BISCO

SCIENCE
AND DENTISTRY.
BONDED.

All-Bond Universal®

Light-Cured Dental Adhesive

Product Profile

Rx Only

MC-9079AB

Table of Contents

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.

2009 **Z-Prime™ Plus**
The first dedicated zirconia primer

2011 **TheraCal LC®**
The first combined pulpcapping agent and liner

2012 **All-Bond Universal®**
A powerful, reliable single-bottle bonding agent

2016 **TheraCem ®**
A self-adhesive cement with THERA technology/zirconia bonding

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!

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.

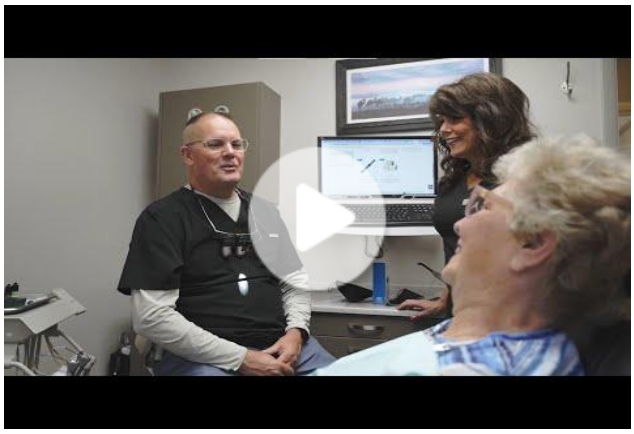
DIRECT ACCOUNTABILITY
If you're not satisfied for any reason, we'll give you a 100% refund.

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!

VISIT US AT WWW.BISCO.COM FOR A COMPLETE PRODUCT CATALOG!

Product Overview

All-Bond Universal is the culmination of more than 40 years of adhesive research at BISCO. As a truly universal adhesive, All-Bond Universal is a single bottle, light-cured system that is 100% compatible with all light-, self-, and dual-cured materials and is indicated for all direct and indirect procedures. It's versatile, meaning that it can be used with any bonding technique (self-, total-, and selective-etch). It is an etchant, primer, and adhesive all in one bottle.

Backed by over 135 research publications, All-Bond Universal has established itself as a reliable and effective choice for dental professionals. Its unmatched combination of universality and versatility—what we call UNIVERSATILITY—makes it an indispensable component for any dental practice.

- 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!

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

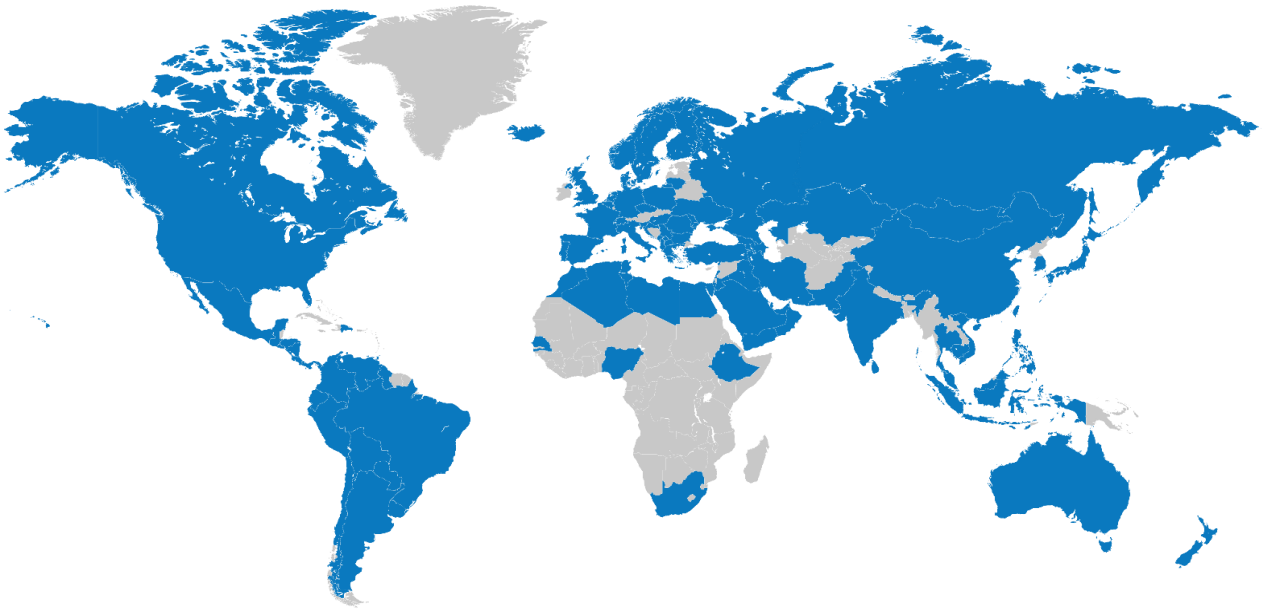
All-Bond Universal Evaluation

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, Isreal, 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

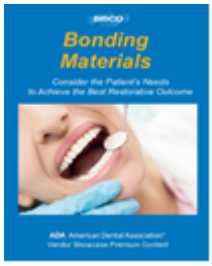
Oceania

Australia, New Zealand

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

Indications

1. **ALL Direct Restorations**
2. **ALL Indirect Restorations**
3. **Desensitization/Sealing of Tooth**
4. **Intraoral Repair**
5. **Protective Varnish for Glass Ionomer Based Fillings**
6. **Orthodontic Bonding**
7. **Endodontic Bonding**

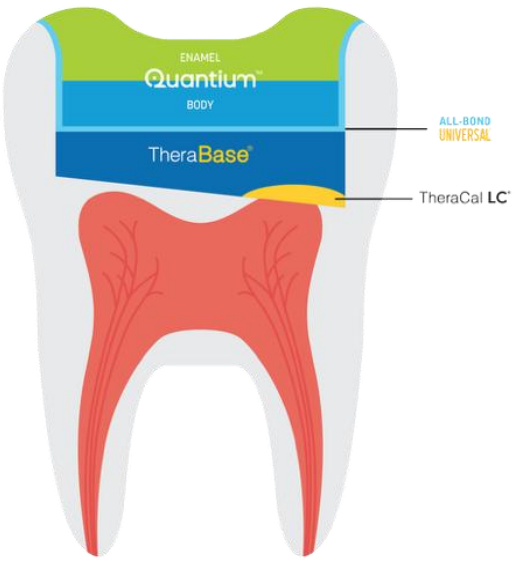


Click on the eBook to learn expert recommended techniques for bonding to various substrates!

Clinical Procedures

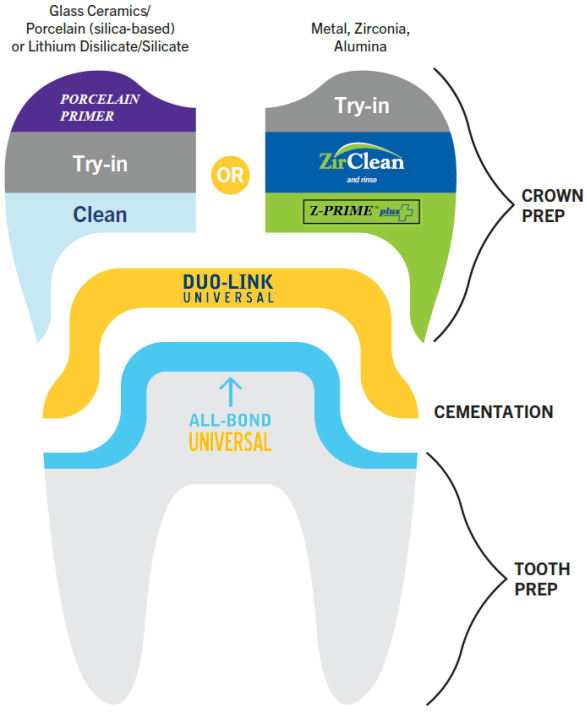
All-Bond Universal provides a reliable foundation for strong, long-lasting adhesion in virtually any clinical scenario. Here are some of the most common procedures where it's routinely utilized.

Sandwich Technique

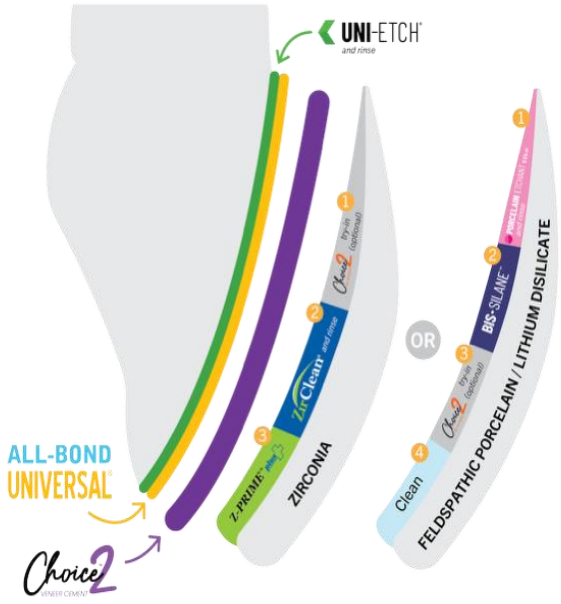


Zirconia Bonding

Cementation with a Bonding Agent



Veneer Cementation



Perfect Pairs

All-Bond Universal is also highlighted as a perfect pair to other BISCO products! Check out the details below to see how the features and benefits of these products can enhance your dental procedures!

Select HV® Etch

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.
- Creates microretentive surfaces that are necessary for successful bonding.
- Blue in color for easy visualization and contrast.
- BAC — Available with the antimicrobial agent Benzalkonium Chloride (BAC)* in select markets.
  -Not available in European Union
- Rinses away cleanly and quickly leaving no residue to interfere with bonding.

** 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®

32% semi-gel phosphoric acid etchant

- Developed for the total-etch technique, but indicated for both total- and selective-etch.
- Creates microretentive surfaces that are necessary for successful bonding.
- Blue in color for easy visualization and contrast.
- BAC — Available with the antimicrobial agent Benzalkonium Chloride (BAC)* in select markets.
  -Not available in European Union
- Rinses away cleanly and quickly leaving no residue to interfere with bonding.

** 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.*

Choice™ 2

Light-cured resin cement designed specifically for veneer cementation

- Specifically formulated for color stability* resulting in high esthetics.
- Excellent physical properties ensure the restoration will stand up to significant pressure and stress that is placed on veneers daily.
- Highly filled resin cement enhances the overall strength of the restoration.
- Low film thickness ensures veneers are completely seated.
- Corresponding try-in pastes facilitate shade selection prior to cementation.
- Available in 8 esthetic shades: A1, A2, A3, B1, Translucent, Milky Bright, Milky Opaque, and Universal Opaque.

** Delta E< 3 is not detectable to the human eye.*

Quantium™

Light-cured universal composite

- High strength, wear resistance, and low shrinkage create durable restorations.
- Low volumetric shrinkage, which minimizes microleakage and ensures marginal adaptation.
- Designed to be easily polished and stain resistant to create and maintain esthetic results and maintain their appearance over time.
- 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.

Duo-Link Universal™

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

- Easily identified on radiographs for quick and effective diagnosis.
- High degree of conversion in both light- and self-cured modes ensures good clinical performance.
- Ideal for all CAD/CAM 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.*

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]
- Visible on radiographs to easily distinguish caries.
- Moisture Tolerant[1] Unlike calcium hydroxide, TheraCal LC has low solubility and will not wash out over time.

** BISCO has data on file*

Clinical Cases

Total-etch Case

1

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

2

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

3

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

4

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

5

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

6

Veneer cementation procedure finalized.

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

Selective-etch Case

1

Pre-op image of old amalgam restorations.

2

Removal of old amalgam restorations.

3

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

4

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

5

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

6

Final restorations

Dentistry Courtesy of Dr. Jorge Fermín Narvaez

Self-etch Case

1

Preoperative view of teeth.

2

Preparations for zirconia-based crowns.

3

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

4

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

5

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

6

Final esthetic result.

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.

**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 hydrophobicity[7], 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
- ISO 14971: Application of risk management to medical devices

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. The device has been cleared for sale by regulatory agencies in applicable markets.

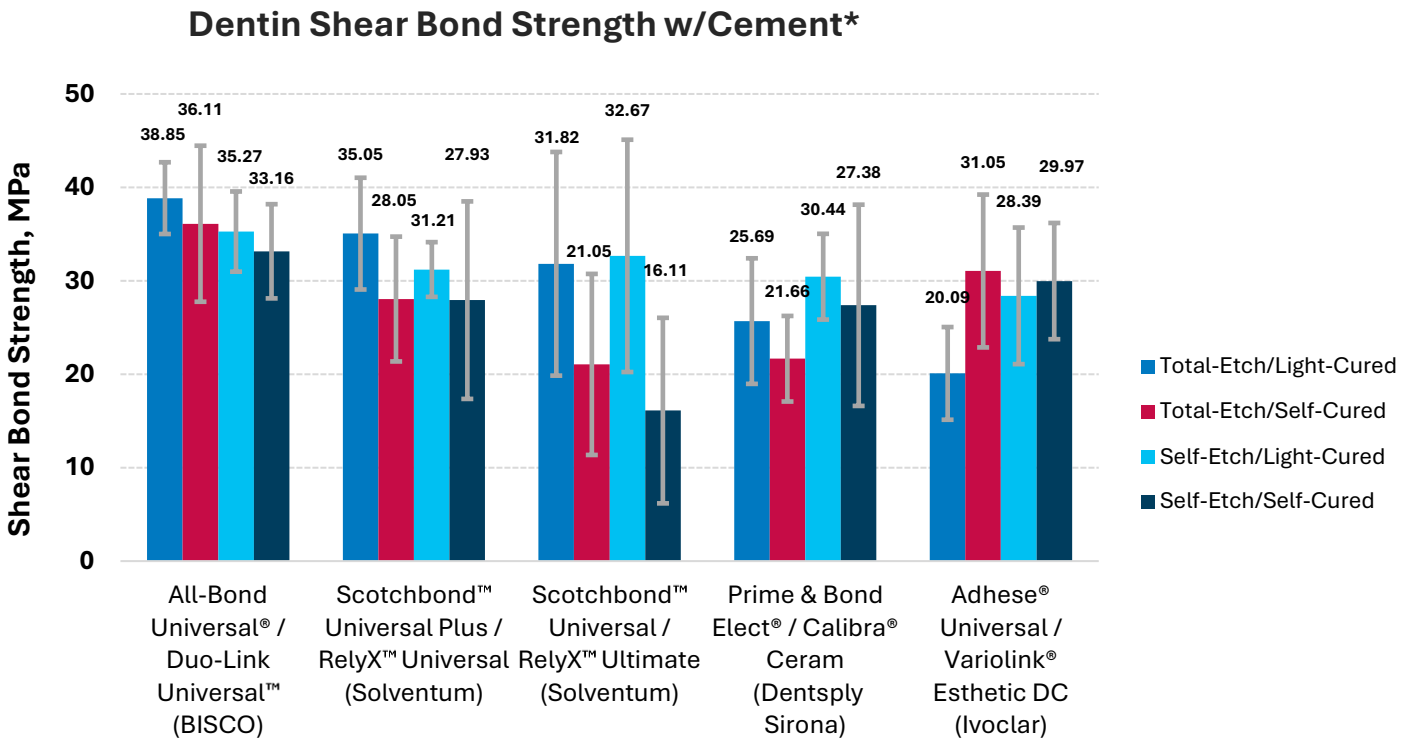
Physical Properties

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.

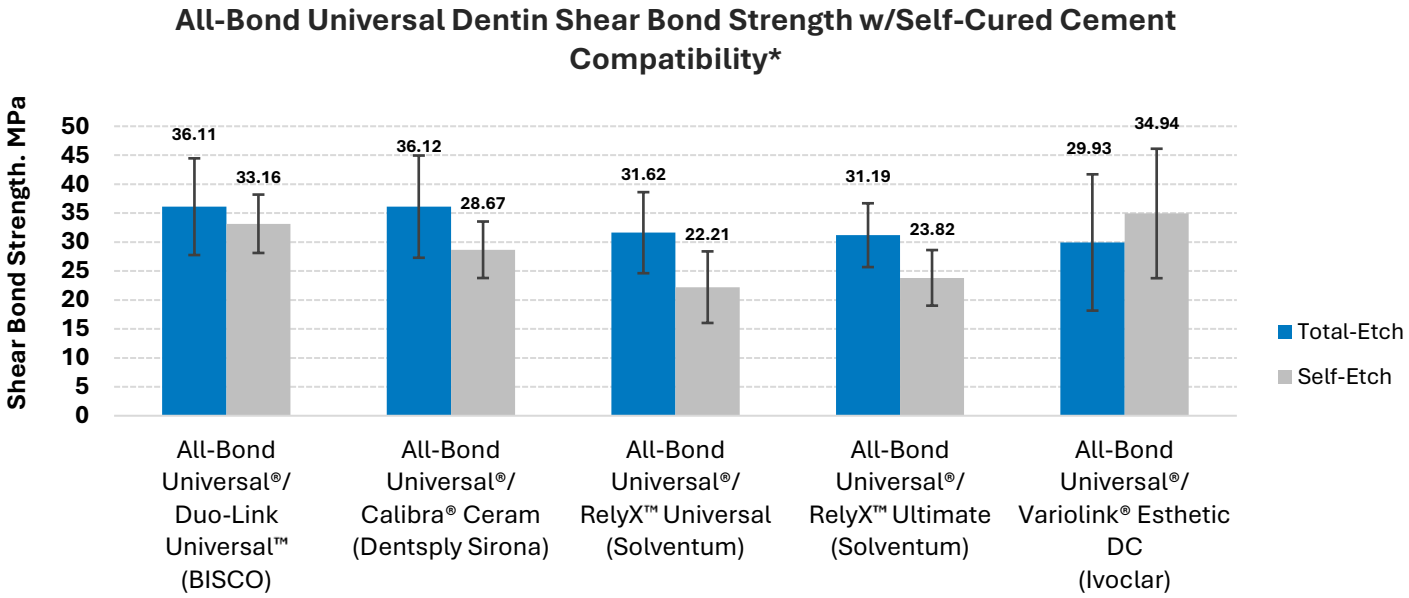
See the chart below which provides a direct comparison between All-Bond Universal and leading competitors, illustrating its superior bond strength to dentin.



*BISCO has data on file

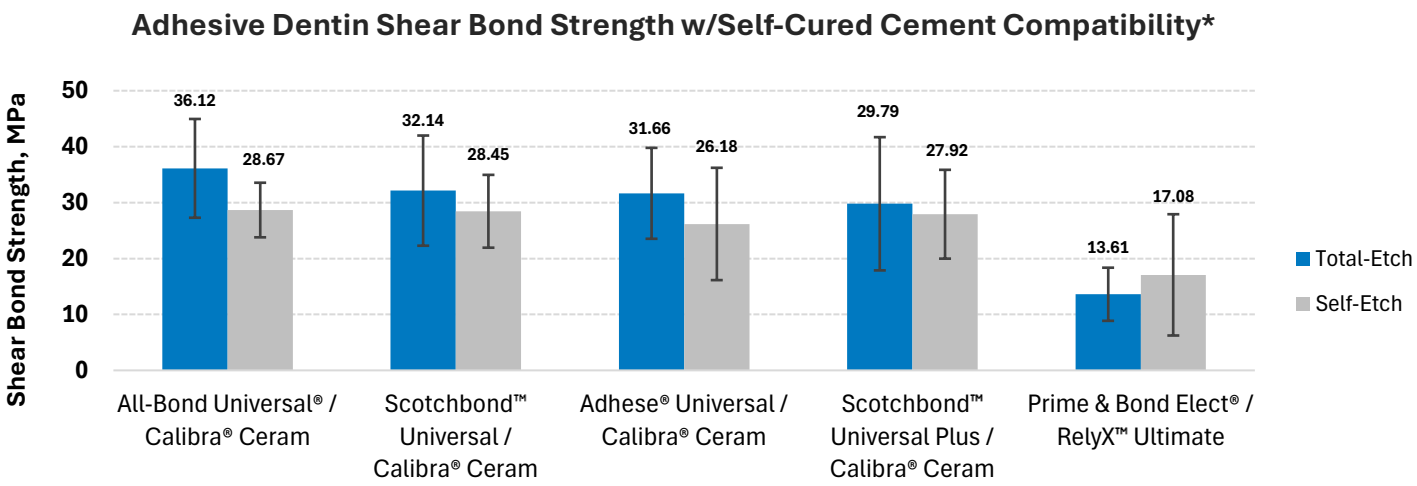
Total Compatibility

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



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

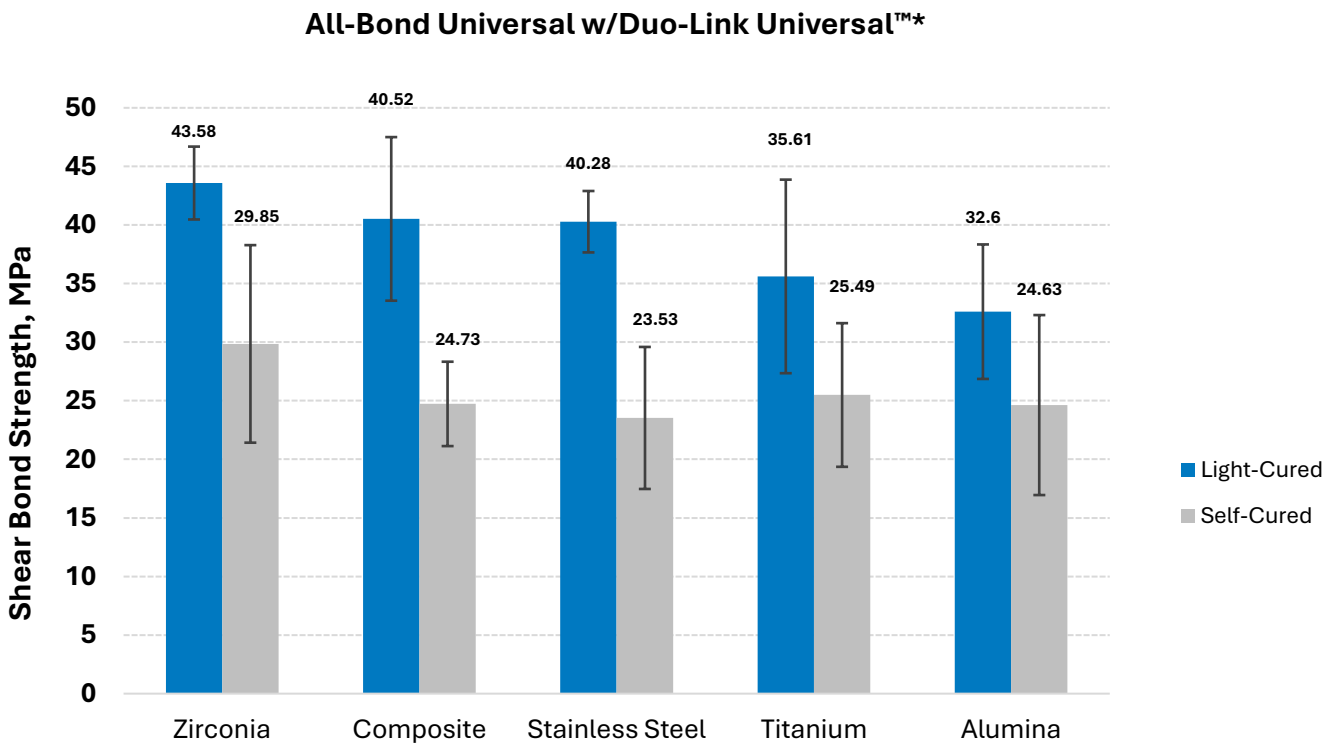
Click on the video to learn more about All-Bond Universal's total compatibility.

*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.

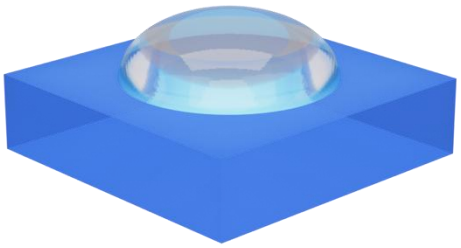
Refer to the chart below for a comparison of All-Bond Universal's bond strength across a range of indirect restorative materials, illustrating its performance and effectiveness.



*BISCO has data on file

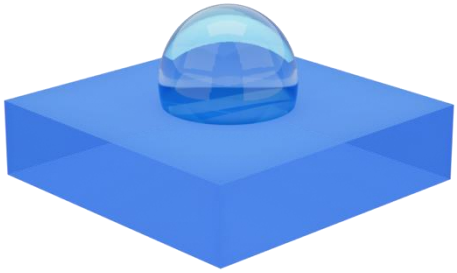
Hydrophilicity & Hydrophobicity

Hydrophilic



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

Hydrophobic

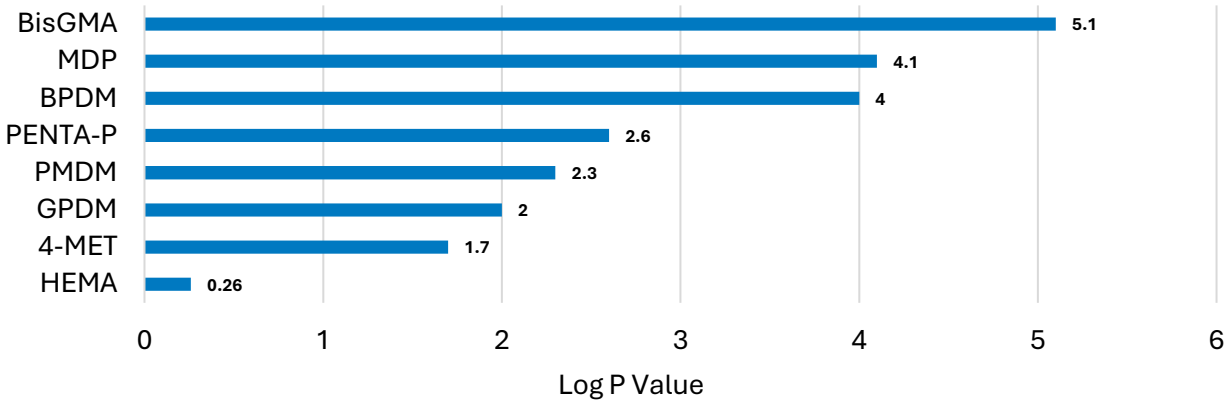


Tending to repel or fail to mix with water

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.

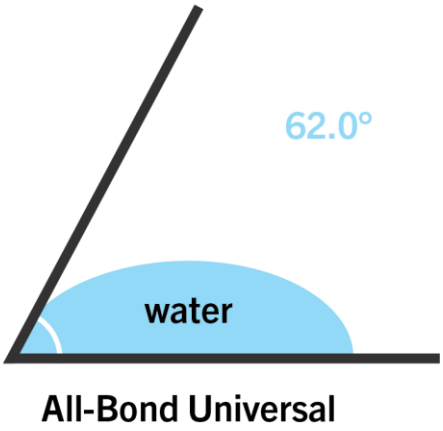
The Difference Between Hydrophilic & Hydrophobic

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.

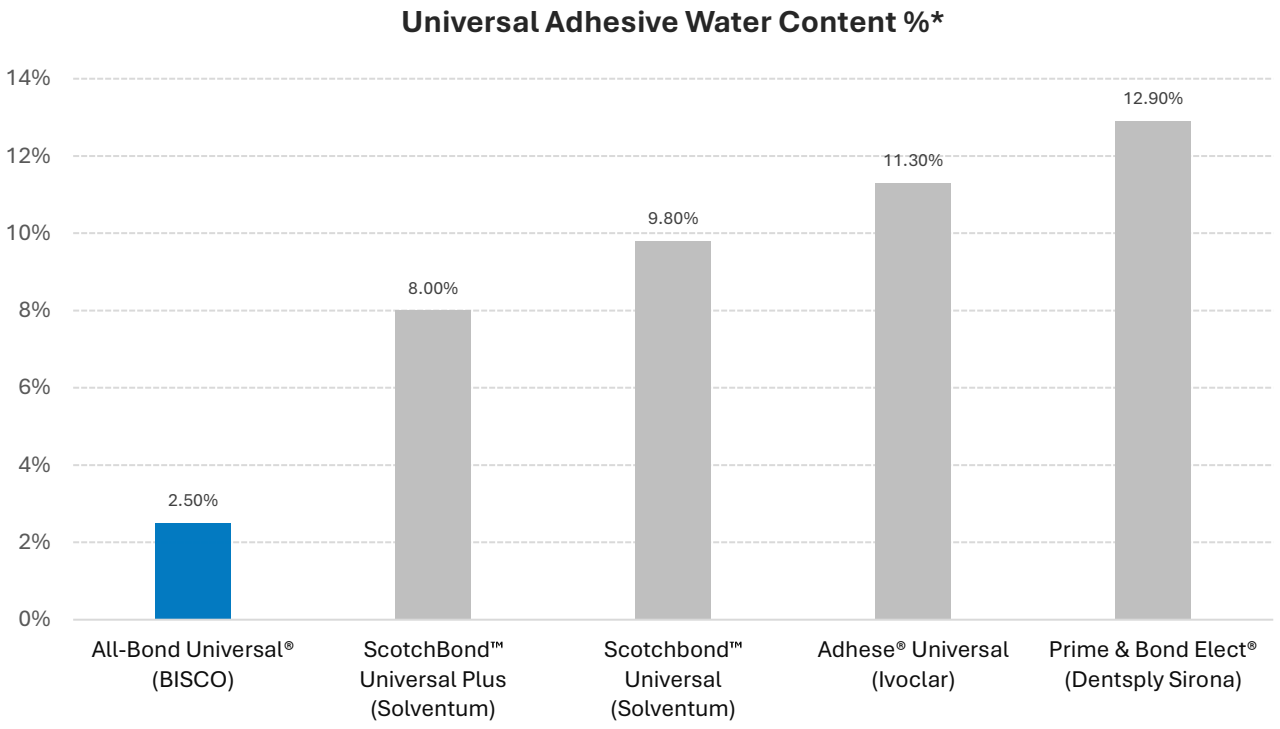
Low Water Content

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*

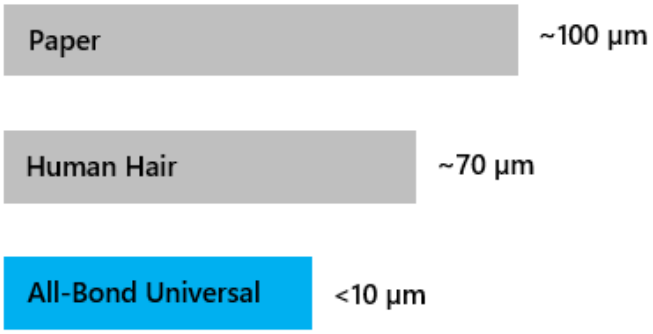
Low Film Thickness

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]

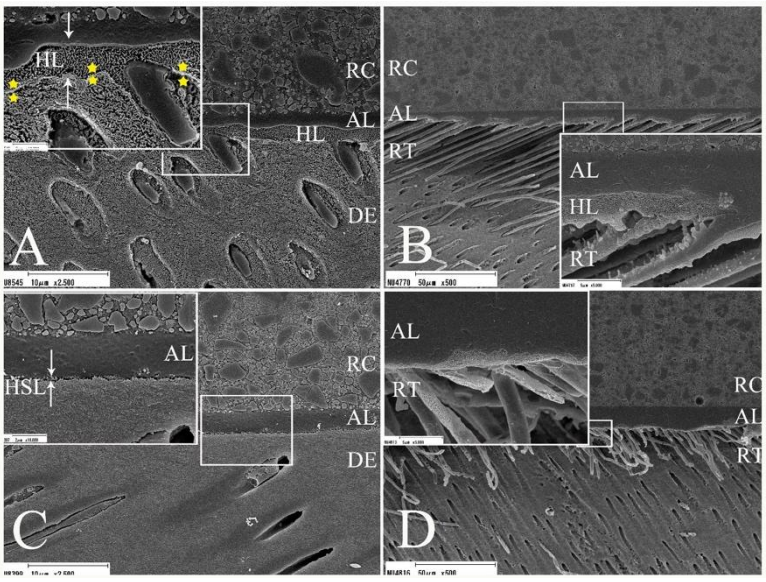


Image courtesy of Takamizawa et al., 2019, *Dental Materials*

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

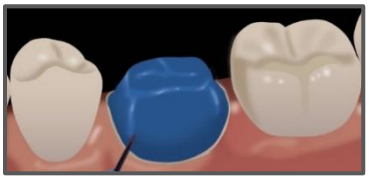
Data for All-Bond Universal - DE: Dentin, RC: Resin Composite, AL: Adhesive Layer, HL: Hybrid Layer, HSL: Hybrid Smear Layer, RT: Resin Tag.[24]

Technique Guide

Self-Etch

No phosphoric acid applied to the tooth structure.

Total-Etch



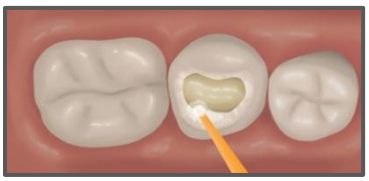
Phosphoric acid (such as Uni-Etch®) applied to both the enamel and dentin surface.

Selective-Etch

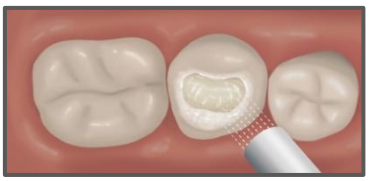
Phosphoric acid (such as Select HV Etch®) applied to the enamel surface only.

Bonding Technique

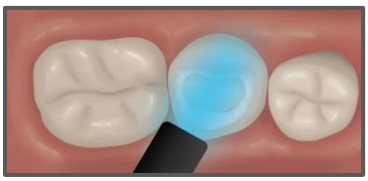
using All-Bond Universal



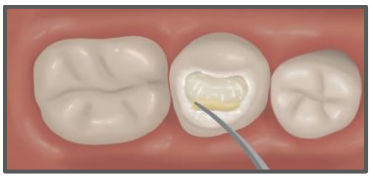
1. Appy two separate coats of All-Bond Universal®, scrubbing the preparation with a microbrush for 10-15 seconds per coat. Do not light cure between coats.



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 Quantium™

How to Use BISCO's All-Bond Universal

Click on the video to learn how to use All-Bond Universal!

Why All-Bond Universal?

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

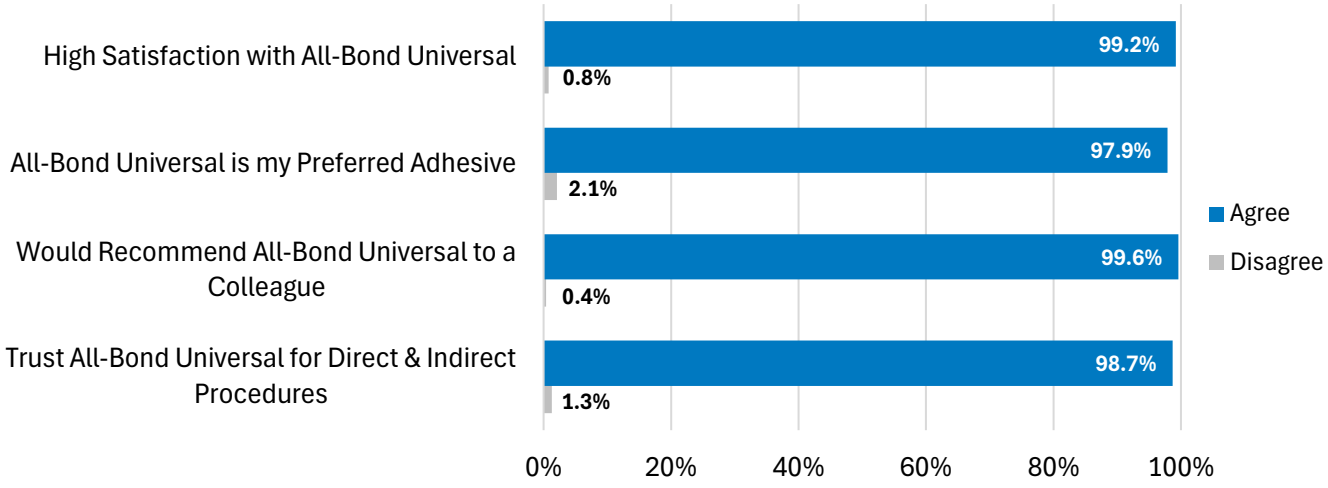
Low film thickness (less than 10 microns) ensures proper fit of indirect restorations.

Customer Feedback

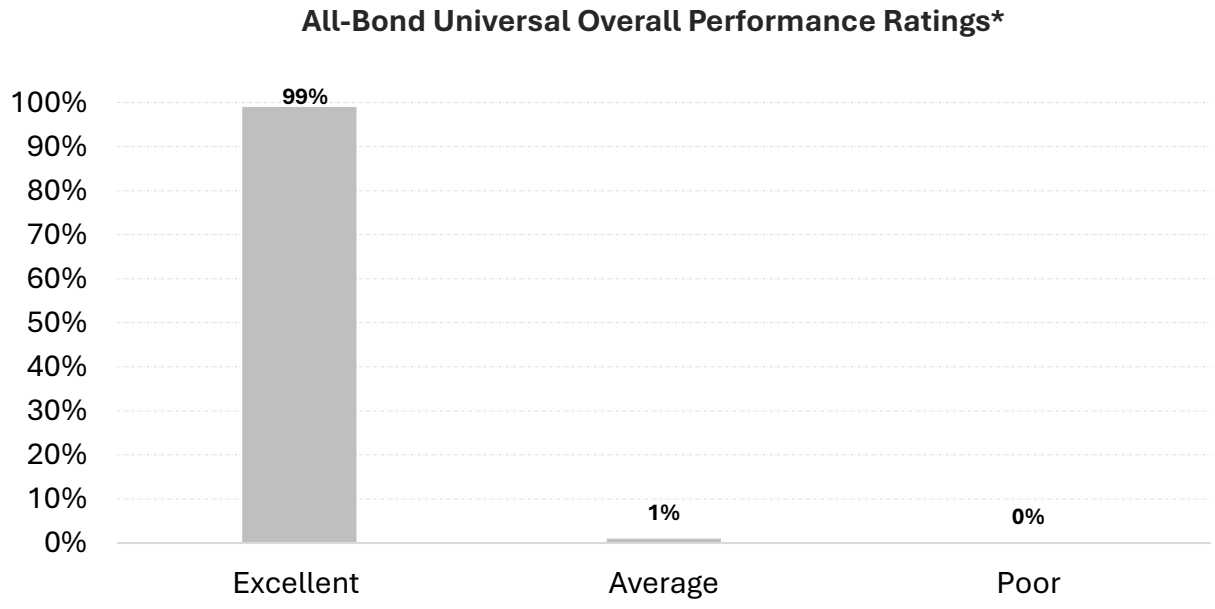
An online survey was conducted to collect customer feedback from active All-Bond Universal users in the United States, yielding 236 responses in total. The survey was carefully designed with a series of rating-scale questions to thoroughly evaluate key aspects of the adhesive, including its performance,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

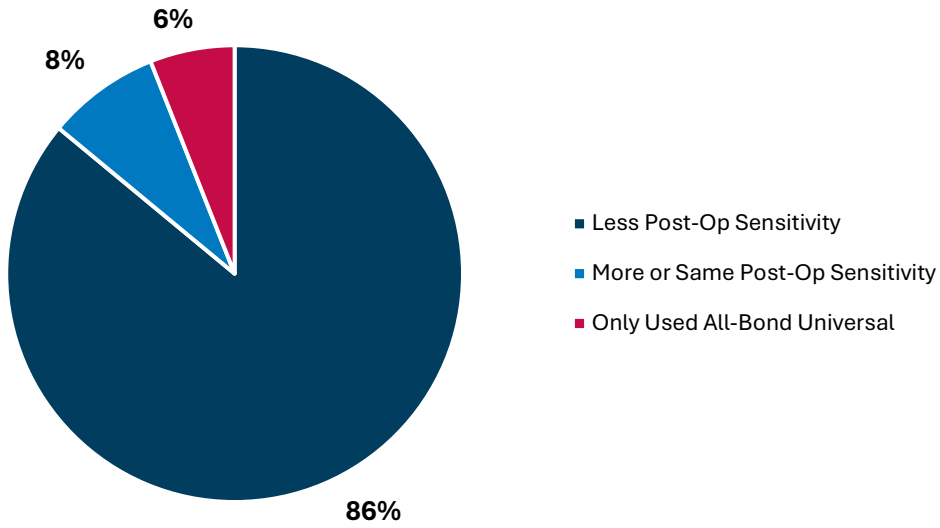


*BISCO has data on file

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.

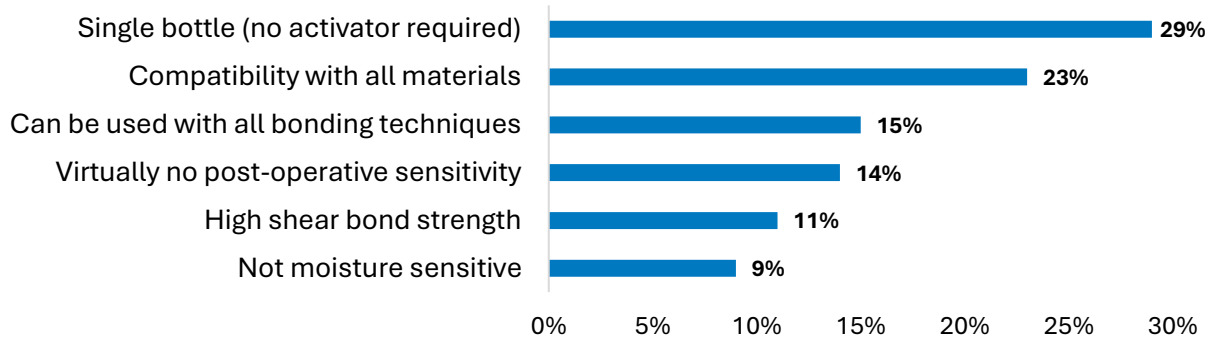
Post-Op Sensitivity Ratings: All-Bond Universal Compared to Other Adhesives*



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

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 All-Bond Universal Experience

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*

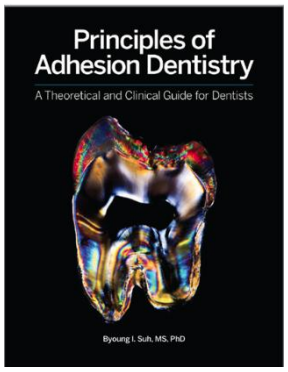
Kit*

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.*



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References

[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-ter*

[3] *Apatite-forming Ability of TheraCal Pulp-Capping Material, M.G. GANDOLFI, F. SIBONI, P. TADDEI, E. MODENA, and C. PRATI J Dent Res 90 (Spec Iss A):abstract number 2520, 2011 (www.dentalre-search.org)*

[4] *Okabe T, Sakamoto M, Takeuchi H, Matsushima K (2006) Effects of pH on mineralization ability of human dental pulp cells. Journal of Endodontics 32, 198-201*

.

[5] *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*

[6] *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.*

[7] *Suh, Beyoung I. "Adhesive Systems." Principles of Adhesion Dentistry: A Theoretical and Clinical Guide for Dentists, AEGIS Publications, LLC, Newtown, PA, 2013, pp. 44–47.*

[8] *Yoshida Y, Yoshihara K, Nagaoka N, et al. Self-assembled nano-layering at the adhesive interface. J Dent Res. 2012;91(4):376-381.*

[9] *Hiraishi N, Tochio N, Kigawa T, Otsuki M, Tagami J. Monomer-collagen interactions studied by saturation transfer difference NMR. J Dent Res 2013;92:284–288.*

[10] *Tay FR, Suh BI, Pashley DH, Prati C, Chuang SF, Li F. Factors contributing to the incompatibility between simplified-step adhesives and self-cured or dual-cured composites. Part II. Single-bottle, total-etch adhesive. J Adhes Dent. 2003;5(2):91-105.*

[11] *Swift EJ Jr, Perdigao J, Combe EC, Simpson CH 3rd, Nunes MF. Effects of restorative and adhesive curing methods on dentin bond strengths. Am J Dent. 2001;14(3):137-40.*

[12] *Tay FR, Pashley DH, Suh BI, Carvalho RM, Itthagarun A. Single-step adhesives are permeable membranes. J Dent. 2002;30(7-8):371-82.*

[13] *Tay FR, King NM, Suh BI, Pashley DH. Effect of delayed activation of light-cured resin composites on bonding of all-in-one adhesives. J Adhes Dent. 2001 Fall;3(3):207-25.*

[14] *Yao C, Yu J, Wang Y, Tang C, Huang C. Acidic pH weakens the bonding effectiveness of silane contained in universal adhesives. Dent Mater. 2018 May;34(5):809-818.*

[15] *Yoshihara K, Nagaoka N, Sonoda A, Maruo Y, Makita Y, Okihara T, Irie M, Yoshida Y, Van Meerbeek B. Effectiveness and stability of silane coupling agent incorporated in 'universal' adhesives. Dent Mater. 2016 Oct;32(10):1218-1225.*

[16] *Kim YR, Kim JH, Son SA, Park JK. Effect of Silane-Containing Universal Adhesives on the Bonding Strength of Lithium Disilicate. Materials (Basel). 2021 Jul 16;14(14):3976*

[17] *Van Meerbeek B, Yoshihara K, Yoshida Y, Mine A, De Munck J, Van Landuyt KL. State of the art of self-etch adhesives. Dent Mater. 2011 Jan;27(1):17-28.*

[18] *Fröhlich TT, Nicoloso GF, Lenzi TL, Soares FZM, De Oliveira Rocha R. The Thickness of the Adhesive Layer Increases the Misdiagnosing of the Radiolucent Zones and Restoration Replacement Indication. J Esthet Restor Dent. 2017 May 6;29(3):193-200*

[19] *Opdam NJ, Roeters FJ, Verdonschot EH. Adaptation and radiographic evaluation of four adhesive systems. J Dent. 1997 Sep;25(5):391-7.*

[20] *Menezes, L. M., da Silva, A. F., & Carvalho, R. M. (2016). "Influence of adhesive layer thickness on the detection of dental materials by radiography." Journal of Esthetic and Restorative Dentistry, 28(1), 16-22. DOI: 10.1111/jerd.12160*

[21] *Suh, Beyoung I. "Adhesive Systems." Principles of Adhesion Dentistry: A Theoretical and Clinical Guide for Dentists, AEGIS Publications, LLC, Newtown, PA, 2013, pp. 110–115.*

[22] *National Institute of Standards and Technology (NIST). Micrometer-scale Measurement of Human Hair Diameter by Optical Methods. Journal of Research of NIST, Vol. 118, 2013. DOI: 10.6028/jres.118.009*

[23] *International Organization for Standardization.* ISO 534:2011 — Paper and board — Determination of thickness, density and specific volume.

[24] *Takamizawa T, Imai A, Hirokane E, Tsujimoto A, Barkmeier WW, Erickson RL, Latta MA, Miyazaki M. SEM observation of novel characteristic of the dentin bond interfaces of universal adhesives. Dent Mater. 2019 Dec;35(12):1791-1804. doi: 10.1016/j.dental.2019.10.006. Epub 2019 Nov 12. PMID: 31727447.*