

# IPS e.max<sup>®</sup> ZirCAD

## Prime and Prime Esthetic

### Instructions for Dentists

#### For the fabrication of

##### ✓ Crowns



##### ✓ 3-unit bridges



##### ✓ 4- to multi-unit bridges with max. 2 pontics (only IPS e.max ZirCAD Prime)<sup>(1)</sup>



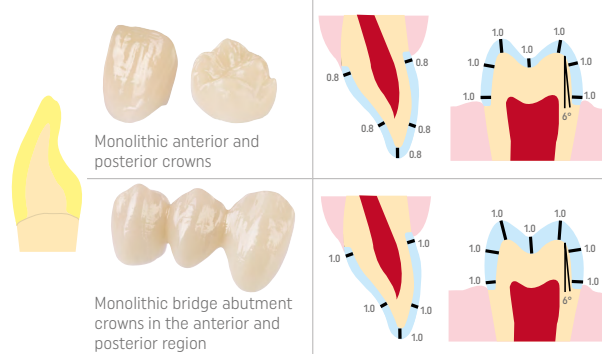
#### Preparation

##### Observe the general rules for all-ceramics:

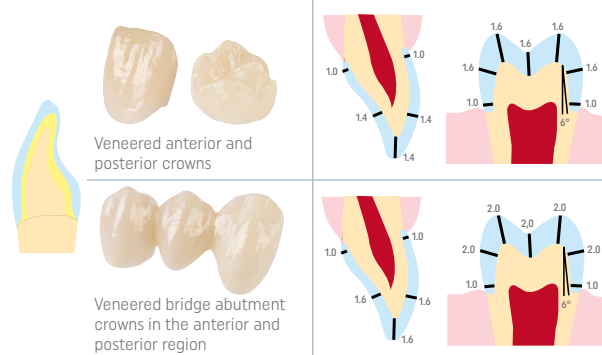
- Prepare no angles or edges
- Prepare a shoulder with rounded inner edges or a chamfer at an angle of 10°–30°.
- Evenly reduce the anatomical shape while observing the stipulated minimum wall thicknesses (mm).
- For conventional and/or self-adhesive cementation, the preparation must demonstrate retentive surfaces (preparation height at least 4 mm).



##### Minimum preparation depth for monolithic restorations



##### Minimum preparation depth for veneered restorations<sup>(4)</sup>



#### Cementation of crowns and bridges

Cementation method	Adhesive	Self-adhesive/conventional
Cleaning	Cleaning with Al <sub>2</sub> O <sub>3</sub> (25–70 μm) at a maximum pressure of 1 bar (14.5 psi).	
	Cleaning with Ivoclean <sup>®</sup> after try-in	
Conditioning	60 s with Monobond <sup>®</sup> Plus	–
Cementation	Variolink <sup>®</sup> Esthetic	SpeedCEM <sup>®</sup> Plus



For more detailed information on cementation go to: [www.cementation-navigation.com](http://www.cementation-navigation.com)

The range of available products may vary from country to country

#### Adjustments, polishing

Perform wet processing intraorally and dry processing extraorally.

	Zirconium oxide (ZrO <sub>2</sub> )	Lithium disilicate glass-ceramic (LS <sub>2</sub> ) and zirconium oxide (ZrO <sub>2</sub> )
Large and small adjustments	Fine diamond <sup>2) 3)</sup>	Extra-fine diamond <sup>2) 3)</sup>
Polishing	2-step polishing with OptraGloss <sup>®</sup> <sup>1)</sup>	2-step polishing with OptraGloss <sup>®</sup> <sup>1)</sup>

<sup>1)</sup> Maximum rotation speed 10 000 rpm

<sup>2)</sup> Intraorally – Maximum rotation speed 15 000 rpm

<sup>3)</sup> Extraorally – Maximum rotation speed 20 000 rpm

Use fine diamonds for large and small adjustments. Smooth surfaces reduce plaque accumulation and the risk of abrasion for antagonists.

After extraoral or intraoral grinding, the contact points can be polished to a high gloss using OptraGloss<sup>®</sup>.

IPS e.max ZirCAD Prime:  
Flexural strength<sup>(2)</sup>: 1200 MPa  
Fracture toughness<sup>(3)</sup>: > 5 MPa · m<sup>1/2</sup>

IPS e.max ZirCAD Prime Esthetic:  
Flexural strength<sup>(2)</sup>: 850 MPa  
Fracture toughness<sup>(3)</sup>: 3.6 MPa · m<sup>1/2</sup>

<sup>(1)</sup> Only IPS e.max ZirCAD Prime is suitable for the fabrication of bridges with up to 14 units. IPS e.max ZirCAD Prime Esthetic is only suitable for bridges with up to 3 units. R&D Ivoclar Vivadent, Schaan, Liechtenstein

<sup>(2)</sup> Typical mean value of biaxial flexural strength (dentin), R&D Ivoclar Vivadent AG, Schaan, Liechtenstein

<sup>(3)</sup> Measurement of the fracture toughness according to Vickers indenter method (dentin), R&D Ivoclar Vivadent AG, Schaan, Liechtenstein

<sup>(4)</sup> Only IPS e.max ZirCAD Prime. IPS e.max ZirCAD Prime Esthetic restorations may not be fully veneered.

CE 0123



Manufacturer:  
Ivoclar Vivadent AG,  
9494 Schaan/Liechtenstein  
[www.ivoclar.com](http://www.ivoclar.com)



Rx only  
For dental use only!