

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.



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.

A unique ultra option to proof two ways: other block p freedom and

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 elect® Universal Dental Adhesive

Low film thickness minimizes pooling to allow passive seating of the restoration, and the clear color helps to ensure that the esthetic outcome of your restoration is not compromised.



Calibra® Ceram Adhesive Resin Cement

Calibra Ceram cement provides impressive high strength when used with Prime&Bond elect adhesive, 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.



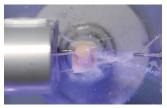
Celtra® Duo

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

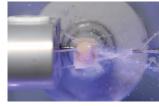
Option 1: Mill and Polish (210 MPa flexural strength)





Polish

Option 2: Mill and Fire (370 MPa flexural strength)





Mill

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



restoration

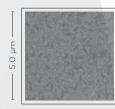


Calibra® Veneer Esthetic Resin Cement should be used to cement a Celtra Duo (ZLS) Veneer.

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

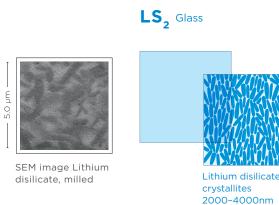
Microstructure comparison



SEM image Celtra® Duo (ZLS) milled

ZLS Glass with completely dissolved zirconia

Lithium silicate crystallites 500-700nm



Marginal integrity for long-term clinical confidence



Simple Cementation

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

STEP 1: Design and mill the restoration

STEP 2: Apply Prime&Bond elect® 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.





 $P_{\!\!\!\mathbf{X}}$ only



Prime&Bond elect® Universal Dental Adhesive

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

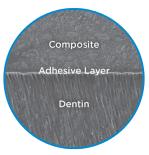
Prime&Bond elect adhesive is based on 20 years of clinical success with the unique combination of acetone and PENTA (dipentaerythritol pentaacrylate monophosphate) monomer technology. PENTA has a molecular structure advantage to make Prime&Bond elect adhesive better able to resist degradation of the bond. The acetone acts as a water chaser enabling fast, easy diffusion into moist dentin tubules and easy evaporation of the solvent.

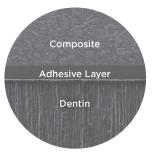
- For all direct and indirect restorations
- For all etching techniques: self-etch, etch&rinse, and selective enamel etching
- Low film thickness
- Cures clear
- Virtually no post-operative sensitivity¹
- High bond strength

Vine Bond elect. Universal Dental Adhesive SmL Ry Only For Dental Use Only

Low film thickness

Thick adhesives can have a tendency to pool in the corners of a preparation. These adhesive pools can show up as translucent areas on a radiograph, which can easily be misdiagnosed as a void, gap, or secondary decay, leading to unnecessary replacement. Thicker adhesives may also change crown prep geometry, impacting crown fit. Prime&Bond elect adhesive creates a thin layer for passive crown seating.





Prime&Bond elect adhesive

ScotchBond[™] Universal

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

Cures Clear

The clear color of Prime&Bond elect adhesive helps to ensure that the esthetic outcome of your restoration is not compromised.





Prime&Bond elect adhesive

ScotchBond Universal

Reference: 1. Data on file.

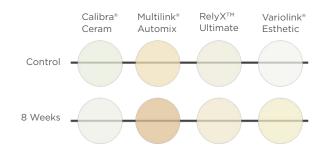
Calibra® Ceram Adhesive Resin Cement

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.

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).



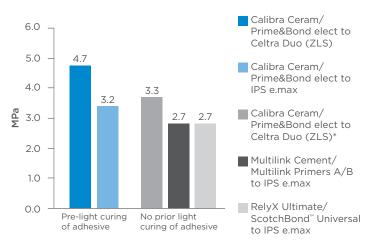
High strength

When combined with Prime&Bond elect® 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.

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

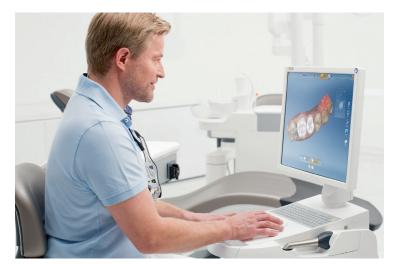
Simplified workflow

Step 1: Scan the preparation



Step 2: Design the restoration

CEREC® Zirconia



The CEREC® Zirconia 3-step restoration and cementation process

Simple Cementation

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



Step 3: Mill the restoration



Step 4: Sinter and glaze



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Calibra® Universal Self-Adhesive Resin Cement

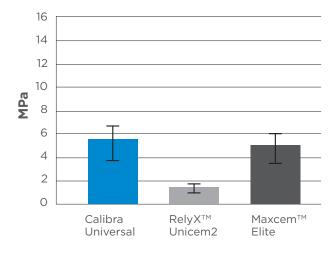
With a formulation that suits so many types of restorations, it's no wonder it's called Calibra Universal. As such, it's the ideal choice for the cementation of CEREC® Zirconia restorations.



Robust bonding performance

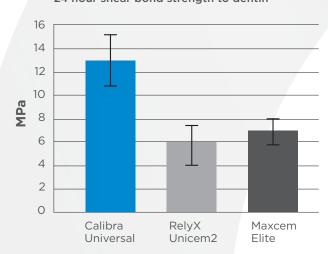
Get the reliability and predictability of proven immediate and short-term bond strength for long-lasting results.

6 Minute shear bond strength to dentin



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

24 hour shear bond strength to dentin



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.

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CEREC® CAD/CAM solutions for optimized workflow and optimized outcomes...

every step of the way

The entire family of CEREC product essentials from Dentsply Sirona was designed with workflow optimization in mind, all in an effort to ensure better, safer, and faster dentistry. Each component in the CEREC process was developed to complement, strengthen, and enhance the working properties of one another. This streamlines your workflow, saves time, and ultimately results in more consistent and predictable results.

For more information and to order, contact your Dentsply Sirona representative directly.











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