

voids. Pat the composite down gently and slightly overfill. Feather-edge the composite up to and just over the margin. For easier handling, the restorative should be contoured prior to curing. A transparent matrix should be used to aid contour in Class III and IV situations.

9. Polymerization of Restorative

For deep cavities the composite material should be placed in layers not exceeding the maximum layer thickness recommended by the manufacturers instructions.

If the area to be cured is larger than the fibre optic tip, repeat the procedure after moving the tip to a position over the remaining area of uncured composite. After polymerization of the occlusal surface, remove the wedges and matrix band, then cure the interproximal areas buccally and lingually for 20 seconds.

10. Finish and Polish

As per composite manufacturer's instructions.

CONDITIONS OF STORAGE

1. Store SDI Bond in a cool place at temperatures below 25°C (77°F). Keep out of direct light. Replace caps on syringes and bottles immediately after use. If the above conditions are maintained the shelf life of SDI Bond will be a minimum of 2 years from the date of manufacture.
2. Do not use SDI Bond after expiry date.
3. Do not refrigerate SDI Bond.

PACKAGING

ETCH AND BOND KIT – LIQUID

2 x 5 ml Bonding Resin
1 x 15 ml Acid Etch

ETCH AND BOND KIT – GEL

2 x 5 ml Bonding Resin
1 x 15 ml Acid Etch Gel

SUPER-ETCH

3 x 2 ml Super-Etch Gel
25 x Super-Etch Disposable Tips

IMPORTANT

1. Avoid prolonged contact of SDI Bond with the skin or oral tissues, as it may cause inflammation of the oral tissues or skin sensitization.
2. Any persons having known resin allergies should immediately discontinue the use of SDI Bond.

Made in Australia by

SDI

BAYSWATER, VICTORIA, 3153



Etch and Bond

INSTRUCTIONS FOR USE

PROCESSING AND PLACEMENT PROCEDURE

1. Cavity Preparation

A conservative cavity should be prepared, employing standard techniques and instruments, to form a slightly rounded internal form. Margins of the cavity preparation should end in sound and supported enamel with no bevels in stress bearing locations. If bevelling is desired in a low stress location it should extend no further than 1 mm at an angle of no greater than 45°. Pre-wedging is also recommended to ensure that the restored tooth will have an adequate contact point. Prophy all surfaces to be etched including surfaces adjacent to the cavity with an oil-free non-fluoride containing paste or a slurry of pumice and water. Rinse thoroughly with water.

2. Composite Shade Selection

(a) Shade selection should be made with a just cleaned moist tooth using the Shade Guide.

(b) Alternative Method of Shade Selection

NOTE: Do not apply acid etch or bonding resin at this stage if you wish to use the following method of shade selection.

Do not use uncured paste for colour matching as there is a slight colour change upon curing.

Place a small amount of composite on the tooth that is to be restored and polymerize to check that the shade selection is correct. Remove from tooth after colour matching.

3. Isolation

Isolation techniques must be used to prevent contamination. Rubber dam is the preferred mode of isolation. To facilitate the restoration of interproximal contacts, teeth requiring Class II restorations may be wedged by using contoured or rounded wedges.

4. Pulp Protection

For shallow cavities dentin/enamel adhesive can be used solely, e.g. PAAMA 2. For deep cavities that require pulp protection a calcium hydroxide lining cement should be placed in the deepest part of the cavity and covered with glass ionomer lining.

If there is more than 0.5 mm of dentin between the cavity floor and the pulp, cover all exposed dentin with glass ionomer lining cement.

Preparations containing eugenol should not be used.

5. Acid Etching

(a) Enamel only

Thoroughly dry the enamel surface to be etched with **dry, oil-free air**. Dispense a small amount of etching liquid or gel onto a pad and apply using a disposable brush. Etch for at least 30 seconds. Rinse thoroughly with water for an additional 30 seconds then thoroughly dry with **dry, oil-free air**. The etched enamel should take on a matt white appearance. If this is not so, or the area has become contaminated with saliva, repeat the acid etching procedure.

Enamel subjected to fluoridation should be etched for 90 to 120 seconds. If a glass ionomer cement was used for pulp protection it should be etched also.

(b) Dentin and enamel

Thoroughly dry the surface to be etched with **dry, oil-free air**. Etch exposed dentin and enamel including any glass ionomer for at least 30 seconds. Rinse with water for an additional 30 seconds. Remove excess water with an air syringe or by blotting. **DO NOT DEHYDRATE** (leave moist).

Enamel subjected to fluoridation should be etched for 90 to 120 seconds. Avoid water puddles because they reduce bond strength

NOTE:

1. A moist dentin produces a stronger and more constant bond strengths.
2. Although not recommended, damp enamel also produces acceptable adhesion.
3. Avoid contamination e.g. saliva
4. Dry dentin appears dull unless it is sclerotic.

Etching Precautions: Avoid acid contact with oral tissues, eyes and skin. If accidental contact occurs wash thoroughly with water. In case of eye contact, also seek medical attention. Use matrix strips to protect adjacent tooth surfaces during etching.

6. Placement of Bond and/or PAAMA 2

(a) Bond — etched enamel only

NOTE: Ensure that the etched enamel is completely dry for the entire procedure (i.e. for placement of both bond and composite). Place a small amount of the bonding resin onto the pad provided and replace the screw cap. Using a new disposable brush tip apply a thin layer of bonding resin to the previously etched surface, ensuring that the etched glass ionomer liner is also covered. A light stream of **dry, oil-free air** could be used to aid the resin flow.

Although it is unnecessary to polymerize at this point, the majority of dentists prefer to do so because it eases the placement of the composite. When curing the bond make sure you do not disturb or contaminate the thin oxygen inhibited layer on the surface of the bond. This layer will polymerize along with the composite to form the chemical bond between the two materials.

(b) PAAMA 2 — Etched dentin and enamel

1. Dispense 1-2 drops of PAAMA 2 Primer onto a mixing pad. Replace the cap on the bottle immediately.
2. Using a brush, immediately apply several coats of the primer on the etched surface (5 coats approximately).
3. Blow gently with **clean, dry, oil-free air** to spread the primer evenly and evaporate excess solvent.

NOTE: Properly primed surface will appear glossy when coverage is sufficient. If surface is not glossy, repeat primer application.

4. Dispense a drop of PAAMA 2 Adhesive onto a mixing pad. Using a brush, apply a thin uniform coating on the primed surface.

7. Polymerization of Bond and/or PAAMA 2

Cure either Bond or PAAMA 2 with a 20 second exposure to visible light. If the area to be cured is larger than that of the fibre optic tip, repeat the procedure after moving the tip to a position over the remaining area of adhesive.

NOTE: It is recommended that the placement of composite should follow immediately to reduce the risk of contaminating the adhesive's oxygen inhibited layer.

8. Placement of Composite

(a) For Syringe System

Dispense the required amount of composite onto the pad provided and turn the screw plunger counter-clockwise one turn to release pressure. Replace syringe cap. If not immediately used the dispensed material should be kept away from both high intensity and ambient light to prevent premature polymerization.

NOTE: Mixing of the paste should be avoided to prevent air entrapment and resultant voids and surface porosity.

(b) For the Complet System

Insert Complet into the applicator opening at 45° with the nozzle in the upright position. Allow the Complet to fall in the horizontal position as soon as the nozzle is past the syringe collar. Push the Complet to final position with applicator plunger. Adjust Complet rotation to suit entry into the cavity. Dispense restorative into the cavity preparation by using a steady pressure.

WARNING: Apply restorative at normal room temperature (approximately 22°C). Use only light, controlled pressure, preventing any rapid extrusion of material. The Complet system may fail if extruded at a fast rate. For best results the total Complet contents should be extruded over a minimum period of 20 seconds.

Using a smooth clean plastic or metal instrument, gently pack the composite into the cavity taking care not to fold it over in such a manner as to create