

GLASS IONOMER : Is a useful filling material that forms a weak chemical bond with enamel and dentine. [the cement has alumina-silicate glass particles with a high fluoride content, in a matrix of acrylic] A tooth cleanser may be applied by a brush to the tooth surface for 20 seconds and then washed off before applying the glass ionomer. [this helps to clean and open the dentine tubules to improve the bond].

THE LUTING CEMENT : comes in different colours, though universal is most commonly used to stick crowns or bridges onto teeth. A very thin layer of glass ionomer will stick porcelain or gold to a tooth, but must be mixed thinly but not runny so the crown can be placed without forcing it on. The correct measures must be used for mixing glass ionomer. For one crown, two or three level scoops are placed on a glass slab and two drops of water for each scoop are placed beside them. Mixing should be quick and thorough using a metal spatula, and then handed to the dentist with a flat plastic instrument.



Capsules of luting cement are mixed and syringed into crowns and bridges

GLASS IONOMER FILLING MATERIAL :

The glass ionomer filling material comes in two forms; the conventional filling material in a series of different shades and is used for filling cavities in children's teeth or wear cavities in adult teeth.

Tooth cleanser to clean the dentine. Light cured varnish to seal the finished filling



The silver reinforced filling material can be used on back teeth to build up badly worn teeth, or to repair a broken filling or tooth. It sticks very well to tooth and amalgam. These glass ionomers are mixed with one scoop of powder to one drop of water and when mixed together quickly and thoroughly should form a very thick paste, usually the thicker and heavier the better.

Glass Ionomers also come as capsules. They are tooth coloured and come in different shades, or they can be silver reinforced. The capsules are activated by pressing the end and mixed for 10 seconds in the mixer and then placed in a dispenser.

It is essential that after the first set of the material it is covered with a varnish or resin while the final set takes place, this stops the cement taking in or losing more water which affects the final strength of the cement. One quarter of the cement is water.

Resin-modified glass ionomer cements – These have a resin in them which will set when a curing light is applied. That is only an initial set and the cement must still have a varnish or resin to cover them while the setting process is complete.

You can tell if the cement is “light cured” as the name usually has LC after the name.



Remember the tooth cleaner is applied

The tooth washed and dried

Varnish resin or Vaseline applied
when finished

**Eye protection is essential.
The light curing lamp is very
bright and will damage the
eyes if a light shield is not used**

