

*BISCO*

***Z-CEM™ SA***

## Instructions for Use



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**Caution:** U.S. Federal law restricts this device to sale by or on the order of a licensed Dentist.

**Z-CEM™ SA**  
**Self-Adhesive Resin Cement**  
**GENERAL INFORMATION**

**Z-CEM SA** is a self-etching, self-adhesive, dual-cured resin luting cement that is exclusively formulated for luting crowns, bridges, inlays, onlays and posts (prefabricated metal and non-metal/fiber posts, as well as cast posts).

**Z-CEM SA** is a paste/paste, fluoride-releasing, luting cement which requires no etching, no priming or bonding of the prepared surfaces. It is easy-to-use, requires only a short chair time, and produces a good bond to most dental materials. The cement is available in Translucent shade. It is radiopaque, allowing for easy identification on radiographs.

**Indications for Use:**

Use **Z-CEM SA** to cement the following:

1. Metal crowns, bridges, inlays and onlays (includes porcelain-fused-to-metal and composite-to-metal)
2. Resin crowns, bridges, inlays and onlays
3. Metal (prefabricated or cast) and non-metal/fiber endodontic posts
4. Porcelain crowns, inlays and onlays (includes alumina and zirconia)

**NOTE:** It is recommended to use **CHOICE™ 2** for veneer cementation.

**Warning:**

- 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 tips. Do not clean, disinfect or reuse.
- Use of commonly available hygienic protective covering to avoid any contamination of syringes during treatment is recommended. If syringe becomes contaminated, discard. Do not clean or disinfect.

**Precautions:**

- Refrigeration is necessary when not in use (2°C/36°F - 8°C/46°F).
- Allow refrigerated **Z-CEM SA** to reach room temperature before use.
- Working and Setting Times will be accelerated in the warm intraoral environment. Intraoral Temperature 37°C/98°F
- Do not use Hydrogen Peroxide, EDTA, or eugenol containing materials prior to bonded procedure as these materials may inhibit bonding.
- Since ceramics and porcelains vary greatly, it is important to consult with the ceramic/porcelain manufacturer or your laboratory for instructions on proper surface treatment and proper prep design prior to using **Z-CEM SA**.
- Avoid contact with the skin; unpolymerized (meth)acrylate resins may cause skin sensitization in susceptible persons. In case of contact, wash skin with soap and water.
- To prevent polymerization or clogging, the Dual-Syringe static 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.
- Safety data sheet available on request.
- Safety data sheet available at [www.bisco.com](http://www.bisco.com).

**TECHNICAL INFORMATION**

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

Working Time: Minimum 1 min. 15 sec. (includes mixing)

Setting Time: Maximum 8 min.

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

**INSTRUCTIONS FOR USE**  
**For: Crowns, Bridges, Inlays and Onlays**

**Preparation Procedures**

**HELPFUL HINTS**

**Z-CEM SA** left on a mixing pad may not appear to set. This is due to oxygen inhibition of the polymerization process. Rest assured the cement will polymerize (set) in a normal fashion under the restoration.

**NOTE: Z-CEM SA** is a self-adhesive cement which does not require etching or priming of the prepared surfaces.

1. Remove the temporary restoration and all temporary cement residue.
2. Try-in the final restoration to insure proper fit.
3. Clean the preparation with pumice and water. Rinse thoroughly.
4. Remove all surface water using a strong stream of air on the preparation for 3 to 5 seconds. Do not desiccate. (Protect the preparation from contamination. When applicable, use of a rubber dam is recommended.)

**Cement Mixing Procedures**

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 **Z-CEM SA**. (See "TECHNICAL INFORMATION" Section for Working and Setting Time information.)

**Cementation Procedures**

**NOTE:** Since ceramics and porcelains vary greatly, it is important to consult with the ceramic/porcelain manufacturer or your laboratory for instructions on proper surface treatment.

1. Apply cement to the Intaglio of the restoration. For inlays, it may be easier to apply the cement to the tooth preparation.
2. Seat the restoration and remove any excess cement. **HINT:** To aid in the removal of excess cement, initially light cure the margins for 2-3 seconds.
3. Light cure for 20-30 seconds, or allow to self cure. (When using self-cured mode, light curing the margins even briefly will expedite the final set.)

**For: Posts (pre-fabricated, metal, cast and non-metal/fiber posts)**

**Preparation Procedures**

1. Prepare the post space per post manufacturer's instruction. Etching and bonding agents are not required.
2. Size and fit post to insure proper fit.
3. Clean post per manufacturer's instructions.

**Cement Mixing Procedures**

1. Remove the syringe cap or mixing tip from the dual-syringe.
2. Dispense a small amount of material onto a mixing pad until material is dispensed from both chambers of the automix 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 **Z-CEM SA**. (See "TECHNICAL INFORMATION" Section for Working and Setting Time information.)

**Cementation Procedures**

1. Remove the Dual-Syringe cap and express some material to confirm that the syringe is free of voids.
2. Attach the root canal tip to the mixing tip and then attach mixing tip to Dual-Syringe.
3. Express Z-CEM SA directly into the canal working in an apical to coronal direction.
4. Quickly seat the post into the canal. Maintain firm pressure for 5-10 seconds once the post is seated.
5. Remove excess cement and light cure for 40 seconds at 500mW/cm<sup>2</sup> by placing the light tip on the post.
6. Once the cement has set, proceed with the core build-up.

**HYGIENE:** Use of commonly available hygienic protective covering to avoid any contamination of the **Z-CEM SA** cement dual-syringes during the treatment is recommended.

**DISPOSAL:** Refer to community provisions relating to waste. In their absence, refer to national or regional provisions relating to waste.

**STORAGE:** Refrigerate at 2°C/36°F - 8°C/46°F.

**WARRANTY:** BISCO, Inc. recognizes its responsibility to replace products if proven to be defective. BISCO, Inc. does not accept liability for any damages 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.

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