



Non Metal Adhesive Fibre Bridges

What is a Fibre reinforced composite (FRC) bridge?

The FRC Bridge is a minimally invasive and cost-effective way to replace a missing tooth or teeth. Instead of metal, glass fibre strands (or bundles) are used to create a fibre frame (see below). The missing tooth or teeth are tooth-shaped white filling (composite) material. The glass fibre bundles are embedded in the white filling material.

The fibre frame is attached to the natural teeth with an adhesive. The bond between composite resin and tooth enamel is the strongest bond possible in the mouth. The strength of the everStick fibres is as high as that of chrome cobalt cast metal and has the advantage of not being completely rigid, but has similar elasticity to that of dentine.

The anchor teeth are undamaged unlike normal bridgework where almost all the enamel of the anchor teeth is removed during the bridge preparation.

Before and after



What does the procedure involve?



Most cases of FibreBond bridges are completed without local anaesthesia.

Very little preparation (only roughening of the enamel) is done to the anchor teeth.

In some cases a very shallow groove preparation may be considered.

This groove stays within the enamel where the best bonding will be obtained. Placing rubber dam isolation in these cases will simplify the procedure for both the dentist and the patient and is recommended. Rubber dam isolation is a rubber sheaf that fits around the teeth (see below).

This will isolate the working area and will form a shield to protect the patient's airway. Please inform your dentist if you are allergic to latex!

What are the main advantages of the FRC bridges against other replacement treatment options?

Cost effective treatment option. Half the cost of conventional bridge work.

Less drilling - most cases done without dental injections

Very little preparation on the anchor teeth.

Single appointment procedure.

If required, the structure can be easily repaired or remodelled

Immediate - no waiting for the final prosthesis

Reversible. - as no damage is done to the anchor teeth, the fibre can be removed and other treatment options can follow.

What are the disadvantages of the FRC Bridges?

Longer appointments necessary - as the teeth are built up directly in the mouth. To compensate for this, frequent breaks should be provided by the operating dentist.

Staining of the composite materials is the main disadvantage. Regular polishing by the dentist or oral hygienist is recommended. In severe cases the composite replacement tooth may need a fresh layer of white filling material to get rid of the staining. Smoking Rubber dam isolation in the mouth, tea, coffee, red wine and certain foods can cause staining of the white filling material. The normal 6 monthly check-up routine will ensure proper maintenance of the FRC Bridge by your dentist or oral hygienist.

Daily maintenance of the bridges is very important. You should be able to remove all accumulating plaque from the bridge, especially in the area of the replacement tooth or teeth. Inter-dental cleaning brushes such as the different coloured "TePe brushes" or special floss called "Super Floss" should be used every time you clean your teeth. Your dentists and oral hygienist should demonstrate to you how to maintain you FRC Bridge.

How long do the FRC bridges last?

The FRC bridges can last for many years as proved by the previous reports.

Regular maintenance and frequent reviews are important.

If any sharp edges or cracks are felt or detected it must be reported to the dentist. As mentioned these bridges can easily be repaired in the dental chair with a simple composite filling procedure.