

# IPS e.max<sup>®</sup> CAD Crown by NobelProcera<sup>™</sup>

## FACT SHEET VERSION 1

### Overview

- High-strength lithium disilicate glass ceramic (LS<sub>2</sub>)
- For full-contour cement-retained crowns
- Optimal esthetics with a wide range of shades (16 A-D, 4 Bleach BL Shades in LT translucency)
- Efficient characterization and crystallization process
- Layering with IPS e.max Ceram for high-end solutions
- Both conventional and adhesive cementation possible
- Individual computer-aided design in NobelProcera Software for optimal esthetics and functionality



### Material characteristics

<b>Composition:</b>	SiO <sub>2</sub> , Li <sub>2</sub> O, K <sub>2</sub> O, MgO, Al <sub>2</sub> O <sub>3</sub> , P <sub>2</sub> O <sub>5</sub> and other oxides.
<b>Flexural strength (biaxial)*:</b>	360 MPa
<b>Fracture toughness:</b>	2.25 MPa m <sup>0.5</sup>
<b>Modulus of elasticity:</b>	95 GPa
<b>Vickers hardness :</b>	5800 MPa
<b>Chemical solubility*:</b>	40 µg/cm <sup>2</sup>
<b>Crystallization temperature:</b>	840–850°C/1544–1562°F
<b>CTE (100–400°C):</b>	10.2 [10 <sup>-6</sup> /K]
<b>CTE (100–500°C):</b>	10.5 [10 <sup>-6</sup> /K]

\*According to ISO 6872

### Characterization/Veneering

- IPS e.max CAD Crystall./Glaze, Shades and Stains for the staining technique on the *non-crystallized* restoration. All necessary materials to finish the non-crystallized restoration are combined in the IPS e.max CAD Crystallization Kit.
- IPS e.max Ceram (nano-fluor-apatite glass ceramic) for the staining, cut-back and layering technique on the *crystallized* restoration

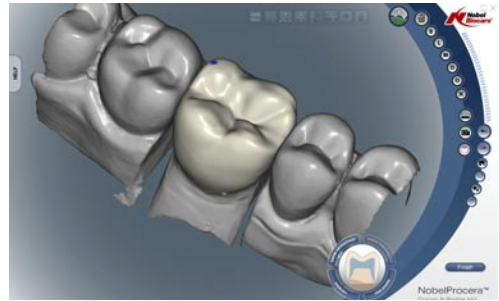


Additional supporting guidelines are available from Ivoclar Vivadent on [www.ivoclarvivadent.com](http://www.ivoclarvivadent.com)

### Additional information

---

- IPS e.max CAD is milled and processed in a crystalline, intermediate state, when it shows its typical “blue” color.
- Non-crystallized restoration is finished with suitable grinding instruments. Grind the occlusal surface to smooth out the surface structure created by the CAD/CAM procedure. Clean the restoration with ultrasound or blast with steam jet – Do not blast the restorations with Al<sub>2</sub>O<sub>3</sub> or glass polishing beads.
- During crystallization firing in a regular ceramic furnace (i.e. Programat P500) the restoration reaches its final physical properties (strength of 360 MPa) and the corresponding optical properties (translucency, tooth color)



### Indications and design features

---

- Full-contour crowns in the anterior and posterior region
- Implant superstructures for single-tooth restorations (anterior and posterior region)

### Contraindications and design limitations

---

- Fully veneered molar crowns
- Very deep subgingival preparations
- Patients with substantially reduced residual dentition
- Bruxism
- Any other use not listed in the indications

### NobelProcera™ – certified quality

---

IPS e.max® CAD Crowns by NobelProcera are guaranteed for five years after shipping date; the NobelProcera Product Warranty covers the NobelProcera products and does not include any additional costs. NobelProcera also provides certificates of material authenticity.



IPS e.max® CAD is a registered trademark of Ivoclar Vivadent AG.

GMT 20555 GB 1008 © Nobel Biocare Services AG, 2010. All rights reserved.

Nobel Biocare, the Nobel Biocare logotype and all other trademarks are, if nothing else is stated or is evident from the context in a certain case, trademarks of Nobel Biocare.

Product images are not necessarily to scale. Disclaimer: Some products may not be regulatory cleared/released for sale in all markets.

Please contact the local Nobel Biocare sales office for current product assortment and availability.