

# Tips

## Finishing and Polishing a Composite Restoration (Case Types IV & V)

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### Introduction

The final step for a direct composite restoration is finishing and polishing. Often, however, despite painstaking effort to create natural contours and line angles, it is easy to run into trouble due to the use of aggressive and haphazard polishing techniques. The finish, polish, and texture are the tooth's "fingerprint," so to speak. If adjacent teeth do not display similar characteristics, then—even if the contours are excellent—the case is lost.

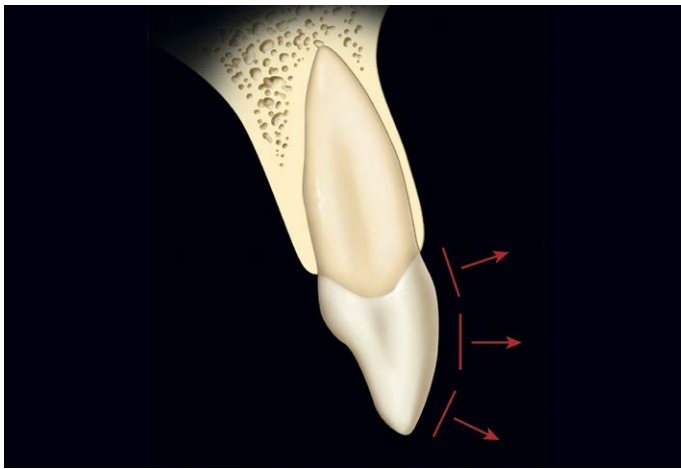


## Tips for Success

**1** The first step in finishing and polishing is to establish the facioincisal line angle. Use of a pencil can be helpful in visualizing line angles and contours. Drawing a pencil line on the incisal edge of the adjacent tooth and the restored tooth will aid in creating the proper line angle. Viewing this profile from an occlusal view will reveal the excess or deficiencies of contour. The same process can be employed in refining the facial line angles. Use a coarse disc to evenly reduce the facial composite material (Figs 1-3).<sup>1-3</sup>



**Figure 1:** Contours viewed from an incisal aspect.



**Figure 2:** The side view shows the three planes of facial contour.



**Figure 3:** Pencil lines are drawn to show the facioincisal line angle.

**2** A disc works well to open up the facial embrasures, creating the facioincisal line angle and achieving an even and smooth facial contour. Once the primary anatomy has been successfully reproduced, it often is a good idea to stop temporarily. Then document your progress with photographs and a diagnostic impression and have the patient return for the final finishing and polishing. With refreshed eyes and analysis of a stone model, it is easier to access those characteristics that may require additional attention (Figs 4 & 5).<sup>4,5</sup>



**Figure 4:** The interproximal embrasures are opened with a small coarse disc.



**Figure 5:** The incisal edge can be made very even and straight with a large red coarse disc.

**3** When the patient returns for the detailing appointment, the secondary anatomy can be created by establishing developmental depressions on the facial surface. These contours can be created by drawing the proximal line angles and a line in the middle of the tooth. With the use of a flame tip carbide or diamond, carefully create a smooth depression area between the lines on the facial. Rubber cups of various grits can be used to refine these contours and eventually achieve a nice polish. A polishing buff and polishing paste can be used to achieve an ultimate shine. If a little surface texture is required (i.e., the tertiary anatomy), then a diamond bur at a very slow speed, or a green stone in a slow-speed handpiece, can be traced carefully across the facial surface. Once this is done, the operator can once again use the polishing buff and paste to recreate the high polish (Figs 6-8).<sup>6,7</sup>

A predictable finishing and polishing technique is essential to become skilled with anterior composites. One of the most common faults that Accreditation Examiners note in Case Types IV and V is the lack of a nice finish and polish. Learn how to create an anatomically correct and beautifully polished restoration that mimics the natural teeth. Cosmetic dentists can become composite artists and provide a wonderful service to their patients.

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**Figure 6:** The developmental depression can be created with a flame tip diamond or carbide bur.



**Figure 7:** Rubber cups are helpful in creating a nice surface polish.



**Figure 8:** A polishing buff and paste are used to create the ultimate high-surface polish in a composite restoration.

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#### References

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