Celtra®, Cercon®, Celtra® Ceram, Universal Stain and Glaze

All-ceramic solutions for every need

Brochure for the dental laboratory

Dentsply Sirona Prosthetics
## Content

**Celtra Ceram**
- High esthetic veneering 4

**Celtra Press**
- Monolithic – stained and glazed 6
- Cut-back technique – Enamel and glaze 7
- Fully veneered 8

**Cercon xt, Cercon ht**
- Monolithic – stained and glazed 10
- Cut-back technique – Enamel and glaze 11
- Fully veneered 12
- Build-up scheme – Fully veneered restorations 14
- Description of ceramic masses 15

**Tips and Tricks**
- Exact reproduction of the preparation shade 16
All-ceramic solutions for every need

Our comprehensive all-ceramic concept offers solutions at the highest esthetic level, while at the same time providing easy and reliable workability. Whether you want quick results or are geared up for partial veneering or full customization – we have the right material for you.

With our framework materials, and the perfectly matched Celtra Ceram veneering material as well as the Universal Stain and Glaze set, you can achieve:

› Excellent esthetics
› Maximum shade fidelity
› Reliable, reproducible results
› Easy processing

<table>
<thead>
<tr>
<th>FRAMEWORK MATERIALS</th>
<th>CUSTOMIZATION OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Celtra Press</strong></td>
<td><strong>Celtra Ceram</strong></td>
</tr>
<tr>
<td>Zirconia-reinforced lithium silicate (ZLS)</td>
<td>(All-ceramic veneering porcelain)</td>
</tr>
<tr>
<td></td>
<td><strong>Universal Stain and Glaze</strong></td>
</tr>
<tr>
<td><strong>Celtra Duo</strong></td>
<td><strong>Celtra Ceram</strong></td>
</tr>
<tr>
<td>Zirconia-reinforced lithium silicate (ZLS)</td>
<td>(All-ceramic veneering porcelain)</td>
</tr>
<tr>
<td></td>
<td><strong>Universal Stain and Glaze</strong></td>
</tr>
<tr>
<td><strong>Cercon xt</strong></td>
<td><strong>Celtra Ceram</strong></td>
</tr>
<tr>
<td>Extra translucent zirconia</td>
<td>(All-ceramic veneering porcelain)</td>
</tr>
<tr>
<td></td>
<td><strong>Universal Stain and Glaze</strong></td>
</tr>
<tr>
<td><strong>Cercon ht</strong></td>
<td><strong>Celtra Ceram</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>Universal Stain and Glaze</strong></td>
</tr>
</tbody>
</table>
High esthetic veneering

Celtra Ceram
Celtra Ceram introduces the versatility of a single veneering system designed exclusively for all-ceramic substructures including lithium silicates and zirconia oxides.

CTE 25–500°C: 9.0 x 10⁻⁶K⁻¹

+ Versatile concept
  Smart veneering concept suitable for both aesthetic and production environments utilizing core masses and multiple effect powders for all-ceramic restorations

+ Premium esthetics
  Smart collection of core masses for high efficiency and yet a multitude of highly esthetic effect porcelains satisfy the most creative minds in your dental laboratory

+ Consistent performance
  Shade accurate, stable and forgiveness achieved using a proprietary mineral ore source with seamless blending to all ceramic substructures

Universal Stain and Glaze
The Universal Stain and Glaze is specially formulated with maximum compatibility to satisfy all of your needs in a single finishing system.

CTE 25–400°C: 8.0±0.5 x 10⁻⁶K⁻¹

+ Ultimate efficiency
  Universal material compatibility eliminates multiple finishing systems in your lab

+ Easy to use
  Preferred gel format simplifies training and makes it easier to achieve a consistent outcome

+ Versatile performance
  Able to be used internally and externally to achieve highly individualized effects
CELTRA CERAM

Indications

Celtra Ceram is suitable for veneering all-ceramic frameworks, including:

- Celtra Press Zirconia-reinforced Lithium Silicate (ZLS) frameworks: 9.7 x 10⁻⁶K⁻¹ (CTE 25-500°C)
- Lithium disilicate frameworks: 10.0 – 10.5 x 10⁻⁶K⁻¹ (25-500°C)
- Cercon ht zirconia framework: 10.5 x 10⁻⁶K⁻¹ (25-500°C)
- Cercon xt zirconia framework: 10.1 x 10⁻⁶K⁻¹ (25-500°C)
- Zirconia frameworks: 10.1 – 11.0 x 10⁻⁶K⁻¹ (25-500°C)

Features

46 Dentin Shades:

- 4 Bleach BL1–BL4
- 16 A1–D4 VITA* classical
- 26 Shades Series (keyed to VITA* 3D-Master)

*VITA, VITA classical A1-D4, and 3D-MASTER are registered trademarks of VITA Zahnfabrik H. Rauter GmbH & Co. KG.

UNIVERSAL STAIN AND GLAZE

Indications

Dentsply Sirona Universal Stain and Glaze are indicated for finishing the following restorations:

- Celtra Press zirconia reinforced lithium silicate (ZLS)
- Celtra Duo zirconia reinforced lithium silicate (ZLS)
- Cercon ht zirconia
- Cercon xt zirconia
- Kiss porcelain (except Duceragold)
- Ceramco porcelain
Monolithic – Celtra Press* MT A2
Universal Stain and Glaze

01 Baseline situation
Due to the exceptional light-optical properties of Celtra Press, you can achieve excellent esthetics quality already in a monolithic restoration.

02 Customization can be done quickly and safely: Customize the mesial and distal line angles areas with Incisal Stain i1. Refine the mamelon structures with Cream and add Violet characterizations between the mamelons.

03 After stain firing, just apply High Flu overglaze across the monolithic restoration. The final shade check confirms the quick and easy shade reproduction with great esthetics.

04 Result
*With Celtra Duo, the possibilities available are identical with the options shown here.
Cercon Press framework with established mamelon structures.

Build the labial and palatal enamel areas with a single enamel (E1).

E1 has been applied.

After ceramic firing.

After finishing the shape and surface texture.

Finishing in this case requires no stains but simply a glaze.

The result: The desired shade has been matched very closely, and the restoration looks “live” with only one enamel and glaze.

Cut-back technique – Celtra Press LT A2
Celtra Ceram, Universal Stain and Glaze

Celtra Press
Enamel and glaze
The framework has been designed to reflect the reduced anatomical shape of the restoration.

Build up the upper part of the crown with Celtra Ceram Dentin A2 and create delicate mamelon structures. Highlight the incisal edge with Enamel Opal EO4. Emphasize the mamelons and incisal ridges with EO4 as well.

Then complete the build-up of the restoration with Enamel E1.

After the ceramic firing, finish the shape and prepare the restoration for the second layer.

On the cervical aspect, use a mixture of Enamel Effect EE3 and Enamel Opal EO4. Support the mesial and distal ridges with Celtra Ceram Enamel Effect EE5.

In the central incisal labial area, add a thin layer of Enamel Opal EO1. Finalize the incisal edges with Enamel Effect EE6.

After the ceramic firing, finalize the shape and create the desired surface texture.

The result: A perfect shade match. The opalescence of the incisal edge supports the natural appearance of the restoration.

Glaze the entire surface of the Celtra Press restoration the High Flu glaze and add Crème stain to design delicate individual features on the incisal aspect.
Premium esthetics with Celtra Press

Fully veneered
Monolithic – Cercon xt A2
Universal Stain and Glaze

01
Baseline situation
The extra-translucent Cercon xt zirconia material provides a high level of esthetics with monolithic restorations. All that is required is final customization with universal stains and glaze.

02
Customize the crown body with a bit of Pink, then highlight the enamel ridges with Incisal Stain i1 and support the incisal area with its mamelon structures with a bit of Crème.

03
After stain firing, add High-Flu Universal Overglaze to the monolithic restoration. The final shade check confirms the quick and easy shade reproduction with great esthetics.

04
Result
Cercon xt
stained and glazed
Cut-back technique – Cercon ht A2
Celtra Ceram, Universal Stain and Glaze

01
Cercon ht framework with established mamelon structures.

02
Build the labial and palatal enamel areas with a single enamel (E1).

03
E1 has been applied.

04
Finishing the shape and surface texture after ceramic firing.

05
Finishing with stain and glaze in a single step. Paint a fine line of Crème on the incisal edges. Then paint on Incisal Stain i along the posterior incisal edge.

06
The result: The desired shade has been matched, and the restoration looks “live” with just one enamel material and some stain.

Cercon ht
Enamel and glaze
As a high translucent zirconia material, Cercon ht provides an excellent foundation for bridges in the posterior region.

Build up the buccal, labial, and occlusal dentin aspects with Dentin DA2.

Emphasize the ridges of the occlusal surfaces with Celtra Ceram Enamel E4.

Then complete the build-up of the restoration with Enamel E1.

Customization with stains was deliberately omitted in this case. The Cercon ht restoration is finally glazed with Universal Overglaze High-Flu.

The result: a restoration that matches the desired target share perfectly.
Premium esthetics, safe and reliable with Cercon ht

Fully veneered
Build-up scheme

Fully veneered restorations

FIRST CERAMIC FIRING

SECOND CERAMIC FIRING

All laboratory work and build-up schemes in this brochure have been created by Yamen Chaban, dental technician and trainer from Dentsply Sirona
Description of ceramic masses

Enamel Opal (EO)

EO1 - Extra Light, EO2 - Light, EO3 - Medium
Opalescent enamel inspired by nature to expand design options in the incisal area without affecting core color. Enamel Opal increases vitality without being too transparent (no greying effect) yet maintains a transparent visual character. A true multifunctional material to quickly achieve high esthetic results.

Enamel Opal Transparent (EO4)
A strong opalescent, almost transparent multi-functional powder with broad application within the system. EO4 can be used in pure form and/or mixed with all other powders to increase opalescence.

Enamel Opal HT (EO5)
A translucent enamel to enhance accents of yellow and orange opalescent effects. Especially formulated for highly translucent core materials, yet versatile to encourage creativity.

Enamel Opal LT (EO6)
A translucent powder with higher value and higher opacity than EOS intended for use with lighter and bleached shade substructures, yet similar to EOS in versatility to promote creativity.

Enamel Effect (EE)

Enamel Effects of varying hues that can be applied in incisal areas to enhance color depth and introduce natural features of adjacent dentition.

Enamel Effect Sunrise (EE1) / Enamel Effect Sunset (EE3)
Opalescent effect powder can be used for yellow/orange (Sunrise), as well as orange/reddish (Sunset) accents in the enamel areas. They are well suited for increasing the chroma level at the 2nd or 3rd dentin firings. Sunset is mainly used for A-shades, whereas Sunrise is used mainly for B-shades. Both powders can be diluted using EO4 Enamel Opal Transparent to reduce the intensity of yellow and reddish colors.

Enamel Effect Violet (EE2) / Enamel Effect Sky (EE5)
Opalescent effect powders for discreet accent rod formations and for creating strong illusions of depth and translucency in incisal areas. They can be diluted using EO4 Enamel Opal Transparent to reduce the intensity of the violet or sky.

Enamel Effect Fog (EE4)
Opalescent effect powder for grayish incisal areas can be diluted by using EO4 Enamel Opal Transparent to reduce the gray intensity.

Enamel Effect Ivory (EE6)
Whitish opalescent effect powder for palatal/lingual ridges in the anterior area and to enhance occlusal cusps in the posterior region as well – can be diluted by using EO4 Enamel Opal Transparent to reduce the intensity of milky-ivory color.

Power Dentin (PD)
Power Dentins are highly chromatic, fluorescent and intensive powders for individual chromatic adjustments. The Power Dentins can be used in all areas to increase the chroma in the cervical, palatal or occlusal fossa areas, and are especially useful for lithium disilicate frameworks lacking chroma. The powders can be used pure or in varying mixtures depending upon desired effect and intensity.

Opaceous Dentin (OD)
Opaceous Dentins are similar in chroma and hue to Dentins, but with a 25% (average) increase in opacity. Opaceous Dentins can be used to control light and translucent effects in the body of the restoration. They are widely used for masking core substructures in zirconia for more life-like restorations. The powders can be used pure or in varying mixtures depending upon desired effect and intensity.

Dentin Effect (DE)
Dentin Effects are intensive powders in a range of cool and warm hues which can be used as rod formations, accents and chromatic or value adjustments plus varied effects. EO4 Enamel Opal Transparent can be used to dilute and reduce the intensity.

Dentin Gingiva (DG)
Gingiva powders in multiple shades mimicking soft tissue areas. Dentin Gingiva has same translucency as dentin and is fired during dentin applications at 770 °C, which is especially helpful in veneering implant-supported frameworks.

High Flu Universal Overglaze
The High Flu Universal Overglaze is a glaze mass used for monolithic zirconia restorations to achieve a higher fluorescence, regulating brightness.

Universal Overglaze
The Universal Overglaze is suitable for glazing the ceramic materials.

Add-On Correction (C) & Add-On Gingiva (G)
Add-On Correction porcelain can be used for making final adjustments. Similarly, Add-On Gingiva can be used for final corrections in gingival areas. Both are low fusing ceramics and can be used either with or after glaze firing.

1 The A-D designations correspond to Vita “Classical Shade Guide which is meant to be a guide not a match. Vita is a registered trademark of Vita Zahnfabrik H. Rauter GmbH & Co.
Tips and Tricks

Exact reproduction of the preparation shade

The Dentsply Sirona Prosthetics Die Material was designed to mimic the actual shade of the prepared tooth. When this material is placed inside the pressed Celtra crown, it will assist in accurate shade reproductions.

**What to do with discolored dies?**
Use Opaque Dentins at the prescribed mixing ratios to cover a grayish tint on heavily discolored dies.

**What if the desired framework shade is not available?**
Use a reduced amount of opaceous dentins to increase the chroma or to darken the pellet (example: for shade A4 and pellet A3, apply a thin layer over the entire surface). If space is limited, complete with Universal Stains before the build-up.

<table>
<thead>
<tr>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A3.5</th>
<th>A4</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>F12</td>
<td>F10</td>
<td>F9</td>
<td>F7</td>
<td>F1</td>
<td>F11</td>
<td>F10</td>
<td>F8</td>
<td>F3</td>
<td>F4</td>
<td>F5</td>
<td>F6</td>
<td>F2</td>
<td>F3</td>
<td>F3</td>
</tr>
</tbody>
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