



## Invisible Retainer Fabrication Technique

Safety glasses should be worn for all lab procedures as well as gloves when handling acrylics. Items featured in this technique are found at the end of the procedure.



Two model designs may be used for this application. The model possessing a thick base is usually placed in the pellets to prevent excessive material stretch and thinning in areas that will not be included in the appliance design. The second method eliminates the model base and is used on the platform. Both models are prepared for appliance construction using plaster instruments and the bases are trimmed flat with a plaster trimmer.



- 1 Apply liquid separator to all model surfaces that will come into contact with the formed material.



- 2 The model possessing a base is positioned in the pellet cup referencing an area 3-4mm below the gingival margin at the same height as the rim of the pellet cup. The pellets are adapted from the model reference area to the rim of the cup. If full palatal coverage is requested, then the pellets are not placed in the palate. Otherwise place the pellets to a reference area 8-10mm below the gingival margin.



- 3 Liquid separator is applied to the trimmed model and is placed on the machine's platform.



- 4 Place the .75mm or 1mm Invisacryl A material on the pressure chamber and clamp it in place. Heat the material with the lamp and form it over the model using standard operating pressure. After cooling the formed material for 2 minutes under pressure, remove the model from the machine. Invisacryl Ultra, Invisacryl C, or Endure material may also be used.



- 5 Remove the formed material and model from the pellet cup or platform.



- 6 The formed material on the model is cutout with a c 3/4" lightning disk in a lab handpiece.



- 7 Cutout the appliance design while the material is on the model. The cut is made approximately 10mm below the lingual gingival margin and facially, 3-4mm below the tissue margin. Remove excess material.



- 8 Remove appliance from model.



- 9 Trim the appliance borders to the gingival margin with a carbide bur in a lab handpiece. Facially it is reduced to a reference 1-2mm below the gingival margin and lingually 6-8mm, terminating at the distal embrasure of the last tooth on each side of the arch. The trimmed borders may be altered (as requested by the doctor).



- 10 A coarse Dymo wheel is used with a lab handpiece to smooth trimmed edges.

**Items featured or recommended in technique:**

235-010 Astro Spec Safety Glasses (reg./blue)  
235-062 N-Dex Non-latex Gloves (Med)  
175-034 Liquid Separator  
021-052 Invisacryl A .030" .75mm/125mm  
021-053 Invisacryl A .040" 1mm/125mm  
021-056 Invisacryl C .040" 1mm/125mm  
021-096 Invisacryl Ultra 1mm/125mm  
021-058 Endure .040" .75mm/125mm  
086-027 3/4" Lightning Disk  
085-003 Carbide Cutting Bur  
085-043 Dymo Pro Grinding & Finishing Wheel



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