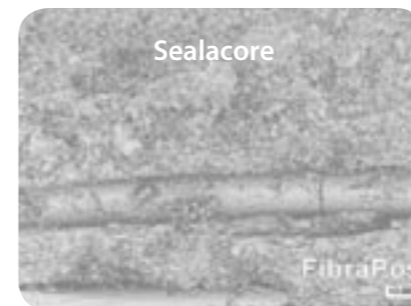
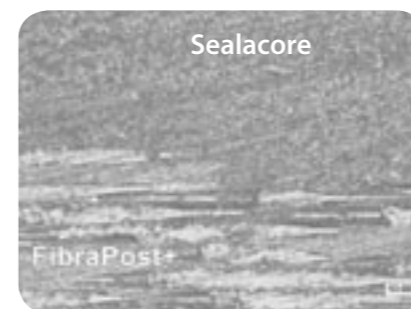
Thanks to its ideal flow characteristics, Sealacore DC Composite completely fills the retention grooves of the FibraPost Plus without blistering and thus ensures the maximum retention.

Figure 1 and 2 show the uninterrupted bond of FibraPost Plus and Sealacore in longitudinal section.

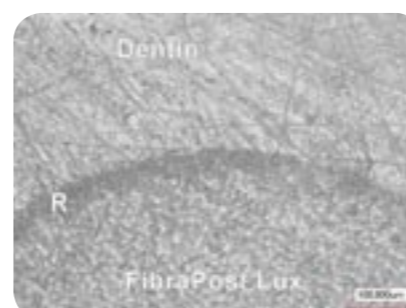
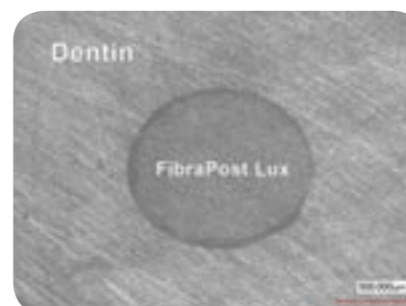
The identical resin matrix based on urethane dimethacrylate (UDMA) results in an optimal interconnection between FibraPost and Sealacore.



**Figure 1**  
FibraPost PLUS in Sealacore (longitudinal 5x, longitudinal 20x)



**Figure 2**  
FibraPost PLUS in Sealacore (longitudinal 50x, longitudinal 150x)



**Figure 3**  
FibraPost PLUS fixed with Sealacore DC nano-reinforced self-etch bonding in the root canal (cross-5x, cross-20x)



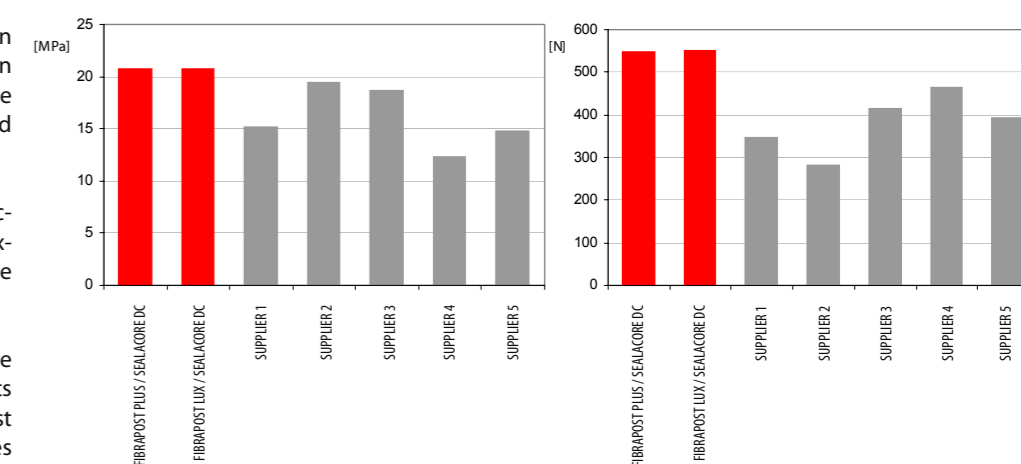
**Figure 4**  
FibraPost PLUS fixed with Sealacore DC nano-reinforced self-etch bonding in the root canal (cross-50x, cross-150x)

### Interconnection

To investigate the bond strength between post and cement, both the adhesion by means of tensile stress as well as the flexural strength have been determined according to DIN 13994 (Figure 5).

To exclusively measure the interconnection of Fibrapost and Sealacore, the experiments were carried out without the inclusion of tooth substance.

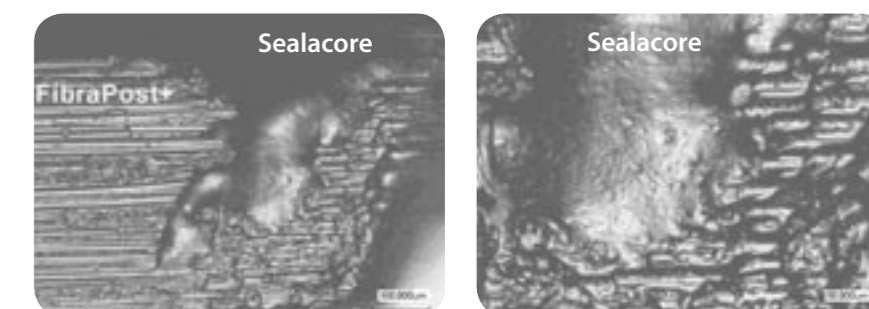
The combination FibraPost / Sealacore shows, in comparison with different posts and composite materials, the highest adhesion and flexural strength values (Figure 5).



**Figure 5**  
Adhesion values (left) and flexural strength (right) of different posts with associated sealing composite materials.

In addition to the adhesion tests, the fracture surfaces after tensile tests have been analyzed with a Laser scanning microscope.

Figure 6 shows a mixed fracture pattern with fracture in both materials, Sealacore Composite as well as Fibrapost Plus. This proves the excellent interconnection between the two materials.



**Figure 6**  
FibraPost PLUS after tensile test (20x, 50x)

### Conclusion

Sealacore system is ideal for the cementation the FibraPost and further core build up. Due to the similar composition of the resin matrix on Urethane Dimethacrylate base, a reliable, strong bond between the two materials is achieved. This expresses itself in a very good bond and flexural strength. Moreover, the good interconnection has been showed in laser scan images.



Swiss quality dental products