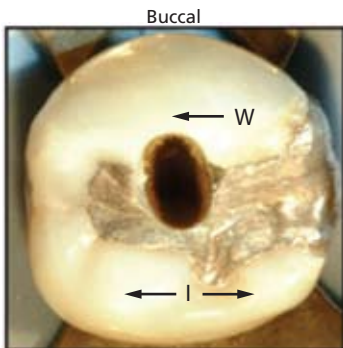


Ideal Access Forms



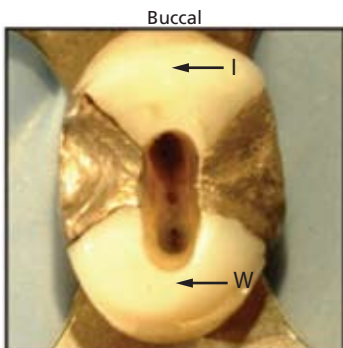
Anteriors

Access should be cut from cingulum to incisal, starting from the middle of the cingulum to just shy of the incisal edge. While it is important to keep the preparation very shallow at the incisal extent, it is critical that you cut adequately under the cingulum, to insure straight line entry. Be careful to limit the mesial to distal enlargement. The final mesial-to-distal access width should be 1.25-1.5 mm. Too narrow a cut will cause difficulty during obturation, but more than 1.5 mm will unnecessarily weaken the tooth.



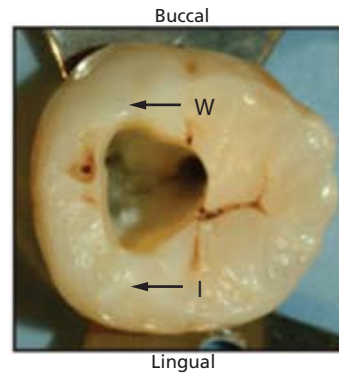
Mandibular Premolars

Because the occlusal surfaces of posterior teeth are not centered over the root structure, the objective in these teeth is cut up to the buccal working cusps (W) and stop short of lingual idling cusps (I) by 1-2 mm. Premolars with 1-2 canals should have slot-like outline forms, keeping the mesial-to-distal enlargement minimal. Those with 3 canals must have the access cavity enlarged at the buccal extent, toward the MB and DB line angles, to allow entry and treatment of the MB and DB canals (resulting in a more triangular outline form).



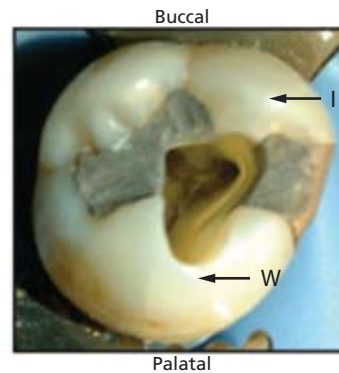
Maxillary Premolars

Cut the access to the lingual working cusp tip, but hold it 1-2 mm shy of the buccal idling cusp. Cut in a straight line between the cusp tips at the angle of the long axis of the tooth. Because the working cusps of upper posterior teeth are on the palatal side, cut to that full extent in the buccal to lingual plane, but keep the mesial-to-distal enlargement minimal.



Mandibular Molars

Begin in a distal to mesial direction, putting the bur in the central fossa of the occlusal surface and cutting toward the mesial. The landmark for the mesial wall position is 2.5 mm distal to the mesial surface of the tooth. Make sure that the bur is angled parallel to the mesial surface of the tooth. **It is absolutely critical that you do not head in at right angles to the occlusal surface.** At the very least, it will create a ledge; at worst, a perforation. The distal extent should be no more than 1 mm past the buccal groove. The access should be at or near the mesiobuccal working cusp, 1-2 mm shy of the mesiolingual idling cusp.



Maxillary Molars

Begin in a straight line between the mesiobuccal and palatal cusp tips, cutting in a buccal-lingual plane. As in mandibular molars, the mesial wall should be 2.5 mm distal to the mesial surface, parallel to the mesial surface of the tooth, **never at right angles to the occlusal surface.** Cut the access to the palatal working cusp tip and 1-2 mm from the idling mesiobuccal cusp tip. It is totally unnecessary and undesirable to cut the distal wall beyond the buccal groove.

Bur Selection

Getting to Sound Dentin

Cutting through porcelain - #4 round diamond bur with water spray
Cutting through cast metal - round-ended cross cut carbide fissure bur with water spray
Removal of decay - #6 surgical length carbide round bur

Initial Entry through Dentin

Anteriors and Bicuspids - #2 surgical length carbide round bur
Molars - #4 surgical length round carbide bur

Cutting Outline Form and Line Angle Extensions

LA Axxess high speed diamond bur (SybronEndo)

Locating Calcified Canals, Undercutting Pulp Horns, Removing Attached Denticles

BUC-1 or 1A, BUC-2 or 2A ultrasonic tips (Spartan)

