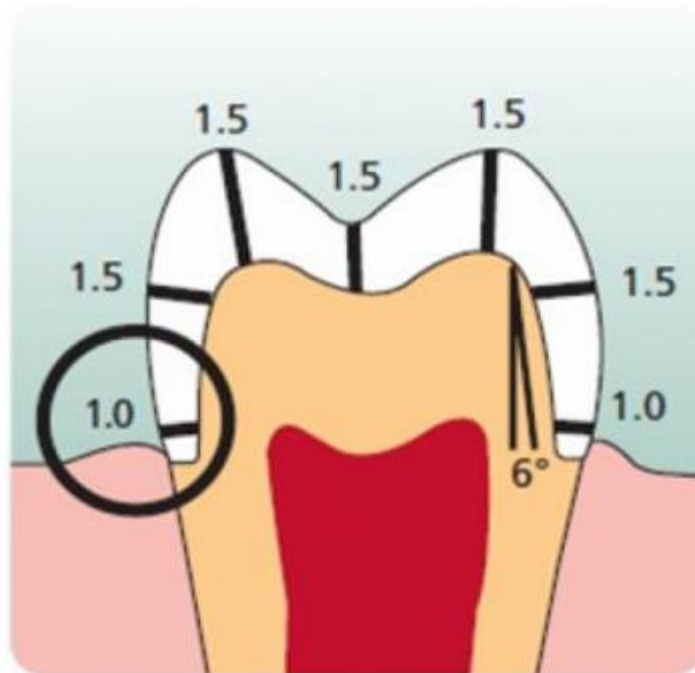


SPEAR

Why Do e.max Crowns Fracture?

By [Bob Winter](#) on December 18, 2015 | [7 comments](#) [PRINT](#)



When I train dental technicians around the world, they state that they have a small percentage of e.max crowns that fracture. It's rare, but e.max crowns can fracture at the time of try-in or during adjustment of the occlusion. The most common reason for the ceramic to fracture is inadequate material thickness.

The manufacturers' stated strength of any ceramic material is totally dependent on the thickness of the material and the preparation design. Manufacturers recommend very specific tooth preparation requirements for their materials in order to guarantee maximum strength and predictable longevity. Needless to say, anything less than following these recommendations will result in a weaker final restoration. Ivoclar's recommended tooth reduction for e.max posterior crowns is:

1. At least 1.5 mm occlusal reduction for cusp tips and the central groove.
2. 1.5 mm on the axial walls circumferentially in the occlusal one-third.
3. At least 1.0 mm deep flat shoulder margin. Chamfer or feather edge finish