




Dentapreg™ Splint - Procedures

Basic Procedures in Short

Splinting with **Dentapreg™ strip** always includes several basic procedures repeated in all particular clinical situations:

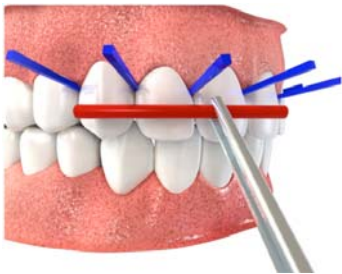
- (A) Clean the bonding surface of splinted teeth
- (B) Maintain dry field during all procedures
- (C) Acid etch the bonding surface using common commercial etching gels or liquids
- (D) Apply thin layer of a desired adhesive and cure
- (E) Form and bond **Dentapreg™** Splint, cure the splint
- (F) Finish the splint

Detailed Step-by Step Instruction for Chairside Splinting

<i>Office/Clinic</i>	Step 1: Prepare Teeth for Splinting
	<ul style="list-style-type: none">• Clean teeth• Assure dry field (rubber dam) etc.• For occlusal splint make preparation of minimum 1.5 mm (diameter of round strip is 1 mm) and take in account that splint should be placed in the level of interproximal contacts. For oral and vestibular splints no preparation is required• Isolate teeth by wax or placing wedges to protect interproximal spaces to keep good spatial and hygienic conditions
	
	



Step 2: Measure the Length of Splint



- Use dental floss or wax rope to measure the length of the splint.

Step 3: Prepare the Tooth Surface for Splinting



- Etch the bonding surface of splinted teeth for approx. 30 second (37% phosphoric acid etching agent)
- Rinse throughoutly and gently dry with a flow of dry air

Step 4: Apply Adhesive and Flow



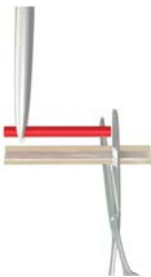
- Apply adhesive according to manufacturer instructions
- Apply a thin layer of hybrid/flowable composite ¹⁾ along desired splint area. For oral and vestibular splints do not omit interproximal spaces
- Do not light cure!



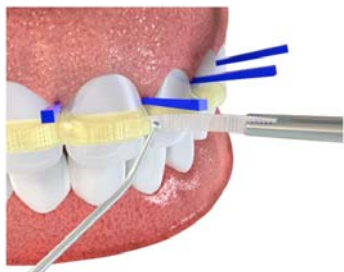
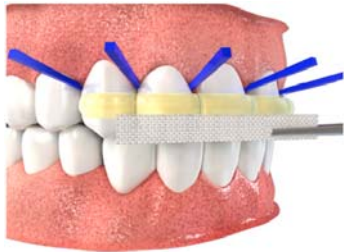
Step 5: Prepare Dentapreg™ Splint



- Separate the single strip from the blister breaking the perforated ligament similarly to blister packaged drugs
- Use sharp instrument (scissors, knife, razor blade, scalpel) to open the aluminum foil along three sides
- Remove the strip from the blister, cut the strip with regular scissors and peel back the waxed paper and transparent foil
- Place the trimmed strip into the light save box. This will prevent premature polymerization of the strip.

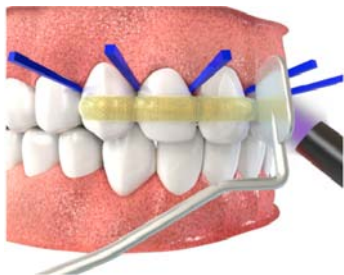


Step 6: Adaptation of Dentapreg™ Strip



- Place and adapt trimmed **Dentapreg™** strip against surfaces of the prepared teeth (you can adapt it with or without protective transparent foil; in case you adapt it with transparent foil non protected side of strip must be applied on the teeth surfaces)
- Sink the **Dentapreg™** strip into the layer of hybrid/flowable composite and adapt the contours for maximal patient comfort

Step 7: Light Curing



- Light cure the splint. When using common light curing lamp light cure Dentapreg™ splint on each tooth for 30 - 40 seconds.
- Use the forming instrument to prevent rest of the strip from curing light to keep it pliable.

Step 8: Outer Layer of Splint



- For oral and vestibular splints apply a layer of hybrid/flowable composite over the cured splint. This smooth surface preserves good hygienic conditions. The thickness of the outer layer should be approximately 0.3 – 0.5 mm.



Step 9: Final Adjustment



- Remove excess of hybrid/flowable composite
- Final polishing of outer layer may be performed with composite polishing burs, points or wheels. This step will ensure patient's comfort as well as esthetics and oral hygiene

- Following sequence for final polishing is recommended:

- a) Polish burns, points or wheel
- b) Diamond paste 3 μm
- c) Diamond paste 1 μm
- d) Aluminum oxide paste



¹⁾ Hybrid composite is stiffer but less easy to form (convenient for posterior and anterior oral splints), flowable composite is less stiff but easy to form (convenient for anterior vestibular splints).

General Remarks for Working with Dentapreg™

- Dental stone model is a good training tool for trials of **Dentapreg™**
- Avoid sharp edges and undercuts on the model
- Before forming **Dentapreg™** strip on a model, always apply separation liquid or wax
- After initial model trial, most dentists can place **Dentapreg™** splints intraorally
- Always use the widest clinically acceptable **Dentapreg™** strip
- During forming and adaptation of the **Dentapreg™** strip advance slowly from one end to the other to allow for a good adaptation of the fibrous reinforcement and small flow of the resin to avoid defects and shape memory effect
- To minimize potential damage to the fibers, is recommended to use plastic instruments used to work with dental filling composites
- When preparing the strip (measuring, trimming), keep the strip in it's original transparent protection foil to avoid contamination
- Avoid sharp edges and extremely small interproximal curvatures when forming **Dentapreg™** strips to prevent fiber breakage
- Most commercially available light or dual curing dental adhesives can be used to bond **Dentapreg™** splints
- Adhere strictly to the acid etching and adhesive curing procedures recommended by the etching agent and adhesive manufacturers

- Polishing or sand blasting of cured **Dentapreg™** should be avoided, to enhance patient comfort and maintain good hygienic conditions, a layer of light curing hybrid composite can be deposited on the **Dentapreg™** surface and polished using standard procedures

Dentapreg™ Splint Removal

- Asses tooth mobility
- If tooth is stable, use an orthodontic bracket remover (or similar tool) and remove **Dentapreg™** strip from teeth
- Remove remaining resin and polish the teeth