

VITA ENAMIC® Bonding Protocol

Bonding to Tooth Structure

Condition the Restoration

Appropriate acid etching (for example, with VITA Ceramic Etch 5% hydroflouric acid for 60 seconds) and use of silane is required for maximizing bond of the restoration.

Condition the Tooth

Etch enamel with phosphoric acid gel, 35% for 30 seconds. Spray clean for 30 seconds and dry for 20 seconds. The etched surface must be white opaque. Apply an adequate primer/bonder system on to the etched tooth substance. Reference the manufacturer's directions specific to the adhesive material.

Cement

Use a composite resin cement and either light or dual cure.

• Light Cure:

- Only for thin ceramics like veneers.

• Dual Cure:

- Needed for thick ceramic and opaque restorations.
- Light cure for a few seconds in order to remove excess.
- Fully cure using appropriate manufacturer instructions.

Remove Excess Cement

- Clean excess bonding cement.
- Cement removal should be parallel, not perpendicular, to avoid cement pull out.

Common Mistakes to Avoid

- Using expired materials or mixing and matching brands could cause the bond to not cure or set correctly.
- Restoration and/or tooth structure contamination:
 - Clean restoration with alcohol to remove any debris
 - Make sure air lines are free of oil or moisture
 - Contamination from finger oils or saliva will inhibit bond
- Over-etching ceramic creates a layer of precipitated ceramic that may inhibit the bond.
- Under-etching ceramic may cause insufficient bonding.
- If the cement is too thick, it is more likely that de-bonding will occur
- Light curing should not be used for thick or opaque ceramic, as the light is not strong enough to activate the photo-initiators. This will also happen if the curing light is too weak and/or the wrong wavelength.

NOTE: For a complete set of VITA ENAMIC processing instructions, refer to the VITA ENAMIC Working Instructions (#1982E)



Etch the enamel and restoration



Condition the tooth substance



Silanize



Insert the restoration



Light cure



Remove excess cement

