

# BRIDGES

## PRINCESS™ CROWNS & BRIDGES

# 5

### Beautiful 360° Pressed Ceramic Margins – PFM Strength

Aurum Ceramic/Classic's exclusive Princess™ crowns and bridges combine the natural beauty of pressable ceramics with the strength of porcelain-fused-to-metal. Indicated for single crowns, anterior and posterior bridges (up to four units) as well as posterior inlay-type retained or cantilever bridges, Princess offers enhanced esthetics, pressed ceramic margins, low wear and full cementability. Metal (alloy of your choice) substructure provides strength and longevity, yet can be cast thin for normal tooth reduction. Princess low-fusing pressable ceramic has a thermal coefficient matched to the substructure for even greater reliability.



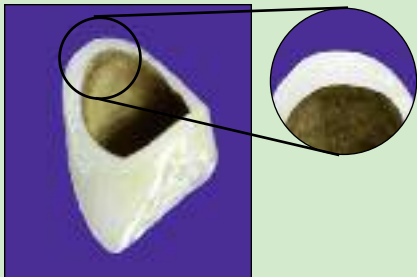
Before.



After. Princess Bridge 12-15.

Dentistry courtesy of Dr. Jeff L. Rodgers.

### The Materials



#### Beautiful All-ceramic Margins

PFMs previously required hand-layered and multiple fired porcelain butt margins to cover visible metal. Thermo-pressed Princess supplies 360° all-ceramic margins that fit more precisely and are stronger than their hand-layered alternatives while providing a full 1-2 mm of beautiful pressed ceramic past the finished metal coping.



#### Remarkable Colour and Shade Depth

Princess' unique fluorescence and natural colour allows you to match surrounding dentition with ease. Even the most delicate forms can be reproduced with perfectly natural esthetic control. Our AE (Advanced Esthetic) Team's™ layering techniques allow more natural esthetic anterior restorations while the smooth ceramic's homogenous structure is kind to natural enamel and gingival tissue.



### Princess Features and Benefits

#### Beautiful pressed ceramic margins – PFM strength.

1. Metal (alloy of your choice) substructure provides strength and longevity.
2. Fluorescence and natural colour allows exact match to surrounding dentition.
3. Specialized Advanced Esthetic Teams combine best in technique and expertise.
4. Can be cemented with your preferred C&B cement.
5. Backed by a 5 year warranty\* against defects in craftsmanship and materials from Aurum Ceramic/Classic.

\* Certain terms and conditions apply. Some restrictions may apply due to the regulations of the College of Dental Technologists of Ontario.

## Indications:

- Anterior and Posterior Crowns
- Up to four unit anterior or posterior metal-supported bridges
- Posterior metal-supported onlay or inlay-type retained or cantilever bridges.
- Where normal preparation and superior esthetics are desired.

## Contraindications:

- Patients with parafunctional conditions such as bruxism.
- Where deep subgingival margins or teeth preps without defined chamfers or shoulders are required.
- Where non-bonded cementation is required.

## Shade Selection:

Select Shade for porcelain with the Chromascop®, Vita® Lumin or Vitapan 3D-Master Shade Guides.

## Laboratory Requirements:

1. Thoroughly detailed prescription denoting which teeth are to be crowned, extracted and/or bridged as well as selected shade.
2. Upper and lower full arch impressions or study models.
3. Bite registration.

## Techniques and Tips:

### A. Custom Laboratory-fabricated Temporaries or Diagnostic Wax-up

1. Take preoperative elastomeric impressions of arches. Construct maxillary and mandibular study models. Take bite registration and mount casts.
2. Send both casts to laboratory. Include thoroughly detailed prescription denoting which teeth are to be crowned, extracted and/or bridged; gingival, body and incisal shades of teeth to be restored and inter-occlusal record.
3. Technician will duplicate master model and use duplicate cast to formulate provisional restorations. Original cast serves as continuing reference for tooth contours, anatomy, texture and gingival architecture.

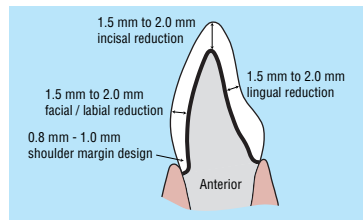
4. Duplicate model will be adjusted by dental technician to agree with prescription. Preparation of crowns and hollowing of appropriate temporary teeth allows ample room for seating.

## B. Preparation

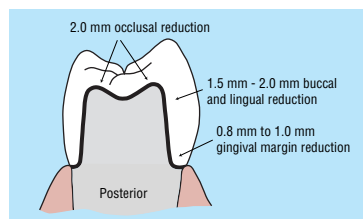
### Crowns and Bridges

- Preparation must include 180° (on labial surface) or 360° bevelled shoulder margin.
- Rounded internal line angles.
- For non-vital teeth, a non-metallic post and/or build-up system is recommended.

Anterior Tooth



Posterior Tooth



1. Anesthetize area if indicated.
2. Take preliminary impression.
3. Remove all defective amalgams, composites and caries.
4. If near pulpal exposure, place small amount of calcium hydroxide in deepest area of preparation.
5. Even reduction of 1.5 to 2.0 mm is recommended ending in a 0.8 – 1.0 bevelled shoulder margin. Ensure there is an adequate path of insertion.
6. Take final impression with Panasil vinyl polysiloxane. Ensure there are no pulls or bubbles in the impression.
7. Secure and trim an adequate interocclusal record over preparation only.
8. Apply separating medium to surfaces of all prepared teeth. Fully seat and check

provisional over crown preparations. Reline temporary with cold cure acrylic. Adjust at each stage as necessary. Cement temporary restoration with dual-curing temporary cement (ensure it is non-eugenol if planning to bond, rather than cement, final restorations).

9. Prepare a detailed lab prescription with details regarding opposing teeth, age and sex of patient, amount of occlusal staining and individual characterization needed.
10. Include a pre-op model for all anterior cases. Include an impression of temporaries for all anterior restorations when four or more units are involved.

### Inlay (for Inlay-type Bridges)

- Butt joint margins, rounded internal line angles.
- 1.5 – 2.0 isthmus width.
- 2.0 mm cusp reduction.
- 1.5 – 2.0 mm wide gingival floor.

## C. Cementation

1. Princess crowns or bridges can be cemented with any conventional cement (Glass ionomer, resin ionomer, adhesive resin cement, Zinc Phosphate, etc.) or can be bonded with Multilink or Panavia F (follow manufacturers directions).

*NOTE: Cements with higher expansion rates (e.g., hybrid ionomer cements) must **NOT** be used.*

2. Tooth should present as smooth a surface as possible. Smooth dentin surfaces are more easily cleaned of debris, which can inhibit chemical bonding.
3. Avoid contaminating surface of dentin with wax, oil, varnish or any protein material, can inhibit chemical bonding.
4. Clean tooth surfaces. Tooth surface should not be dehydrated when cement is applied. Excessive drying concentrates protein debris and prevents efficient wetting of tooth surface.
5. Never use varnishes to protect tooth if polyacrylic acid cements are used (prevents chemical bonding to tooth).
6. Margins of cement should be protected with varnish after initial set (5 to 6 minutes). Saliva should not come into direct contact with unset cement.

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