Instructions for Use

Caution: U.S. Federal law restricts this device to sale by or on the order of a licensed Dentist.
C&B™* CEMENT
Crown & Bridge Luting Cement

GENERAL INFORMATION

C&B CEMENT is a self-cured crown and bridge luting composite cement with viscosity and flow characteristics that make it ideal for indirect restorations. This versatile cement can be used successfully with precious, semi-precious and non-precious metals and for cementation of all-ceramic/porcelain and composite fixed prostheses. C&B CEMENT is intended for use with a universally compatible adhesive. All BISCO adhesives are engineered for optimal bond strengths with C&B CEMENT.

C&B Opaque is recommended for restorations such as Maryland Bridges, which require masking underlying metal.

C&B Natural is recommended for aesthetic restorations requiring a natural tooth shade beneath the restoration.

C&B Natural with Fluoride should be used in areas particularly susceptible to caries that would benefit from the effect of fluoride.

Warnings:
- This product may not be appropriate for use in patients who have a history of allergic reactions methacrylate resins
- When using dental adhesives, saliva and oral fluid contamination will seriously compromise dentin bonding.

Cautions:
- Cross-contamination: Product may contain items that are designed for one time use. Dispose of used or contaminated accessories. Do not clean, disinfect or reuse.

Precautions:
- Avoid contact with the skin; unpolymerized resins may cause skin sensitization in susceptible persons. In case of contact, wash skin with soap and water.
- Working and setting times will be accelerated in the warm intraoral environment.
- Refer to the manufacturer’s instructions. Unlike BISCO adhesives, not all bonding systems are chemically compatible with self-cured or dual-cured materials.
- For thin veneers it is recommended to use CHOICE™* 2 for cementation.
- To prevent polymerization or clogging, the dual-syringe mixing tip should be left in place until the next application. If used intraorally, it should be wiped with disinfectant prior to storage.
- See individual component labels for specific expiration dates

TECHNICAL INFORMATION

At Room Temperature (20°C/68°F - 25°C/77°F):

<table>
<thead>
<tr>
<th>Individual Syringes:</th>
<th>Working Time:</th>
<th>Setting Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;B Opaque</td>
<td>3 min. ± 30 sec.</td>
<td>4 min. 30 sec. ± 30 sec.</td>
</tr>
<tr>
<td>C&amp;B Natural</td>
<td>4 min. ± 30 sec.</td>
<td>7 min. ± 1 min.</td>
</tr>
<tr>
<td>C&amp;B Natural with Fluoride</td>
<td>4 min. ± 30 sec.</td>
<td>7 min. ± 1 min.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dual-Syringe:</th>
<th>Working Time:</th>
<th>Setting Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;B Opaque</td>
<td>2 min. 45 sec. ± 30 sec.</td>
<td>4 min. 15 sec. ± 30 sec.</td>
</tr>
<tr>
<td>C&amp;B Natural</td>
<td>3 min. 15 sec. ± 30 sec.</td>
<td>6 min. ± 1 min.</td>
</tr>
<tr>
<td>C&amp;B Natural with Fluoride</td>
<td>3 min. ± 30 sec.</td>
<td>6 min. ± 1 min.</td>
</tr>
</tbody>
</table>

Working time and Setting time may vary based on storage conditions, temperature, humidity, etc.

To Increase Working Time/Slow Setting Time:
(Optional for cementation of multiple units)
- Increase catalyst. (This is the OPPOSITE of most catalyst/base cements.) Catalyst can be increased up to a ratio of 3:1 with the base.
- Chill cement in refrigerator before use.
- A chilled glass slab for spatulation can help slow the set of the cement.

HELPFUL HINTS

Loading the Prosthesis with C&B:
- Do not overload the crown/bridge with cement.
- The restoration should only be lined with the cement.

Seating the Restoration:
- Sensitivity under crowns bonded with composite cement can be avoided by applying the priming adhesive correctly and by passively placing the crown using light pressure only.
- Holding the crown in place (while polymerization occurs) with excessive force may cause hydrostatic pressure sensitivity upon release of the restoration.

C&B Cement left on the mixing pad may appear not to set:
- This is due to oxygen inhibition of the polymerization process.
- Rest assured the cement under the restoration will polymerize (set) in a normal fashion.
- The user can confirm this by placing a mylar strip over a substantial amount of cement on a mixing pad; the cement will set within the specified setting time.

Clean-up:
- C&B CEMENT sets very hard; removal of excess cement should begin as soon as the crown is seated.
- Failure to remove the cement early may result in the cement adhering to areas from which it should be removed.

INSTRUCTIONS FOR USE

A. Tooth Preparation
1. Remove provisional restoration and thoroughly clean the preparation.
2. Apply an adhesive that is compatible with all dental materials according to manufacturer’s instructions.

NOTE: All BISCO adhesives have been designed for optimal bond strengths with BISCO’s C&B CEMENT.
B. Restoration Preparation

Preparation of Glass Ceramics/porcelain (silica-based) or Lithium Disilicate/Silicate Restorations:
1. Since different ceramics require different surface treatments (e.g. etching or particle abrasion), contact the laboratory or manufacturer for proper internal surface treatment instructions.
2. Clean the bondable surfaces of the restoration; rinse and air dry.
3. Apply 1 coat of silane, such as BISCO's PORCELAIN PRIMER*. Dry with an air syringe.
   NOTE: BISCO's research demonstrates silane maintains bond durability, maximizing longevity to glass ceramics.
4. Proceed with cementation.

Priming of Metal, Zirconia, Alumina, Composite, and Post Restorations:
1. Prepare the surface of the restoration according to instructions provided by the laboratory or the manufacturer. (e.g. particle abrasion)
2. Clean the bondable surfaces of the restoration; rinse and air dry.
3. Apply 1 coat of Z-PRIME™* Plus, uniformly wetting the bondable surface. Dry thoroughly with an air syringe.

C. Cementation

Cement Mixing Procedures:
Dual-Syringe
1. Remove the syringe cap or mixing tip from the dual-syringe.
2. Dispense a small amount of material onto a mixing pad to eliminate any voids in each chamber of the dual-syringe.
3. Attach a mixing tip to the dual-syringe by lining up the key and keyway. Then turn the brown locking mechanism clockwise.
4. Pressing the plunger will mix and dispense the C&B CEMENT. (See “TECHNICAL INFORMATION” Section for Working and Setting Time information.)

Individual-Syringes
1. Mix equal amounts of C&B base and catalyst into a uniform paste (10-15 seconds) until the paste is a uniform color. (To increase working time, follow directions listed under TECHNICAL INFORMATION.)

Cementation Procedures:
Indirect Restorations:
1. Apply cement to the bondable surfaces of the restoration. For inlays, it may be easier to apply the cement directly to the tooth preparation.
2. Fully seat the restoration and gently remove the excess cement immediately with a brush or instrument.

Posts:
1. Using the root canal mixing tip, or needle tip, inject C&B CEMENT into the canal. Start at the apical end of the canal and withdraw the tip slowly while keeping the tip in the cement to minimize voids.
2. Coat the apical end of the post with cement.
3. Seat the post into the canal gently and maintain firm pressure for 20-30 seconds once the post is seated.
4. Remove excess cement and allow to self-cure.
5. As soon as the cement has set, proceed with restorative treatment.

Hygiene:
Use of commonly available hygienic protective covering to avoid any contamination of the C&B CEMENT syringes during the treatment is recommended.

STORAGE:
Store at room temperature (20°C/68°F - 25°C/77°F).

WARRANTY:
BISCO, Inc. recognizes its responsibility to replace products if proven to be defective. BISCO, Inc. does not accept liability for any damage or loss, either direct or consequential, stemming from the use of or inability to use the products as described. Before using, it is the responsibility of the user to determine the suitability of the product for its intended use. The user assumes all risk and liability in connection therewith.

* C&B, CHOICE 2 and Z-PRIME are trademarks of BISCO, Inc. PORCELAIN PRIMER is manufactured by BISCO, Inc.