

FABRICATION OF A ZENDURA PONTIC RETAINER

OVERVIEW

Temporary space retainer appliances made with Zendura A or Zendura FLX are very popular for their hardness, ultra clarity and ease of fabrication. They typically hold a pontic to temporarily replace a missing tooth for patients who will later receive a tooth implant placement or other final tooth restoration.

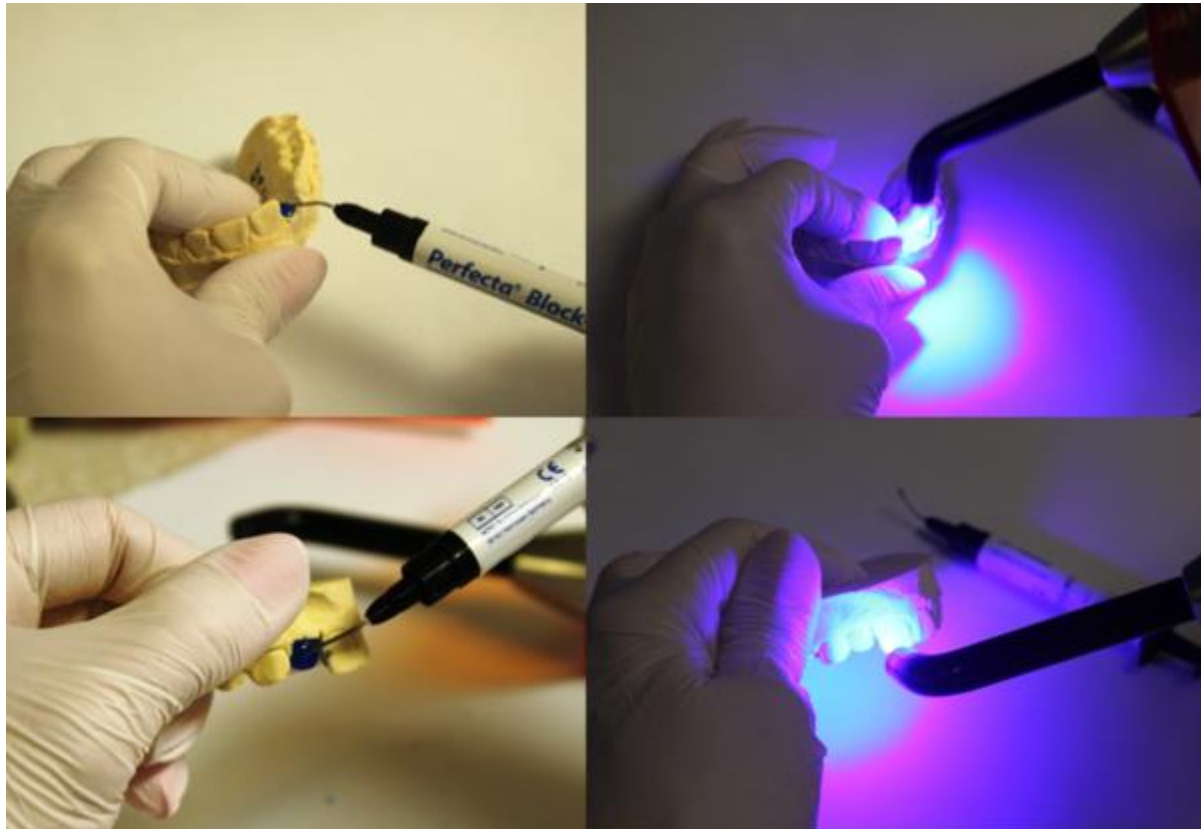
The fabrication of a Zendura pontic retainer is fairly straightforward and can be completed quickly and inexpensively in-office.



Two Techniques for Fabricating Zendura Pontic Retainers

FABRICATION METHOD I – Using Blockout and Dental Composite Material

1. Make an accurate alginate or 3D printed model of the patient's teeth and prepare all necessary fabrication tools.
2. Fill up the space on the model where the tooth was extracted with a dental block-out material and properly build the shape of the material until it resembles an actual tooth. Incrementally light cure the block-out material several times during the process so that the tooth shape stays firm.



3. Thermoform the Zendura plastic sheet over the model to fabricate a regular retainer.

(If the patient already had a retainer made before tooth extraction, skip steps 2 and 3.)

4. Trim the edge of Zendura retainer's cutline to a smooth finish.
5. Create a small dimple using dental pliers on the lingual surface of the retainer where the pontic will be placed. The dimple will help secure the pontic during the next few steps.



6. Apply dental tray adhesive to the inside of the retainer where the pontic will be placed.



7. Fill the area of the retainer where the pontic will be placed using a light or self-cured crown-and-bridge provisional material or other similar dental composite. Match the color of the provisional material to the patient's teeth.



8. The Zendura pontic retainer is ready to be delivered to patient within 30 minutes of curing.



EXAMPLE: Perfecta Block-Out Resin (HENRY SCHEIN Item #: 4008300)

EXAMPLE: [3M VPS Tray Adhesive](#)

EXAMPLE: [TEMPSPAN®](#) Indirect Provisional System (7 shades available)

FABRICATION METHOD II – Using a Denture Tooth

1. Make an accurate alginate or 3D printed model of the patient's teeth and prepare all necessary fabrication tools. Apply model separator to the edentulous alveolar ridge area if needed.
2. Fit a denture tooth of an appropriate size and color into the edentulous area. Cut and trim the base of the denture tooth to approximate the edentulous alveolar ridge.
3. Cut a groove about 3-4mm wide and 2-3mm deep into the lingual surface of the denture tooth, so that the plastic will fill the groove and secure the denture tooth in place during the thermoforming process.
4. Check the incisal capability of the denture tooth, then secure it in place with a quick-cure or light-cured acrylic. Wax is not suggested, as it will melt during thermoforming and the denture tooth will tilt or move.
5. With the denture tooth in the right place, thermoform the Zendura plastic sheet over the teeth model.
6. Trim and finish the appliance as you normally would.

Patient Case Study

PHOTOS COURTESY OF DR. ALEJANDRO RAMÍREZ



Benefits of Using a Zendura Pontic Retainer

The most common problem with temporary pontic retainers is breakage due to localized forces and wear. It is not uncommon for a dental lab to make multiple pontic retainers at the same time to account for "expected breakage."

Durability, strength, rigidity and lifetime clarity make pontic retainers made from Zendura A or Zendura FLX a cost efficient solution.

They will fit well and comfortably and remain resistant to breakages, helping to protect your patients' investment and improving their treatment experience and satisfaction.