



SCIENCE
AND DENTISTRY.
BONDED.

Product Profile

All-Bond Universal®

Light-Cured Dental Adhesive

**Bond Every Restoration
with Trusted Results**



Rx Only

MC-9179AB

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All-Bond Universal, the trusted solution for predictable adhesion and bonding in modern restorative dentistry

The Clinical Challenge

Achieving durable, predictable adhesion is fundamental to restorative success. Every day, clinicians make critical decisions that influence the longevity of restorations, patient comfort, and overall treatment outcomes. In these cases, the clinician's goal is clear: create a reliable bond while preserving tooth structure and optimizing efficiency.

However, modern restorative dentistry presents a range of adhesive challenges. Different substrates, varying moisture conditions, and multiple etching techniques can introduce complexity into even routine procedures.

When managing these restorative cases, clinicians must carefully balance multiple concerns:

- Achieving consistent bond strength across enamel and dentin
- Selecting the appropriate etching technique for each clinical situation
- Minimizing post-operative sensitivity
- Streamlining procedures without compromising performance
- Delivering long-term restorative success with confidence

Achieving predictable outcomes requires both clinical expertise and adhesive systems that support the clinician's treatment goals.

Clinicians drive successful restorative outcomes through their judgment, skill, and experience. All-Bond Universal is designed to support those decisions with the flexibility and dependable performance needed to simplify bonding and help clinicians focus on what matters most—the patient.

Product Overview

Successful restorative dentistry requires durable, predictable bonding and the flexibility to adapt to each clinical situation. Clinicians need an adhesive that supports confident decision-making without compromising performance. All-Bond Universal was developed to provide that confidence.

Built on more than 40 years of adhesive research, All-Bond Universal is a single-

bottle, light-cured universal adhesive compatible with self-, total-, and selective-etch techniques. Its versatility simplifies restorative procedures while delivering reliable bond strength.

Backed by more than 135 research publications, All-Bond Universal is a trusted solution for predictable adhesion across a wide range of indications.



Indicated for ALL **direct** and **indirect** restorations in ALL **cure modes**, and with ANY **bonding technique**



Contains **MDP monomers** for enhanced durability



Ultra **mild acidity** (pH > 3) allows for universal compatibility with all dual- and self-cured materials (no separate activator required)



Low water content formulation allows for any residual water to be evaporated after air drying



Hydrophobic formula (resin friendly) results in improved durability of the bond



Low film thickness (< 10 microns) allows the adhesive to readily flow into etched surfaces and offers both chemical and mechanical sealing



Clinical evaluation confirms the ease of use as a benefit leading to **virtually no post-operative sensitivity**



Moisture tolerant formulation allows the adhesive to bond in the presence of wet, dry or moist tooth structure



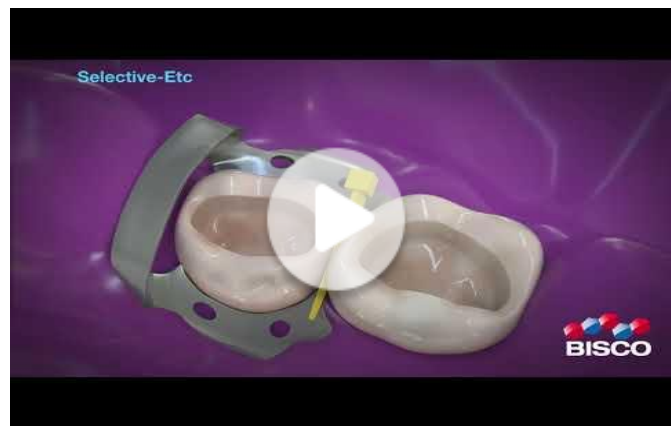
No refrigeration needed



Truly universal **single-bottle system**



Truly simple. Truly universal. Watch the video above for a fun intro to All-Bond Universal and learn why it's your all-in-one adhesive solution!



Want to learn more about All-Bond Universal? Click on the video above to explore its features, benefits, indications, a step-by-step technique demonstration, and what makes it truly universal!



Rolando Nunez, DDS

“We did all the research and looked at the possibility of incorporating everything into a single bottle that could work in an optimized way, and that was 100 percent compatible.”

Great dentistry starts with great confidence. All-Bond Universal is designed to give clinicians predictable results while ensuring long-lasting restorations that patients can trust.

With one simple bottle, you can provide care that is faster, stronger, and more reliable so that your patients can spend less time in the chair and more time smiling.



Click on the eBook to learn more about BISCO's All-Bond Universal!

Awards & Evaluations

Since its launch in 2012, All-Bond Universal has received numerous awards for excellence in restorative dentistry! All-Bond Universal is trusted by clinicians worldwide for consistent performance and predictable outcomes



3x Award Winner



Award Winner



Award Winner



Award Winner

All-Bond Universal DPS Evaluation



Dental Product Shopper awarded All-Bond Universal a score of 4.4 out of 5 making this a DPS Best Product!

Click on the video to learn more about the Dental Product Shopper evaluation!

Click on the logos below to see the full All-Bond Universal evaluations!



*All-Bond Universal
Evaluation*



*All-Bond Universal & Duo-Link
Universal Evaluation*



*All-Bond Universal
Evaluation*

Trusted by Leading Institutions

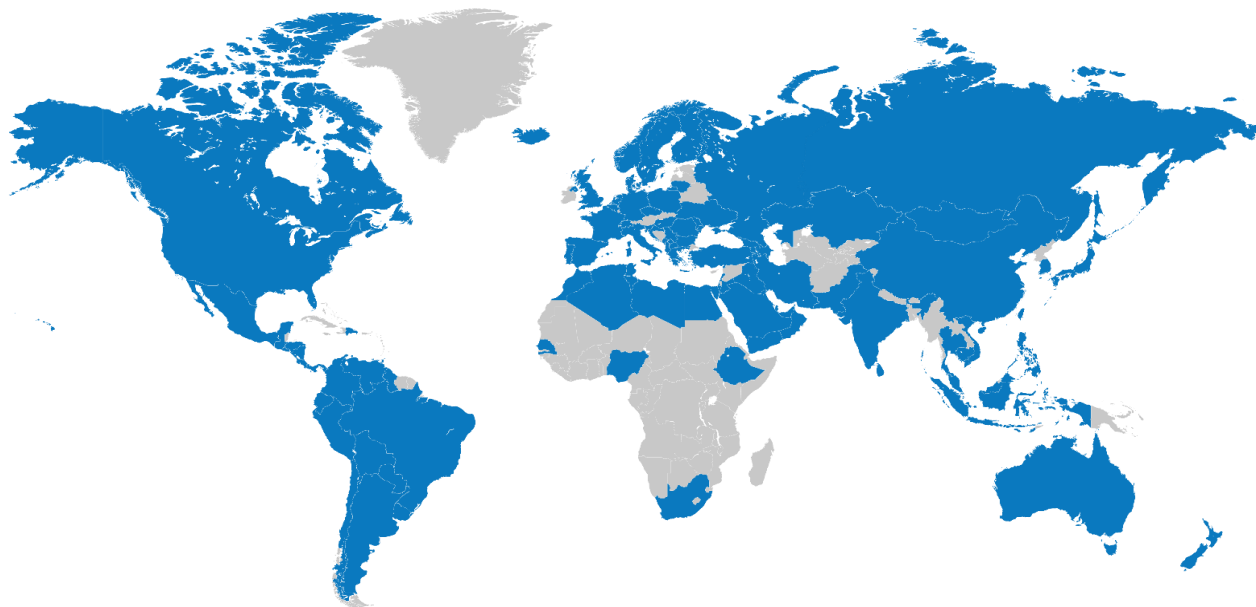
All-Bond Universal is not only trusted in clinical practice but also plays a vital role in dental education. It is actively used in hands-on training and clinical instruction at prestigious dental institutions such as the Las Vegas Institute (LVI), Legion, and ImP.R.E.S. These programs rely on

All-Bond Universal for its consistency, ease of use, and compatibility with a wide range of clinical techniques, helping both new and practicing dentists refine their skills with materials they can trust in real-world clinical settings.



Global Reach & Impact

Since its 2012 debut, All-Bond Universal has reached **90+ countries**, sold over **900,000 units**, and supported more than **125 million restorations worldwide**—and these numbers continue to grow! *



North America

United States, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Panama, Nicaragua, Trinidad & Tobago

South America

Bolivia, Guyana, Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela

Europe

Albania, Azerbaijan, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, Kosovo, Macedonia, Moldova, Montenegro, Russia

Asia

Bahrain, Cambodia, China, Georgia, Hong Kong, India, Indonesia, Iran, Israel, Japan, Kazakhstan, Kuwait, Lebanon, Russia, Malaysia, Pakistan, Philippines, Qatar, Saudi Arabia, Singapore, Sri Lanka, Thailand, Turkey, United Arab Emirates, Vietnam, Armenia, Iraq, Jordan, Korea, Mongolia, Oman, Taiwan, Yemen

Africa

Egypt, Morocco, Nigeria, South Africa, Tunisia, Algeria, Libya, Senegal

Oceania

Australia, New Zealand

*All figures are based on sales data from 2012 to 2025. Estimated number of applications. Samples not included.

Who is All-Bond Universal Right For?

Dentists who prioritize high-quality care understand that predictable adhesion is the foundation of long-lasting restorative success. For clinicians who value efficiency, versatility, and confidence in every procedure, reliable bonding performance matters more than adding complexity to their workflow.

All-Bond Universal is designed to support dentists who want the freedom to choose the bonding technique that best fits each case. Its universal compatibility allows clinicians to adapt their approach while maintaining confidence in predictable, durable results.

Rather than relying on multiple adhesive systems, these clinicians choose solutions that simplify procedures and reinforce their clinical judgment. All-Bond Universal integrates seamlessly into modern restorative workflows, helping deliver consistent outcomes across a broad range of indications.

For practices that believe great dentistry starts with confidence, All-Bond Universal serves as a trusted partner—supporting the clinician's expertise and commitment to exceptional patient care.



Indications

1. ALL Direct Restorations

- Resin-Based Composite, Resin-Modified Glass Ionomers, Core Build-Ups, etc.

2. ALL Indirect Restorations

- Metal, Glass Ceramics, Zirconia/Alumina, etc.

3. Desensitization/Sealing of Tooth

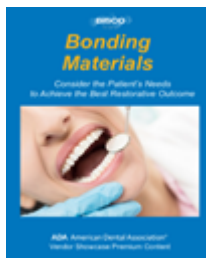
4. Intraoral Repair

- Chipped Porcelain, Additions to Direct Restorations, etc.

5. Protective Varnish for Glass Ionomer Based Fillings

6. Orthodontic Bonding

7. Endodontic Bonding



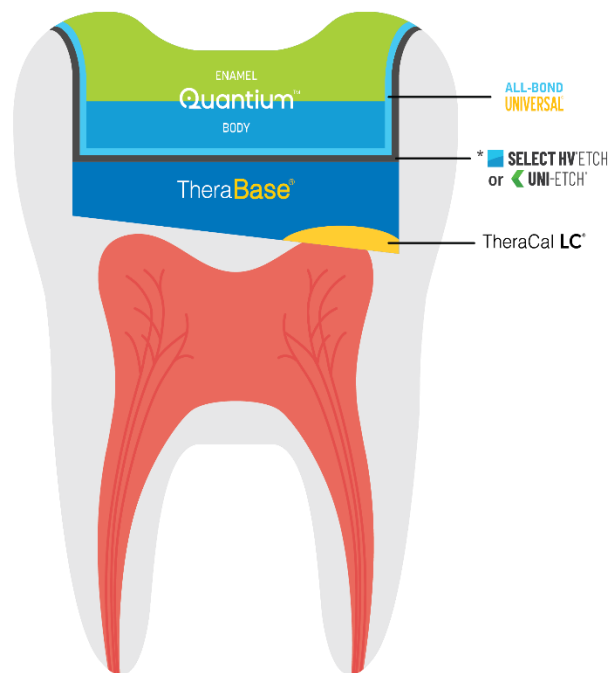
Click on the eBook to learn expert recommended techniques for bonding to various substrates!

Workflow Integration

Clinicians need materials that adapt to their workflow—not the other way around. All-Bond Universal provides the flexibility to use self-etch, total-etch, or selective-etch techniques while delivering reliable adhesion across a wide range of procedures.

Below are some of the most common ways clinicians integrate All-Bond Universal into everyday restorative procedures, often alongside other trusted BISCO products.

Sandwich Technique



Step 1 – Pulpal Protection

In deep restorations & when pulpal exposure occurs, TheraCal LC can be used for direct & indirect pulp capping & as a protective liner.

Step 2 – Base

If a base material is desired, TheraBase could be applied for optimal calcium release with TheraCal LC. *

Step 3 – Etchant**

The surface is conditioned according to the selected bonding protocol. BISCO recommends Select HV Etch for selective-etch and Uni-Etch for total-etch.

Step 4 – Adhesive

All-Bond Universal is applied to create strong, reliable adhesion for long-term restorative success.

Step 5 – Composite

Quantum is applied to restore tooth structure and complete the final restoration.

*BISCO has data on file

**Optional if using self-etch

Zirconia Bonding



Retentive Prep Tooth Structure

No Steps

Zirconia Crown

Step 1 – Intraoral Try-In

Try-in the restoration to ensure proper fit.

Step 2 – Zirconia Cleaner

ZirClean is applied to the substrate to remove phosphate contaminants such as saliva.

Step 3 – Self-Adhesive Cement

Apply TheraCem, a self-adhesive MDP containing cement, fully seat the restoration, and tack cure to complete.

**Optional if using self-etch*

Non-Retentive Prep Tooth Structure

Step 1 – Etchant*

The surface is conditioned according to the selected bonding protocol. BISCO recommends Select HV Etch for selective-etch and Uni-Etch for total-etch.

Step 2 – Adhesive

All-Bond Universal is applied to create strong, reliable adhesion for long-term restorative success.

Zirconia Crown

Step 1 – Intraoral Try-In

Try-in the restoration to ensure the proper fit.

Step 2 – Zirconia Cleaner

ZirClean is applied to the substrate to remove phosphate contaminants such as saliva.

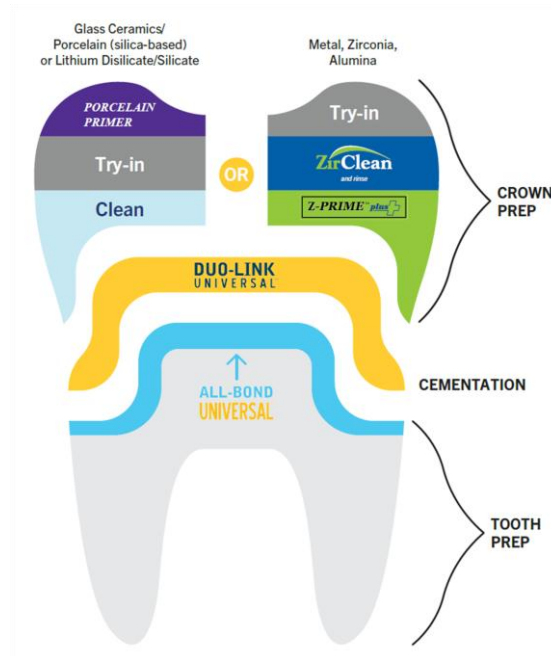
Step 3 – Primer

Z-Prime Plus is applied to enhance adhesion between the zirconia substrate and resin cement.

Step 4 – Cement

Apply Duo-Link Universal, fully seat the restoration, and tack cure.

Cementation with a Bonding Agent



Glass Ceramics, Porcelain, E.Max Tooth Structure

Step 1 – Etchant*

The surface is conditioned according to the selected bonding protocol. BISCO recommends Select HV Etch for selective-etch and Uni-Etch for total-etch.

Step 2 – Adhesive

All-Bond Universal is applied to create strong, reliable adhesion for long-term restorative success.

Crown

Step 1 – Intraoral Try-In

Try-in the restoration to ensure proper fit.

Step 2 – Clean

Rinse the restoration with water spray and air dry or use a cleaning agent such as ZirClean.

Step 3 – Primer

Porcelain Primer/Bis-Silane is applied to enhance adhesion between the substrate and resin cement.

Step 4 – Cement

Apply Duo-Link Universal, fully seat the restoration, and tack cure.

Metal, Zirconia, Alumina Tooth Structure

Step 1 – Etchant*

The surface is conditioned according to the selected bonding protocol. BISCO recommends Select HV Etch for selective-etch and Uni-Etch for total-etch.

Step 2 – Adhesive

All-Bond Universal is applied to create strong, reliable adhesion for long-term restorative success.

Crown

Step 1 – Intraoral Try-In

Try-in the restoration to ensure the proper fit.

Step 2 – Zirconia Cleaner

ZirClean is applied to the substrate to remove phosphate contaminants such as saliva.

Step 3 – Primer

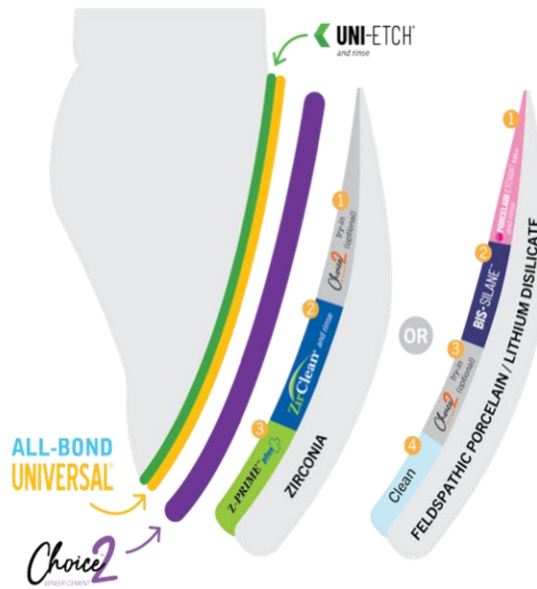
Z-Prime Plus is applied to enhance adhesion between the substrate and resin cement.

Step 4 – Cement

Apply Duo-Link Universal, fully seat the restoration, and tack cure.

*Optional if using self-etch

Veneer Cementation



Feldspathic Porcelain & E.Max

Tooth Structure

Step 1 – Etchant

The surface is conditioned via the total-etch technique with Uni-Etch.

Step 2 – Adhesive

All-Bond Universal is applied to create strong, reliable adhesion for long-term restorative success.

Veneer

Step 1 – Etchant

The intaglio surface is conditioned with Porcelain Etchant 9.5% or 4%.

Step 2 – Primer

Porcelain Primer/Bis-Silane is applied to enhance adhesion between the substrate and resin cement.

Step 3 – Intraoral Try-In

Try-in the restoration to verify proper fit and shade selection using Choice 2 Try-In Paste.*

Step 4 – Clean

Rinse the restoration with water spray or use a cleaning agent such as ZirClean.

Step 5 – Cement

Apply Choice 2, fully seat the restoration, and tack cure.

Zirconia

Tooth Structure

Step 1 – Etchant

The surface is conditioned via the total-etch technique with Uni-Etch.

Step 2 – Adhesive

All-Bond Universal is applied to create strong, reliable adhesion for long-term restorative success.

Veneer

Step 1 – Intraoral Try-In

Try-in the restoration to verify proper fit and shade selection using Choice 2 Try-In Paste.*

Step 2 – Zirconia Cleaner

ZirClean is applied to the substrate to remove phosphate contaminants such as saliva.

Step 3 – Primer

Z-Prime Plus is applied to enhance adhesion between the substrate and resin cement.

Step 4 – Cement

Apply Choice 2, fully seat the restoration, and tack cure.

*Use of Choice 2 Try-In Paste Optional.



TheraCal LC®

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^{1*} hydroxyapatite and secondary bridge formation. ^(2,3)



Alkaline pH promotes pulp vitality and apatite formation. ^(2,4)



Forms a protective barrier to protect the pulp from thermal changes. ^(5,6)



Moisture Tolerant¹ Unlike calcium hydroxide, TheraCal LC has low solubility and will not wash out over time.

** BISCO has data on file*



TheraBase®

TheraBase is a dual-cured, self-adhesive base/liner.



Offers continuous calcium and fluoride release. *



Visible on radiograph to easily distinguish from caries.

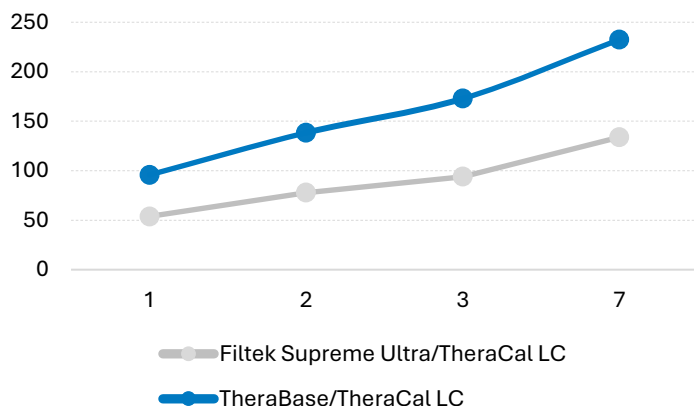


Generates an alkaline pH (pH = 11*) in minutes, which promotes pulp vitality.⁴

**BISCO has data on file.*

**Fluoride release not available in European Union. See TheraBase Ca (calcium only).*

Calcium Release ($\mu\text{g}/\text{cm}^2$)*



Did You Know?

Internal testing shows that combining TheraBase with TheraCal LC results in 75% greater calcium release compared to using TheraCal LC with a composite alone providing optimal calcium release. *

**BISCO has data on file*



Select HV® Etch

Select HV Etch is a 35% high viscosity phosphoric acid etchant



Developed for the selective-etch technique, but indicated for both selective- and total-etch.



Designed to offer maximum handling and pin-point placement, while eliminating run-on onto the occlusal dentin surface.



Available with the antimicrobial agent Benzalkonium Chloride (BAC)* in select markets.
-Not available in European Union

** 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.*



Uni-Etch®

Uni-Etch is a 32% semi-gel phosphoric acid etchant



Developed for the total-etch technique, but indicated for both total- and selective-etch.



Low viscosity, flowable material allows for easy application to larger surface areas making it ideal for the total-etch technique.



Available with the antimicrobial agent Benzalkonium Chloride (BAC)* in select markets.
-Not available in European Union

** 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.*



Quantium®

Quantium is a light-cured universal composite



Low volumetric shrinkage, which minimizes microleakage and ensures marginal adaptation.



Highly radiopaque for easy identification on radiographs aiding in post treatment evaluation, allowing clinicians to confidently monitor the integrity of the restoration.



Delivers smooth, non-sticky handling and its unit dose capsules can be warmed for an even greater flowable experience, depending on the clinician's needs and preference.



ZirClean®

ZirClean is a cleaning gel designed for the non-abrasive cleaning of the bonding surfaces of zirconia (and other prosthetic restorations) after intraoral try-in.



Removes contaminants, such as saliva, to help achieve better bond strength after try-in.*



Enhances the bond strength to Zirconia.



Syringe delivery system offers improved ease of use.

**As compared to untreated samples. Data on file.*



Porcelain Primer/Bis-Silane™

Porcelain Primer/Bis-Silane are silane coupling agents used to improve bonding between porcelain restorations and resin cement.



Increases bond strengths to all porcelain and glass ceramic restorations.



Ideal for all e.max restorations, delivering high shear bond strength.



Convenient, single bottle delivery offers ease of dispensing (Porcelain Primer).



Z-Prime™ Plus

Z-Prime Plus is a single-component, MDP-containing, priming agent used to enhance adhesion between indirect restorative materials and resin cements.



High bond strengths to zirconia, metal and alumina substrates.



Compatible with all light-, self-, and dual-cured materials.



Convenient, single bottle delivery offers ease of use.



Duo-Link Universal™

Duo-Link Universal adhesive resin cement is specially formulated for cementation of ALL* indirect restorations.



Formulated to allow for quick and easy removal of excess cement.



Auto-mix dual-syringe guarantees a perfect mix and easy placement



Universal for all cementation procedures* such as crowns, bridges, inlays, onlays, and post/dowels, fabricated from metal, composite, porcelain, ceramic, zirconia, alumina, CAD/CAM restorations, etc.

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



TheraCem®

TheraCem self-adhesive resin cement is specially formulated for luting crowns, bridges, inlays, onlays and posts.



Enhances the bond strength to Zirconia.



Self-adhesive! No bonding agent required.



Provides a continuous calcium and fluoride release.*

**BISCO has data on file.*

**Fluoride release not available in European Union. See TheraCem Ca (calcium only).*



Choice™ 2

Choice 2 is a light-cured resin cement designed specifically for veneer cementation



Specifically formulated to not shade shift over time. *



Excellent physical properties ensure the restoration will stand up to significant pressure and stress that is placed on veneers daily.



Available in 8 esthetic shades:
A1, A2, A3, B1, Translucent, Milky Bright, Milky Opaque, and Universal Opaque.

**BISCO has data on file.*



Choice™ 2 Try-In Paste

Choice 2 Try-In Paste allows clinicians to simulate the shade effect of the corresponding Choice 2 shade during intraoral try-in.



Facilitates shade selection prior to final cementation.



Porcelain Etchant

Porcelain Etchant is a hydrofluoric acid gel that improves the mechanical bond between porcelain and adhesive/cement.



Ideal for glass ceramic restorations.



Improves the mechanical bond between porcelain and adhesive/cement by increasing the surface area of the porcelain. The effect is similar to sandblasting but is more controlled and effective.

Clinical Cases

See how clinicians use All-Bond Universal to streamline restorative procedures and achieve predictable, long-lasting results with confidence!

Total-etch Case



Treatment plan: lithium disilicate veneers #4-#13 with minimal preparations on enamel only.



A total etch technique was used for 15 seconds and rinsed well.



All-Bond Universal was applied liberally in several coats to a moist tooth surface.



All-Bond Universal was air thinned, leaving a shiny surface and then light cured for 10 seconds.



Choice™ 2 was applied to the tooth surface and each veneer was placed and light-cured.



Veneer cementation procedure finalized.

Selective-etch Case



Pre-op image of old amalgam restorations.



Removal of old amalgam restorations.



Select HV® Etch w/BAC was used in the selective-etch bonding technique.



All-Bond Universal was applied to each restoration and then light-cured for 10 seconds.



Quantum™ A2 Body & Enamel composite was applied using the layering technique.



Final restorations

Self-etch Case



Preoperative view of teeth.



Preparations for zirconia-based crowns.



Application of Z-Prime™ Plus to intaglio surface of zirconia crown.



Application of All-Bond Universal and then light cure for 10 seconds.



Application of Duo-Link Universal™ to the zirconia restorations.



Final esthetic result.

Dentistry Courtesy of Jack D. Griffin Jr., DMD, MAGD, AAACD, ABAD

Dentistry Courtesy of Dr. Jorge Fermín Narvaez

Dentistry Courtesy of Tyler Lasseigne, DDS, CDT

Refer to complete instructions for use for detailed technique and instructions.

Chemistry

All-Bond Universal is a highly advanced adhesive, built on the success of previous products like All-Bond 2° and All-Bond 3°. Its chemical composition has been optimized for maximum performance, making it reliable and easy to use for dental procedures. These chemical innovations allow clinicians to deliver both clinical benefits and durable restorations.



**Conducted by a third party via the Karl Fischer Method*



All-Bond Universal utilizes the MDP phosphate monomer as its main adhesive ingredient known for its high hydrophobicity⁷, which delivers strong and long-lasting bonds. Research has demonstrated that MDP bonds effectively with calcium ions, creating self-assembled nano-layers at the adhesive interface.⁸ Furthermore, MDP's stable hydrophobic interaction with collagen enhances the bond, ensuring better durability and performance.⁹



Unlike other adhesives, All-Bond Universal has an extra mild pH of around 3.2, making it compatible with dual-cure resin products without needing an extra activator. This is achieved by optimizing the MDP monomer in a low-water, high-ethanol mix, which ensures complete evaporation during air drying, preventing issues like water blisters and weak bonds.⁽¹⁰⁻¹³⁾



All-Bond Universal does not include silane in its chemical formulation:

- Studies have shown that silane in low-pH universal adhesives can become unstable, reducing bond strength.⁽¹⁴⁻¹⁶⁾
- To improve bonding to glass-ceramics, BISCO recommends using a separate porcelain primer like Porcelain Primer or Bis-Silane.



All-Bond Universal does not include fillers in its chemical formulation. Fillers are known to:

- Increase film viscosity and thickness, thus hindering infiltration and leading to misdiagnosis.⁽¹⁷⁻¹⁹⁾
- High film thickness requires radiopacity.²⁰

Overall, All-Bond Universal represents a scientifically advanced and user-friendly solution in adhesive dentistry. By addressing key challenges such as compatibility with dual cure resin cements, optimizing pH levels, and ensuring complete water removal, it enhances both bond strength and durability. Its unique formulation eliminates the need for additional activators, streamlining clinical procedures while maintaining high performance. All-Bond Universal continues the legacy of innovation in the All-Bond family, offering clinicians a reliable and versatile adhesive system.

Biocompatibility

All-Bond Universal has been thoroughly evaluated for biocompatibility as part of device design. Applicable testing has been conducted as indicated by international standards including the following:

- ISO 10993: Biological evaluation of medical devices
- ISO 7405: Evaluation of biocompatibility of medical devices used in dentistry

Material characterization, risk assessment, biological testing, and available information on all raw materials have been assessed to determine that All-Bond Universal is safe for its intended use.



Physical Properties

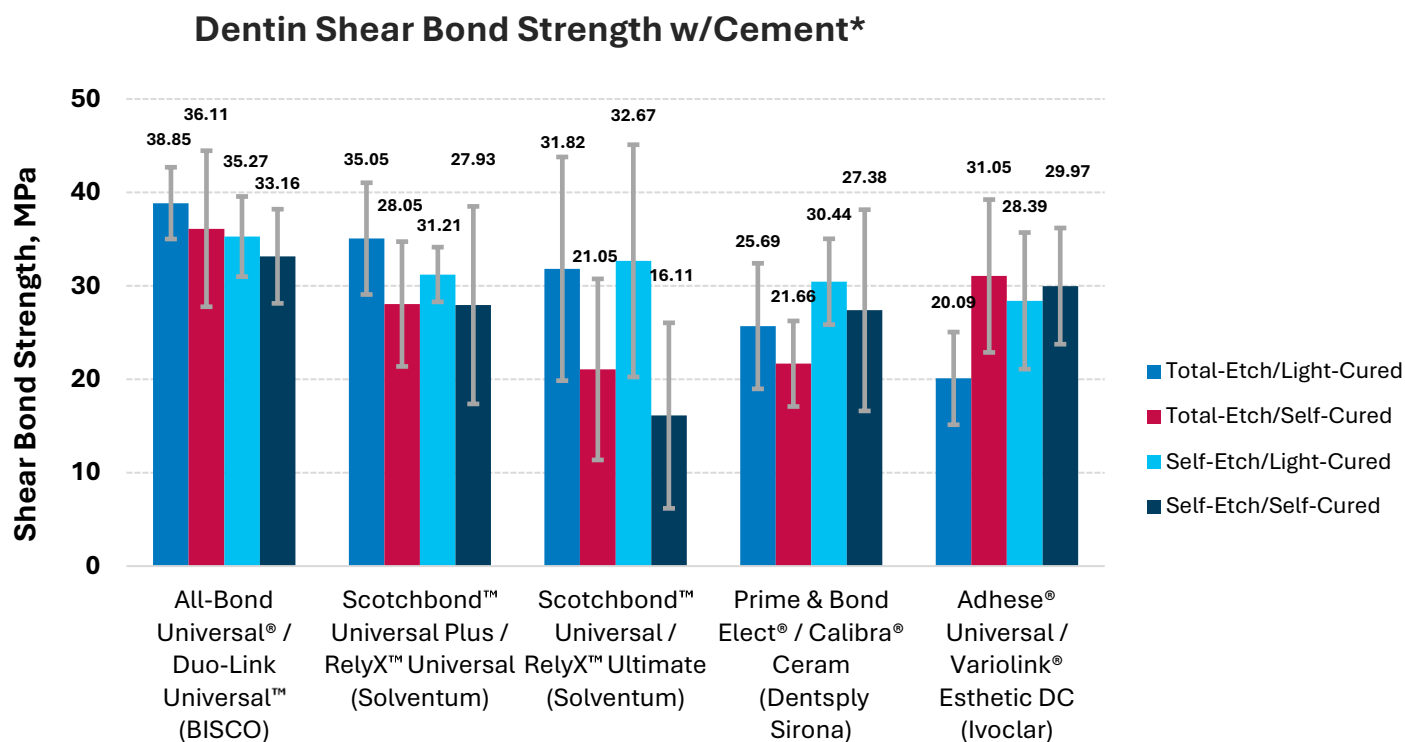
Bond Strength of Universal Adhesives

All-Bond Universal delivers superior shear bond strength (SBS) in all etch and cure modes compared to leading competitors.

Shear bond strength measures the force required to break the bond between a dental adhesive and a substrate. It's a key test for evaluating adhesive effectiveness, indicating how well restorative materials,

like crowns or fillings, will stay in place under everyday forces. A higher bond strength value means a stronger, more durable bond, reducing the risk of failure.

See the chart below which provides a direct comparison between All-Bond Universal and leading competitors, illustrating its superior bond strength to dentin.

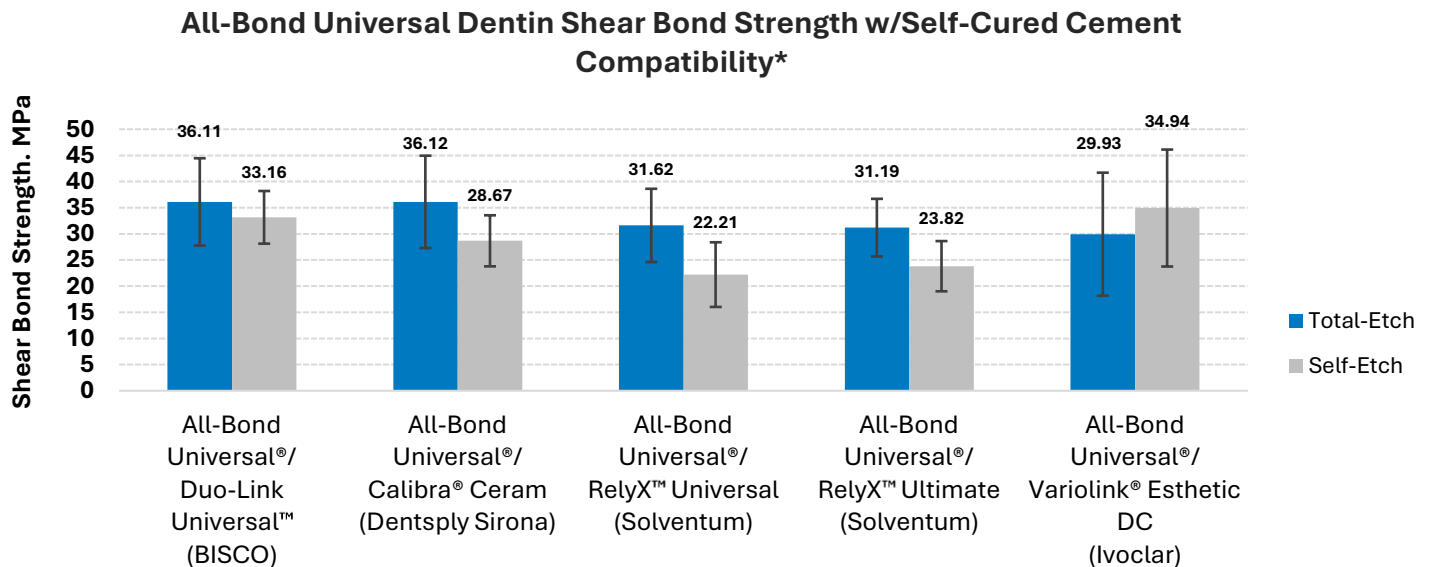


*BISCO has data on file

Total Compatibility

All-Bond Universal has an ultra-mild acidity (pH > 3) making it an open system that is compatible with all light-, self-, and dual-cured resin composite & cement materials, without ever needing an activator. When

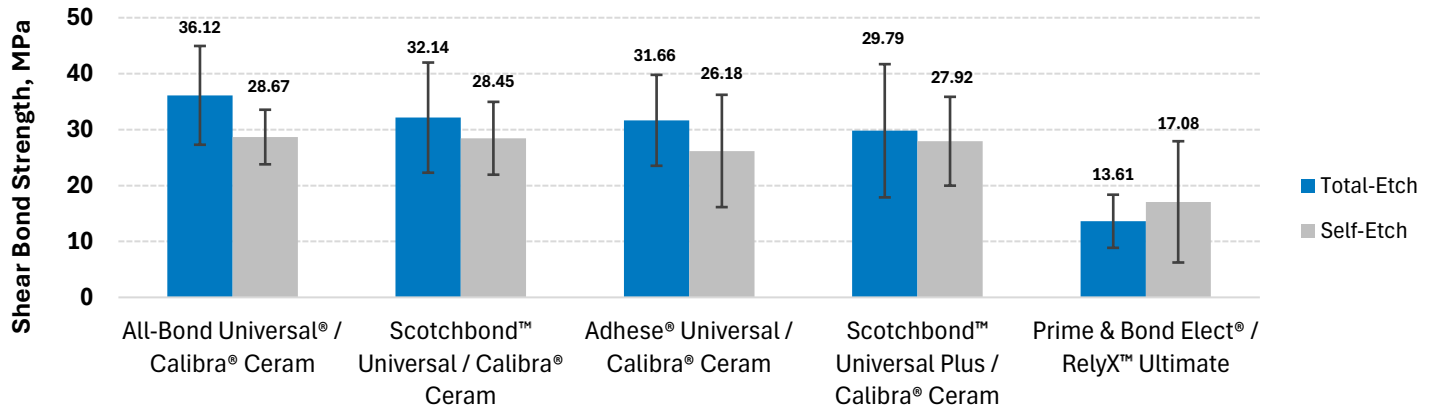
tested with other manufacturer resin cement materials, All-Bond Universal exhibited high bond strengths to dentin and successful bonding in both self-etch and total-etch modes.



All-Bond Universal demonstrates outstanding compatibility with resin cements from any manufacturer. The chart above illustrates its exceptional bond strength to dentin across a wide range of different cements from other manufacturers.

*BISCO has data on file

Adhesive Dentin Shear Bond Strength w/Self-Cured Cement Compatibility*



When compared to other adhesives on the market, All-Bond Universal demonstrates superior compatibility. The chart above illustrates adhesive bond strengths when used with Calibra® Ceram cement (Dentsply Sirona). Note that Calibra® Ceram was not paired with Prime & Bond Elect® (Dentsply Sirona), which is the dedicated cement for that adhesive. Instead, RelyX™ Ultimate (Solventum) was used.

All-Bond Universal DPS Evaluation



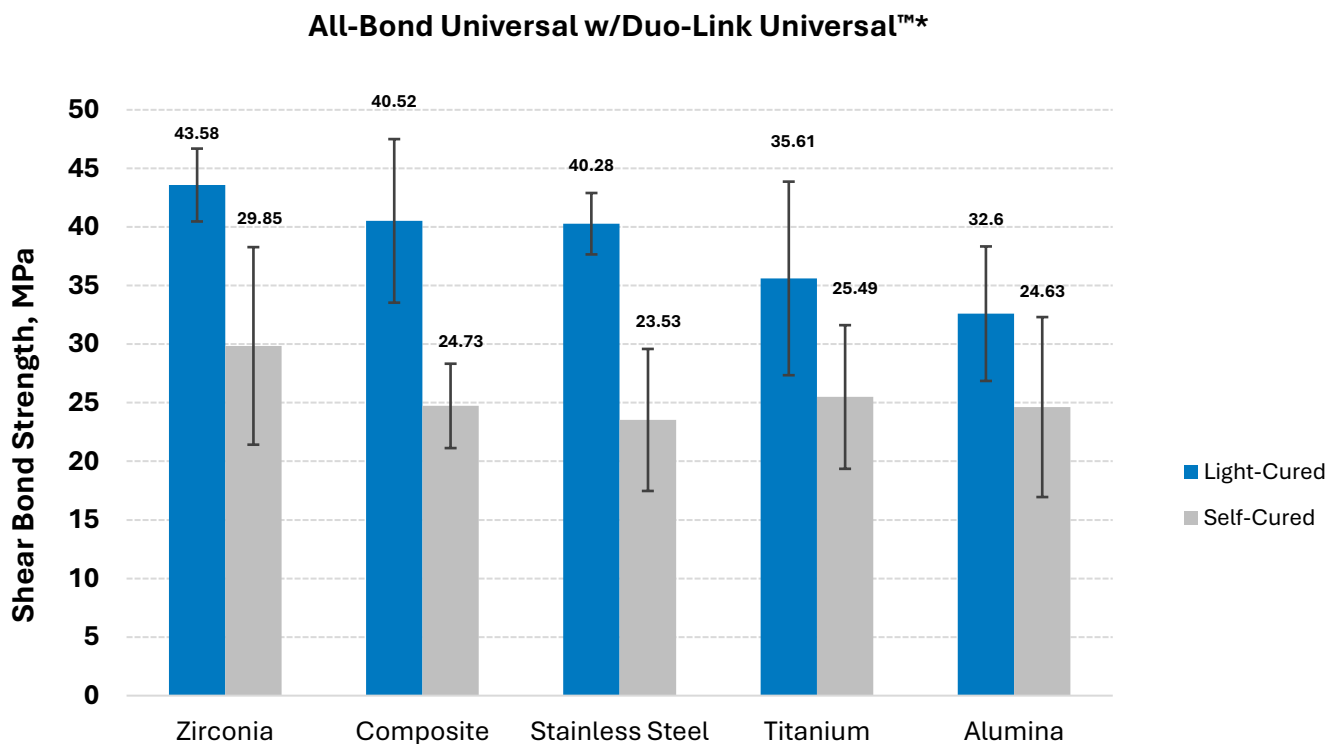
Click on the video to learn more about All-Bond Universal's total compatibility.

*BISCO has data on file

Bond Strength to Indirect Restorative Materials

All-Bond Universal delivers outstanding shear bond strength (SBS) across a wide range of substrates, making it a dependable and versatile adhesive for indirect restorative materials like crowns, veneers, inlays, onlays, and more. It establishes a strong, durable bond between the restorative material and the cement, ensuring excellent adhesion and long-term stability.

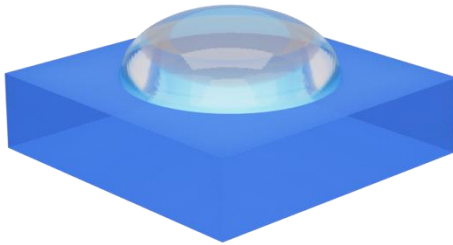
Refer to the chart below for a comparison of All-Bond Universal's bond strength across a range of indirect restorative materials, illustrating its performance and effectiveness.



*BISCO has data on file

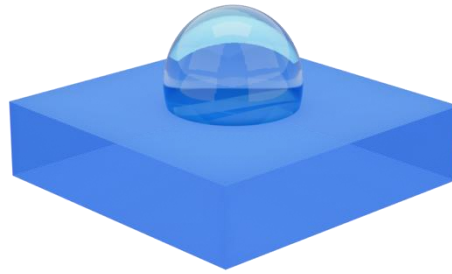
Hydrophilicity & Hydrophobicity

Hydrophilic



Tending to mix with, dissolve in, or be wetted by water

Hydrophobic

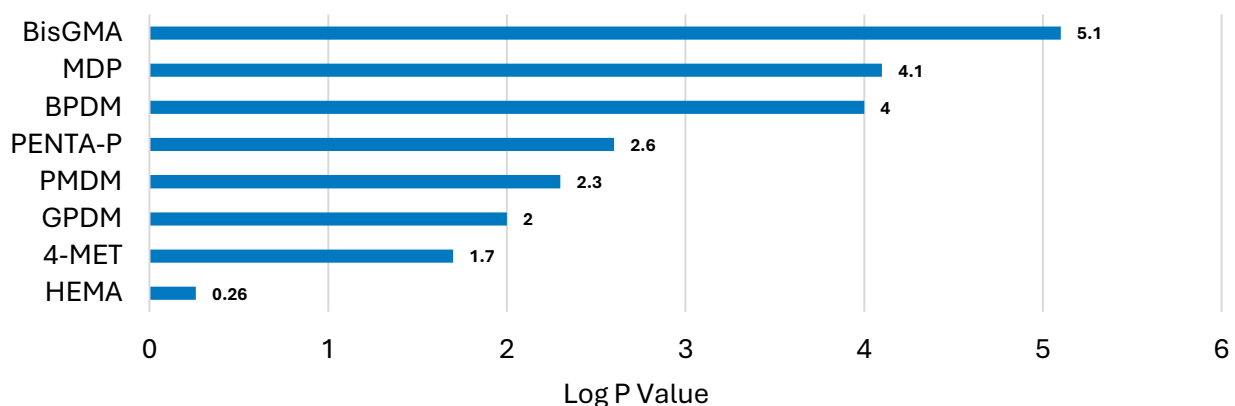


Tending to repel or fail to mix with water

Ideal adhesives must transition from hydrophilic ("water-loving") to hydrophobic ("water-repelling"). This transition is important because the adhesive must contain water initially, as it aids in the ionization process that is crucial for etching and bonding to the tooth structure. Once the adhesive undergoes light-curing, the adhesive layer should become hydrophobic to prevent hydrolytic degradation and ensure long-term durability.

Hydrophobicity can be demonstrated by the partition coefficient (log P), which measures how a substance behaves when placed in two solvents that do not dissolve into each other—water (which is hydrophilic, or water-loving) and octanol (which is hydrophobic, or water-repelling).⁷

Partition Coefficient (Log P)



Data courtesy of Suh, Beyoung I. *Principles of Adhesion Dentistry*, AEGIS Publications, 2013, pp. 44-47.

As seen in the comparative table, MDP has the highest log P value (4.1) among the adhesive functional monomers tested, indicating it's the most hydrophobic. On the other hand, HEMA, which has the lowest log P value, should be minimized in hydrophobic adhesives to enhance hydrophobicity.⁷

All-Bond Universal's innovative chemistry maximizes MDP and minimizes HEMA, allowing the adhesive layer to become hydrophobic after polymerization, ultimately enhancing long-term durability.

The Difference Between Hydrophilic & Hydrophobic



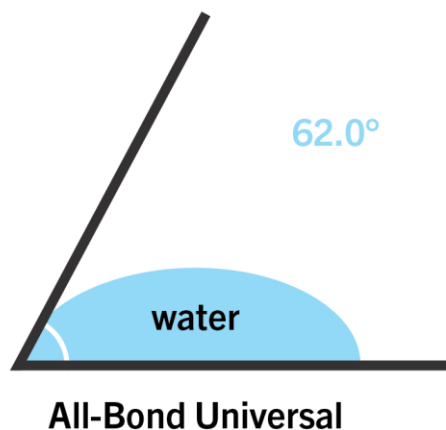
Click on the video above for a live demonstration of the difference between hydrophilic and hydrophobic surfaces!

Why Adhesives Should Go From Hydrophilic to Hydrophobic



Click on the video above as Dr. Rolando Nunez explains why adhesives need to transition from hydrophilic to hydrophobic!

Did You Know?



All-Bond Universal demonstrates a 62.0° water contact angle after curing — a high value that confirms the hydrophobic nature of its cured adhesive resin layer. ⁷

Water contact angle is a measure of surface wettability, indicating how well a liquid (water) spreads or beads up on the cured adhesive surface. A high water contact angle means the adhesive surface is more hydrophobic, while a low water contact angle means the surface is more hydrophilic.

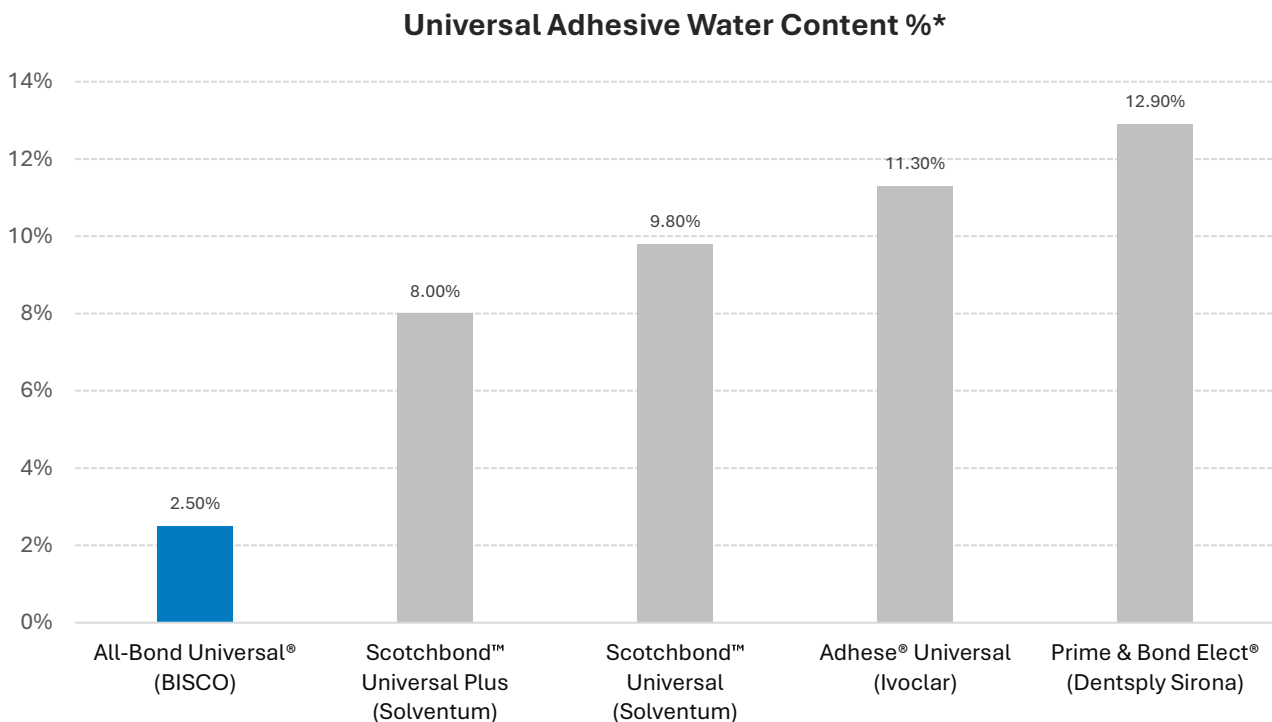
Low Water Content

During adhesive procedures on dentin, water is needed to keep the collagen fibrils expanded so the primer can penetrate properly. However, completely removing this water before polymerization is difficult because of the hydrophilic acidic monomers in simplified adhesives. As a result, some water can become trapped in the hybrid and adhesive layers, which can interfere with complete polymerization.

This weakens the final polymer, making it more permeable and prone to hydrolysis.²¹

All-Bond Universal's optimized formula with low water content allows for any residual water to evaporate after only 10 seconds of air-drying time.

Check out the chart below to see how water content compares across leading universal adhesives!



**Conducted by a third party via the Karl Fischer Method*

Low Film Thickness

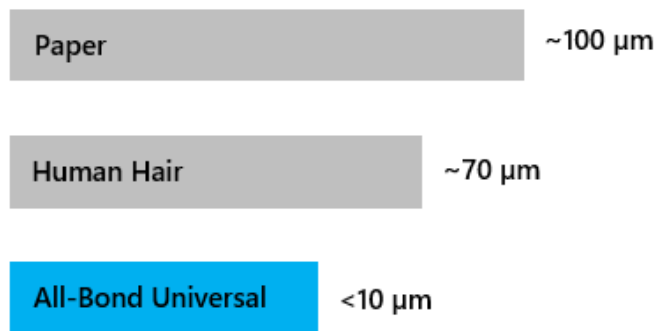
Low film thickness in adhesives allows the material to flow easily into etched surfaces, providing strong chemical and mechanical sealing. Adhesives with a thin film ensure that indirect restorations are accurately seated, even in tight-fitting cases.

Additionally, adhesives with low film thickness do not require radiopacity, as the adhesive layer is too thin to be visible on a radiograph. Only adhesives with a film

thickness greater than 20–25 μm need to be radiopaque to avoid misdiagnosis and overtreatment.²⁰

All-Bond Universal features a film thickness of less than 10 μm , which enables it to flow seamlessly into etched surfaces and ensures precise seating of indirect restorations. Because the adhesive layer is so thin, it does not appear on radiographs, removing the need for radiopaque additives.

How Thin is Less Than 10 Microns?



All-Bond Universal film thickness compared to the human hair and paper — a clear visual of just how thin <10 microns really is. ⁽²²⁻²³⁾

Film Thickness in Bonding Agents



Click on the video which gives a quick explanation as to why film thickness matters in a dental adhesive!

All-Bond Universal Adhesion to Dentin

The Scanning Electron Microscopy (SEM) images below provide a detailed view of dentin after the application of All-Bond Universal, highlighting the surface characteristics and the interaction between the adhesive and dentinal structure.

In total-etch mode (A&B), the smear layer is removed, and the dentinal tubules are exposed. After applying All-Bond Universal and light-curing, a hybrid layer of approximately 1–1.5 μm in thickness is formed. The dentinal tubules are sealed, as evidenced by the resin tags, which range from 50 to 100 μm in thickness.²⁴

In self-etch mode (C&D), the smear layer is not removed, and the dentinal tubules remain sealed. All-Bond Universal penetrates the smear layer, forming a hybrid smear layer after light-curing, with resin tags ranging from about 20 to 40 μm .²⁴

Note that the precise measurement of resin tag length was challenging due to variations across dentin locations, the wide range of resin tag lengths, and artifacts in specimen preparation. Therefore, the goal of the observation was to assess the penetration ability of resin monomers into dentinal tubules, rather than measure exact resin tag lengths.²⁴

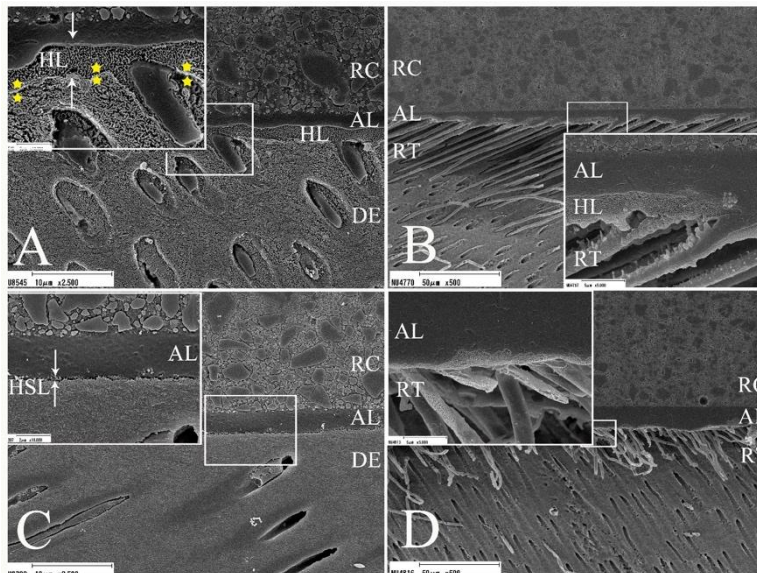


Image courtesy of Takamizawa et al., 2019, *Dental Materials*

Bonding Technique	Adhesive Layer Thickness	Hybrid Layer Thickness	Resin Tag Length
Total-Etch (A & B)	2–3 μm	1–1.5 μm	50–100 μm
Self-Etch (C & D)	2–3 μm	-	20–40 μm

Data for All-Bond Universal - DE: Dentin, RC: Resin Composite, AL: Adhesive Layer, HL: Hybrid Layer, HSL: Hybrid Smear Layer, RT: Resin Tag.²⁴

Competitor Comparison Chart

					
	All-Bond Universal® (BISCO)	Scotchbond™ Universal Plus (Solventum)	Scotchbond™ Universal (Solventum)	Adhese® Universal (Ivoclar)	Prime & Bond Elect® (Dentsply Sirona)
Cure Mode	Light	Light	Light	Light	Light
Storage*	Room Temperature	Refrigeration not required if room temp does not exceed 25°C/77°F	Refrigeration not required. Can be stored between 36–77°F.	Room temperature at 2–28 °C (36–82 °F)	Refrigerate between 2°C - 8°C (35°F - 46°F)
Single Bottle	Yes	Yes	No (If Using Activator)	Yes	No (If Using Activator)
pH**	3.2	2.7	2.7	2.5	2.3
Water Content %***	2.5%	8%	9.8%	11.30%	12.90%
Etch Method	Total, Self, Selective	Total, Self, Selective	Total, Self, Selective	Total, Self, Selective	Total, Self, Selective
Direct & Indirect	Yes	Yes	Yes	Yes	Yes
Dentin Shear Bond Strength (MPa)**	TE/LC: 38.85 TE/SC: 36.11 SE/LC: 35.27 SE/SC: 33.16	TE/LC: 33.05 TE/SC: 28.05 SE/LC: 31.21 SE/SC: 27.93	TE/LC: 31.82 TE/SC: 21.05 SE/LC: 32.67 SE/SC: 16.11	TE/LC: 20.09 TE/SC: 31.05 SE/LC: 28.39 SE/SC: 29.97	TE/LC: 25.69 TE/SC: 21.66 SE/LC: 30.44 SE/SC: 27.38

*Per manufacturer's instructions for use

**BISCO has data on file

***Conducted by a third party via the Karl Fischer Method

Technique Guide

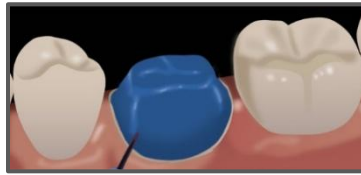
All-Bond Universal features a simple technique designed for efficient restorative workflows!

Self-Etch



No phosphoric acid applied to the tooth structure.

Total-Etch



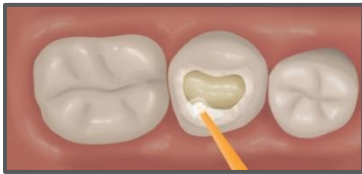
Phosphoric acid (such as Uni-Etch®) applied to both the enamel and dentin surface.

Selective-Etch



Phosphoric acid (such as Select HV Etch®) applied to the enamel surface only.

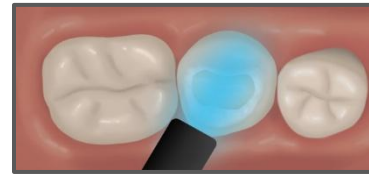
Bonding Technique using All-Bond Universal



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 material. The surface should have a uniform glossy appearance; otherwise, repeat steps 1-2.



3. Light-Cure for 10 seconds.



4. Continue with placement of the restorative material according to the manufacturer's instructions.
Example: BISCO's Universal Composite Quantum™



Scan the QR code to watch a quick
'how-to' demonstration!

Confidence in Every Bond

All-Bond Universal stands apart as a trusted, versatile adhesive that empowers you, the dentist, to deliver confident, efficient care and durable restorative outcomes for your patients.

1.



Compatible

Compatible with all light-, self-, and dual-cured resin composite and cement materials for all direct and indirect procedures.

2.



Versatile

Its chemistry offers the flexibility to either total-, self-, or selective-etch.

3.



Durable

Unique chemistry allows for the adhesive layer to become hydrophobic after polymerization, which enhances durability over time.

4.



Convenient

No separate activator bottle is required.

5.



Peace-of-Mind

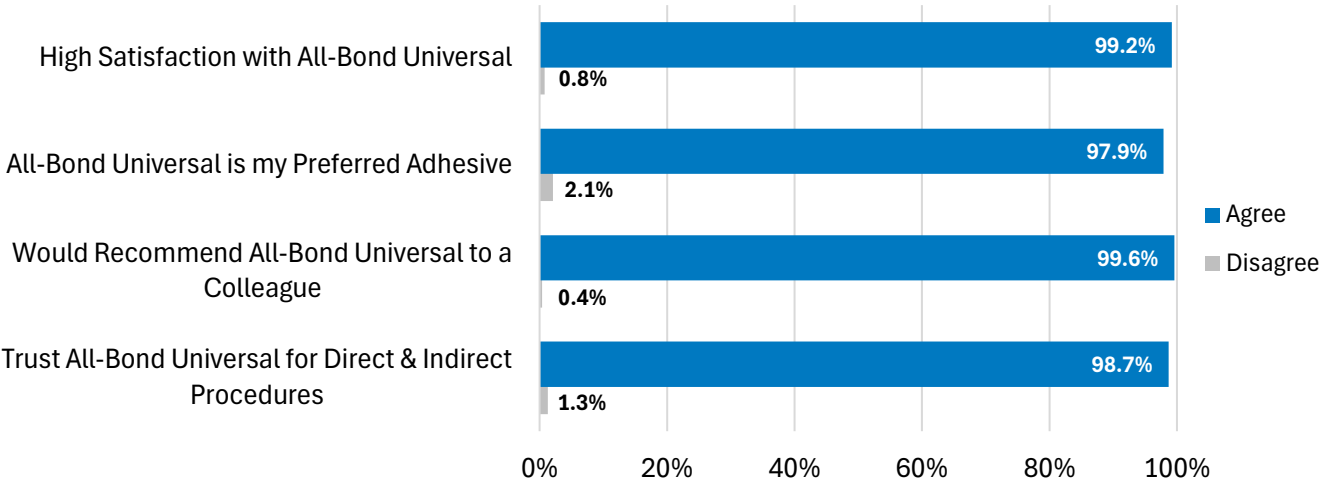
Low film thickness (less than 10 microns) ensures proper fit of indirect restorations.

Customer Feedback

An online survey was conducted to collect customer feedback from active All-Bond Universal users in the United States, yielding 236 responses in total. The survey was carefully designed with a series of rating-scale questions to thoroughly evaluate key aspects of the adhesive, including its performance, ease of use, and overall user satisfaction.

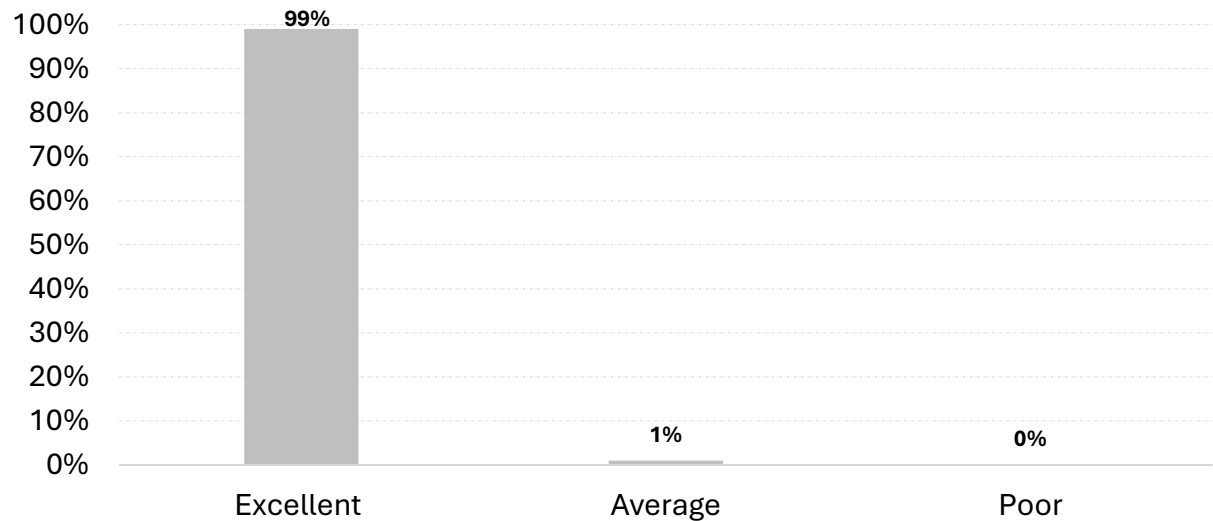
Customer Satisfaction

Survey respondents reported high levels of satisfaction with All-Bond Universal, citing consistent performance, ease of use, and clinical reliability. The chart below presents their responses to satisfaction-related questions. *



When asked how they would assess All-Bond Universal’s overall performance, almost all respondents gave it an excellent rating.

All-Bond Universal Overall Performance Ratings*



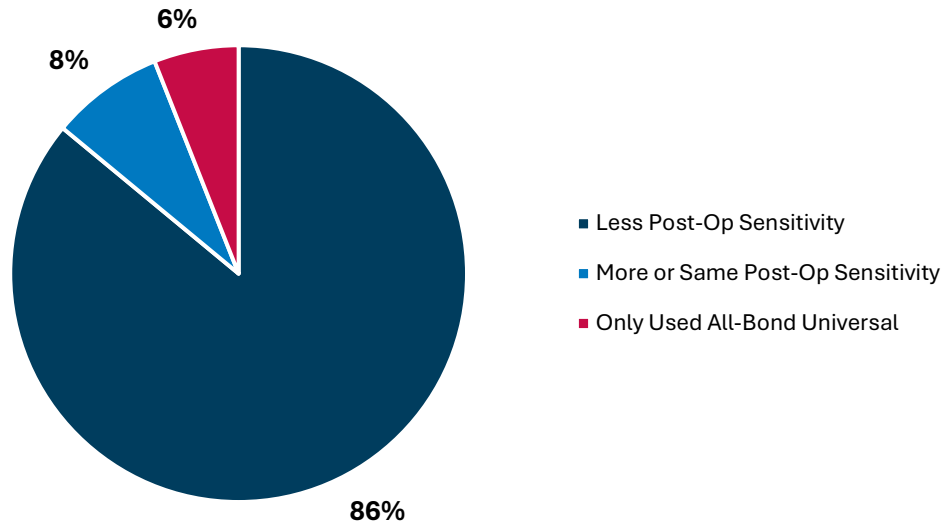
*BISCO has data on file

Post-Operative Sensitivity

When asked about post-operative sensitivity following the use of All-Bond Universal compared to other adhesives, 86% of respondents reported experiencing fewer

instances of sensitivity. It is worth noting that 6% of respondents have only used All-Bond Universal and have not used other adhesives for comparison.

Post-Op Sensitivity Ratings: All-Bond Universal Compared to Other Adhesives*

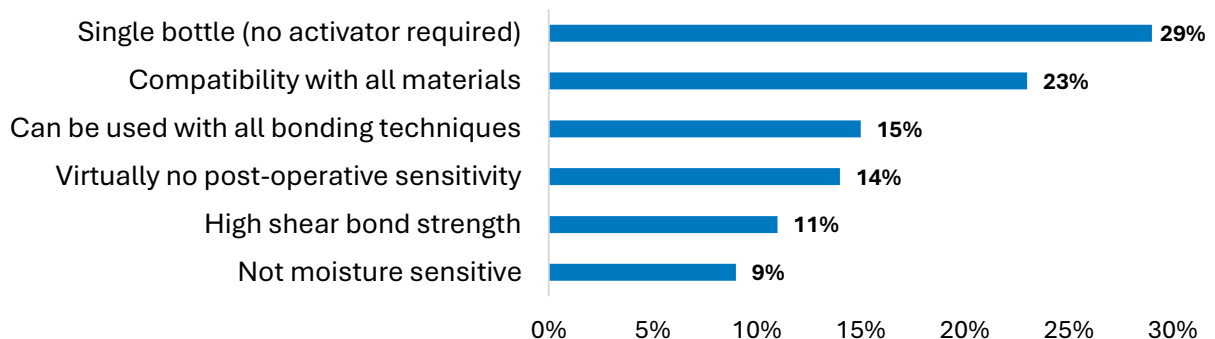


Most Valued Features

When asked to identify the three most desirable features of All-Bond Universal, the majority of respondents highlighted its single-bottle delivery system, universal compatibility, and versatility across all

bonding techniques as key factors contributing to their positive experience. The chart below illustrates which features respondents found most desirable.

Respondent Ratings of All-Bond Universal's Top 3 Most Desirable Features*



*BISCO has data on file

Customer Testimonials

Hear what dentists across the country are saying about their experience using All-Bond Universal in everyday restorative procedures!



*Angelina Browning, DDS,
Martinsburg, WV*

"I've been using BISCO's All-Bond Universal for a while now, and I have to say, it's one of the best bonding agents I've worked with. It's incredibly easy to apply, and I love how it provides such a strong, reliable bond across a variety of materials. Whether I'm working on direct restorations or bonding to different surfaces, it always delivers exceptional results. The consistency is perfect, neither too runny nor too thick, and it gives me confidence in every procedure. I also appreciate how versatile it is; I can rely on it for nearly every case. Highly recommend it to anyone looking for a dependable, high-performance bonding solution!"



*Jessica Meyers, DDS,
Bellaire, TX*

"I have been using BISCO's BAC etch and All-Bond Universal for years now with great results with bonding procedures and little to no post-op sensitivity! Other reps have tried to get me to change bonding agents but why would I when I get great long-lasting results!"



*Resmi Nair, DMD,
Rutland, MA*

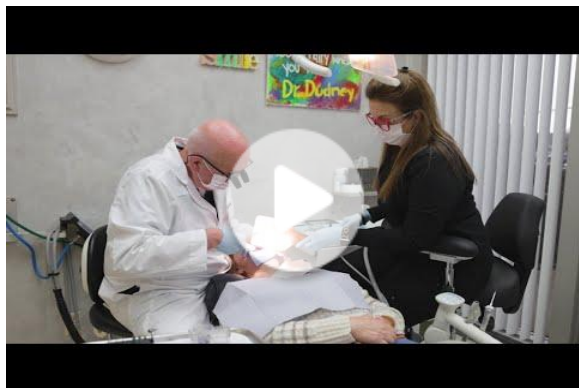
"I like All-Bond Universal because it is reliable and the results have studies to prove it. I try to remove as many variables as possible in my restorative procedures, and All-Bond Universal helps me to provide consistently excellent results."



*John Horn, DMD,
Hegins, PA*

"All-Bond Universal is my preferred bonding agent due to its versatility and performance. I use it with all my direct and most indirect procedures. I rarely have post operative sensitivity. I love that it bonds to all substrates and works equally well with various etching techniques and wet or dry tooth structure."

Dr. Thomas Dudney's Testimonial



Click on the video to hear Dr. Thomas Dudney share his All-Bond Universal experience!

Frequently Asked Questions

- 1. Does All-Bond Universal ever require an activator?**

No. Unlike most adhesives on the market, All-Bond Universal is a true single bottle system that **never** requires an activator. This TRULY universal adhesive is formulated to work with all light-cured, self-cured, and dual-cured materials, and can be used for all direct and indirect restorations with any bonding technique.
- 2. Why should I switch from my current adhesive to All-Bond Universal?**

If you prefer to have just one adhesive in the office for all procedures, All-Bond Universal is the ideal solution. It is so unique and easy to use, 1 bottle for all indications: direct and indirect; for all techniques: total-etch, self-etch, or selective-etch; and is compatible with all light, dual and self-cured restorative materials.
- 3. Do adhesives need to be radiopaque?**

Radiopacity is only required if the film thickness of the adhesive layer is greater than 20-25 microns, otherwise it cannot be detected on a radiograph. All-Bond Universal is less than 10 microns in thickness and therefore, it does not need to be radiopaque.
- 4. Does All-Bond Universal require refrigeration?**

Refrigeration is not required for All-Bond Universal. All-Bond Universal can be stored at room temperature.
- 5. Does All-Bond Universal need to be light cured?**

All-Bond Universal must be light-cured. However, if you do not wish to light cure, consider BISCO's Universal Primer as a dual cured adhesive option.
- 6. What is the shelf life for All-Bond Universal?**

2 Years
- 7. How many restorations can one bottle of All-Bond Universal perform?**

One 6ml bottle of All-Bond Universal contains 290 drops and can perform approximately 145 restorations. One 0.20ml unit-dose of All-Bond Universal can perform approximately 4 restorations.
- 8. Does the water content matter in an adhesive and why?**

Unlike acetone or ethanol, water is difficult to remove during application. Residual water left in the adhesive has many potential problems, such as increased permeability of the cured adhesive and faster hydrolytic degradation. If your adhesive contains a high water content, it is very difficult to completely evaporate all water. All-Bond Universal's optimized formula with low water content allows for any residual water to evaporate after only 10 seconds of air-drying time.

Ordering Information

Bottle*

B-7202P All-Bond Universal 6ml Bottle
1 Bottle All-Bond Universal (6ml), Instructions

B-7204P All-Bond Universal 4ml Bottle
1 Bottle All-Bond Universal (4ml), Instructions

Kit*

B-72020K All-Bond Universal Standard Kit
1 Bottle All-Bond Universal (6ml), 1 Syringe Select HV® Etch w/BAC (5g), Accessories, Instructions

B-7202B0K-EU All-Bond Universal Standard Kit – No BAC
1 Bottle All-Bond Universal (6ml), 1 Syringe Select HV® Etch (5g), Accessories, Instructions

Unit-Dose*

B-73100K All-Bond Universal 100 ct. (0.20ml ea.) Unit-Dose
100 All-Bond Universal Unit-Dose (0.20ml), Accessories, Instructions

**Product availability may vary by country.*

All-Bond Universal has set the benchmark for versatility, performance, and clinical simplicity. Trusted by clinicians around the world, it continues to redefine adhesive dentistry with proven bond strength, exceptional durability, and compatibility across virtually every etching technique.

Designed to streamline procedures without compromising results, All-Bond Universal delivers the confidence and consistency you need for everyday restorative success.

Join the growing number of clinicians who have made All-Bond Universal their adhesive of choice and experience the difference of one bottle, endless possibilities!

Call us! We're here to help:

1-800-247-3368

www.bisco.com



THE BISCO STORY

Find out how BISCO's beginnings form the foundation of our commitment to lasting results and confident smiles



Restoration, Simplified

BISCO founder Dr. Byoung Suh began his scientific career as a research chemist developing restorative bonding products. In 1981, he founded BISCO to provide simplified, effective restoration solutions.

Over 40 years later, this goal guides BISCO's work to revolutionize bonding and make better dentistry possible across key areas:



**Treatment
Outcomes**



Efficiency



Cost Savings



**Patient
Satisfaction**

The Values Behind the Science

BISCO's commitment to better restorative dentistry goes beyond a passion for science. Guided by our core values, we apply our passion to offer you solutions.



Sharing Knowledge

We're always available to help you get the right solutions and perform your best dentistry.



Innovative Thinking

We incorporate customer feedback and industry conversations to design simple, effective products.



A Growth Mindset

We continuously evaluate our solutions for new ways to overcome common challenges.



Integrity

Every BISCO product is thoroughly researched and tested - often for years - before launch.

Bonding Breakthroughs

You tell us what you need - and we find a way. Here are some BISCO products that have helped to streamline protocols and deliver better results.



Z-Prime™ Plus

The first dedicated zirconia primer



TheraCal LC®

The first combined pulpcapping agent and liner



All-Bond Universal®

A powerful, reliable single-bottle bonding agent



TheraCem®

A self-adhesive cement with THERA technology/zirconia bonding

For over 40 years, BISCO innovations have helped clinicians deliver predictable outcomes and preserve natural dentition.

BISCO: Who We Are

At BISCO, we cherish our customers as if they were part of our own family. We are committed to delivering exceptional service and support every step of the way.

Corporate Video



[Click here to learn more about who we are and our history!](#)

Trusted by Dentists Who Demand Predictable Results



*John Horn, DMD
Horn Family Dental*

“BISCO puts out very good products that every general dentist can use, and these competitively priced products produce outstanding results. BISCO just provides the personal touch.”



Lauren Yasuda Rainey, DDS

“BISCO is a solid organization, from chemical science to clinical delivery. Their top-notch customer service and knowledgeable team help me understand the research behind their materials, giving me confidence in patient care. Dentistry can be unpredictable, but with BISCO, I know I’ll get consistent, reliable results.”

BISCO's Direct-to-You Promise

Get the customer-driven products and services you need from the experts who make them. BISCO is a direct-to-you company, meaning we sell, ship, and serve our customers directly, and you can ONLY get

BISCO products directly from us. This allows us to provide you with special advantages that you can't get anywhere else. With BISCO, it's not just dental products; it's a whole lot more!



DIRECT PRODUCTION

BISCO controls every aspect of the manufacturing process to always deliver the best quality.



DIRECT CONNECTION

Your feedback guides our new offerings and continuous product improvements.



DIRECT ACCOUNTABILITY

If you're not satisfied for any reason, we'll give you a 100% refund.



DIRECT SERVICE

Speak with a BISCO expert and get real-time answers about accounts, products and inventory optimization.



DIRECT DELIVERY

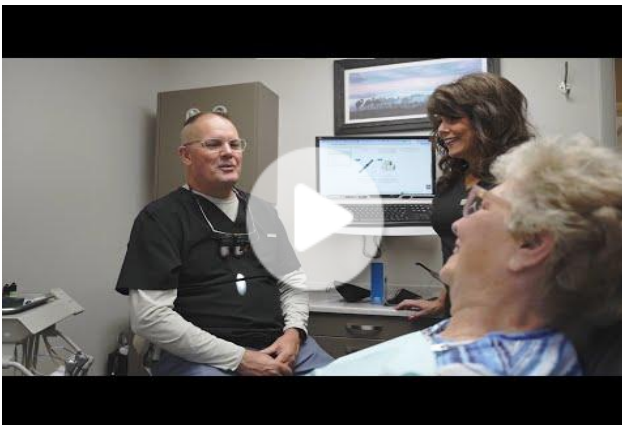
Get fresh inventory straight to your door for the longest possible shelf life.



DIRECT SAVINGS

Quality, innovation and reduced inventory – without the distributor markup.

Dr. John Horn's Direct-to-You BISCO Experience



Click on the video to hear about Dr. John Horn's direct-to-you experience with BISCO!



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WWW.BISCO.COM
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PRODUCT CATALOG!

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