



## **CLEARFIL REPAIR Multi Purpose is indicated for the following uses:**

### **Case A**

Repairing fixed prosthetic restorations fabricated from porcelain, ceramic, hybrid ceramics or composite resin (e.g. inlays / onlays, crowns, bridges and the superstructure of implants).

### **Case B**

Re-glazing fixed intra-oral restorations (e.g. cured direct / indirect composite resin, provisionals, acrylic appliances, glass ionomers)

## Curing unit and Curing time

Table 1: Dental curing unit

| Type                 | Light source | Wavelength range and light intensity  |
|----------------------|--------------|---|
| Conventional halogen | Halogen lamp | Light intensity of 300 - 550 mW/cm <sup>2</sup> in wavelength range from 400 - 515 nm   |
| Fast halogen         | Halogen lamp | Light intensity of more than 550 mW/cm <sup>2</sup> in wavelength range from 400 - 515 nm   |
| Plasma arc           | Xenon lamp   | Light intensity of more than 2000 mW/cm <sup>2</sup> in wavelength range from 400 - 515 nm, and light intensity of more than 450 mW/cm <sup>2</sup> in wavelength range from 400 - 430 nm |
| LED                  | Blue LED     | Light intensity of more than 300 mW/cm <sup>2</sup> in wavelength range from 400 - 515 nm   |

Table 2: Relationship between dental curing unit and curing time for CLEARFIL ST OPAQUER

| Dental curing unit   | Thickness of CLEARFIL ST OPAQUER |              |
|----------------------|----------------------------------|--------------|
|                      | less than 0.4 mm                 | 0.4 - 0.5 mm |
| Conventional halogen | 40 sec.                          | 60 sec.      |
| Fast halogen         | 10 sec.                          | 20 sec.      |
| Plasma arc           | 5 sec.                           | 5 sec.       |
| LED                  | 40 sec.                          | 80 sec.      |




Table 3: Relationship between dental curing unit and curing time for SURFACE COAT

| Dental curing unit          | Curing time |
|-----------------------------|-------------|
| Conventional halogen        | 20 sec.     |
| Fast halogen,<br>Plasma arc | 10 sec.     |

# Case A **CLEARFIL™ REPAIR Multi Purpose**

KURARAY MEDICAL INC.

Repairing fixed prosthetic restorations fabricated from porcelain, ceramic, hybrid ceramics or composite resin. (1/2)

|   |  |  |   |
|---|--|--|---|
| <p><b>1</b> Roughen the surface with a diamond point, rinse and dry.</p>    | <p><b>2</b> Apply K-ETCHANT GEL on the surface, leave in place for 5 seconds., rinse and dry.</p> <p>5 s</p> <p>Zirconia-alumina prosthetic restorations do not require this step.</p>  | <p><b>3</b> If the surface contains a metal, apply ALLOY PRIMER.</p>     | <p><b>4</b> Apply CLEARFIL CERAMIC PRIMER to the surface.</p>  |
| <p><b>5</b> Dry the liquid sufficiently using low or medium pressure.</p> <p>If the surface includes a tooth structure, treat with a bonding agent (e.g. CLEARFIL TRI-S BOND), light-cure.</p>  | <p><b>6</b> If the surface contains a metal, apply CLEARFIL ST OPAQUER.</p>    | <p><b>7</b> Light-cure<br/>•Refer to table 2 for light-curing time</p>  |   |

A

## Case A

### Repairing fixed prosthetic restorations fabricated from porcelain, ceramic, hybrid ceramics or composite resin. (2/2)

**8** Place and light cure the selected composite resin (e.g. CLEARFIL MAJESTY Esthetic).



**9a** Contour, finish and polish the polymerized resin.



**9b** Contour and roughen the restoration surface using diamond point, rinse and dry.



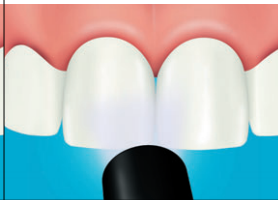
**10b** Apply a thin layer of SURFACE COAT to the restoration surface.



The flat type disposable brush tip is recommended.

**11b** Light-cure

\*Refer to table 3 for light-curing time



#### **[Caution]**

Check for any unpolymerized resin on the cured SURFACE COAT using an explorer.

If an unpolymerized resin layer is found, light cure again or remove with dry gauze.

When using SURFACE COAT without finishing and polishing, go to step 9b.

## Case B **CLEARFIL™ REPAIR Multi Purpose**

KURARAY MEDICAL INC.

Re-glazing fixed intra-oral restorations.



**[Caution]**  
Check for any unpolymerized resin on the cured SURFACE COAT using an explorer.  
If an unpolymerized resin layer is found, light cure again or remove with dry gauze.

B