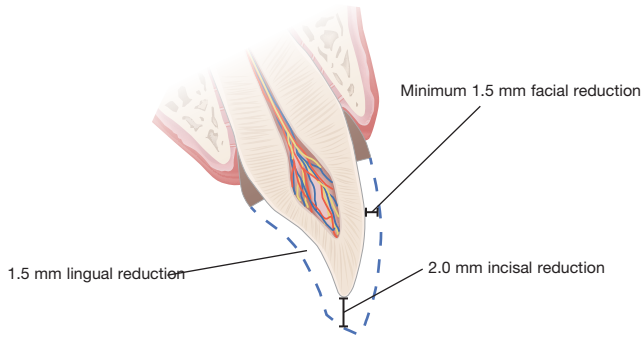


# PREPARATION GUIDELINES FOR OBSIDIAN® PRESSED TO METAL RESTORATIONS

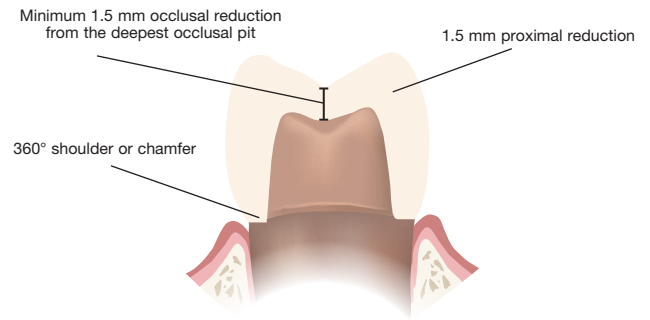
**Indications:** Up to 14-unit bridges can be pressed.

## ANTERIOR CROWNS

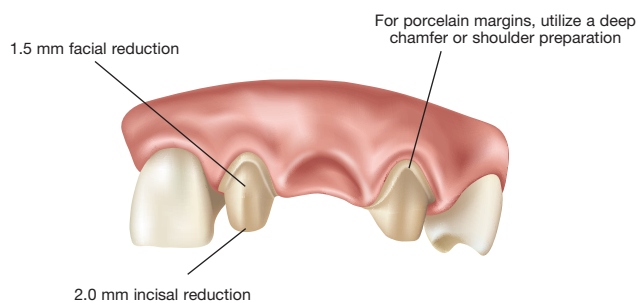


For porcelain margins, utilize a deep chamfer or shoulder preparation

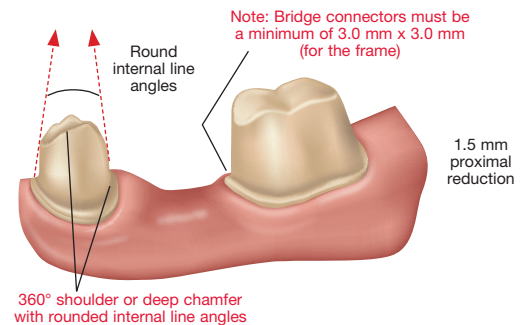
## POSTERIOR CROWNS



## ANTERIOR BRIDGES



## POSTERIOR BRIDGES



## Minimum Thickness (in mm) for Obsidian Pressed to Metal Restorations

### Crowns and Bridges

	Anterior	Posterior	Connector
<b>Framework (Alloy)*</b>	0.3	0.3	9 mm <sup>2</sup>
<b>Opaque</b>	0.2	0.2	0.2
<b>Obsidian Pressed to Metal</b>	0.8	0.8	0.8

\*Bridge abutments must be greater than or equal to 0.5 mm.

## FRAMEWORK COMPOSITION

Alloy Recommendations	Alloy Framework Compositions to Avoid
<ul style="list-style-type: none"> <li>Argeloy NP Supreme</li> <li>Argelite 71</li> <li>Argedent Euro</li> <li>Non-precious</li> <li>Semi-precious</li> <li>White high noble</li> </ul>	<ul style="list-style-type: none"> <li>Alloys with a silver (Ag) content higher than 10%</li> <li>Alloys that contain any:                             <ul style="list-style-type: none"> <li>Titanium (Ti)</li> <li>Copper (Cu)</li> <li>Zirconia (Zr)</li> <li>Beryllium (Be)</li> </ul> </li> </ul>

\*All recommended frameworks are nickel free.

## DESIGN PARAMETERS FOR 3SHAPE

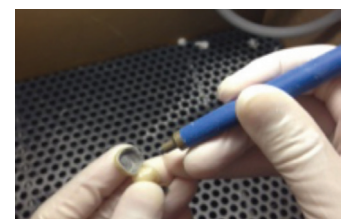
Cement Gap:	0.030 mm
Extra Cement Gap:	0.090 mm
Distance to Margin Line:	1.000 mm
Smooth Distance:	0.500 mm
Drill Radius:	0.520 mm
Drill Compensation:	0.100 mm
Offset Angle:	80 degrees
Margin Line Offset:	0.450 mm
Extension Offset:	0.080 mm

## CEMENTATION

Dental professionals should use conventional cement, adhesive resin cements or self-adhesive resin cements for luting Obsidian restorations. The inside of the pressed to metal restoration may need to be sandblasted prior to seating in order to prepare the bonding surface for cementation. Anterior and posterior crowns can be cemented with conventional cement, adhesive resin cements or self-adhesive resin cements.



Aluminum Oxide Used to Clean Inside Restoration



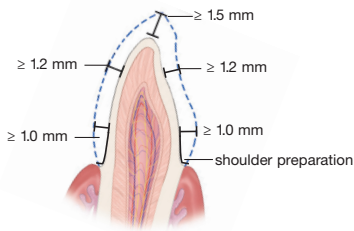
Removing Oxide Layer and Other Residue

# PREPARATION GUIDELINES FOR ALL-CERAMIC RESTORATIONS

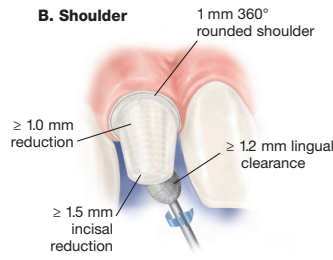
**Indications:** Single-unit crowns, inlays, onlays and veneers.

## ANTERIOR FULL-COVERAGE CROWN

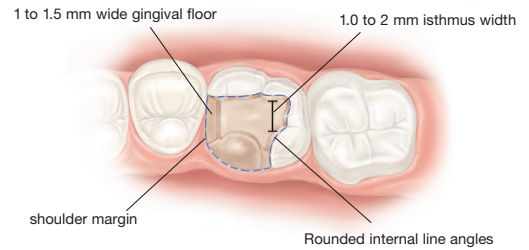
### A. Full anterior wall thickness



### B. Shoulder

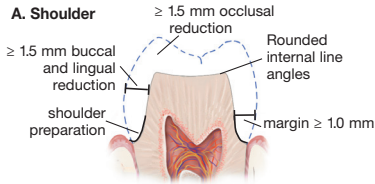


## ONLAY (PREMOLARS OR MOLARS)

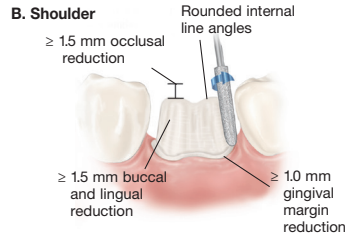


## POSTERIOR FULL-COVERAGE CROWN

### A. Shoulder



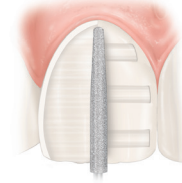
### B. Shoulder



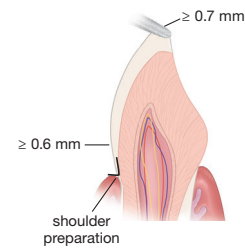
## VENEERS

### Uniform Facial Preparation

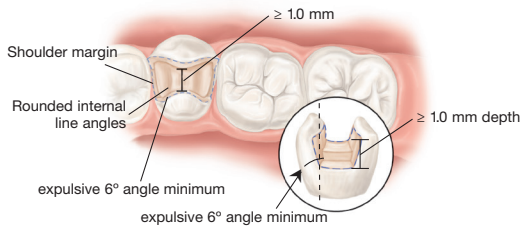
A medium-grit round-ended diamond is used to join the depth cut grooves to establish a uniform preparation and veneer thickness of  $\geq 0.6$  mm.



### Veneers wall thickness



## INLAY (PREMOLARS OR MOLARS)



## Minimum Thickness (in mm) for Obsidian Monolithic All-Ceramic Restorations

	Inlay	Onlay	Veneer	Partial Crown	Crowns		
					Anterior	Premolar	Molar
<b>Circular</b>	1.0*	1.0	0.6	1.5	1.2	1.5	1.5
<b>Incisal/Occlusal</b>	1.0*	1.0	0.6	1.5	1.5	1.5	1.5

\*isthmus width

## DESIGN PARAMETERS FOR 3SHAPE

Cement Gap:	0.030 mm	Drill Compensation:	0.100 mm
Extra Cement Gap:	0.070 mm	Offset Angle:	65 degrees
Distance to Margin Line:	1.000 mm	Margin Line Offset:	0.150 mm
Smooth Distance:	0.500 mm	Extension Offset:	0.070 mm
Drill Radius:	0.520 mm		

## CEMENTATION

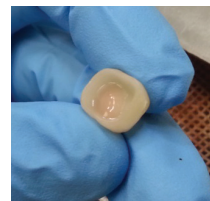
The restorations must be etched (5% HF for 10 sec) prior to cementing. The etched surface should be thoroughly rinsed with water.

Etching for longer time (more than 10 sec) or using a higher concentration (>5%) of HF etchant is **NOT** recommended.

Dental professionals should use conventional cements, adhesive resin cements or self-adhesive resin cements for luting Obsidian restorations. Obsidian restorations require salinization or conditioning of the bonding surface. Adhesive resin cement is preferred for inlay, onlays and partial crowns. Anterior and posterior crowns can be cemented with conventional cements, adhesive resin cements or self-adhesive resin cements.



Incorrectly etched (lacking etching on select internal areas & margin edges).



5% HF etching gel applied inside the restoration.



5% HF etching gel applied all around the margin using a microbrush.



Correctly etched restoration (internally and all around the margin edges).