

3M ESPE

RelyX™ ARC

Adhesive Resin Cement System Instructions

ENGLISH

Indications for Use

The RelyX™ ARC adhesive resin cement, manufactured by 3M ESPE, is a permanent dual-cure resin cement with an improved delivery system for cementation of indirect and amalgam restorations. It can be used for the final cementation of:

- porcelain fused-to-metal crowns and bridges
- metal crowns, bridges, inlays and onlays (high noble, noble, and base metals)
- crowns and bridges with minimal tooth structure
- Maryland bridges (resin bonded bridges)
- all ceramic/porcelain and pre-cured composite crowns, bridges, inlays and onlays
- endodontic posts
- adhesive (bonded) amalgam restorations
- Note: For laboratory-fabricated veneers, use RelyX™ Veneer Cement, manufactured by 3M ESPE, with Adper™ Single Bond Plus Adhesive or Adper™ Scotchbond™ Multi Purpose Adhesive, both manufactured by 3M ESPE.

Recommendations

Light curing the marginal areas is recommended to provide maximum strength and wear resistance. Light curing time assumes the use of a 3M ESPE curing light or other dental visible curing light of comparable intensity. Curing lights should be checked often for proper output using a reliable light metering system.

Air used during bonding procedure should be free of oil and water contamination.

Mix cement with plastic mixing spatula or a high quality stainless steel spatula.

Temporize with a non-eugenol containing cement.

Working and Setting times:

Mixing Time	Working Time*	Clean-up Time**	Set Time
@22°C/72°F	@22°C/72°F	@35°C/94°F	(Self-Cure)
(Room Temp.)	Approximately (~)	(Oral Temp.)	@35°C/94°F
10 seconds	2 minutes	~3-5 minutes	~10 minutes

* To extend working time: mix for 10 seconds (longer mix times can shorten working time), spread cement into thin layer on mix pad; chill pad, spatula and/or prosthesis.

** If excess cement is removed from margins immediately after seating, the margins must be light cured to minimize oxygen inhibition, which can lead to poorly sealed margins.

For non-retentive restorations (crowns and bridges with minimal tooth structure), seat and hold the restoration in place during clean-up.

***Translucent restorations must be light cured for 40 seconds per marginal surface. Metal restorations should allow the cement to self-cure for 10 minutes from the start of mix. The margins of metal restorations can be light cured for 40 seconds per marginal surface to provide initial stability.

RelyX Veneer cement contains acrylate resins. Avoid use of this product on patients with known acrylate allergies. To reduce the risk of allergic response, minimize exposure to these materials. In particular, avoid exposure to uncured resins. **Use of protective gloves and a no-touch technique is recommended.**

If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If cement contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. If accidental contact with eyes or prolonged contact with oral soft tissue occurs, flush with large amounts of water. If irritation persists, consult a physician.

Sensitivity

Some patients may experience transitory post-operative sensitivity. The risk of sensitivity can be minimized by the following measures: remove minimal tooth structure; use proper isolation; use a rubber dam; use adequate pulp protection; use Vitrebond™ light-cure glass ionomer liner/base, manufactured by 3M ESPE, in areas of deep excavation; adjust occlusion carefully; check for hyperocclusion, particularly in lateral excursive contacts.

Do not desiccate tooth during the bonding procedure.

Instructions for Use:

RelyX ARC cement was designed to be used in conjunction with the Adper Single Bond Plus Adhesive, manufactured by 3M ESPE. Use only with

Adper Single Bond Plus Adhesive is strongly recommended, however it may work with other unfilled one-bottle bonding agents. **Use with dual-cure or self-cure adhesives, including Adper™ Scotchbond™ Multi-Purpose Plus Adhesive, manufactured by 3M ESPE, can cause significantly reduced cement working and setting time. Note: The user is solely responsible for testing the cement for its suitability and use for any purpose not explicitly stated in these instructions, including use with any dental adhesive other than Adper Single Bond Plus Adhesive.**

Instructions for bonding crowns, bridges (including resin-bonded or Maryland bridges), inlays and onlays:

1. Remove temporary restoration. Trial-fit the final restoration with light finger pressure to evaluate the fit, shade and marginal integrity. Adjust if necessary.
2. Prepare the bonding surface of the indirect restoration and the core build up, if applicable. Porcelain bonding surfaces should have been etched with hydrofluoric acid by the dental laboratory. Metal and amalgam bonding surfaces should be roughened, preferably using an air abrasion system, diamond or bur. Any composite surfaces should be roughened with a diamond, bur or air abrasion system. Glass ionomer build-ups should be pumiced with a slurry of plain flour of pumice.
3. **Silane treatment:** Apply RelyX™ Ceramic Primer (#2721), manufactured by 3M ESPE, to the bonding surface of the indirect restoration. Dry for 5 seconds.
4. Clean the prepared teeth in preparation for seating and bonding using a plain flour of pumice slurry. Rinse and dry thoroughly, isolate from moisture and adjacent teeth.
5. Etch preparation and apply Adper Single Bond Plus adhesive according to instructions.
6. Dispense appropriate amount of cement onto a mixing pad and mix for 10 seconds.
7. Apply and evenly distribute a thin layer of cement to the bonding surface of the indirect restoration. The cement may also be applied directly onto the tooth surface for inlay/onlay restorations when used with Adper Single Bond Plus adhesive.
8. Slowly seat and hold restoration in proper occlusion. Begin clean-up of excess cement approximately 3–5 minutes after seating. **Note: If excess cement is removed immediately after**

seating, each cement surface/margin must be light-cured for 40 seconds and not be allowed to self cure only to minimize effects of oxygen inhibition. For non-retentive restorations (crowns and bridges with minimal tooth structure), seat and hold the restoration in place during clean-up.

9. Once the excess cement is removed, each cement surface/margin may be light cured for 40 seconds or allowed to selfcure for 10 minutes from start of mix.

Note: For porcelain and pre-cured composite restorations, each cement surface/margin must be light-cured for 40 seconds to insure high immediate strength at the margins.

10. Instruct patient to avoid applying any excessive pressure for 10–15 minutes.

Instructions for bonding endodontic posts:

1. Prepare the endodontically treated tooth to receive the post (a root apex sealer and gutta percha filling approximately one third of the root canal are recommended). **Trial fit and adjust post as needed.** Bond to cast posts can be enhanced by roughening the surface using an air abrasion system.
2. **Silane treatment:** Apply RelyX Ceramic Primer (#2721) to the bonding surface of the post. Dry for 5 seconds.
3. Etch preparation and apply Adper Single Bond Plus adhesive according to instructions.
4. Trial fit the post after applying and light curing the adhesive.
5. Dispense appropriate amount of cement onto a mixing pad and mix for 10 seconds.
6. Apply cement to the bonding surface of the preparation in and around canal using an instrument such as a spiral paste filler. Place a thin layer of mixed cement on post.
7. Seat and hold the post in place. Begin clean-up of excess cement approximately 3–5 minutes after seating. Light cure for 40 seconds from the occlusal surface to allow immediate placement of core build-up material.

Instructions for bonding amalgam to tooth structure:

1. Isolation: Rubber dam is the advocated method of isolation.
2. Cavity preparation: Prepare a standard amalgam cavity preparation. Roughen residual restorative materials with an air abrasion system or a bur.
3. Matrix application: Lightly lubricate the inner

surface of the matrix band with hard wax or petroleum jelly before placement.

4. Etch preparation and apply Adper Single Bond Plus adhesive according to instructions.
5. Dispense appropriate amount of cement onto a mixing pad and mix for 10 seconds.
6. Use a brush or appropriate applicator to place cement in adhesive sealed cavity preparation. Triturate amalgam during placement of cement.
7. Condense and burnish amalgam in the usual way.
8. Instruct patient to avoid applying any pressure for 10–15 minutes.

Storage and use:

1. The RelyX ARC cement is designed to be used at room temperature of 21–24°C or 70–75°F.

2. Shelf life in refrigerator or room temperature is 24 months.

See outer package for expiration date. Storage in refrigerator ensures longest possible shelf life.

3. Do not store in proximity to eugenol-containing products.

4. Do not expose materials to elevated temperature or intense light.

No person is authorized to provide any information which deviates from the information provided in this instruction sheet.

Warranty

3M ESPE warrants this product will be free from defects in material and manufacture. 3M ESPE MAKES NO OTHER WARRANTIES INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

User is responsible for determining the suitability of the product for user's application. If this product is defective within the warranty period, your exclusive remedy and 3M ESPE's sole obligation shall be repair or replacement of the 3M ESPE product.

Limitation of Liability

Except where prohibited by law, 3M ESPE will not be liable for any loss or damage arising from this product, whether direct, indirect, special, incidental or consequential, regardless of the theory asserted, including warranty, contract, negligence or strict liability.

3M Technical Hotline/MSDS Information 1-800-634-2249.

**3M ESPE
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