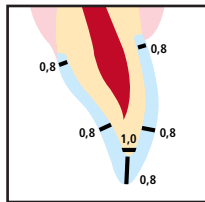


ZirCAD®

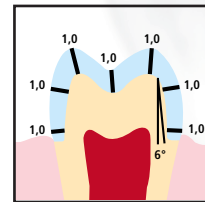
Preparation and Cementation Guidelines

IPS e.max ZirCAD MT/MT Multi Preparation



Monolithic anterior crowns

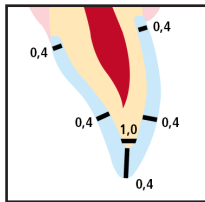
- Incisal and/or occlusal reduction of the tooth structure by at least 0.8 mm
- Reduction in the labial or lingual area and in the cervical area by at least 0.8 mm



Monolithic posterior crowns

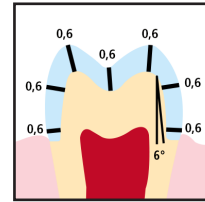
- Occlusal reduction of the tooth structure by at least 1.0 mm
- Reduction in the vestibular or lingual area, as well as the cervical area by at least 1.0 mm

IPS e.max ZirCAD LT/MO Preparation



Monolithic anterior crowns

- Incisal and/or occlusal reduction of the tooth structure by at least 0.4 mm
- Reduction in the labial or lingual area, as well as the cervical area by at least 0.4 mm



Monolithic posterior crowns

- Occlusal reduction of the tooth structure by at least 0.6 mm
- Reduction in the vestibular or lingual area, as well as the cervical area by at least 0.6 mm

If needed, additional preparation and cementation information can be found in the IPS e.max ZirCAD Labside instructions for use.

Cleaning the Restoration




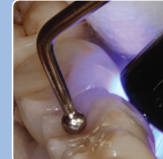

Conditioning the IPS e.max ZirCAD restoration surface in preparation for cementation is highly recommended. Sandblasting can be done using Al₂O₃ at max 1 bar of pressure and saliva can easily be removed by means of Ivoclean; a universal cleaning paste that effectively cleans the bonding surface of all types of restorations after try in. For adhesive cementation, sandblast, clean and condition the bonding surface using Monobond Plus.



Cementation of the Restoration

Esthetic cementation options are necessary for harmonious intraoral shade effects with all-ceramic restorations. IPS e.max ZirCAD restorations can be seated by means of adhesive cement or conventional cement. SpeedCEM Plus, a self-adhesive, self-curing resin cement featuring optional light curing is particularly suitable for the placement of zirconium oxide restorations.



Clean Restoration		Simplified Cementation with SpeedCEM PLUS			
	<ul style="list-style-type: none"> • Rinse restoration with water, then air dry. • Cover entire internal surface with Ivoclean. • Allow to react for 20 seconds then rinse and air dry. 				
		Step 1: Seat <ul style="list-style-type: none"> • Apply SpeedCEM Plus cement directly into the restoration. 	Step 2: Clean-Up <ul style="list-style-type: none"> • After seating, light-cure each quarter surface for 1 sec. The cement will achieve a gel-like consistency for easy clean-up. • Excess material can be easily removed with a scaler. 	Step 3: Final Cure <ul style="list-style-type: none"> • Utilize Liquid Strip to eliminate oxygen-inhibited layer. • Light-cure all margins for 20 sec. • Rinse off Liquid Strip 	Step 4: Finish <ul style="list-style-type: none"> • Finish the proximal surfaces and polish the restoration margins e.g. DptraPol.

High quality materials, as well as professional preparation and processing are prerequisites for producing restorations that fulfill the patient's long-term requirements. The following basic parameters and principles should be observed:

IPS e.max ZirCAD MT IPS e.max ZirCAD MT Multi	Anterior region		Posterior region		Design type
	Minimum layer thickness in mm	Connector dimensions in mm ²	Minimum layer thickness in mm	Connector dimensions in mm ²	
Crowns	0.8	–	1.0	–	supports the tooth shape and the gingiva shape (incisal, occlusal and/or basal)
3-unit bridges	1.0	12*	1.0	16	

* Height: 4 mm, Width: 3 mm

IPS e.max ZirCAD LT IPS e.max ZirCAD MO	Anterior region		Posterior region		Design type
	Minimum layer thickness in mm	Connector dimensions in mm ²	Minimum layer thickness in mm	Connector dimensions in mm ²	
Crowns	0.4	–	0.6	–	supports the tooth shape and the gingiva shape (incisal, occlusal and/or basal)
3-unit bridges	0.6	7	0.6	9	
4- to multi-unit bridges with 2 pontics *	0.6	9	0.7	12	
Cantilever bridges with one pontic	0.7	12	0.7	12	

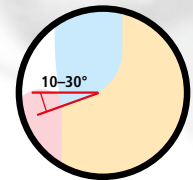
* In Canada, bridge indications are limited to 6 units with a maximum of 2 connected pontics.

The following preparation guidelines apply:

- No angles or sharp edges.
- A modified shoulder preparation with round inner edges or a chamfer is ideal.
- An anatomical cusp-supported design is recommended.
- Minimum thicknesses must be observed.
- For veneered restorations, the tooth structure must be reduced by another 1-2mm, in addition to the minimum wall thickness of the framework material used, in the area of the intended veneer.
- For conventional and/or self-adhesive cementation, the preparation must demonstrate a retentive shape and sufficient preparation height.
- Preparation angles: 4 - 8° for conventional and self-adhesive cementation, >6° for adhesive cementation.



Modified shoulder preparation



Chamfer preparation