**Preparation Guide: anterior**

**Full-coverage crowns**

**All-ceramic**
- Butt joint margin
- 1.0-mm reduction at gingival margin
- 1.5-mm lingual contact clearance
- Football-shaped finishing bur
- Rounded internal line angles

**Porcelain fused to metal**
- Chamfer margin
- 1.0-mm to 1.5-mm facial reduction
- 1.5-mm to 2.0-mm incisal reduction
- 1.0-mm to 1.5-mm lingual contact clearance

**Veneers**

**Uniform facial preparation:** A medium-grit round-ended diamond is used to join the depth cut grooves to establish a uniform preparation and porcelain thickness of at least 1.0-mm.

**Interproximal extension:** Using the same round-ended diamond bur, the interproximal preparation is extended from the gingival chamfer margin into the proximal space.

**Incisal preparation:** The diamond is angled to eliminate undercuts and establish a butt joint on the lingual aspect of the preparation. The incisal edge should be rounded to eliminate sharp line angles.

**Chamfer margins:** Correct preparation of the chamfer margins interproximally allows for adequate bulk of porcelain.

**A “slice” preparation:** This technique enables the ceramist to close the space and avoid unnatural lingual contours.

**Three-unit bridge**

**Maryland bridge**

- Butt joint margin
- 1.5-mm axial reduction
- 1.0-mm reduction at gingival margin
- 1.5-mm to 2.0-mm incisal reduction
- 1.5-mm lingual clearance
- Supragingival margins
- 1.0-mm to 1.5-mm rounded shoulder reduction

*All internal line angles are rounded and smoothed*
Preparation Guide: posterior

full-coverage crowns

**all-ceramic**
- 1.5-mm to 2.0-mm occlusal reduction
- 1.5-mm axial reduction
- 1.0-mm to 1.5-mm gingival margin reduction

A flat-ended tapered diamond bur is utilized to establish a butt joint margin.

**porcelain fused to metal**
- Buccal
- Lingual

Porcelain junction margin design
- Metal margin design

**full cast**
- 1.0-mm to 1.5-mm occlusal reduction
- Rounded internal line angles
- 1.0-mm buccal and lingual reduction
- Feather-edge or chamfer margin

inlay

**butt joint margin**
- 1.5-mm to 2.0-mm isthmus width
- Rounded internal line angles
- 1.5-mm depth at isthmus
- 1.0-mm to 1.5-mm wide gingival floor

**inlay/onlay bridge**
- 1.5-mm to 2.0-mm occlusal reduction
- Butt joint margin
- 1.0-mm reduction at the gingival margin
- 1.5-mm axial reduction

**onlay**
- 1.0-mm to 1.5-mm wide gingival floor
- 1.5-mm to 2.0-mm isthmus width
- Rounded internal line angles
- 1.5-mm depth at isthmus

**three-unit bridge**
- 1.0-mm cuspal reduction
- Edentulous space
- Molar onlay preparation (2.0-mm cuspal reduction)

Premolar inlay preparation (1.5-mm depth)