



Technique Guide for cementation of glass-ceramic veneers with G-ænial® Universal Flo

G-ænial Universal Flo represents a simple and efficient solution for the cementation of veneers. This versatile, injectable restorative composite unites easy handling, high physical properties and excellent aesthetics. Generally used as a restorative and liner material, it can also be used for the bonding of veneers and some inlays and onlays where light-curing is possible*. In the luting procedure, the use of a bonding agent also plays an important role. Thanks to a low film thickness, G-ænial Bond and G-Premio BOND can be perfectly associated with G-ænial Universal Flo for optimal retention and durability in time.

Key clinical advantages of G-ænial Universal Flo

- Injectable composite with excellent thixotropic consistency and **initial high viscosity** for **easy placement of veneers**
- Thanks to direct dispensing, the risk of bubbles at margins is limited
- High wear resistance and excellent polishability for **long-term aesthetics**
- **Good alternative to heated composite** with less risk of failure for thin indirect restorations



Easy dispensing



Thixotropic consistency:
easy removal of excess



Perfectly match the aesthetics
of the restorations thanks to
15 available shades!

Pictures are courtesy of
Prof. Jean-François Lasserre - France

"Well-known for its optical and mechanical properties, G-ænial Universal Flo is a good solution for direct restorations and cementation (veneers, inlays and onlays). Nowadays, the practitioner is looking for a multi-purpose material and G-ænial Universal Flo fulfils this requirement. Its high viscosity allows for easy control of the excess and easy placement and positioning of the restoration."

DR. STEPHEN KOUBI, FRANCE

*For indirect restorations with thin thickness ($\leq 2\text{mm}$) that enable the use of a purely light-curing technique.

GC

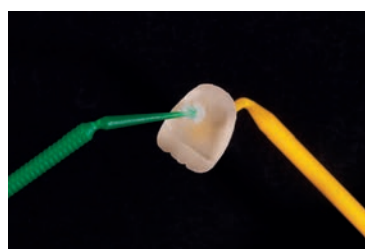
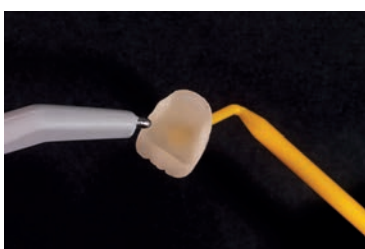
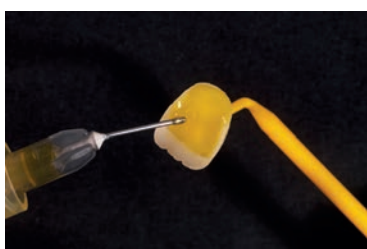
Step by Step

Initial situation



Remove the temporary restoration. Clean the prepared tooth using a brush and pumice slurry. Select the appropriate shade from the 15 shades available. In case of discoloration, use an opaque shade such as AO2 or AO3. When a translucent shade is needed, choose between JE (Junior Enamel) which brings more value and AE (Adult Enamel) which is more translucent.

Treatment of the veneer



Etch the bonding surface with hydrofluoric acid (~ 9%) for 60 sec in case of feldspatic ceramics and for 20 sec in case of lithium disilicate ceramics (e.g. e.max®*).

Rinse and dry thoroughly.

Apply a silane coupling agent (e.g. **GC G-Multi Primer**) to the adherent surface of the veneer, according to instructions for use.

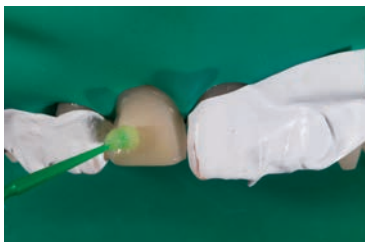
Treatment of the tooth surface



Use isolation with rubber dam to prevent any contamination. Protect the adjacent teeth with a Teflon strip or polyester matrix.

Choose either Selective Etching or Total Etching technique. Etch then for 10-15 sec. with 35-40% phosphoric acid.

Rinse and gently dry according to the manufacturer's instructions. Do not desiccate.



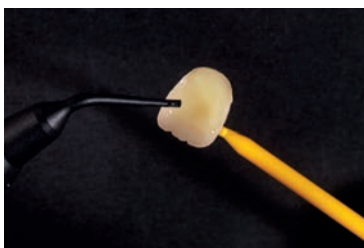
Apply **GC G-Premio BOND** or **GC G-ænial Bond** on the prepared tooth surface and leave undisturbed for 10 sec. Dry thoroughly for 5 sec, using maximum air pressure in order to obtain a thin film thickness and evaporate the solvent. Note: G-Premio BOND & G-ænial Bond are recommended due to their high bond strength, thin film thickness and non-slippery surface. When applying another bonding agent, please refer to the respective instructions for use.

Light-cure the bonding agent for 10 seconds.

Light curing time of G-Premio BOND		
	Distance from light guide tip	
Light curing unit	<10mm	>10mm
Halogen / LED (700 mW/cm²)	10 sec.	20 sec.
High power LED (>1200 mW/cm²)	5 sec.	10 sec.

* e.max is not a trademark of GC.

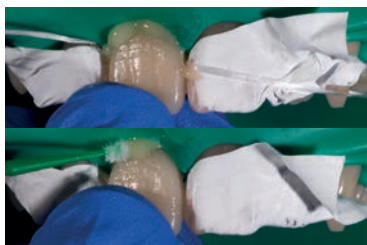
Luting & finishing procedure



- Apply **GC G-ænial® Universal Flo** directly to the bonding surface of the veneer and/or the tooth surface.
- Seat the veneer on the preparation, exerting moderate pressure.
- Make sure that G-ænial Universal Flo flows around all margins.
- Remove excesses using one of the techniques below.

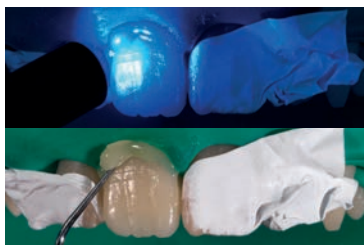
Important: Exposure to intensive light should be avoided during application.

Technique 1



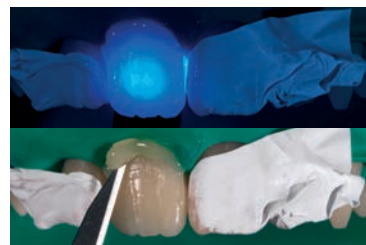
Keep the veneer in position and carefully remove the excesses. Make sure that excesses are removed from areas of difficult access (e.g. interproximal areas).

Technique 2



Tack-cure the excesses for 1-3 sec*. Remove the excesses with a probe.

Technique 3



Light-cure the palatal/lingual side for 15 sec.* Then remove excesses with a blade or a probe.



Light-cure each surface of the restoration for 30 sec with maximum light intensity.

Note: to avoid the oxygen inhibition layer, it is recommended to cover the restoration margins with glycerine gel before the final light curing procedure.



Finish the interproximal spaces with polishing strips (e.g. **GC Epitex**). For a final gloss, polish the margins with **GC DiaPolisher Paste**.



Final result. Check the occlusion if needed.

*Time may vary according to the light intensity of the light-curing device.

GC Products for Cementation of Veneers

G-ænial Universal Flo (2mL/3,4 g per syringe)



Refill: 1 syringe, 20 Dispensing Tips III Plastic

004202	A1	004213	BW (bleach white)	004214	CV (cervical)
004203	A2	004207	B1	004211	AO2
004204	A3	004208	B2	004212	AO3
004205	A3.5	004209	B3	004215	JE (junior enamel)
004206	A4	004210	C3	004216	AE (adult enamel)

GC G-ænial Universal Flo Accessories

004634	Dispensing Tip III Plastic, 30 pcs
004635	Dispensing Tip III Needle (metal), 30 pcs
003910	G-ænial Shade Guide



G-Premio BOND (universal bonding system)

009030	G-Premio BOND 5mL Kit (1 bottle 5mL + applicators & dispensing dishes)
009036	G-Premio BOND 5mL Bottle Refill
009034	G-Premio BOND Unit Dose 50 pcs



G-ænial Bond (self-etching bonding system)

004217	G-ænial Bond Starter Kit (1 bottle 5mL + applicators & dispensing dishes)
004220	G-ænial Bond 5mL Bottle Refill



G-Multi Primer

009553	G-Multi PRIMER, 5 mL
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DiaPolisher Paste

004415	GC DiaPolisher Paste, 2g
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For more information on these or other GC products, please visit our website: www.gceurope.com

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