



CLEARFIL Universal Bond Quick



Introduced November 2016

MDP and AMIDE chemistry rapidly permeates dentin and enamel eliminating waiting time plus producing bond strengths equal to **CLEARFIL SE BOND**.

- 3-5 second application time
- Self-etching with no waiting time
- No post-operative sensitivity
- Less technique sensitivity
- Film thickness: 5-10µm
- Low water absorption
- Allows for ALL etching techniques: (Self-etch, Selective-etch & Total-etch)
- CR Choice (Clinicians Report May 2018)
- #1 Rated Universal Bond (Reality Now)
- 5 Star, Editor's Choice (Dental Advisor)

PANAVIA SA Cement Universal



Introduced August 2019

Automix & Handmix

PANAVIA SA Cement Universal contains the unique **LCSI** monomer that delivers a strong and durable chemical bond to porcelain, lithium disilicate and composite resins without the need for a silane step. PANAVIA SA Cement Universal also contains the original **MDP** monomer that will chemically bond to zirconia and metal without any separate primers.

- Room temperature storage (up to 77°)
- Easy application
- Easy excess cement removal
- Radiopaque
- Film thickness: approx. 16µm
- No restoration primers required
- Shades: Universal/A2, Translucent, White

Direct Restoration
Using Light-cured Composite



TOOTH PREPARATION:

- 1 Choose Etching Technique
a. Self-etch (go to step 2)
b. Selective-etch (10sec)
c. Total-etch (10sec)
Rinse and dry for **b & c**
- 2 Apply **Clearfil UBQ** with a rubbing motion 3-5 seconds. No waiting time after application.
- 3 Air dry 5 seconds.
- 4 Light-cure for 10 seconds.

COMPOSITE PLACEMENT:

- 5 Place flowable composite (**Clearfil Majesty Flow**) on gingival floor, light-cure for 10 seconds. Continue with light-curing 2mm increments of flowable till desired fill.
- 6 Place sculptable composite (**Clearfil Majesty ES-2**) light-cure for 10 seconds.
- 7 Finish & Polish.

Bonding Accessories



Clearfil DC Activator
Mix Clearfil UBQ and Clearfil DC Activator when using other brands of dual-cured cement, composite or core build-up material.



Alloy Primer
Apply Alloy Primer to sandblasted precious or semi precious metals to enhance bond strength.



Katana Cleaner
Used after try-in to restore the restorations clean surface by removing blood and saliva contamination. Safe to be used intra-orally.

Direct Restoration
Using Bulk EZ PLUS
(Directed Shrinkage Tech.)



TOOTH PREPARATION:

- 1 Choose Etching Technique
a. Self-etch (go to step 2)
b. Selective-etch (10sec)
c. Total-etch (10sec)
Rinse and dry for **b & c**
- 2 Apply **Clearfil UBQ** with a rubbing motion 3-5 seconds. No waiting time after application.
- 3 Air dry for 5 seconds.
- 4 Light-cure for 10 seconds.

COMPOSITE PLACEMENT:

- 5 Start by placing **Bulk EZ PLUS** in the deepest part of the box keeping the tip moving and embedded till the restoration is filled.
- 6 Allow the **Bulk EZ PLUS** to self-cure for 90 seconds from start of fill.
- 7 Light-cure for 10 seconds.
- 8 Finish & Polish.

! Capping Bulk EZ PLUS:
Fill restoration to desired height (DEJ). Wait the 90 seconds, **do not light-cure**, then proceed to cap with your favorite sculptable composite (Majesty, AP-X, Estelite, ZNano, etc...)

Indirect Restoration
Zirconia, Metal, Composite
Panavia SAC Universal



SURFACE PREPARATION:

- 1a After try-in Sandblast restoration using 50 micron aluminum oxide in a **MicroEtcher**. Blow with air.
 - 1b After try-in clean restoration with **Katana Cleaner**.
- ! No primers required.** See info on **Panavia SACU**. See **Alloy Primer** for metal.

TOOTH PREPARATION:

- 1 Metal or composite abutment **Sandblast** using a **Microetcher**. No primers required on abutment. If tooth structure is present proceed with steps 2-4.
- 2 Sandblast tooth clean with a **MicroEtcher**. Wash and dry.
- 2 Choose Etching Technique
a. Self-etch (go to step 3)
b. Selective-etch (10sec)
c. Total-etch (10sec)
Rinse and dry for **b & c**
- 3 Apply **Clearfil UBQ** with a rubbing motion 3-5 seconds. No waiting time after application.
- 4 Air dry for 5 seconds.
- 4 Do not light cure.

CEMENTATION:

- 5 Place **Panavia SACU** in the restoration and seat.
- 6 Tack-cure for 2 to 5 seconds or let chemical-cure for 2-4 minutes, then remove the excess cement.
- 7 Maintain isolation for 5 min.
- 8 For a translucent restoration light-cure for 10 seconds around margin.

Indirect Restoration
Lithium Disilicate (eMax)
Panavia SAC Universal



SURFACE PREPARATION:

- 1a After try-in apply **Ceram Etch 5% HF Acid** for 20 seconds. Wash and dry.
 - 1b After try-in clean restoration with **Katana Cleaner** if already HF etched from lab.
- ! Silane application is not required.** **Panavia SACU** contains silane.

TOOTH PREPARATION:

- 1 Metal or composite abutment **Sandblast** using a **Microetcher**. No primers required on abutment. If tooth structure is present proceed with steps 2-4.
- 2 Sandblast tooth clean with a **MicroEtcher**. Wash and dry.
- 2 Choose Etching Technique
a. Self-etch (go to step 3)
b. Selective-etch (10sec)
c. Total-etch (10sec)
Rinse and dry for **b & c**
- 3 Apply **Clearfil UBQ** with a rubbing motion 3-5 seconds. No waiting time after application.
- 4 Air dry for 5 seconds.
- 4 Do not light cure.

CEMENTATION:

- 5 Place **Panavia SACU** in the restoration and seat.
- 6 Tack-cure for 2 to 5 seconds or let chemical-cure for 2-4 minutes, then remove the excess cement.
- 7 Maintain isolation for 5 min.
- 8 For a translucent restoration light-cure for 10 seconds around margin.

Core Build-up
Using Clearfil DC Core PLUS



POST TREATMENT AFTER TRY-IN:
(no post, skip to step 7)

- ! Clean posts with **Katana Cleaner** or use the standard procedure in step 1.**
- 1a **Glass Fiber Post:** Apply **SureEtch Liquid** for 5 seconds, rinse and dry.
 - 1b **Metal Post:** Sandblast post using a **MicroEtcher**. Blow with air.
 - 1c **Ice Post or IceLight Post:** Posts are super silted, wipe with alcohol.
- 2 Apply **Clearfil UBQ** to post. Air dry for 5 seconds. Do not light cure.

POST CEMENTATION:

- 3 If you wish to selective-etch the enamel margins and or post canal apply **SureEtch Liquid** for 10 seconds. Rinse and air dry.
- 4 **Canal and occlusal surface:**
Apply **Clearfil UBQ** then air dry for 5 sec. Do not light cure.
- 4 For a loose post space use **DC Core PLUS**.
- 5a Inject **Panavia SACU**
- 5b Inject **Clearfil DC Core PLUS**
- 6 Insert the treated post into the canal. Light-cure for 10 seconds. Go to step 8

TOOTH PREPARATION:

- 7 If you wish to selective-etch the enamel margins apply **SureEtch Liquid** for 10 sec. Rinse and air dry.
- 8 Apply **Clearfil UBQ** with a rubbing motion 3-5 seconds. No waiting time after application. Air dry for 5 sec.
- 9 Light-cure 10 sec.

CORE BUILD-UP:

- 10 Place **Clearfil DC Core PLUS**, a matrix can be used to stabilize the paste or tack cure for 5 seconds.
- 11 Light-cure for 20 seconds both lingual and buccal sides. Allow to self-cure for 6 minutes if thicker than 2mm.
- 12 After determining the paste is cured prepare the abutment.

Cervical Desensitization Class V



TOOTH SURFACE

- ! Self-etch primers may be used for desensitizing cervical areas. They do not require anesthesia for application so the result can be immediately tested.
- 1 Wipe area clean with gauze, avoid procedures that hurt.
- 2 Gently apply **Clearfil UBQ** with a rubbing motion 5 seconds. No waiting time after application.
- 3 Gently air dry 5 seconds.
- 4 Light-cure for 10 seconds.
- ! Test by blowing air.

COMPOSITE PLACEMENT:

- ! With single bottle systems a flowable composite must be placed. When applying the composite, apply to the gingival area first and cure it, then the incisal portion and cure it separately. This is known as decoupling, minimizing the stresses on the dentin bond.
- 5 Place flowable microfill composite (**Aria** or **Clearfil Majesty ES Flow**). Light-cure for 10 sec.
- 6 Finish and polish.

Broken Anterior Tooth Bonding a broken anterior tooth fragment



TOOTH SURFACE

- ! Do not sandblast or do any adjusting, it will modify the perfect fit. Cement and composite will not be used for luting. The thickness of the bond will be the luting cement. These steps should be done quickly.
- 1 Try-in for fit and position.
- 2 Wash and dry (both sides).
- 3 Apply **Clearfil UBQ** to tooth and fragment with a rubbing motion 3-5 seconds. No waiting time after application.
- 4 Air dry 5 seconds.
- 5 Seat the treated tooth fragment.
- 6 Thoroughly light-cure.
- 7 If there is a chip or other defect, use a flowable microfill composite after re-attaching the fragment (**Aria** or **Clearfil Majesty ES Flow**). Light-cure for 10 sec.
- 8 Finish and polish.

Ceramic Repair Composite Repair Zirconia Repair 1



SURFACE PREPARATION:

- 1 **Sandblast** restoration using 50 micron aluminum oxide in a **MicroEtcher**. Blow with air.
- ! **Zirconia**: skip to step 4
- 2 Apply **K-etchant Gel** for 5 sec. Wash and dry.
- 3 Apply **Clearfil Ceramic Primer Plus** (no waiting). Air dry.
- 4 Apply **Clearfil UBQ** (no waiting). Air dry 5 seconds.
- 5 Light-cure for 10 seconds.
- COMPOSITE PLACEMENT:**
- 6 Place flowable composite (**Clearfil Majesty ES Flow**), light-cure for 10 seconds.
- 7 Place sculptable composite (**Clearfil Majesty ES-2**) light-cure for 10 seconds.
- 8 Finish & Polish.

PFM Repair 1 Using aluminum oxide and Alloy Primer



SURFACE PREPARATION:

- 1 **Sandblast** restoration using 50 micron aluminum oxide in a **MicroEtcher**.
- 2 Apply **K-etchant Gel** for 5 sec. Wash and dry.
- 3 If precious, semi-precious or mystery metal is exposed apply **Alloy Primer** and air dry. Try to keep off ceramic.
- 4 Apply **Clearfil Ceramic Primer Plus** (no waiting). Air dry.
- 5 Apply **Clearfil UBQ** (no waiting). Air dry 5 seconds.
- 6 Light-cure for 10 seconds.
- COMPOSITE PLACEMENT:**
- 7 Exposed metal; apply composite opaquer such as **Accolade OP Mask**. Light cure 30+ seconds.
- 8 Place flowable composite (**Clearfil Majesty ES Flow**), light-cure for 10 seconds.
- 9 Place sculptable composite (**Clearfil Majesty ES-2**) light-cure for 10 seconds.
- 10 Finish & Polish.

PFM Repair 2 Zirconia Repair 2 Using SilJet



SURFACE PREPARATION:

- ! **SilJet** is a 30 micron silicating media comprised of encapsulated alumina that embeds silica into impacted inorganic surfaces. The metal becomes a porcelain surface. Great for mystery metal.
- 1 Affix the **SilJet Powder** to a **MicroEtcher**. Surface should be clean and dry.
- 2 Direct the **SilJet** powder stream perpendicularly onto the target surface from a distance from 5-10mm. Coat entire restorative surface evenly. Blasting time is usually 15 seconds.
- 3 Apply air for 5 seconds to remove residual powder.
- 4 Apply **Clearfil Ceramic Primer Plus** (no waiting). Air dry.
- 5 Apply **Clearfil UBQ** (no waiting). Air dry 5 seconds.
- 6 Light-cure for 10 seconds.
- COMPOSITE PLACEMENT:**
- 7 Exposed metal; apply composite opaquer such as **Accolade OP Mask**. Light cure 30+ seconds.
- 8 Place flowable composite (**Clearfil Majesty ES Flow**), light-cure for 10 seconds.
- 9 Place sculptable composite (**Clearfil Majesty ES-2**) light-cure for 10 seconds.
- 10 Finish & Polish.

Bonding Failed Crown With post and core inside



SURFACE PREPARATION:

- ! Visually inspect the failure to avoid another. Many failures similar to these are because of weak adhesives/cements, compromised tooth structure, going beyond limitations or steps that were poorly executed during the bonding procedure. If tooth structure and the core in the crown is sound then continue with the following steps.
- 1 Try-in for fit and position.
- 2 Wash and dry. (both sides)
- 3 **Sandblast** the internal of the restoration (post, core and crown margin) and tooth using 50 micron aluminum oxide in a **MicroEtcher**. Blow with air.
- 4 Apply **K-etchant Gel** to the tooth, canal and internal of crown for 5 seconds. Wash and dry.
- ! Do not apply **K-etchant Gel** on Zirconia.
- 5 Apply **Clearfil Ceramic Primer Plus** on the internal of the crown including post and core (no waiting). Air dry.
- 6 Apply **Clearfil UBQ** to crown and tooth with a rubbing motion 3-5 seconds on any exposed dentin. Air dry 5 seconds. Do not light cure.
- CEMENTATION:**
- ! For a loose post space or large void in crown use **Bulk EZ PLUS**. Choose your cement for step 7.
- 7a Inject/apply **Panavia SACU**
- 7b Inject/apply **Bulk EZ PLUS**
- 8 Seat the crown and remove excess cement with a small brush.
- 9 Maintain isolation for 5 minutes and/or light cure thoroughly.

Review all manufacturers instructions and precautions before using this cheat sheet.