**Direct Restoration Using Light-Cured Composite Resin**

Follow the standard procedures for isolation, moisture control, cavity preparation and pulp protection.

1. **Tooth Pretreatment**
   - Choose either etching procedure
     a. Self-etching (Move to section 2)
     b. Selective-etching
       - Apply K-ETCHANT Syringe to the uncut and/or cut enamel, then rinse and dry 10sec.
     c. Total-etching
       - Apply K-ETCHANT Syringe to the entire cavity (enamel and dentin), then rinse and dry 10sec.

2. **Apply BOND with a rubbing motion**

3. **Dry by blowing mild air until BOND does not move**
   - 5sec.

4. **Light-cure**

5. **Place composite resin, light-cure and finish**

**Intraoral Repair of Fractured Restorations**

1. Roughen, rinse and air dry
2. Apply K-ETCHANT Syringe, then rinse and dry
3. Apply BOND with a rubbing motion

4. **Dry by blowing mild air until BOND does not move**
   - 5sec.

5. **Light-cure**

6. **Place composite resin, light-cure and finish**

**Post Cementation / Core Build-ups with CLEARFIL DC CORE PLUS**

Follow the standard procedures for moisture control and preparing root canal.

1. **Post Pretreatment**
   - For Glass Fiber Post
     1. Apply K-ETCHANT Syringe, rinse and dry
     2. Apply BOND, then dry by blowing mild air
   - For Metal Post
     1. Blast with alumina powder, then ultrasonic clean and dry

2. **Tooth Pretreatment**
   - Choose either etching procedure
     a. Self-etching (Move to section 3)
     b. Selective-etching
       - 10sec.
     c. Total-etching
       - 10sec.

3. **Apply BOND with a rubbing motion**

4. **Dry by blowing mild air until BOND does not move**
   - 5sec.

5. **Light-cure**

6. **Post cementation and core build-up using CLEARFIL DC CORE PLUS according to the manufacturer's instructions**

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**Table 1: Dental curing unit and curing time**

<table>
<thead>
<tr>
<th>Type</th>
<th>Light source</th>
<th>Light intensity</th>
<th>Light-curing time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halogen</td>
<td>Halogen lamp</td>
<td>More than 400 mW/cm²</td>
<td>10 seconds</td>
</tr>
<tr>
<td>LED</td>
<td>Blue LED*</td>
<td>800-1400 mW/cm²</td>
<td>10 seconds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 1500 mW/cm²</td>
<td>5 seconds</td>
</tr>
</tbody>
</table>

* Peak of emission spectrum: 450-480 nm

* Effective wavelength range of each dental curing unit must be 400-515 nm

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**Flow Chart Sheet**

**Indications**

1. Direct restorations using light-cured composite resin
2. Cavity sealing as a pretreatment for indirect restorations*
3. Treatment of exposed root surfaces*
4. Treatment of hypersensitive teeth*
5. Intraoral repairs of fractured restorations
6. Post cementation and core build-ups
7. Cementation of indirect restorations

Post Cementation / Core Build-ups
with Other Core Material (except for CLEARFIL DC CORE PLUS)

Follow the standard procedures for moisture control and preparing root canal

1. Post Pretreatment
   For Glass Fiber Post
   1] Apply K-ETCHANT Syringe, rinse and dry
   2] Apply the mixture of BOND and CLEARFIL DC Activator, then dry by blowing mild air
   3] Light-cure

   For Metal Post
   1] Blast with alumina powder, then ultrasonic clean and dry
   2] Apply the mixture, then dry by blowing mild air
   3] Light-cure

   Note: Working time will be dramatically shortened when not light-curing

2. Tooth Pretreatment
   Choose either etching procedure
   a. Self-etching (Move to section 3)
   b. Selective-etching
   c. Total-etching

3. Apply the mixture*1 with a rubbing motion
   No waiting time

4. Dry by blowing mild air and paper point until the mixture does not move*2

5. Light-cure*3

   Note: Working time will be dramatically shortened when not light-curing

* Use a vacuum aspirator to prevent the mixture from scattering.

** Refer to Direct Restoration

Cementation of Indirect Restorations
with PANAVIA SA Cement Plus

Clean and dry the tooth surface, and then trial fit the prosthetic restoration

1. Surface preparation of prosthetic restorations
   Silica-based Glass Ceramic (e.g. Lithium Disilicate)
   Metal-oxide (e.g. Zirconia, Metal or Composite resin)

   Apply a hydrofluoric acid, then rinse and dry

   Blast with alumina powder (30–50μm, 0.2–0.4MPa/29–58 PSI/2–4 kgf/cm²), then ultrasonic clean and dry

2. Apply BOND*4, then dry by blowing mild air until BOND does not move*2

3. Tooth Pretreatment
   Choose either etching procedure
   a. Self-etching (Move to section 4)
   b. Selective-etching
   c. Total-etching

4. Apply BOND with a rubbing motion
   No waiting time

5. Dry by blowing mild air until BOND does not move*2

6. Cementation using PANAVIA SA Cement Plus according to the manufacturer’s instructions

** Refer to Direct Restoration

Cementation of Indirect Restorations
with Resin Cement
(except for PANAVIA SA Cement Plus)

Clean and dry the tooth surface, and then trial fit the prosthetic restoration

1. Surface preparation of prosthetic restorations
   Silica-based Glass Ceramic (e.g. Lithium Disilicate)
   Metal-oxide (e.g. Zirconia, Metal or Composite resin)

   Apply a hydrofluoric acid, then rinse and dry

   Blast with alumina powder (30–50μm, 0.2–0.4MPa/29–58 PSI/2–4 kgf/cm²), then ultrasonic clean and dry

2. Apply the mixture of BOND and CLEARFIL DC Activator, then dry by blowing mild air

3. Light-cure

4. Tooth Pretreatment
   Choose either etching procedure
   a. Self-etching (Move to section 5)
   b. Selective-etching
   c. Total-etching

5. Apply the mixture* with a rubbing motion
   No waiting time

6. Dry by blowing mild air until the mixture does not move*2

7. Light-cure*3

   Note: Working time will be dramatically shortened when not light-curing

* Dispense one drop each of BOND and CLEARFIL DC Activator and mix them.
* Use a vacuum aspirator to prevent the mixture from scattering.
* Refer to the Table 1 for light-curing time.

** Refer to Direct Restoration