



SCIENCE  
AND DENTISTRY.  
BONDED.



PRODUCT SPOTLIGHT

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Visit us at [www.bisco.com](http://www.bisco.com) for a complete product catalog!





At BISCO "adhesion is our passion," and we dedicate ourselves to understanding and improving the ability to bond restorations. Our goal is to make your life easier, while helping you perform your best dentistry! We place tremendous value on sharing our research and scientific knowledge to benefit you and your practice, and offering award-winning products that provide reliable solutions to your clinical needs.

With BISCO, you are no longer alone. If you have a question about restorative protocols or are wondering which products to use (or maybe you are just looking for someone to talk to), give us a call. We're here to help!



**BISCO HEADQUARTERS**  
SCHAUMBURG, ILLINOIS



**DR. BYOUNG SUH**  
FOUNDER AND PRESIDENT OF BISCO  
- CHEMIST  
- AUTHOR OF PRINCIPLES OF  
ADHESION DENTISTRY  
- EXCELLENT GOLFER

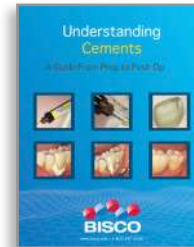
## Restorative Solutions eBook

Meet the Award-Winning TheraFamily



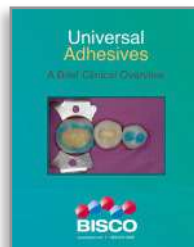
## Understanding Cements eBook

A Guide From Prep to Post-Op



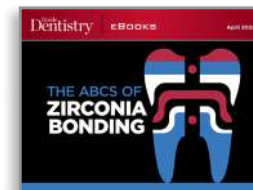
## Universal Adhesives eBook

A Brief Clinical Overview



## The ABCs of Zirconia Bonding

Bonding to Zirconia is Achievable



USE YOUR MOBILE DEVICE  
TO SCAN THE QR CODES  
AND LEARN MORE!

## All-Bond Universal®

Light-Cured Dental Adhesive

All-Bond Universal is the culmination of over 30 years of adhesive research at BISCO. All-Bond Universal is compatible with all light-, self-, and dual-cured resin composite and cement materials for all direct and indirect procedures.



**Versatile**  
Offers the flexibility for total-, self-, or selective-etch procedures



**MDP**  
Contains MDP for enhanced durability



**High Shear Bond Strengths**  
High shear bond strength to all substrates



**Low Film Thickness**  
Less than 10 microns



**Single Bottle System**  
Other adhesives may need more than one bottle for indirect restorations, but with All-Bond Universal, NO activator is required



**Total "Universality"**  
Compatible with all light-, self- and dual-cured resin composite and cement materials for all direct and indirect procedures

Dentistry courtesy of Tyler Lasseigne, DDS, CDT



1. Apply Z-Prime Plus



2. Apply All-Bond Universal



3. Apply Duo-Link Universal

LEARN MORE ABOUT ALL-BOND UNIVERSAL



**Order Info: Bottle**

All-Bond Universal Standard Kit	B-72020K
All-Bond Universal (6ml)	B-7202P

**Unit-Dose Packages**

All-Bond Universal Unit-Dose (50pk)	B-73050K
All-Bond Universal Unit-Dose (100pk)	B-73100K

\*Universality: The powerful feeling of the entire universe in one single bottle.

Universally Strong. Universally Simple.



## Duo-Link Universal™ Resin Luting Cement

Duo-Link Universal is specially formulated for cementation of ALL\* indirect restorations. The adhesive resin cement is intended for use with adhesives designed for compatibility with all dental materials, including all BISCO adhesives.



### Easy Clean-Up

Formulated to allow for quick and easy removal of excess cement



### Radiopaque

Visible on radiograph to easily distinguish from caries



### High Degree of Conversion

In both light- and self-cured modes ensures a strong, long lasting restoration



### Easy to Use

Auto-mix, dual-syringe provides a consistent mix and easy placement



### CAD/CAM Restorations

Ideal for all chairside and lab-fabricated restorations



### Universal For All Cementation Procedures\*

Crowns, bridges (fixed prosthesis), inlays, onlays, and posts/dowels, fabricated from metal, composite, porcelain, ceramic, zirconia, alumina, CAD/CAM restorations, etc.

Dentistry courtesy of Darren D. Simpson, DDS



1. Duo-Link Universal dispensed in the crown



2. All-Bond Universal applied, air dried, and light-cured



3. Restoration seated. Excess cement removed



4. Final restoration

LEARN MORE ABOUT  
DUO-LINK UNIVERSAL



**Order Info:** System Kit with All-Bond Universal

B-19620K

Universal Dual-Syringe (8g)  
Milky White Dual-Syringe (8g)

A-19030P  
A-197MWP

\* It is recommended to use BISCO's CHOICE™ 2 for veneer cementation.





## Select HV<sup>®</sup> Etch w/BAC Uni-Etch<sup>®</sup> w/BAC Etch-37<sup>™</sup> w/BAC

*Phosphoric Acid Etchants with Benzalkonium Chloride (BAC)*

Select HV Etch is a 35% high-viscosity phosphoric acid etchant with BAC. It is specifically formulated for pin-point placement to etch enamel when using an adhesive in selective-etch mode.

Uni-Etch w/BAC and Etch-37 w/BAC are 32% and 37% semi-gel phosphoric acid etchants with BAC. They are specifically formulated to be easily applied to larger surface areas and rinsed cleanly with no residue.



**Blue Color**  
Easy visualization and contrast



**Easy Clean Up**  
Rinses away cleanly and quickly leaving no residue to interfere with bonding



**Contains BAC**  
In-vitro research shows benzalkonium chloride is effective against Streptococcus mutans<sup>1,2</sup>

NOTE: Inclusion of BAC has not been shown to correlate with a reduction in secondary decay in patients. In vivo clinical studies to evaluate the effects of BAC on oral bacteria or caries have not been performed.

Dentistry courtesy of Michael Morgan, DDS



Select HV Etch w/BAC demonstrating pin-point placement on enamel

LEARN MORE ABOUT  
ETCHANTS



**Order Info: Select HV Etch w/BAC (35%)**

- 30ml Bulk Syringe Kit E-59200K
- Bulk Syringe Refill (30ml) E-59160P
- 4 Syringe Package (5g ea.) E-59110P

**Uni-Etch w/BAC (32%)**

- Bulk Bottle (30g) E-5637EB
- Bulk Syringe Refill (30ml) E-56621P
- 4 Syringe Package (5g ea.) E-5502EBM

**Etch-37 w/BAC (37%)**

- Bulk Bottle (30g) E-5638EB
- Bulk Syringe Refill (30ml) E-56741P
- 4 Syringe Package (5g ea.) E-5503EBM

1. M.Sc.Dt. Emre ÖZEL, Dr. Haktan YURDAGÜVEN, Yrd.Doç.Dr. Esra CAN SAY, Prof.Dr. Sesin KOCAGÖZ, Evaluation of the Antibacterial Activity of Disinfectant Solutions with Phosphoric Acids Against Streptococcus Mutans. Journal of Hacettepe Faculty of Dentistry, Volume: 29, Issue 4, Page: 8-14, 2005  
2. M. TURKUN1, Z. ERGUCU, L.S. TURKUN, E.U. CELIK, and M. ATES, Is Phosphoric Acid Sufficiently Antibacterial?, J Dent Res 85 (Spec Iss B):abstract number 1605, 2006 (www.dental.research.org).



## TheraCal LC®

Resin-Modified Calcium Silicate Pulp Protectant/Liner

TheraCal LC is a light-cured resin modified calcium silicate ideal for direct and indirect pulp capping and as a protective liner.



**Calcium Release\***  
Stimulates hydroxyapatite formation<sup>1,2</sup> and secondary dentin bridge formation<sup>2,3</sup>



**Radiopaque**  
Visible on radiograph to easily distinguish from caries



**Moisture Tolerant**  
Has low solubility and will not wash out over time



**Alkaline pH**  
Alkaline pH promotes pulp vitality<sup>3</sup>



**Insulates Pulp**  
Forms a protective barrier that insulates the pulp<sup>4,5</sup>

### Dentistry courtesy of Ross Nash, DDS



1. Distal-occlusal caries present on an asymptomatic mandibular first premolar



2. Incomplete excavation of caries leaving affected dentin without exposing the pulp



3. Placement of TheraCal LC on moist dentin



4. Place 1mm of TheraCal LC and light cure for 20 seconds

LEARN MORE ABOUT  
THERACAL LC



OR VISIT  
THERAFAMILY.COM

**Order Info:** TheraCal LC 4-Syringe Pack  
TheraCal LC Syringe (1g)

H-33014P  
H-3301P

\* BISCO has, on file, the calcium release data for TheraCal LC

1. Gandolfi MG, Siboni F, Prati C. Chemical-physical properties of TheraCal, a novel light-curable MTA-like material for pulp capping. International Endodontic Journal. 2012 Jun;45(6):571-9.
2. ADA definitions for direct and indirect pulp capping at: [www.ada.org/en/publications/cdt/glossary-of-dental-clinical-and-administrative-terms](http://www.ada.org/en/publications/cdt/glossary-of-dental-clinical-and-administrative-terms)
3. T. Okabe, M. Sakamoto, H. Takeuchi, K. Matsushima. Effects of pH on Mineralization Ability of Human Dental Pulp Cells. Journal of Endodontics. Volume 32, Number 3, March 2006.
4. Sangwan P; Sangwan A; Duhan J; Rohilla A. Tertiary dentinogenesis with calcium hydroxide: a review of proposed mechanisms. Int Endod J. 2013; 46(1):3-19
5. Selcuk SAVAS, Murat S. BOTSALI, Ebru KUCUKYILMAZ, Tugrul SARI. Evaluation of temperature changes in the pulp chamber during polymerization of light-cured pulp-capping materials by using a VALO LED light curing unit at different curing distances. Dent Mater J. 2014;33(6):764-9.







## TheraCal PT®

*Dual-Cured Resin-Modified Calcium Silicate Pulpotomy Treatment*

TheraCal PT is a biocompatible, dual-cured, resin-modified calcium silicate designed for pulpotomy treatment. TheraCal PT maintains tooth vitality by performing as a barrier and protectant of the dental pulpal complex.



### Calcium Release

Unique hydrophilic matrix facilitates calcium release



### Radiopaque

Visible on radiograph to easily distinguish from caries



### Easy Syringe Application

Manual mixing is not required, the dispensing tip creates a uniform mix allowing for direct placement



### Alkaline pH

Alkaline pH promotes pulp vitality<sup>1</sup>



### Dual Cured

One-layer confidence



### Moisture Tolerant

Low water solubility

Dentistry courtesy of Juan Carlos Hernández Cabanillas, DDS



1. Perform pulpotomy treatment and achieve hemostasis



2. Place TheraCal PT directly in the pulp chamber, and ensure good adaptation to the cavity walls and margins



3. After light curing TheraCal PT for 10 seconds, place desired adhesive, base, and/or restoration following manufacturer's directions

LEARN MORE ABOUT  
THERACAL PT



OR VISIT  
THERAFAMILY.COM



**Order Info:** TheraCal PT Dual-Syringe (4g) H-34110P

1. T. Okabe, M. Sakamoto, H. Takeuchi, K. Matsushima. Effects of pH on Mineralization Ability of Human Dental Pulp Cells. Journal of Endodontics. Volume 32, Number 3, March 2006.



## TheraCem<sup>®</sup> Self-Adhesive Resin Cement

TheraCem is a dual-cured, calcium- and fluoride-releasing, self-adhesive resin cement indicated for luting crowns, bridges, inlays, onlays and posts (prefabricated metal/non-metal/fiber posts).



### Calcium and Fluoride Release

TheraCem offers continuous calcium and fluoride release\*



### Alkaline pH

TheraCem transitions from acidic to alkaline pH in minutes\*



### High Degree of Conversion

A high degree of conversion ensures a higher physical strength



### Radiopaque

Visible on radiograph to easily distinguish from caries



### Easy Clean-Up

Specially formulated to allow for quick and easy clean-up



### MDP

TheraCem contains MDP offering a strong bond to zirconia, metal, and alumina substrates with no priming or etching required

Dentistry courtesy of Joseph Kim DDS, JD, FAGD, FICOI



1. Prepare tooth.



2. Seat restoration with TheraCem.



3. Remove excess cement.



4. Inspect margins.

LEARN MORE ABOUT  
THERACEM



OR VISIT  
THERAFAMILY.COM

Order Info: Natural Dual-Syringe (8g)

D-46311P

\* Data on file. BISCO, Inc.





## TheraBase® Self-Adhesive Calcium Releasing Base/Liner

TheraBase is a dual-cure, calcium and fluoride-releasing, self-adhesive base/liner. It is the ideal dual-cured material that will polymerize even in deep restorations where light cannot reach.



### Calcium and Fluoride Release

TheraBase offers continuous calcium and fluoride release\*



### High Flexural Strength

Stronger and more fracture resistant



### High Compressive Strength

Absorbs shock and stress from occlusal forces without fracturing



### Radiopaque

Visible on radiograph to easily distinguish from caries



### Alkaline pH

Generates an alkaline pH in minutes, which promotes pulp vitality<sup>1</sup>



### High Degree of Conversion

Ensures enhanced physical properties



### Dentistry courtesy of Dr. Rual Euan, DDS



1. After cavity preparation, all water was removed using a stream of air, leaving the surface visibly moist. TheraCal LC was applied on the small pulp exposure and light-cured for 20 seconds.



2. TheraBase was applied to the dentin surface of the prepared cavity directly from the dispensing syringe.



3. TheraBase was light-cured for 20 seconds. If desired, TheraBase can be allowed to self-cure for 4 minutes.



4. A selective-etch bonding technique was used to condition the surface of the preparation. Any bonding technique can be applied.



5. All-Bond Universal was applied following manufacturer's instructions.



6. Restorations were filled with a light-cure composite material following manufacturer's instructions.

LEARN MORE ABOUT  
THERABASE



OR VISIT  
THERAFAMILY.COM

**Order Info:** TheraBase Single Syringe Pack H-35001P

\* Data on file. BISCO, Inc.

1. T. Okabe, M. Sakamoto, H. Takeuchi, K. Matsushima. Effects of pH on Mineralization Ability of Human Dental Pulp Cells. Journal of Endodontics. Volume 32, Number 3, March 2006.

Superior Bonds begin with Z-Prime Plus.



## Z-Prime™ Plus

Zirconia - Alumina - Metal Primer

Z-Prime Plus is a one-bottle primer used to enhance adhesion between indirect restorative materials and composite resin cements.



### High Bond Strength

To zirconia, alumina, and metal restorations



### Compatibility

Compatible with light-cured and dual-cured resin luting cements



### Single Bottle

Convenient single bottle delivery offers ease of dispensing



### Versatile

Can be used with all metal and metal-oxide substrates



### Enhances Bond Strength

Significantly enhances bond strengths of other resin cements\*



### MDP

Contains MDP, allowing for a strong bond to zirconia, metal, and alumina substrates

**Order Info:** 1 Bottle Z-Prime Plus (2ml)  
1 Bottle Z-Prime Plus (4ml)

B-6002P  
B-6001P

LEARN MORE ABOUT  
Z-PRIME PLUS



\* Data on file. BISCO, Inc.





### ZirClean® Restoration Cleaner

ZirClean is an extraoral cleaning agent designed for the non-abrasive cleaning of the bonding surfaces of zirconia, ceramic and metal restorations, after intraoral try-in.



#### Easy to Use

Syringe delivery system offers improved ease of use



#### Easy Clean up

Easy clean-up of the material



#### Contaminant Remover

Contaminants such as saliva can be removed to help achieve better bond strengths after try-in\*



#### Reliable Results

Helps to achieve reliable cementation results with zirconia restorations after intraoral try-in\*

**Order Info:** 1 Syringe ZirClean (5g)

B-7351P

\* As compared to untreated samples.

LEARN MORE ABOUT  
ZIRCLEAN



The Perfect Core Starts Here.



## Core Flo™ DC & Core Flo™ DC Lite

Dual-Cured Core Build-Up Materials

Core-Flo DC and Core Flo DC Lite are dual-cured, core products that are ideal for core build-ups, post cementation and as a dentin replacement material.



### High Compressive Strength

Provides high compressive strength in LC and SC modes



### High Flexual Strength

Offers high flexual strength in LC and SC modes



### Radiopaque

Easy to identify on radiographs for quick and effective diagnosis



### Cuts Like Dentin

Allows for easy preparation



### Stackable (Core-Flo DC)

Optimal handling when building up core



### Self-Leveling (Core-Flo DC Lite)

Allows for excellent adaption resulting in gap-free margins

Dentistry courtesy of Ross Nash, DDS, FAACD



1. Enamel etched with Select HV Etch



2. Core-Flo DC applied after use of Universal Primer™



3. Core-Flo DC placed

LEARN MORE ABOUT  
CORE-FLO DC +  
CORE-FLO DC LITE



### Order Info: Core-Flo DC Lite

System Kit with Universal Primer  
Natural/A1 Dual-Syringe (8g)  
Opaque White Dual-Syringe (8g)

AB-17410K  
A-17801P  
A-17803P

### Core-Flo DC

Natural/A1 Dual-Syringe (8g)  
Opaque White Dual-Syringe (8g)

A-23011P  
A-23012P

### Accessories

Dispenser  
Endo Mixing Tips  
Intraoral Mixing Tips

L-22020P  
X-81267P  
X-81257P





## FluoroCal™

5% Sodium Fluoride Varnish with Tri-Calcium Phosphate

FluoroCal is a calcium and fluoride releasing, 5% sodium fluoride varnish that contains TriCalcium Phosphate. FluoroCal provides immediate sensitivity relief to hypersensitive teeth by penetrating and sealing exposed dentin tubules. It is available in a refreshing spearmint flavor that is sweetened with xylitol.



### Calcium and Fluoride Release\*

Delivers sustained and targeted release of fluoride and calcium over 24 hours<sup>1</sup>



### Sweetened with Xylitol

Xylitol acts as a sweetener to help patient compliance



### Immediate Relief

Penetrates and seals dentin tubules, providing immediate sensitivity relief



### Fluoride Uptake

When tested, FluoroCal demonstrated significantly higher enamel fluoride uptake than other leading fluoride varnishes<sup>2</sup>



### Contains TriCalcium Phosphate (TCP)

Studies have shown that when combined, fluoride and TCP provide greater protection and acid-resistance<sup>3</sup>

LEARN MORE ABOUT FLUOROCAL



Order Info: FluoroCal 50ct. Unit Dose

B-30501K

1. As tested in deionized water.

2. BISCO has, on file, the fluoride uptake data for FluoroCal.

3. Li X. The remineralisation of enamel: a review of the literature. J Dent. 2014;42:S12-S20. doi: 10.1016/S0300-5712(14)50003-6.



## TECHNIQUES

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### Self-Etch Technique



No phosphoric acid applied to the tooth structure.

### Total-Etch Technique



Phosphoric acid (such as Uni-Etch® w/ BAC applied to both enamel and dentin surface.

### Selective-Etch Technique



Phosphoric acid (such as Select HV® w/ BAC applied to the enamel surface only.

### Bonding Technique\* using All-Bond Universal



1. Apply two separate coats of All-Bond Universal®, scrubbing the preparation with a microbrush for 10-15 seconds per coat. Do not light cure between coats.



2. Evaporate solvent by thoroughly air-drying with an air syringe for at least 10 seconds; there should be no visible movement of the material. The surface should have a uniform glossy appearance; otherwise, repeat Step 1-2. Light cure for 10 seconds.



3. Continue with placement of the restorative material according to the manufacturer's instructions.

\* Refer to instructions for complete details.

## Pulp Exposures (Direct Pulp Capping)\*

with TheraCal LC



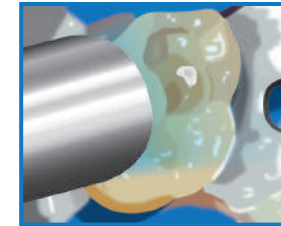
1. Under rubber dam isolation, complete cavity preparation.



2. Achieve hemostasis. Leave dentin visibly moist.



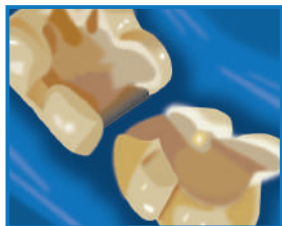
3. Apply TheraCal LC\* directly to the exposed pulp. Layer is not to exceed 1 mm in depth. Cover all the exposed areas and extend TheraCal LC at least 1mm onto sound dentin surrounding the exposure.



4. Light cure for 20 seconds. Place desired adhesive, base, and/or restoration following manufacturer's directions. Continue restoring tooth.

## Deep Preparations (Indirect Pulp Capping)\*

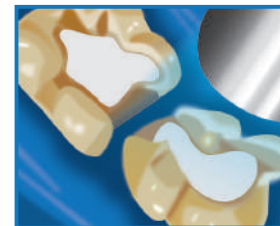
with TheraCal LC



1. Isolate the tooth and perform conventional cavity preparation. Remove all infected carious tooth structure. Leave dentin visibly moist.



2. Apply TheraCal LC directly to the cavity floor of the preparation. Layer is not to exceed 1 mm in depth. Manipulate into a smooth surface covering all deep dentin areas.



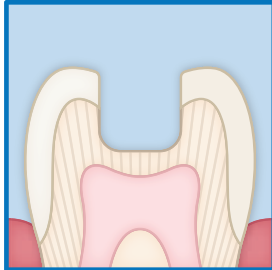
3. Light cure for 20 seconds. Place desired adhesive, base, and/or restoration following manufacturer's directions. Continue restoring tooth.



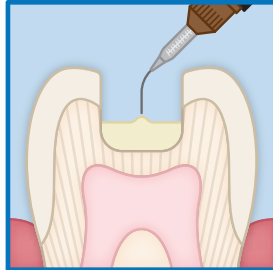
\* Refer to instructions for complete details.

## Sandwich Technique\*

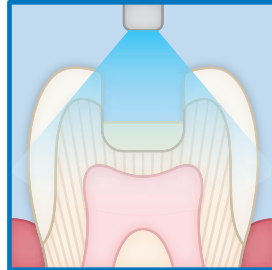
using TheraBase



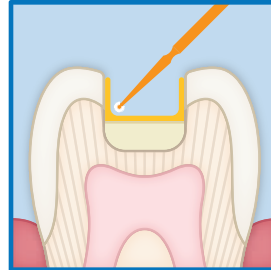
1. Prepare cavity. Clean the preparation with pumice and water. Rinse thoroughly and dry.



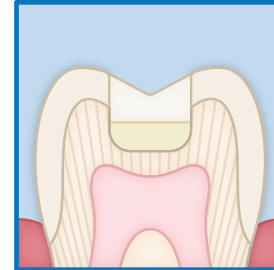
2. Apply TheraBase® to the dentin surfaces of the prepared cavity directly from the syringe.



3. Light cure for 20 seconds or allow to self-cure.



4. Proceed with bonding procedure, such as All-Bond Universal® following manufacturer's instructions.



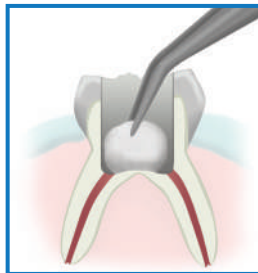
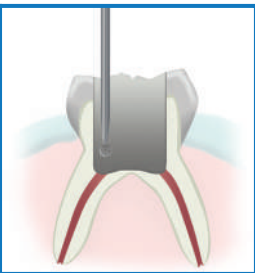
5. Restore with composite following manufacturer's instructions.

## Pulpotomy Treatment\*

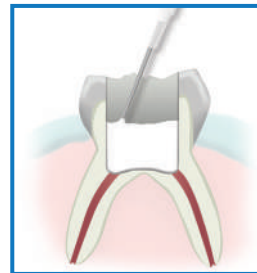
using TheraCal PT



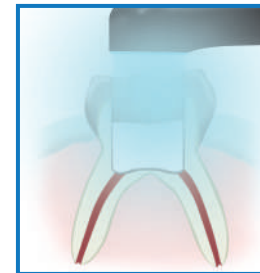
1. Perform pulpotomy treatment.



2. Achieve hemostasis.



3. Place TheraCal PT® directly in the pulp chamber, and ensure good adaptation to the cavity walls and margins.

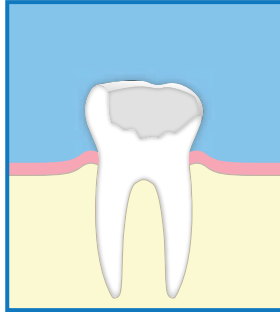


4. Light cure TheraCal PT for 10 seconds. Place desired adhesive, base, and/or restoration following manufacturer's directions for restoring tooth.

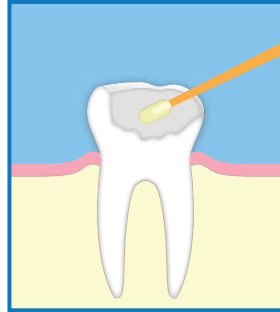
\* Refer to instructions for complete details.

## Core Build-Ups\*

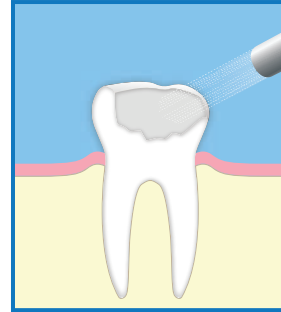
with Core-Flo DC



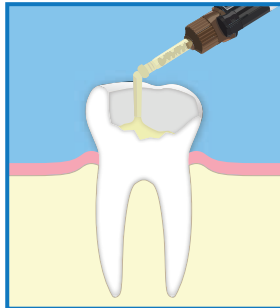
1. Isolate tooth and prepare accordingly. Rinse and dry.



2. Dispense 1-2 drops of Universal Primer™ A & B into a clean well. Apply two separate coats of Universal Primer, scrubbing the preparation with a microbrush for 10-15 seconds per coat.



3. Evaporate excess solvent by thoroughly air-drying with an air syringe for at least 10 seconds; there should be no visible movement of the adhesive. The surface should have a uniform glossy appearance; otherwise, apply an additional coat of Universal Primer A & B and air dry.



4. Place the end of the intra-oral tip directly onto the preparation, and express Core-Flo™ DC or Core-Flo™ DC Lite.



5. Light cure the Core-Flo DC or Core-Flo DC Lite for 40 seconds and continue with final preparation.



TO LEARN MORE ABOUT  
UNIVERSAL PRIMER A + B  
VISIT [WWW.BISCO.COM](http://WWW.BISCO.COM)

\* Refer to instructions for complete details.

## Intraoral Repairs of Porcelain (PFM, or PFZr)\*

1. Isolate the area to be repaired. Remove the glaze and bevel (45 degrees) the porcelain around the area to be repaired. Sandblast or abrade with a coarse diamond bur. Rinse with water and air dry.



2. Place Barrier Gel on the gingival tissue and porcelain to protect areas where etching is not desired.



3. Apply 9.5% Porcelain Etchant to the dry porcelain surface for 90 seconds. Suction the etchant with high volume evacuation, then rinse with water and air dry. The etched porcelain should appear dull and frosty.



4. Apply 1 coat of silane (Porcelain Primer) to the etched porcelain and allow to dwell for 30 seconds. Dry with (warm) air syringe.



5. Apply 1 coat of Z-Prime™ Plus to the exposed metal/zirconia/alumina and dry with an air syringe for 3-5 seconds.



6. If metal masking is required, use Dual-Cured Opaquer Base and Catalyst, one drop of each, onto a mixing pad and mix with a brush tip. Apply a thin coat of the mixture only to the metal surface. Allow to self cure, or light cure for 5 seconds.



7. Apply a thin layer of Porcelain Bonding Resin to the repair site. Apply a hybrid composite (Aelite™ All-Purpose Body) to replace fractured porcelain and light cure, finish/polish.

LEARN MORE ABOUT  
THE INTRAORAL  
REPAIR KIT



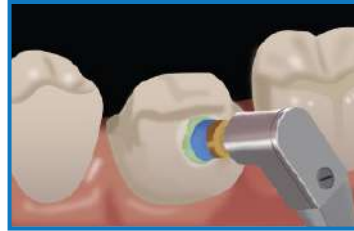
\* Refer to instructions for complete details.

## Conventional Cementation of Crowns (Retentive Preps)\*

using TheraCem



1. Sandblast internal surface of restoration (unless restoration has previously been sandblasted).



2. Remove temporary restoration and clean prep with pumice and water slurry. Rinse thoroughly and dry.



3. Try-in (to check occlusion and fit). After try-in, thoroughly rinse the restoration with water spray and dry.



4. Outside of the mouth, cover all bonded surfaces of the restoration with a layer of ZirClean®. Allow 20 seconds for the cleaning action of ZirClean to take affect, then thoroughly rinse with water spray and dry.



5. Dispense TheraCem® into the restoration. Seat the restoration with gentle passive pressure and remove any excess cement.

**PRO TIP:** To aid in the removal of excess cement, initially light-cure the margins for 2-3 seconds.



6. Light cure for 20-30 seconds or allow to self cure.

\* Refer to instructions for complete details.

## Bonded Cementation of Inlay/Onlays, Bridges, Crowns (Short/Tapered Preps)\* using Duo-Link Universal

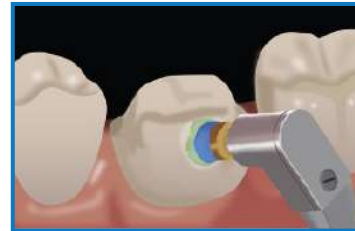


**1a.** Porcelain/Lithium Disilicate: Apply a thin coat of silane (Porcelain Primer) to the internal surface. Wait for 30 seconds, or dry with (warm) air.

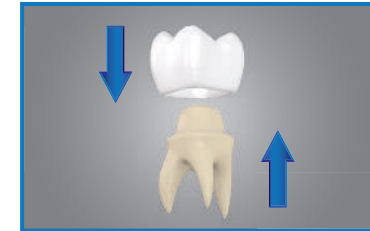
OR



**1b.** If restoration is metal/zirconia/indirect composite sandblast internal surface of restoration, unless restoration has previously been sandblasted.



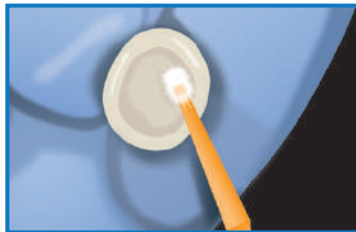
**2.** Remove temporary restoration and clean prep with pumice and water slurry. Rinse thoroughly and dry.



**3.** Try-in (to check occlusion and fit). After try-in, thoroughly rinse the restoration with water spray and dry.



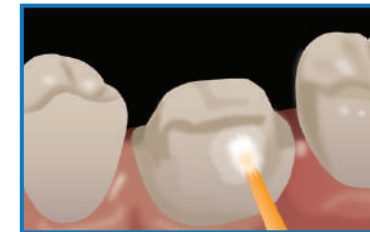
**4.** Outside of the mouth, Cover all bonded surfaces of the restoration with a layer of ZirClean®. Allow 20 seconds for the cleaning action of ZirClean to take affect, then thoroughly rinse with water spray and dry.



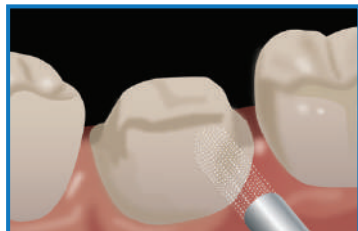
**5.** If restoration is metal/zirconia/indirect composite, apply one coat of Z-Prime™ Plus to the internal surface of the restoration and air dry for 3-5 seconds.



**6.** If prep includes enamel, selectively etch enamel with Select HV® Etch w/BAC for 15 seconds, suction then rinse thoroughly.



**7.** Dispense Universal Primer™ and mix (or All-Bond Universal®) in a mixing well. Apply 2 separate coats, agitating each coat for 10-15 seconds.



**8.** Gently air dry until there is no visible movement of the adhesive. Then thoroughly air dry with greater air pressure. The surface should appear shiny, otherwise repeat step 7. Light cure for 10 seconds.\*\*



**9.** Using a dual-cured resin cement (Duo-Link Universal™), fill the internal surface of the restoration and/or the prep with the cement. Seat with gentle, passive pressure and remove excess cement while holding restoration in place. Allow the cement to self-cure, or light-cure each surface of the tooth for 40 seconds.



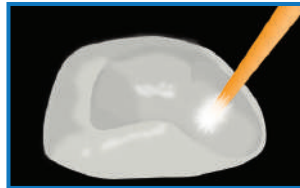
\* Refer to instructions for complete details.  
\*\* Universal Primer does not require light cure.

## Veneer Cementation\*

using Choice™ 2



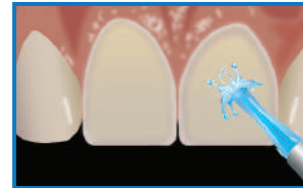
OR



1. Prepare the internal surface of the restoration as instructed by the laboratory:

**a.** Porcelain/Lithium Disilicate:  
If needed, etch the veneer with hydrofluoric acid (4% Porcelain Etchant or 9.5% Porcelain Etchant) according to the manufacturer's instructions.

**b.** Apply a thin coat of silane (Porcelain Primer/Bis-Silane™) to the internal surface. Wait for 30 seconds, or dry with (warm) air.



2. Remove the temporary restorations and clean the preparations (Cavity Cleanser™ and pumice slurry). Rinse thoroughly.



3. Try in the restorations using the corresponding shade of water-soluble try-in paste (Choice™ 2 Try-In Paste). Remove the veneers and either clean with etchant (Uni-Etch® w/BAC or Select HV® Etch w/BAC) and rinse thoroughly, or ultrasonicate in water or alcohol for 2-3 minutes. Dry the restorations.



4. Isolate. Etch preparations (Uni-Etch w/BAC or Select HV Etch w/BAC) for 15 seconds, rinse thoroughly.



5. Dispense adhesive (All-Bond Universal®) in a mixing well. Apply 2 separate coats, agitating each coat for 10-15 seconds.



6. Gently air dry until there is no visible movement of the adhesive. Then thoroughly air dry with greater air pressure. The surface should appear shiny, otherwise apply additional coats.



7. Light cure for 10 seconds.



8. Apply a thin layer of HEMA-free resin (Porcelain Bonding Resin) to the internal surface of the veneer. Do NOT light cure.



9. Using a light-cured resin cement (Choice 2), fill the internal surface of the restoration with the cement.



10. Seat with gentle, passive pressure and light cure for 2-3 seconds to tack the veneer into place. Remove excess cement, then light cure each veneer for 40 seconds.

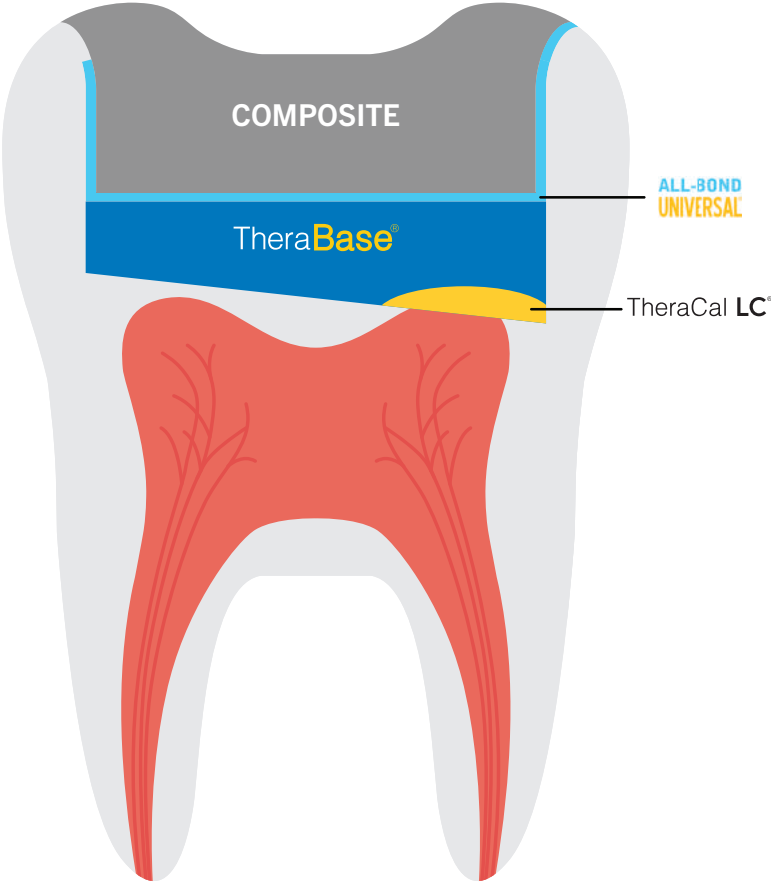
\* Refer to instructions for complete details.



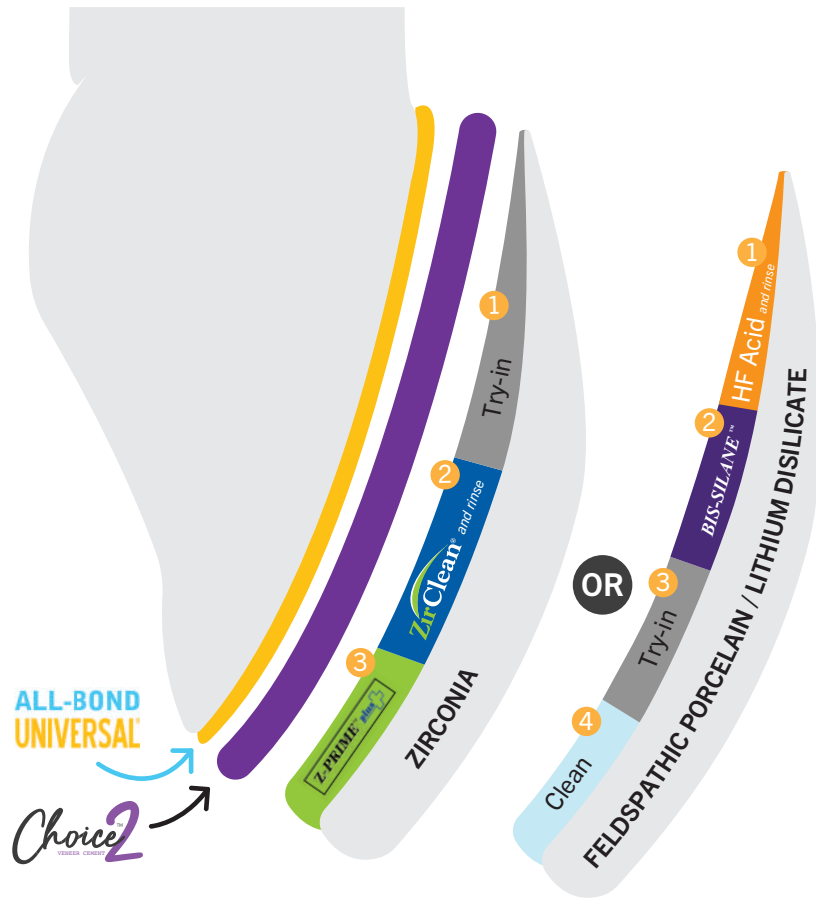
### Zirconia Bonding



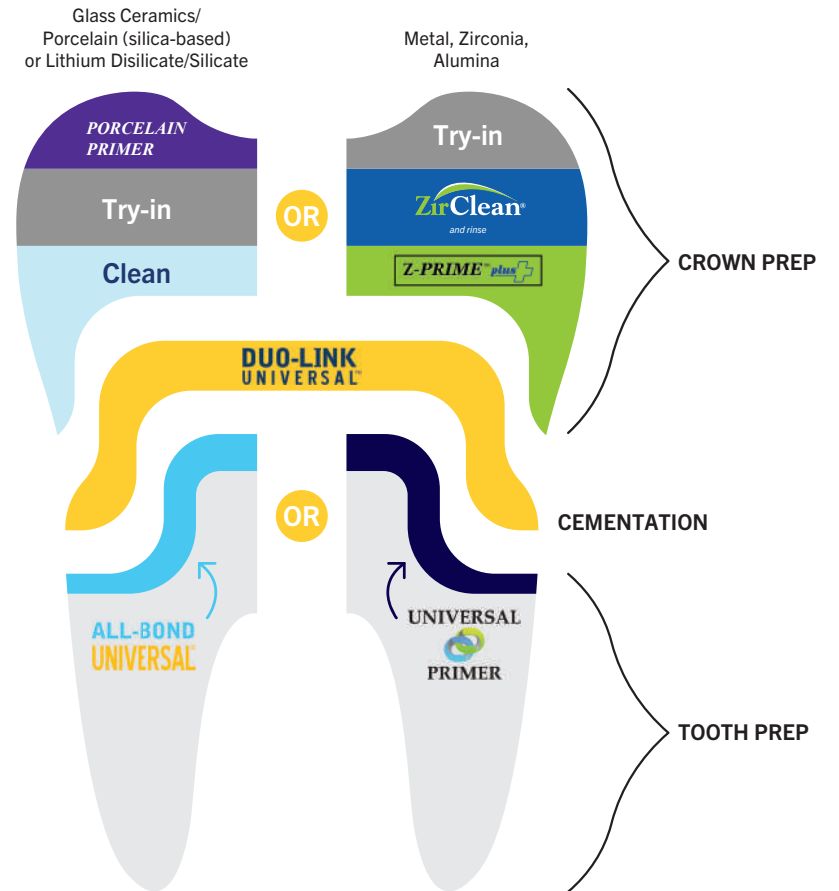
### Sandwich Technique



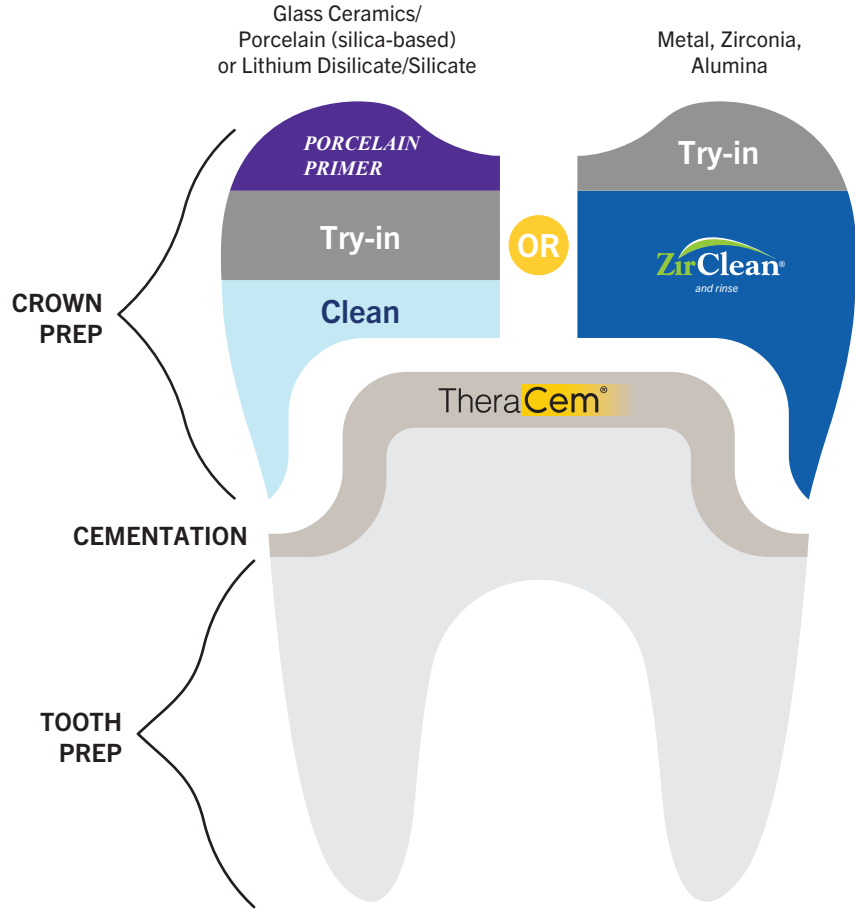
### Veneer Cementation



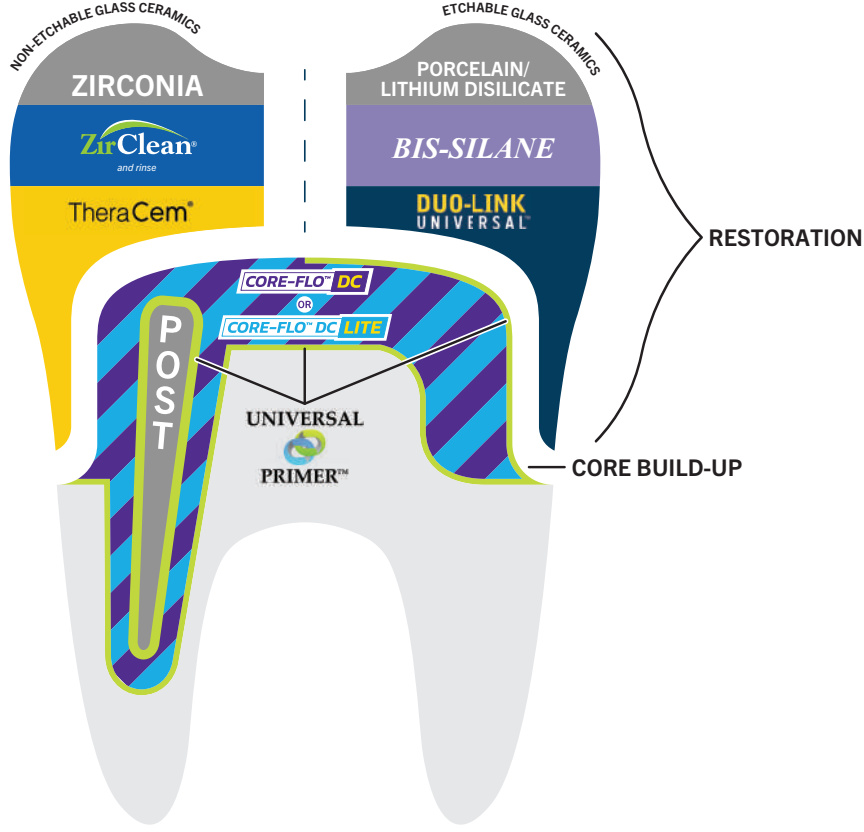
### Cementation With a Bonding Agent



### Cementation Without a Bonding Agent



### Post Cementation With Core Build-up



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