

**TECHNIQUE GUIDE**  
***ONE-STEP***<sup>®</sup>  
***UNIVERSAL DENTAL ADHESIVE SYSTEM***

BPDM Patent # 5,348,988

Uni-Etch w/ BAC Patent # 5,385,728

ONE-STEP Patent #s 5,658,963 & 5,749,733

## **ONE-STEP®    TECHNIQUE GUIDE**

**ONE-STEP** technique cards are provided as a concise chairside guide to various clinical procedures. Flip through the cards until you find the procedure you are about to perform. Should you need materials other than those supplied in the **ONE-STEP** kits, they will be listed under 'also needed'.

**ONE-STEP** bonds composite to dentin, enamel, cast metals, treated porcelain and set amalgam. Although **ONE-STEP** is a light-cured system, it allows for indirect restorative procedures, due to its extremely thin and uniform film thickness.

The **ONE-STEP** system contains Uni-Etch® w/BAC (32% phosphoric acid with Benzalkonium Chloride). This polymer-thickened semi-gel is indicated for simultaneous use on dentin and enamel (15 seconds). Further research toward elimination of potential causes of post-operative sensitivity has yielded another significant innovation - the incorporation of a powerful antimicrobial agent, Benzalkonium Chloride (BAC).

To place an order, or for TECHNICAL ASSISTANCE, call **1-800-BIS-DENT** (800-247-3368) or 1-847-534-6000.

Bisco, Inc.  
1100 W. Irving Park Road  
Schaumburg, Illinois 60193

**ONE-STEP® INDEX**

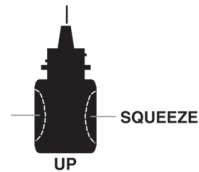
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## **ONE-STEP®**

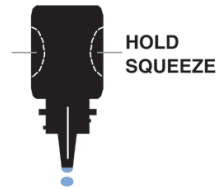
### **Dispensing One Drop of Acetone Based ONE-STEP Adhesive**

Due to the vapor pressure of acetone in adhesive solution, dispensing one to two drop(s) from the adhesive bottle may be difficult sometimes. The following technique will help to obtain the exact number of drops every time.

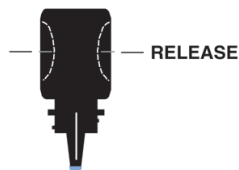
**Step 1.** After removing cap, hold bottle "up" between two fingers and squeeze lightly to expel air.



**Step 2.** Maintain finger pressure, turn bottle "down" and hold it in that vertical position, or lightly squeeze further, until one or two drops fall free.



**Step 3.** While unwanted drop is formed at the tip, release finger pressure from the bottle to suck the adhesive liquid back into the bottle.



### ***ONE-STEP® IN VITRO TESTING PROTOCOL***

In a clinical situation, keeping the dentin "moist" is easy because of high humidity and three dimensional cavity configuration. To simulate these conditions in a laboratory situation (flat specimen), where even a brief burst of air can remove too much moisture, the researcher must pay particular attention to maintaining a visibly "moist" dentin surface prior to adhesive applications.

#### **PROTOCOL FOR PREPARING IN VITRO "MOIST" DENTIN BONDING SPECIMEN:**

1. Apply UNI-ETCH® with BAC (32% H<sub>3</sub>PO<sub>4</sub>) to tooth surface for 15 seconds. Rinse thoroughly and store in distilled water.
2. Dispense 2 drops of ONE-STEP Adhesive into a mixing well. Taking only one specimen out of the water at a time, blot the tooth surface of excess water with a "moist" cotton pellet or Kimwipes® (laboratory wipes).
3. With a fully saturated brush tip, apply 2 consecutive coats to dentin (and/or enamel) with slight agitation.
4. Gently apply air for 10 seconds to evaporate solvent. A smooth glossy surface should be present. (If not shiny, apply an additional coat and evaporate solvent).
5. Light-cure adhesive for 10 seconds, bond composite to specimen.

## **ONE-STEP® HELPFUL HINTS**

**The ONE-STEP Introductory Package does not contain composite or cement.**

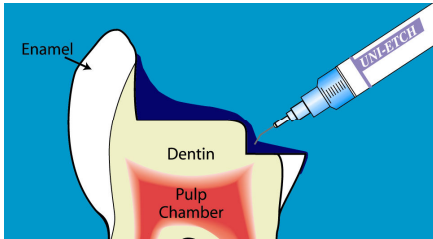
1. Bisco does not recommend the use of bases or liners. The adhesive will serve this purpose.
2. In order to facilitate penetration of **ONE-STEP** adhesive into the dentin and enamel, the tooth surface should be left visibly moist with water (not saliva).
3. **ONE-STEP** adhesive contains a monomer, BPDM, dissolved in an acetone solvent. Once the 2 coats have been applied to the dentin surface, **thorough air drying** for 10 seconds should be done to remove excess solvent. Inadequate air drying to remove the solvent completely could lead to reduced bond strength and post-operative sensitivity.
4. Drying **ONE-STEP** adhesive with an air syringe should begin lightly to avoid displacement of adhesive from preparation and proceed to a fairly strong stream of air, making sure all of the excess solvent and water have been removed.
5. Proper air drying is extremely important with indirect procedures such as inlays or onlays. Pay particular attention to the line angles and margins. Do **not** allow the **ONE-STEP** adhesive to pool in these areas. Excessive pooling could interfere with the final fit of the restoration.
6. A rubber dam is essential to the success of a porcelain repair. Also, if metal is exposed, a sandblaster is highly recommended for optimum adhesion.
7. Always **lubricate matrix band** prior to amalgam bonding procedure. This prevents adhesion of amalgam to band. Hard inlay wax is recommended.
8. AQUA-PREP™ F, an aqueous solution of HEMA and fluoride, can be used after acid etching of the preparation to insure that a proper level of moisture remains on the tooth. Dispense 2 drops of AQUA-PREP™ F into a mixing well and apply to the preparation. **Allow a dwell (soak) for 20 seconds**, then gently blow off the excess while leaving the tooth structure shiny in appearance. Proceed with the application of ONE-STEP. AQUA-PREP™ F also provides immediate, although temporary, desensitization of dentin which will enhance patient comfort during the application of a polymerizable bonding resin.

**ONE-STEP®**

***Dr. John Kanca's Technique***

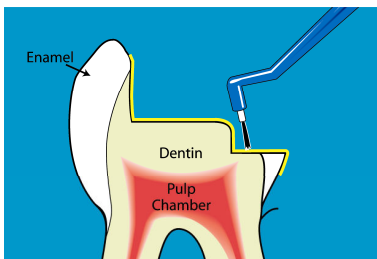
1. Acid etch a minimum of 15 seconds with ETCH-37™ w/BAC (37% phosphoric acid).
2. Rinse thoroughly with air-water spray for 3 seconds.
3. Dry the cavity for 2 seconds with compressed air.
4. Generously apply AQUA-PREP™ F to cavity (1-3 applications).
5. Allow to dwell (soak) for 15-20 seconds undisturbed.
6. Gently blow off excess, leaving a shiny appearing surface.
7. Apply 1-3 applications of ONE-STEP depending on the cavity size, and allow this to dwell 3-5 seconds.
8. Dry thoroughly for at least 5 seconds, beginning 5 cm (2") away from the cavity and finishing 1 cm (0.5") away.
9. Apply 1-3 applications of ONE-STEP again.
10. **Dry thoroughly again** as in step #8 (no need to wait).
11. Light-activate for 10 seconds (for sealing a crown prep, light activate 10 seconds per surface).

**ONE-STEP TECHNIQUE**  
**CLASS II**

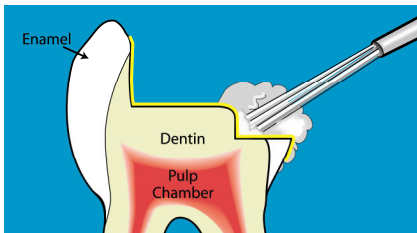


Clean and prepare cavity.

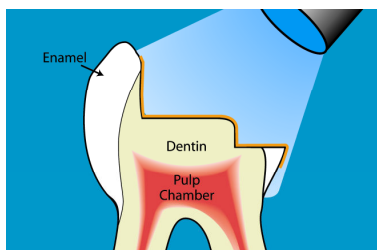
Etch enamel and dentin with UNI-ETCH™ w/BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly **moist** with a shiny surface.



Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats.

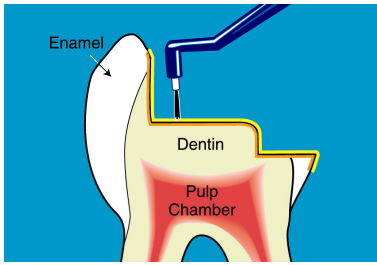


With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry.

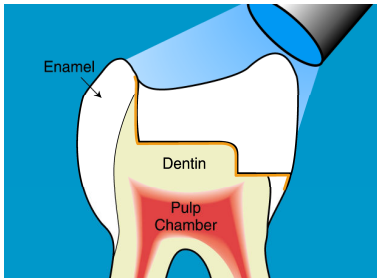


Light-cure for 10 seconds.





Apply **ONE-STEP** adhesive remaining on brush tip to dentin and enamel, briefly air dry. **DO NOT LIGHT-CURE.**



Incrementally place composite, light-cure, finish and polish.

**ONE-STEP®****Class I, II, III, IV Composite**

1. Clean and prepare cavity.
2. Etch enamel and dentin with UNI-ETCH® w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air, leaving the dentin and enamel slightly, but visibly moist with a shiny surface.  
**(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into set mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry. **Light-cure for 10 seconds.** Applying extra coats of **ONE-STEP** will help reduce stress placed on tooth and bond.
4. Apply **ONE-STEP** adhesive remaining on brush tip to dentin and enamel followed by brief air drying.
5. Incrementally place composite and finish. Apply FORTIFY™ composite surface sealant.

**ONE-STEP®*****Directed Shrinkage Composite*****Also needed: BISFIL™ 2B or BISFIL™ II**

1. Clean and prepare cavity.
2. Etch enamel and dentin with UNI-ETCH® w/BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly **moist** with a shiny surface.  
**(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time apply 2 **consecutive** coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry. **Light-cure for 10 seconds.** Additional coats of ONE-STEP are helpful.
4. Place matrix band. Mix an equal portion of base and catalyst of BISFIL 2B or BISFIL II. Using a tube and plug, syringe into cavity preparation to level of the DEJ.\* See adjacent page.
5. Prior to initial set of the self-cure composite, place a thin preformed patty of light-cure composite (such as AELITEFIL™ or BISFIL P) slightly wider than the cavity preparation and lightly condense. *\*This step will help prevent voids enhancing adaptation of composites.*
6. Following set of the self-cure composite, firmly condense the light-cure composite, remove excess and light cure for 40 seconds.
7. Remove matrix band and proceed with conventional finishing and polishing. Apply FORTIFY™ composite surface sealant

## ***ONE-STEP***<sup>®</sup>

### **What is the 'Directed Shrinkage Composite' technique?**

The directed shrinkage technique utilizes materials which initiate polymerization of the composite from the bulk of the material toward the tooth, in contrast to the behavior of light-cured composites, where shrinkage is directed toward the curing light. This technique will decrease subgingival gap formation.

**BISFIL 2B** is a low viscosity, self-cured, radiopaque, rapid setting hybrid composite that is specifically designed to be used as the first increment (or base increment) in a Class I or II restoration. **BISFIL II** is a high viscosity or thicker version of this material. With Bisfil 2B and Bisfil II, interproximal marginal integrity is maintained.

\* **BISFIL 2B** must be syringed into prep using a needle tube and plug. **BISFIL II** may be condensed into prep with a composite instrument.

The BITINE<sup>™</sup> Ring and Matrix (Darway Dental: (415) 548-9261) and COMPOSI-TIGHT<sup>™</sup> sectional Matrix (Garrison Dental: (616) 842-2244) help in achieving the ideal contact with the adjacent tooth.

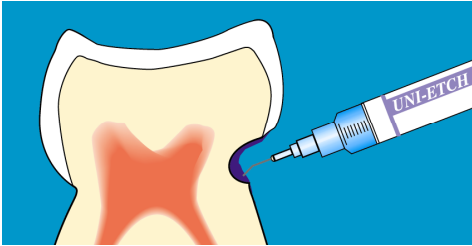
**ONE-STEP®**  
**Class V Composite**

1. Clean and prepare cavity.  
**Note: Sclerotic or shiny dentin should be roughened with a medium diamond bur prior to etching.**
2. Etch enamel and dentin with UNI-ETCH® w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly **moist** with a shiny surface  
**(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry. **Light-cure for 10 seconds.**
4. Apply 2 additional coats of **ONE-STEP** adhesive to tooth followed by thorough air drying. Light-cure for 10 seconds. **Note: Step 4 is optional, but highly recommended. Research indicates a thicker layer of adhesive will help dissipate the effects of tooth flexure<sup>1,2</sup> while providing a wet air-inhibited resin layer to help adapt dry, viscous composites.**
5. Apply **ONE-STEP** adhesive remaining on brush tip followed by brief air drying. **DO NOT LIGHT-CURE!**
6. Incrementally place composite and light-cure, finish and polish. A flowable, low modulus composite such as AELITEFLO™ is highly recommended. Apply FORTIFY™ composite surface sealant.

Ref:

1. Kemp-Scholte CM, Davidson CL (1990b). Marginal integrity related to bond strength and strain capacity of composite resin restorative systems. J Prosthet Dent 64:658-664
2. Van Meerbeek, Bart (1993). Dentine Adhesion: Morphological, physico-Chemical and Clinical Aspects. Thesis, Lenven (Belgium).

**ONE-STEP TECHNIQUE**  
**CLASS V**

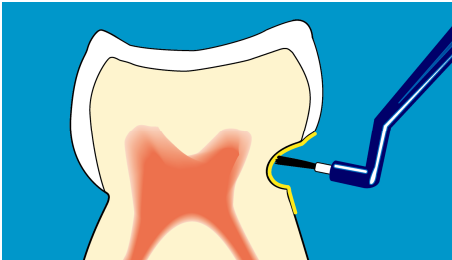


Clean and prepare cavity.

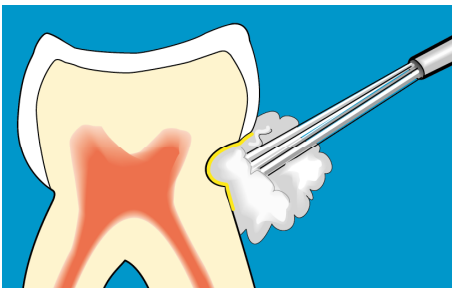
**Note: Sclerotic or shiny dentin should be roughened with a medium diamond bur prior to etching.**

Etch enamel and dentin with UNI-ETCH w/BAC for 15 seconds.

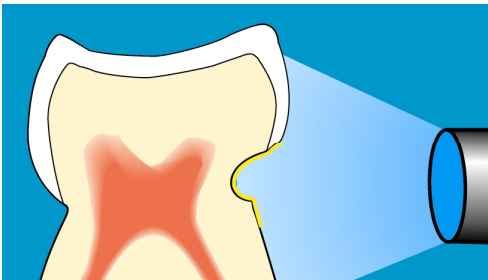
Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly **moist** with a shiny surface.



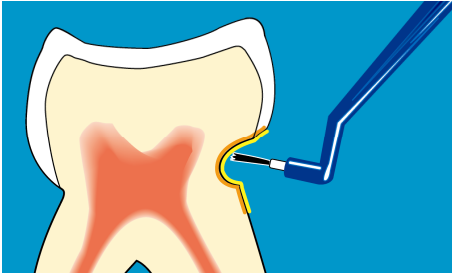
Dispense 2 drops of *ONE-STEP* adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats.



With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry.



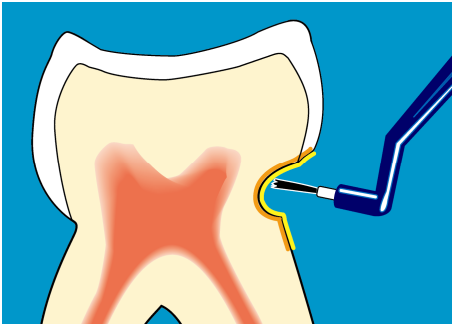
Light-cure for 10 seconds.



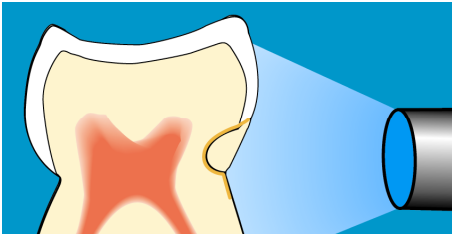
Apply 2 additional coats of ONE-CTEP adhesive to tooth followed by thorough air drying.

**LIGHT-CURE FOR 10 SECONDS.**

Note: This step is optional, but highly recommended. Research indicates a thicker layer of adhesive will help dissipate the effects of tooth flexure while providing a wet resin layer to help adapt dry, viscous composites.



Apply ONE-STEP adhesive remaining on brush tip. Briefly air dry. **DO NOT LIGHT-CURE!**



Incrementally place composite and light-cure, finish and polish.

4

**ONE-STEP®**

***Crown Preparation Desensitization Prior to Impression/Temporization***

**Preparation:**

1. Clean preparation with pumice.
2. Etch enamel and dentin with UNI-ETCH w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly **moist** but with a shiny surface.  
**(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 consecutive coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy apply additional coats and dry. **Light-cure for 10 seconds.**
4. With a moistened 2x2 gauze, remove the oxygen inhibited (sticky) layer from the sealed tooth. This will help prevent the impression material and temporary from adhering to tooth.

**Final Cementation:**

*Conventional Cement (Zinc Phosphate, Polycarboxylate, Glass Ionomer)*

1. Remove temporary and pumice preparation. Rinse and dry.
  2. Proceed with cementation
- Composite Cement (Duo-Link™, Choice™, C & B™ CEMENT, Resinomer™)*
1. Remove temporary and pumice preparation. Rinse and dry.
  2. Proceed to appropriate technique (5, 6, 7, or 8) in technique guide.



## ***ONE-STEP***<sup>®</sup>

### **Why desensitize before impression or temporization?**

Most patient discomfort is experienced after tooth preparation during the period between prep and final seating of restoration. Desensitizing prior to impression and temporization provides additional comfort for the patient and peace of mind for the doctor.

In many cases, the patient will not require anesthesia for the seating appointment.

**Sensitivity under crowns bonded with composite cement can be avoided by applying the priming adhesive correctly and by passively placing the crown using light pressure only. Holding the crown in place (while polymerization occurs) with excessive force may cause hydrostatic pressure sensitivity upon release of the restoration.**

**ONE-STEP®*****Metal Cementation (Inlay, Onlay, Crown)***

**Also needed: RESINOMER™, Bisco's multi-purpose resin ionomer, or Bisco C&B™ CEMENT**

1. Remove temporary, clean the preparation and try-in the restoration.
2. Etch enamel and dentin with UNI-ETCH w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly but visibly **moist** with a shiny surface. **(SEE IN VITRO TESTING PROTOCOL)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy apply additional coats and dry. **AVOID POOLING AT INTERNAL LINE ANGLES! Light-cure for 10 seconds** from buccal and lingual of preparation.

**Metal Preparation (Precious, Semi-Precious, Non-Precious)**

1. Sandblast the inside of restoration. Rinse and dry.
2. Apply 1 coat of **ONE-STEP** adhesive. With an air syringe, **gently but thoroughly air dry** to remove excess solvent. Light-cure for 10 seconds (optional).

**Cementation**

1. Mix base and catalyst of Bisco Resinomer and place inside restoration.
2. Seat\* restoration with gentle passive pressure and begin clean up immediately.  
\*Excessive seating pressure may cause hydrostatic pressure sensitivity.

## **ONE-STEP®**

### **Porcelain\* Cementation (Inlay, Onlay, Crown)**

**Also needed: Duo-Link™ or CHOICE™ Porcelain Adhesive, Porcelain Primer (Silane)**

1. Remove temporary, clean the preparation and try in the restoration.
2. Etch enamel and dentin with UNI-ETCH w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air, leaving the dentin and enamel slightly, but visibly **moist**.  
**(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of ONE-STEP adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 consecutive coats to tooth without waiting between coats. With an air syringe (placed 1.5 in. away from prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry. **AVOID POOLING AT INTERNAL LINE ANGLES! Light-cure for 10 seconds** from buccal and lingual of preparation.

### **Porcelain Preparation**

1. Apply UNI-ETCH w/ BAC to sandblasted inside of restoration for 15 seconds. Rinse and dry.
2. Apply 2 coats of Porcelain Primer and dry with an air syringe.
3. Apply 1 coat of **ONE-STEP** adhesive and with an air syringe **thoroughly air dry** to remove excess solvent. Light-cure for 10 seconds (optional).

### **Cementation**

1. Mix base and catalyst of Bisco DUO-LINK Luting Composite and place inside restoration.
2. Seat restoration with gentle passive pressure allowing cement to self-cure\*\*.
3. Remove excess from margins immediately. Light-cure 40 seconds per surface.

\*DO NOT USE resin ionomers for porcelain bonding! This may lead to porcelain fractures.

\*\*Excessive seating pressure may cause hydrostatic pressure sensitivity.

**ONE-STEP®**  
**Composite Cementation**  
**(Inlay, Onlay, Crown)**

**Also needed: DUO-LINK™ or CHOICE™ Porcelain Adhesive.**

1. Remove temporary, clean the preparation and try-in the restoration.
2. Etch enamel and dentin with UNI-ETCH w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air, leaving the dentin and enamel slightly, but visibly **moist** with a shiny surface. **(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy apply additional coats and dry. **AVOID POOLING AT INTERNAL LINE ANGLES! Light-cure for 10 seconds** from buccal and lingual of preparation.

**Composite Preparation**

1. Sandblast inside of restoration. Rinse and dry.
2. Apply 1 coat of **ONE-STEP** Adhesive or appropriate composite activating liquid and with an air syringe, **thoroughly air dry** to remove excess solvent. Light-cure for 10 seconds (optional).

**Cementation**

1. Mix base and catalyst of Bisco Duo-Link Luting Composite and place inside restoration.
2. Seat restoration with gentle passive pressure allowing cement to self-cure.
3. Remove excess from margins immediately. Light-cure for 40 seconds per surface.

**ONE-STEP®****Porcelain Veneer Cementation****Also needed: CHOICE™ Porcelain Veneer Adhesive, Porcelain Primer (Silane)**

If using try-in paste, follow manufacturers instructions. Proceed with step #1 for final cementation.

**Tooth Preparation**

1. Pumice preparation, etch dentin and enamel with Uni-Etch w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly , but visibly **moist** with a shiny surface.  
**(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
2. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 consecutive coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry.  
**DO NOT LIGHT-CURE!** (\*If dentin is present, light-cure for 10 seconds)

**Veneer Preparation**

1. Apply Uni-Etch w/ BAC to sandblasted porcelain veneer for 15 seconds. Rinse and dry. Apply 2 coats of Porcelain Primer to acidified veneer. With an air syringe, dry thoroughly.
2. Apply 1 coat of **ONE-STEP** adhesive to veneer. With an air syringe, thoroughly air dry to remove excess solvent. **DO NOT LIGHT-CURE!**

**Cementation**

1. Select desired shade of CHOICE Porcelain Adhesive and line the inside of the veneer.
2. Seat veneer on tooth with gentle, passive pressure and light-cure for 10 seconds to tack restoration into place.
3. Remove excess and light-cure 40 seconds per surface, beginning with the lingual.

**ONE-STEP®**  
**Bisco Luting Cements**

**RESINOMER** is a dual-cured, glass-filled fluoride-releasing composite with viscosity and flow characteristics that make it nearly ideal for bonded amalgam restorations, as a dental liner and luting agent. Because of the hydrophilic monomer, DSDM, contained within the resin matrix, Resinomer is especially suited for bonding in crown and bridge with metal substrates. **DO NOT USE** with porcelain!

**DUO-LINK** is a dual-cured, translucent luting composite with ultra-fine particles designed specifically for cementation of composite or porcelain inlays, but may also be used to cement onlays and crowns. Because of the small particle size and even distribution, wear around the margins is minimal as compared to other luting cements with larger particle fillers.

**BISCO C&B CEMENT** is a self-cure, Bis-GMA based cement designed for cementation of inlays, onlays, and crowns with either metal, porcelain or composite substrates. This cement is available in Original Opaque, Natural and Natural with Fluoride. The opaque formulation is indicated for cementation of Maryland Bridges and because of its rapid setting time, for endodontic posts. When used in conjunction with the ONE-STEP Universal Dental Adhesive, BISCO C&B CEMENT will bond micro-mechanically to metal, porcelain, and tooth structure with unsurpassed bond strength.

**CHOICE PORCELAIN ADHESIVE SYSTEM** is a dual-cure hybrid luting cement available in a 5 or 10 shade kit for bonding porcelain veneers. This cement is accompanied by try-in paste to match each one of the Vita® \*shaded light-cure pastes. To give the doctor added versatility, a syringe of dual-cure catalyst paste or liquid dual-cure catalyst (5-shade only) is available in the system. This allows for cementation of porcelain or composite inlays, onlays and crowns.

\*VITA is a registered trademark of VITA ZAHNFABRIK H. Rauter GmbH & Co. KG. Germany. Shades are correlated on a best match basis with the Vita-Lumin Shade System.

ONE-STEP®

	Post	Maryland Bridge	Crowns	Veneers	Inlay/Onlay (Por/Comp)	Inlay/Onlay Metal	Ortho Brackets
C&B (Opaque)	✓*	✓*	✓			✓*	
C&B (Natural)	✓		✓		✓	✓	
C&B (Nat. w/Fluo.)	✓		✓		✓	✓	
Choice (light-cure)				✓*			
Choice (dual-cure)			✓		✓	✓	
Duo-Link			✓		✓*	✓	
Resinomer	✓*		✓**			✓*	✓*(w/out primer)

\* Highly Recommended

\*\*METAL

**ONE-STEP®**  
**Adhesive (Bonded) Amalgam Restoration**

**Also needed: RESINOMER™, Bisco's multi-purpose resin ionomer.**

1. Cavity preparation
2. Etch enamel and dentin with Uni-Etch w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly **moist** with a shiny surface. **(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry. **Light-cure for 10 seconds.** Apply all remaining **ONE-STEP** to tooth.
4. **Lightly lubricate matrix band with provided wax stick and place around tooth.**  
*\* This step may be done in the beginning to help with contamination control.*
5. On a mixing pad, mix an equal volume of RESINOMER base and catalyst and apply a thin layer onto entire cavity surface including margins. Keep layer thin and avoid pooling.
6. Condense amalgam. Carve and finish as usual. Burnishing margins will enhance the final restoration.



## **ONE-STEP®**

### **Why bond an amalgam to tooth?**

Bonding amalgam to tooth reduces the need for undercuts, slots and pins. All of these features create an enormous amount of stress on an already compromised tooth.

Besides reducing the amount of retentive features needed, bonding amalgam to tooth also seals and desensitizes. The patient is more comfortable and has a much stronger restoration.

***ONE-STEP***<sup>®</sup>  
***Fresh Amalgam to Old Amalgam***

**Also needed: RESINOMER**<sup>™</sup>, Bisco's multi-purpose resin ionomer

1. Sandblast the surface of the old amalgam. Rinse and dry.
2. Apply 1 coat of ***ONE-STEP*** adhesive to sandblasted amalgam surface. With an air syringe, **thoroughly air dry** to remove excess solvent. **Light-cure for 10 seconds.**
3. Mix an equal volume of RESINOMER base and catalyst on a mixing pad and brush a thin layer onto the amalgam surface. Keep layer thin and avoid pooling.
4. Condense amalgam, carve and finish as usual.

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**ONE-STEP®****Composite Core Build-Up**

**Also needed: BIS-CORE™ (dual-cure), CORE-FLO™ (self-cure) or BISFIL™ CORE (light-cure) core build-up composite**

1. Clean and prepare cavity.
2. Etch enamel and dentin with UNI-ETCH w/BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly **moist** with a shiny surface. **(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 **consecutive** coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. If surface is not glossy, apply additional coats and dry. **Light-cure for 10 seconds.**
4. Apply **ONE-STEP** adhesive remaining on brush tip to dentin and enamel followed by brief air drying. Additional resin helps adapt core build-up composite to tooth.
5. Apply core build-up composite material thoroughly around post and build up in increments. Light-cure if necessary.

**ONE-STEP®**  
**Porcelain Repair**

**Also needed: Sandblaster, Porcelain Etchant, OPAQUER, Porcelain Primer (Silane)**

1. **Place rubber dam!** Clean surface of porcelain and metal with pumice. Rinse and dry.
2. Bevel porcelain margin with a medium diamond bur. Rinse and dry.
3. Sandblast metal and porcelain. Rinse and dry. Apply Porcelain Etchant to porcelain for 4 minutes. Rinse and dry. Apply 2 coats of Porcelain Primer to porcelain and air dry.
4. Apply 1 coat of **ONE-STEP** adhesive to metal and porcelain. With an air syringe, **thoroughly air dry** to remove excess solvent. **Light-cure for 10 seconds.**
5. Apply a thin coat of OPAQUER\* to metal only and allow to self-cure. **Light-cure for 30 seconds if slumping occurs.**
6. Apply 1 coat of **ONE-STEP** adhesive remaining on brush to opaqued metal and treated porcelain. With an air syringe, **thoroughly air dry** to remove excess solvent. **Light-cure for 10 seconds.**
7. Proceed with composite layering and finishing. **DO NOT USE** a microfill composite.  
\* Shake bottles well prior to dispensing. Confirm the expiration date.

***ONE-STEP®***  
***Composite to Composite (repair)***

**Also needed: Sandblaster**

1. Pumice tooth preparation
2. Remove layer of old composite and bevel fractured margin.
3. Sandblast composite surface. Rinse and dry.
4. Apply UNI-ETCH w/ BAC to composite and tooth structure for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air.
5. Apply 1 coat of ***ONE-STEP*** adhesive to composite and tooth structure. With an air syringe, **thoroughly air dry** to remove excess solvent and water. **Light-cure for 10 seconds.**
6. Proceed with composite layering and finishing.

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**ONE-STEP®**  
**Composite to Metal/Set Amalgam (Direct Veneering)**

**Also needed: Sandblaster, OPAQUER (metal mask).**

1. Sandblast metal surface. Rinse and dry.
2. Etch tooth structure, if present, using UNI-ETCH w/ BAC for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air leaving the dentin and enamel slightly, but visibly moist. **(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Apply 1 coat of **ONE-STEP** adhesive to sandblasted and etched surface. With an air syringe, **thoroughly air dry** to remove excess solvent and water. **Light-cure for 10 seconds.**
4. Apply a thin layer of OPAQUER\* to primed metal/amalgam surface and allow to self-cure. **Light-cure for 30 seconds if slumping occurs.**
5. Apply composite directly to the opaqued metal and proceed with composite layering and finishing.

**\* Shake bottles well prior to dispensing.**

**ONE-STEP®**  
**Root Desensitization**

**Also needed: Bisco CAVITY CLEANSER and pumice.**

1. Clean dentin surface by scrubbing with Bisco CAVITY CLEANSER and pumice (dip cotton pellet soaked with cleanser into flour of pumice).
2. Rinse thoroughly with warm water and blot with a cotton pellet. Do not air dry!  
**(SEE IN VITRO TESTING PROTOCOL/HELPFUL HINTS)**
3. Dispense 2 drops of **ONE-STEP** adhesive into mixing well. Using a fully saturated brush tip each time, apply 2 consecutive coats to tooth without waiting between coats. With an air syringe (placed 1.5 inches away from the prep) **thoroughly air dry** for 10 seconds to remove excess solvent and water. **Light-cure for 20 seconds.**
4. **Repeat step # 3 if desensitization has not been achieved.**
5. With a moistened 2x2 gauze, remove the oxygen inhibited (sticky) layer, if still present.

\* If complete desensitization is not accomplished, scale tooth thoroughly and repeat procedure.

**ONE-STEP®**

1. Prepare post space according to manufacturer's instructions. Etch post space with UNI-ETCH w/BAC (32% phosphoric acid with benzalkonium chloride) for 15 seconds. Rinse thoroughly. Remove excess water with a brief burst of air, leaving the dentin slightly, but visibly moist with a shiny surface. Using a paper point, remove any pooled water from the post space.
2. With the provided brush tip, apply 2 consecutive coats of **ONE-STEP** Adhesive into the etched, moist post space. With an air syringe, dry thoroughly for approximately 10 seconds to remove excess solvent and displaced water. Using a paper point, remove any puddled primer left in the post space. This step is important to make sure that there is no interference in complete seating of endodontic post.
3. With a light transmitting post or small light tip, cure the **ONE-STEP** Adhesive for 10 seconds. \*This step is extremely important! Failure to completely light-cure the **ONE-STEP** will result in poor bonding. Light access is crucial!
4. Sandblast metal post. Rinse and dry. Apply one layer of **ONE-STEP** Adhesive to post followed by thorough air drying. Light-curing is not necessary at this step!
5. Dispense appropriate amounts of self- or dual-cure luting composite cement of your choice. Mix thoroughly and with a syringe, dispense into the canal space and place on post. Place post into canal space and remove excess. Wait until final cure before disturbing post.
6. At this time, the core build-up may be done.

**\*The user must use their own discretion as to whether light will reach into the canal space. Although *ONE-STEP* is very light sensitive, Bisco cannot guarantee success if the appropriate amount of light has not reached the adhesive.**



**ONE-STEP®**  
**Kit & Refill Selection**

***U-10010: ONE-STEP Standard Pkg***

2 Syringes (5g each) UNI-ETCH (32% $H_3PO_4$ ) w/ BAC, 1 Bottle (4ml) ONE-STEP adhesive, 1 Brush Handle, 50 Brush Tips, 30 Syringe Tips, Resinvoirtm, INSTRUCTIONS/MSDS.

***U-1101P: ONE-STEP Adhesive Refill Bottle (4 ml)***

***U-1102P: ONE-STEP Adhesive Refill Bottle (6 ml)***

**INSTRUCTIONS/MSDS**

***U-101101: ONE-STEP System #1***

2 Syringes (5g each) UNI-ETCH (32% $H_3PO_4$ ) w/ BAC, 1 Bottle (4ml) ONE-STEP adhesive, 1 Brush Handle, 50 Brush Tips, 30 Syringe Tips, Resinvoirtm, INSTRUCTIONS/MSDS.

2 Syringes (4g each) RESINOMER Base, 2 Syringes (4g each) RESINOMER Catalyst, Matrix Lubricant, Mixing Sticks & Pads, INSTRUCTIONS/MSDS.

***ONE-STEP System #2 w/ ÆLITEFIL Syringes:***

2 Syringes (5g each) UNI-ETCH (32% $H_3PO_4$ ) w/ BAC, 1 Bottle (4ml) ONE-STEP adhesive, 1 Brush Handle, 50 Brush Tips, 30 Syringe Tips, Resinvoirtm,, INSTRUCTIONS/MSDS.

Plus, 1 Syringe (5 g each) of each shade:

***U-101201: Primary Shades A1, A2, A3.5, C2, D3***

**INSTRUCTIONS/MSDS**

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