



CEREC® CAD/CAM solutions

Developed to make a difference... every step of the way

Essential restorative products designed to complement one another to provide a seamless CEREC workflow resulting in optimal outcomes, and overall better, safer, and faster dentistry.

dentsplysirona.com

Offering complete CAD/CAM solutions... every step of the way

It's all about practicing better, safer, and faster dentistry

Dentsply Sirona is pleased to present a carefully curated selection of restorative products specifically developed to optimize the CEREC® workflow process, as well as to enhance the overall treatment experience for you and your patients.

Each component—from the material blocks to the cement—has been purposefully engineered to impart a positive effect, not only the final restorative outcome, but also on workflow. From a procedural standpoint, you save time, increase efficiency, and improve the productivity of your practice. And from a treatment perspective, you can be confident in knowing the restorations you place will be consistently and predictably strong, beautiful, and long-lasting, case after case.

Whether you choose to craft your CEREC restorations with Celtra® Duo (ZLS) or CEREC® Zirconia, Dentsply Sirona offers a complete suite of restorative CAD/CAM essentials you need to ensure optimal outcomes.



A carefully curated selection of CAD/CAM restorative product essentials from a single source



A simplified, seamless, and efficient workflow



Intrinsically developed to work better together

Celtra® Duo

Zirconia-Reinforced Lithium Silicate (ZLS) Block

The complete solution for Celtra Duo (ZLS) restorations

Developed to make a difference at each step in the restorative process, each component of the Celtra Duo system was designed to perform ideally when used together. When used as a system, the result is a remarkably strong and long-lasting bond you can rely on.

Celtra Duo (ZLS) Blocks

A unique ultra-fine microstructure gives you the option to process Celtra Duo (ZLS) in your choice of two ways: Mill and Polish, or Mill and Fire. No other block provides this degree of workflow freedom and flexibility.



Prime&Bond active™ Universal Adhesive

Low film thickness minimizes pooling to allow passive seating of the restoration, and active moisture control ensures a reliable bond, even when dentin is too wet or too dry.



Calibra® Ceram Adhesive Resin Cement

Calibra Ceram cement provides impressive high strength when used with Prime&Bond active, as well as quick and easy cleanup.



CEREC® Zirconia

Translucent Zirconium Oxide Block

The complete solution for CEREC Zirconia restorations

Designed to perform better together, Calibra® Universal Self-Adhesive Resin Cement is simple and easy to use with CEREC Zirconia restorations. There's no need to prepare enamel or dentin with an etchant or bonding agent—simply apply Calibra Universal to the restoration and it's ready to seat.

CEREC Zirconia Blocks

A high-performance, pre-colored translucent zirconium oxide material with a high degree of flexural strength, CEREC Zirconia allows for tooth-conserving preparations for full-contour zirconia restorations.



Calibra® Universal Self-Adhesive Resin Cement

With its wide tack-cure window of up to 10 seconds* and an extended 45-second gel-phase, Calibra Universal cement ensures an easy, stress-free cleanup for all CEREC Zirconia restorations.

*10-second tack cure window equals five-second wave cure per surface. For excess cement cleanup, monowave output LED lights with a single peak output around 470nm are recommended. High power, dual, or broad spectrum lights may cause premature hardening of excess cement. Check curing light effect on mixed cement prior to clinical use.



Celtra® Duo

Zirconia-Reinforced Lithium Silicate (ZLS) Block

Finally, a CEREC® block that gives you total control. You choose the workflow process. You determine the level of esthetics you wish to achieve. Even the degree of strength is up to you. And Celtra Duo (ZLS) is the epitome of processing simplicity from start to finish, with fast firing times and no need for pins or putty.

Simplicity that matters: One highly esthetic block – two processing options

Option 1: Mill and Polish

(210 MPa flexural strength)

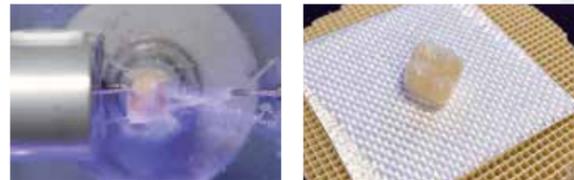


Mill

Polish

Option 2: Mill and Fire

(370 MPa flexural strength)



Mill

Fire

Remarkable optical properties for lifelike restorations

Natural opalescence, fluorescence, and pronounced chameleon effect give Celtra Duo (ZLS) restorations the appearance of natural teeth.

Celtra Duo (ZLS) Veneer



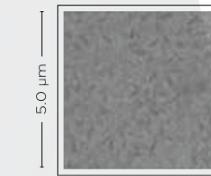
Final restoration



The ultra-fine microstructure makes all the difference

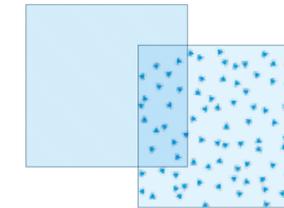
- Crystallites four to eight times smaller than lithium disilicate blocks
- Very fine-grained lithium silicate crystallites impart excellent light-optical and mechanical properties
- High flexural strength and high glass content results in an impressive strength and beauty profile

Microstructure comparison

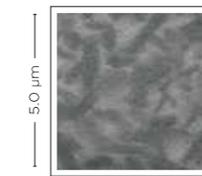


SEM image Celtra® Duo (ZLS) milled

ZLS Glass with completely dissolved zirconia

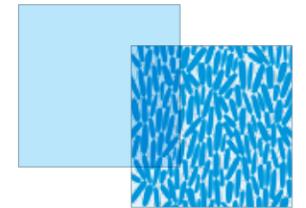


Lithium silicate crystallites 500-700nm



SEM image Lithium disilicate, milled

LS₂ Glass



Lithium disilicate crystallites 2000-4000nm

Marginal integrity for long-term clinical confidence



Material 1
IPS Empress® CAD

Material 2
VITABLOCS® Mark II

Material 3
IPS e.max®

Celtra Duo (ZLS)

Simple Cementation

The Celtra Duo (ZLS) 3-step restoration and cementation process

STEP 1: Design and mill the restoration

STEP 2: Apply Prime&Bond active™ adhesive directly to the tooth

STEP 3: Apply a thin, uniform layer of Calibra® Ceram cement to the internal surface of the restoration. The surface has to be etched with 5-9% HF acid for 30 sec. and silanated for 60 sec. Seat the restoration and remove any excess cement.



Rx Only
For Dental Use Only

Prime&Bond active™ Universal Adhesive

A reliable, convenient universal adhesive for Celtra® Duo (ZLS) restorations

With patented Active-Guard™ moisture control technology, Prime&Bond active adhesive provides well-balanced hydrophobic and hydrophilic properties to ensure complete coverage and penetration at varying moisture levels. So even if dentin is overly wet or dry, you get a reliable bond that actively guards against the leading causes of adhesive failure.



Active Mixing



Prime&Bond active

To ensure a homogeneous application, water and solvent evaporate together, leaving an even, consistent adhesive layer.



ScotchBond™ Universal

Cannot overcome the surface tension of water. Adhesive and water remain separated.



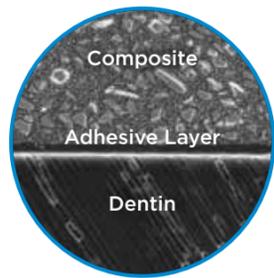
iBOND® Universal

Cannot overcome the surface tension of water. Adhesive and water remain separated.

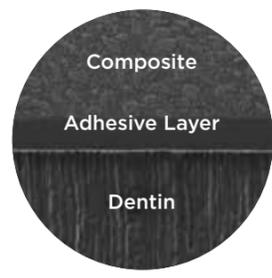
Low film thickness

Prime&Bond active adhesive self-levels to actively create a thin, uniform adhesive layer. Low film thickness minimizes pooling to allow passive seating of the restoration.

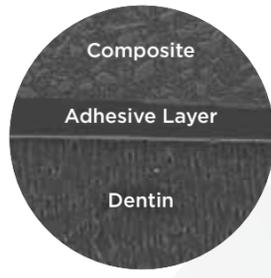
- Thick adhesives have a tendency to cause pooling
- Adhesive pools change the geometry of the preparation, impacting crown fit
- Adhesive pools can show up as translucent areas on a radiograph, easily misdiagnosed as secondary decay leading to unnecessary replacement



Prime&Bond active



Scotchbond Universal



Clearfil™ Universal

Source: "Film Thickness FE-SEM evaluation," Andre F. Reis, DDS, MS, PhD.

Calibra® Ceram Adhesive Resin Cement

A perfect companion for Celtra® Duo (ZLS) cementation

With its great strength and easy cleanup, Calibra Ceram cement is the ideal cementation companion for Celtra Duo (ZLS) restorations. Now you can enjoy the choice and control that Celtra Duo (ZLS) provides with the confidence of long-term restoration retention you get with Calibra Ceram cement.

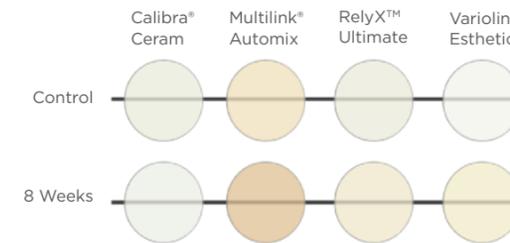
High strength

When combined with Prime&Bond active™ adhesive, Calibra Ceram cement provides high strength on various substrates and preparation types. This incredible strength is perfectly suited for all-ceramic crowns, such as those made with Celtra Duo (ZLS).

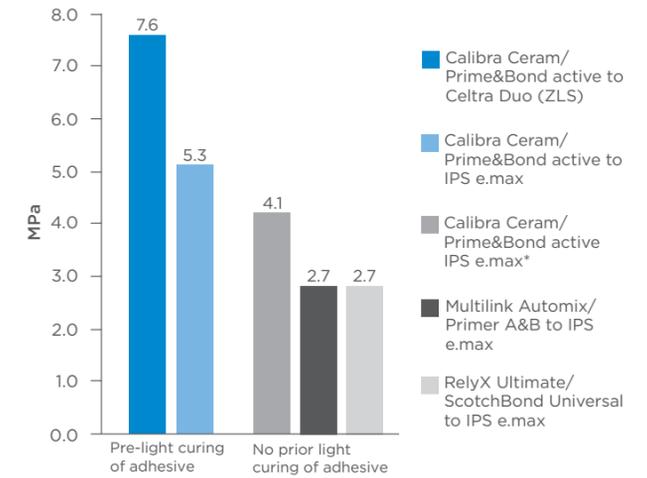
Retention of Celtra Duo (ZLS) vs. e.max® crowns after 10,000 thermal cycles.
Celtra Duo (ZLS) crowns cemented with Calibra Ceram cement have a higher retention than e.max crowns.

Enduring esthetics

Calibra Ceram cement, with its patented Shade Stable® technology, is formulated to ensure esthetic success in light-transmissible restorations, such as those made with Celtra Duo (ZLS).



Crown Retention After 10,000 TC



Test: Crown-pull Bond Strength Testing. Ceramics were treated with 5% HF and silanated. All adhesives were used in self-etch mode. All cements were self-cured except for the group with optional light-curing through crown. Artificial aging: 10,000 thermocycling (5-55°C). Source: Prof. John Burgess.

* light curing of adhesive through crown



Easy cleanup

A 45-second gel phase gives you the time you need for thorough, stress-free cleanup of excess cement.



CEREC® Zirconia

Translucent Zirconium Oxide Block

Available in ten classic VITA® shades, CEREC Zirconia is a pre-colored, translucent zirconium oxide material designed to mimic the shade of natural teeth without the addition of liquid coloring. CEREC Zirconia is indicated for single-unit crowns, multiple-unit bridges, and implants.



Full-contour restorations in a single visit

- **Minimally invasive:** Full contour zirconia restorations require a lower wall thickness and less reduction in tooth structure for full strength
- **Strength:** Full contour zirconia ensures that you and your patients receive long-lasting restorations
- **Perfect fit:** 25% larger pre-sintered state yields highly precise margins and occlusal surfaces

Tooth-conserving preparation

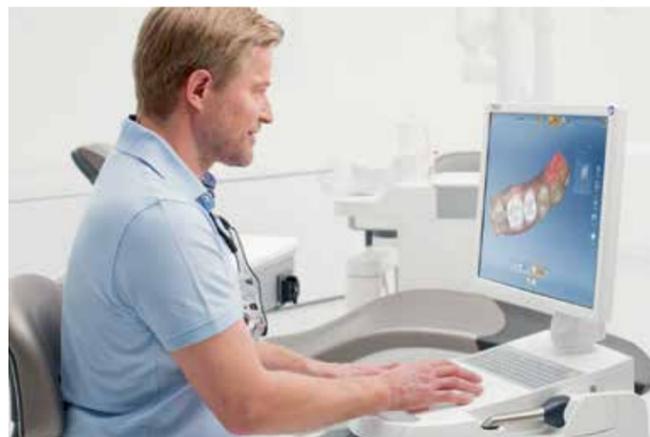
- The high strength of CEREC Zirconia benefits both dentist and patient
- Restorative treatment is even possible in confined spaces and when replacing metal restorations, hardly any of the old preparations have to be removed
- Preparations preserve natural tooth structure and can be cemented conventionally

Simplified workflow

Step 1: Scan the preparation



Step 2: Design the restoration



Step 3: Mill the restoration



Step 4: Sinter and glaze



Simple Cementation

The CEREC® Zirconia 3-step restoration and cementation process

STEP 1: Design and mill the restoration

STEP 2: Apply a thin, uniform layer of Calibra® Universal cement to the internal surface of the restoration

STEP 3: Seat the restoration and remove any excess cement



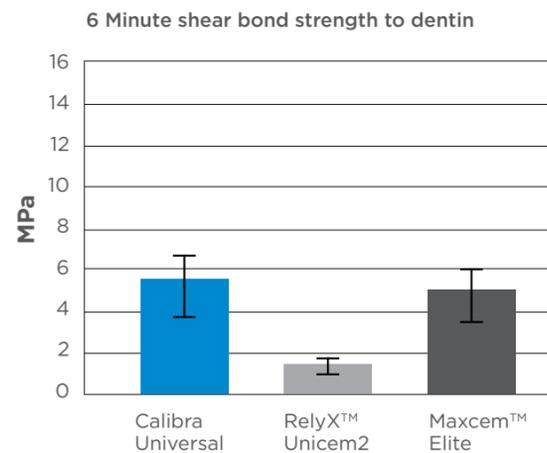
Calibra® Universal Self-Adhesive Resin Cement

With a formulation that suits so many types of restorations, it's no wonder it's called Calibra Universal. As such, it's the ideal choice for the cementation of CEREC® Zirconia restorations.

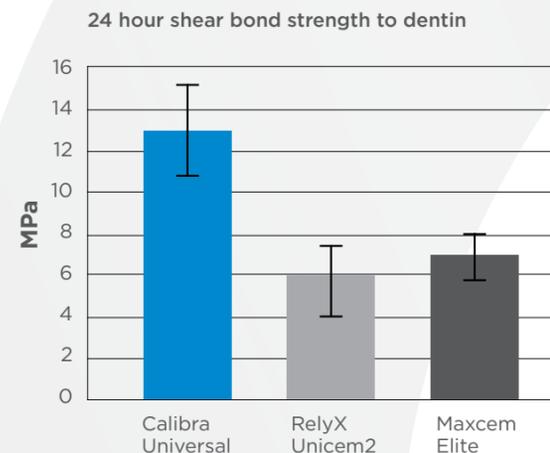


Robust bonding performance

Get the reliability and predictability of proven immediate and short-term bond strength for long-lasting results.



Test: Shear Bond Strength to dentin after self-curing for 6 minutes at 37°C. Source: Dentsply Sirona.



Test: Shear Bond Strength to dentin after self-curing for 24 hours at 37°C. Source: Dentsply Sirona.

Avoid misdiagnosis

- High radiopacity can aid in providing a clear view of the material within the crown
- This helps avoid a misdiagnosis of gaps or voids, which can lead to costly remakes



Cleanup is a snap

Benefit from the swiftness of tack curing without the stress of over-curing.

- Tack cure with confidence: Up to 10-second initiation phase*
- More cleanup time: 45-second gel phase



*10-second tack cure window equals five-second wave cure per surface. For excess cement cleanup, monowave output LED lights with a single peak output around 470nm are recommended. High power, dual, or broad spectrum lights may cause premature hardening of excess cement. Check curing light effect on mixed cement prior to clinical use.

Pocket for Sell Sheet



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Clearfil Universal, iBOND Universal, IPS e.max, IPS Empress CAD, Maxcem Elite, Multilink Automix, RelyX Ultimate, RelyX Unicem2, ScotchBond Universal, Variolink Esthetic, VITA, and VITABLOCS Mark II are not trademarks of Dentsply Sirona.

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