Minimally invasive crown preparation for lithium disilicate glass-ceramic

Description

Years of clinical experience have shown that the high strength of IPS e.max® lithium disilicate of 500 MPa* in combination with adhesive cementation permit a crown layer thickness of at least 1 millimetre.

Indication

Full-contour anterior and posterior crowns

Contraindications

– Layer thicknesses below 1 mm
– Preparations with sharp edges
– Preparations without anatomical support and with irregular layer thicknesses
– Conventional and self-adhesive cementation
– Build-up materials other than composite
– Bruxism
– Lack of canine guidance
– Bridges
– Crowns on implants

Preparation guidelines

Crown preparation for adhesive cementation

1. Reduce the anatomical shape and observe the stipulated minimum layer thickness. Circular shoulder preparation with rounded inner edges and/or chamfer preparation. Width of the circular shoulder/chamfer at least 1.0 mm. Reduce the occlusal crown third by 1 mm.
2. Reduce the vestibular and/or oral area by 1 mm.

Anterior crown preparation for adhesive cementation

1. Reduce the anatomical shape and observe the stipulated minimum layer thickness. Circular shoulder preparation with rounded inner edges and/or chamfer preparation. Width of the circular shoulder/chamfer at least 1.0 mm.
2. Reduce the incisal crown third by at least 1 mm.
3. Reduce the vestibular and/or oral area by at least 1 mm.

Adhesive cementation

Adhese® Universal
The universal adhesive

Variolink® Esthetic
The esthetic luting composite

Monobond Etch & Prime®
Etch and prime in one easy step

* mean biaxial flexural strength over 10 years (IPS e.max CAD 530 MPa, IPS e.max Press 470 MPa). Source: R&D Ivoclar Vivadent AG, Schaan, Liechtenstein
** O. Brix, Germany