

REINFORCED COMPOSITE BLOC FOR PERMANENT RESTORATION

BRILLIANT Crios

Handling Guideline



CONTENT

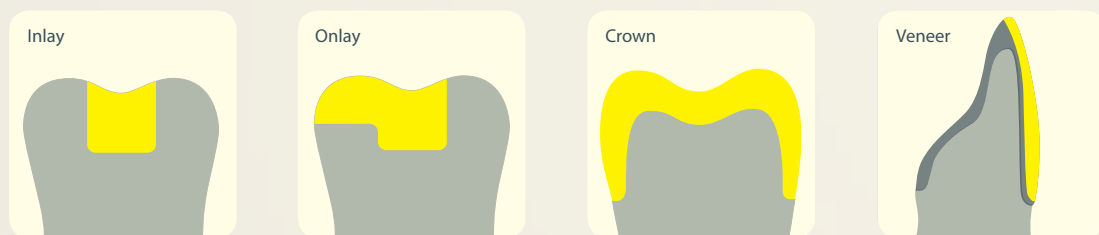
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BRILLIANT CRIOS

BRILLIANT CRIOS IS A REINFORCED COMPOSITE BLOC FOR PERMANENT RESTORATIONS

- High flexural strength supports permanent restorations
- Shock-absorbing effect reduces stress transmission
- Blends in well to provide natural aesthetics
- Comparable wear resistance to glass-ceramic with less wear on human antagonist
- Secure bonding with ONE COAT 7 UNIVERSAL
- Compatible luting materials for all stated indications

INDICATIONS

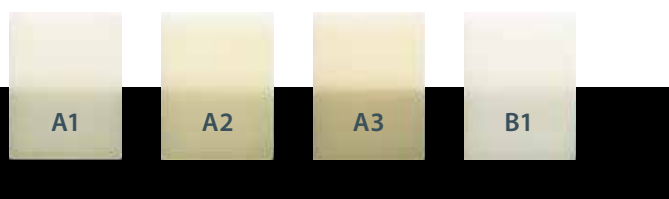


SHADES

Low Translucent

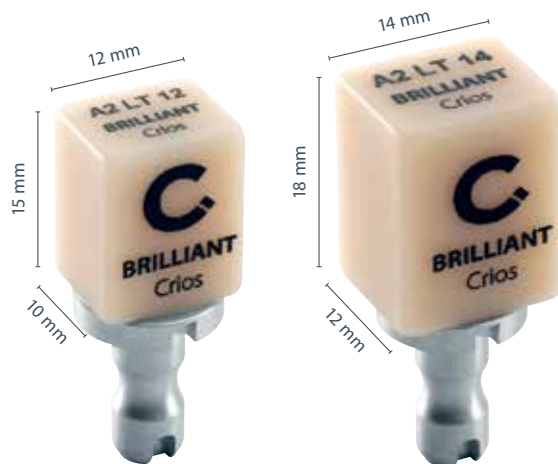


High Translucent



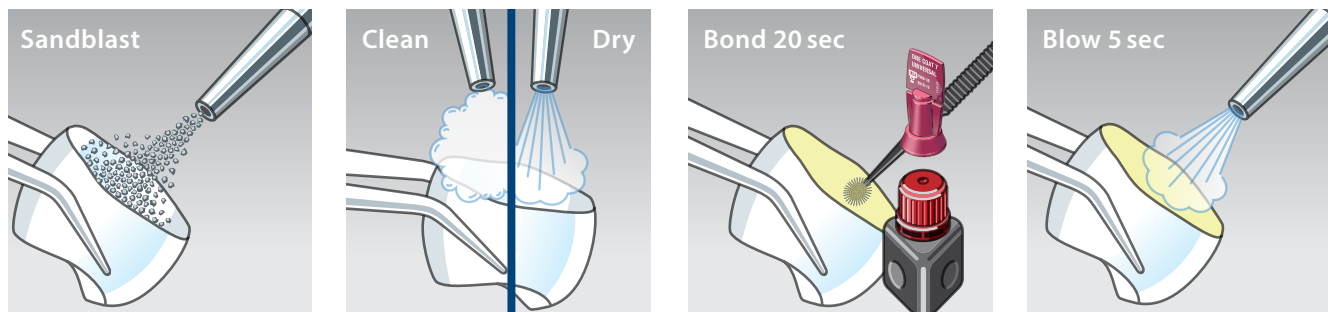
SIZES

BRILLIANT Crios is available in two different sizes.



KEY LUTING STEPS

STEP 1: TREATMENT OF BRILLIANT CRIOS RESTORATION



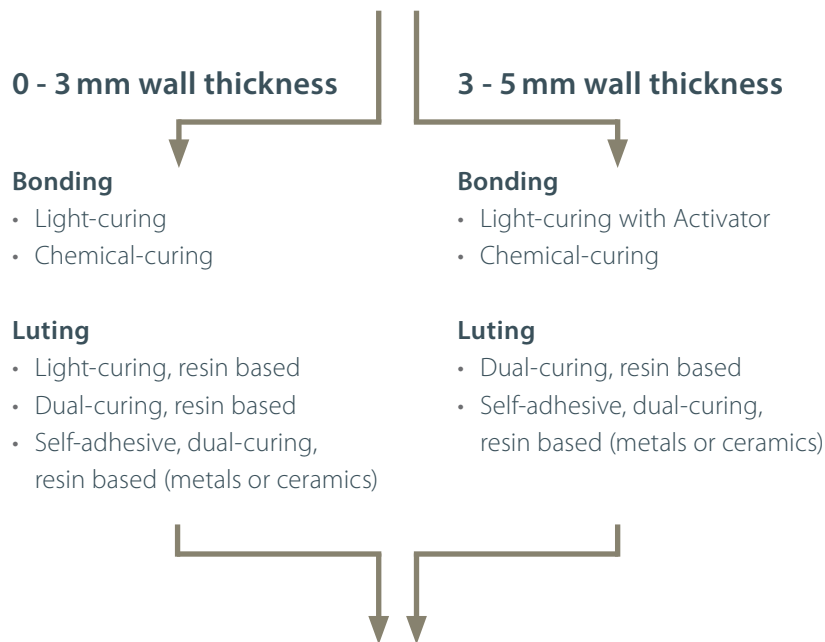
Sandblast the BRILLIANT Crios restoration. Use ONE COAT 7 UNIVERSAL as the bonding agent on BRILLIANT Crios.

Note: Do not use hydrofluoric acid or silane!



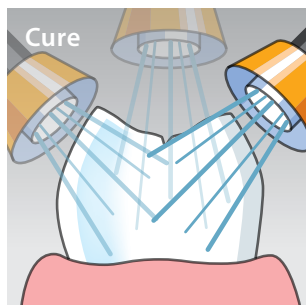
STEP 2: BONDING AND LUTING TO SUBSTRATE

Bonding and luting material must be chosen due to wall thickness of the BRILLIANT Crios restoration and the luting substrate. Follow the detailed proceeding according to manufacturer's instructions for use.



STEP 3: FINAL CURING

Always light-cure each surface for 30 sec. at the end to cure the adhesive on the BRILLIANT Crios restoration.



LUTING MATERIALS

With the universal adhesive ONE COAT 7 UNIVERSAL, BRILLIANT EverGlow composite and the dual-curing resin cements DuoCem and SoloCem, COLTENE offers a complementary and proven luting system for BRILLIANT Crios for indication-appropriate solutions.

ONE COAT 7 UNIVERSAL

ONE COAT 7 UNIVERSAL is matched perfectly to the BRILLIANT Crios components, resulting in strong anchorage and a reliable adhesion. This is why ONE COAT 7 UNIVERSAL adhesive is used in conjunction with BRILLIANT Crios.

The monomers (red) contained in ONE COAT 7 UNIVERSAL penetrate into the polymerized resin matrix of BRILLIANT Crios



Polymer chains are formed during polymerization of the monomers and these are anchored in the resin matrix.

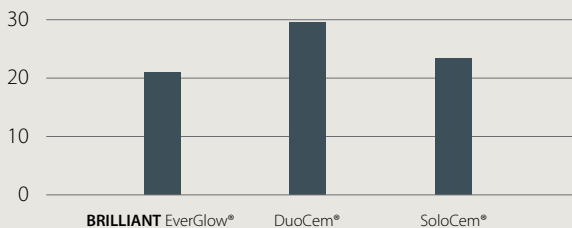


The double bonds contained in the resin matrix form chains during polymerization of the monomers.

- BRILLIANT Crios
- ONE COAT 7 UNIVERSAL

SHEAR BOND STRENGTH WITH ONE COAT 7 UNIVERSAL

Measured in MPa



The BRILLIANT EverGlow, DuoCem and SoloCem luting materials demonstrate excellent bonding strengths to give a secure adhesion to BRILLIANT Crios.

Source: internal data



BRILLIANT EverGlow®

Light-curing composite

Ideal as luting material to dentin or composite for thin restoration walls.

DuoCem®

Dual-curing resin cement

Offers exceptional bonding values to dentin or composite, in particular for greater wall thickness.

SoloCem®

Self-adhesive, dual-curing resin cement

Strong bonding to metal or ceramic abutments, without requiring an additional bonding step.

IMPORTANT NOTES TO ENSURE SUCCESSFUL LUTING

DO'S

- Use of a dental dam is recommended.
- Follow the guideline for preparation and wall thickness.
- ONE COAT 7 UNIVERSAL adhesive must be applied to BRILLIANT Crios, but the use of other bonding agents on the tooth substance is permitted.
- If a light-curing bonding is used on the tooth surface, always light cure before placing the restoration.
- Only resin-based luting materials should be used.

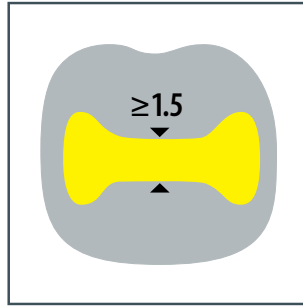
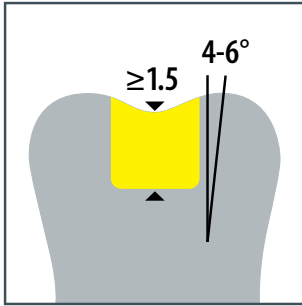
DON'TS

- Do not use silane.
- Do not use inorganic cements.
- Do not lute with light-curing opaque shades.
- Do not fire BRILLIANT Crios.
- Do not use hydrofluoric acid.



STEP-BY-STEP GUIDELINE INLAY

STEP 1: PREPARATION



- Minimal occlusive thickness 1.5 mm
- Preparation angle: 4-6°

COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL
(mandatory)

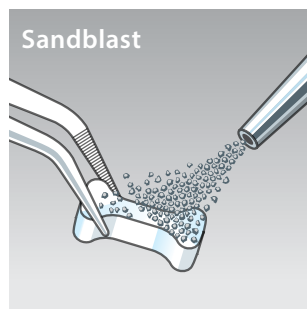
Bond to tooth surface
ONE COAT 7 UNIVERSAL

Etch
Etchant Gel S

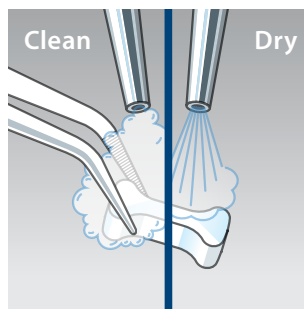
Lute
BRILLIANT EverGlow
(≤ 3 mm wall thickness)

If other materials are used, the exact procedure can slightly differ. Please proceed according to manufacturer's instructions for use.

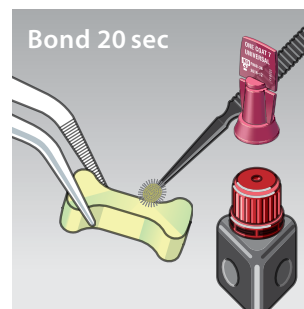
STEP 2: TREATMENT OF BRILLIANT CRIOS RESTORATION



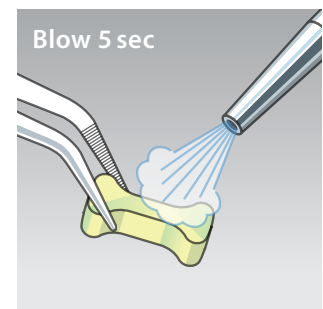
Sandblast the surface to be bonded with 25-50 µm aluminum oxide at 1.5 bar. **Note:** Do not etch the restoration with hydrofluoric acid.



Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

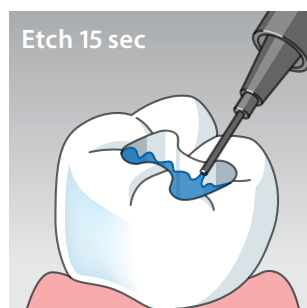


Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 sec. **Note:** Do not use other bonding agents or silane!

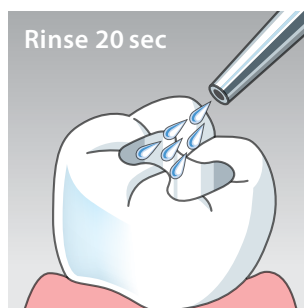


Blow gently with oil-free compressed air for 5 sec.

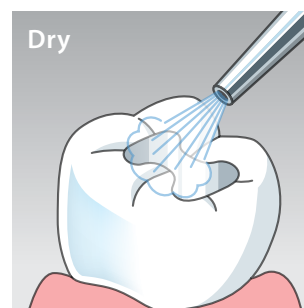
STEP 3: ETCH



Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 sec. **Note:** Selective etch is recommended for optimum adhesive results.



Rinse thoroughly with water until all traces of Etchant Gel S have been removed.



Dry with pressurized oil-free air, taking care not to overdry the dentin.

BRILLIANT EverGlow®

Light-curing composite

- Smooth consistency
- Exceptional polishability
- Excellent gloss retention
- Very good wettability

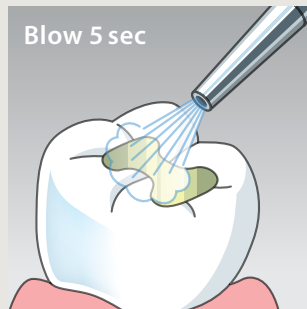


STEP 4: BOND



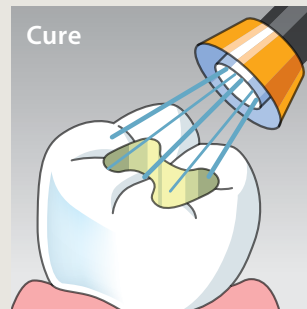
Bond 20 sec

Apply ONE COAT 7 UNIVERSAL to dentin and enamel with a disposable dentalbrush and rub in for 20 sec.



Blow 5 sec

Blow gently with oil-free compressed air for 5 sec.



Cure

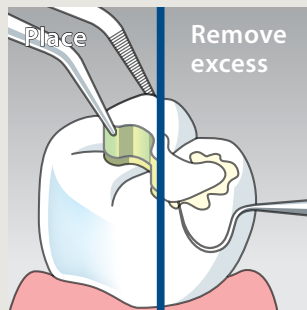
Light-cure for 10 sec (Light intensity ≥ 800 mW/cm²).

STEP 5: LUTE



Lute

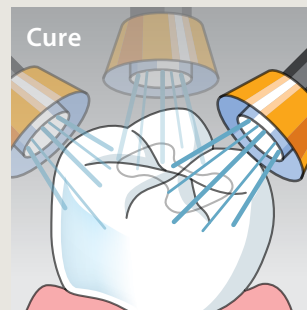
Apply BRILLIANT EverGlow into the cavity and shape to the margins. **Note:** Do not use BRILLIANT EverGlow opaque shades for luting, because full curing can not be ensured.



Place

Remove excess

Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.

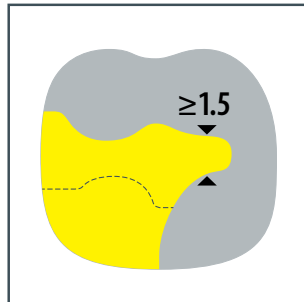
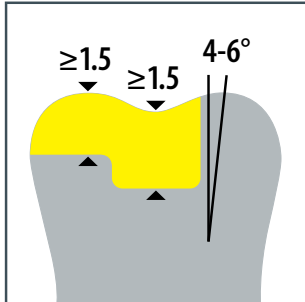


Cure

Light-cure each surface of the restoration for 30 sec (Light intensity ≥ 800 mW/cm²).

STEP-BY-STEP GUIDELINE ONLAY

STEP 1: PREPARATION



- Minimal occlusive thickness 1.5 mm
- Minimal thickness under supporting cusp 1.5 mm
- Preparation angle: 4-6°

COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL
(mandatory)

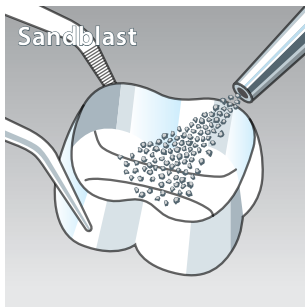
Bond to tooth surface
ONE COAT 7 UNIVERSAL
One Coat 7.0 Activator

Etch
Etchant Gel S

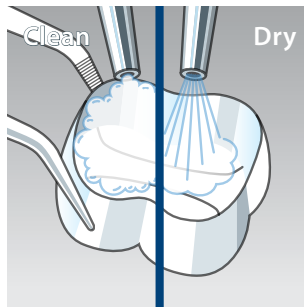
Lute
DuoCem (≤ 5 mm wall thickness)

If other materials are used, the exact procedure can slightly differ. Please proceed according to manufacturer's instructions for use.

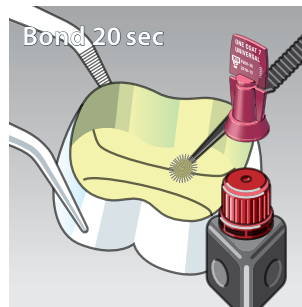
STEP 2: TREATMENT OF BRILLIANT CRIOS RESTORATION



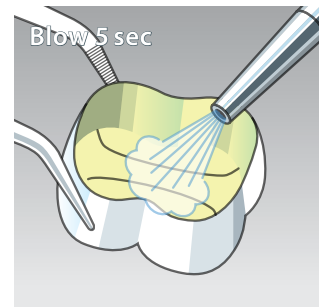
Sandblast the surface to be bonded with 25-50 µm aluminum oxide at 1.5 bar. **Note:** Do not etch the restoration with hydrofluoric acid.



Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

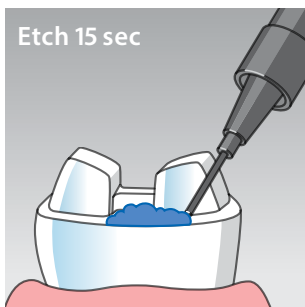


Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 sec. **Note:** Do not use other bonding agents or silane!

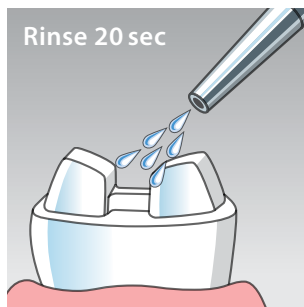


Blow gently with oil-free compressed air for 5 sec.

STEP 3: ETCH



Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 sec. **Note:** Selective etch is recommended for optimum adhesive results.



Rinse thoroughly with water until all traces of Etchant Gel S have been removed.



Dry with pressurized oil-free air, taking care not to overdry the dentin.

DuoCem®

Dual-curing resin cement

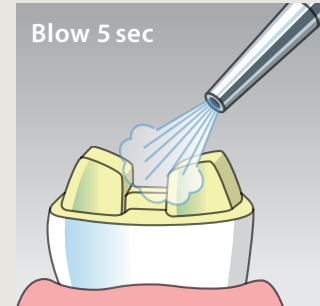
- Strong adhesion and properties similar to composites
- All-purpose material for a variety of indications
- Convenient flow properties and ideal processing times
- Easy removal of excess material



STEP 4: BOND

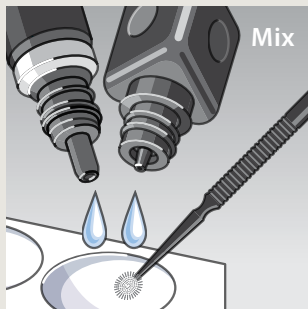


Bond 20 sec
Apply ONE COAT 7 UNIVERSAL to dentin and enamel with a disposable dentalbrush and rub in for 20 sec.

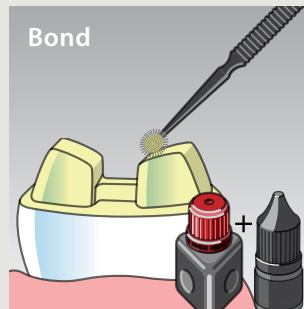


Blow 5 sec
Blow gently with oil-free compressed air for 5 sec.

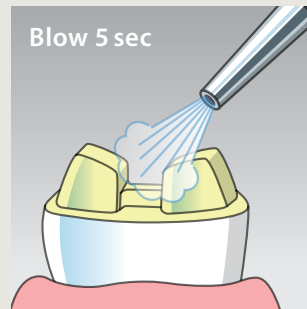
These steps are only required if restoration wall thickness is > 3 mm and light curing of the inhibition layer of ONE COAT 7 UNIVERSAL can not be guaranteed. Otherwise they can be skipped.



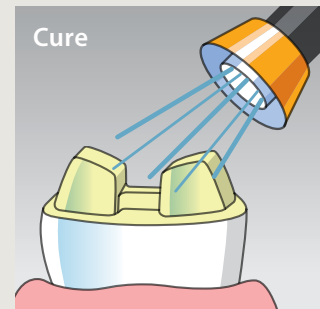
Mix
Dispense one drop of ONE COAT 7 UNIVERSAL and one drop of One Coat 7.0 Activator into the dispensing well and mix it with a clean disposable brush (approx. 5-10 sec).



Bond
Apply the mixed bond to dentin and enamel with a disposable brush.

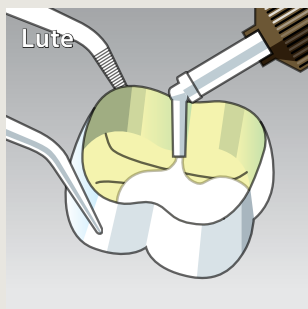


Blow 5 sec
Blow gently with oil-free compressed air for 5 sec.

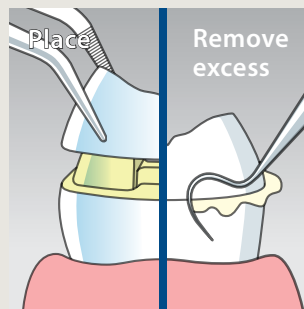


Cure
Light-cure for 10 sec (Light intensity $\geq 800 \text{ mW} / \text{cm}^2$).

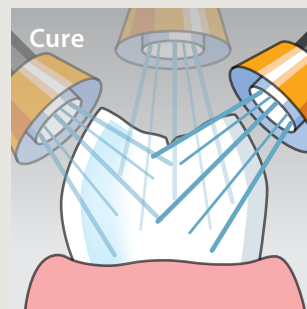
STEP 5: LUTE



Lute
Apply DuoCem directly to the inner surfaces of the restoration.
Note: Before applying, dispense material and discard until an even, homogenous paste is flowing out.



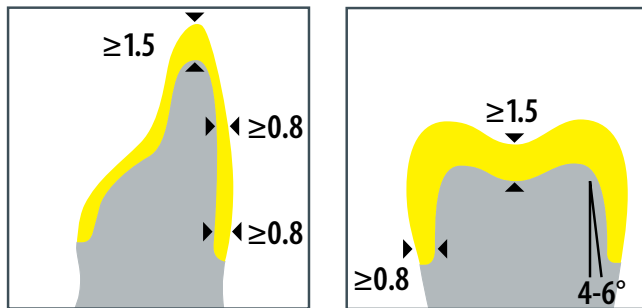
Place
Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.



Cure
Light-cure each surface of the restoration for 30 sec (Light intensity $\geq 800 \text{ mW} / \text{cm}^2$).

STEP-BY-STEP GUIDELINE CROWN

STEP 1: PREPARATION



- Minimal occlusive thickness 1.5 mm
- Minimal buccal thickness 0.8 mm
- Minimal thickness under supporting cusp 1.5 mm
- Minimal cervical thickness 0.8 mm
- Preparation angle: 4-6°

COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL
(mandatory)

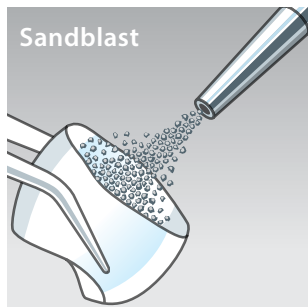
Bond to tooth surface
ONE COAT 7 UNIVERSAL
One Coat 7.0 Activator

Etch
Etchant Gel S

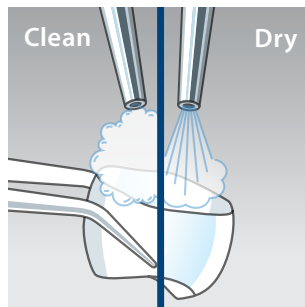
Lute
DuoCem (≤ 5 mm wall thickness)

If other materials are used, the exact procedure can slightly differ. Please proceed according to manufacturer's instructions for use.

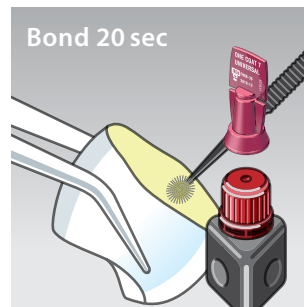
STEP 2: TREATMENT OF THE BRILLIANT CRIOS RESTORATION



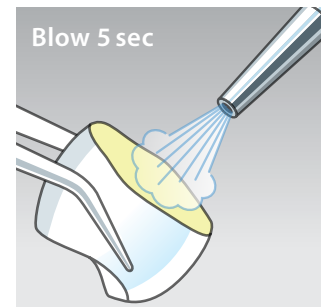
Sandblast
Sandblast the surface to be bonded with 25-50 µm aluminum oxide at 1.5 bar. **Note:** Do not etch the restoration with hydrofluoric acid.



Clean **Dry**
Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

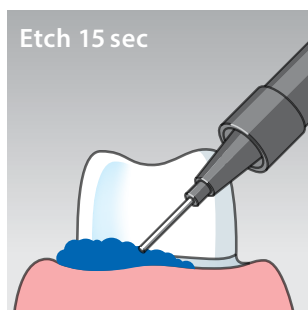


Bond 20 sec
Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 sec. **Note:** Do not use other bonding agents or silane!

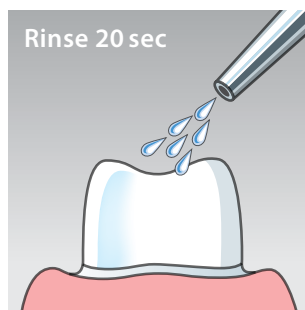


Blow 5 sec
Blow gently with oil-free compressed air for 5 sec.

STEP 3: ETCH



Etch 15 sec
Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 sec. **Note:** Selective etch is recommended for optimum adhesive results.



Rinse 20 sec
Rinse thoroughly with water until all traces of Etchant Gel S have been removed.



Dry
Dry with pressurized oil-free air, taking care not to overdry the dentin.

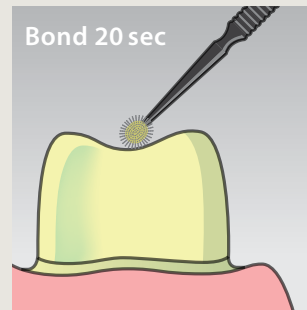
DuoCem®

Dual-curing resin cement

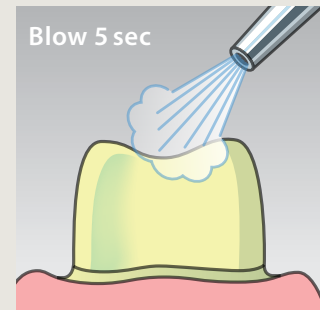
- Strong adhesion and properties similar to composites
- All-purpose material for a variety of indications
- Convenient flow properties and ideal processing times
- Easy removal of excess material



STEP 4: BOND

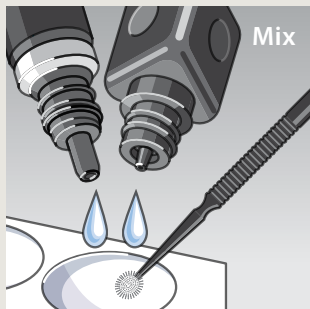


Apply ONE COAT 7 UNIVERSAL to dentin and enamel with a disposable dentalbrush and rub in for 20 sec.

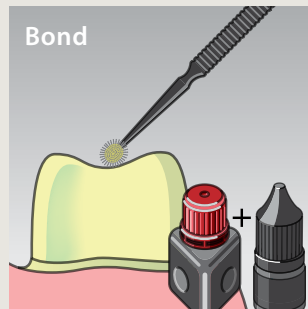


Blow gently with oil-free compressed air for 5 sec.

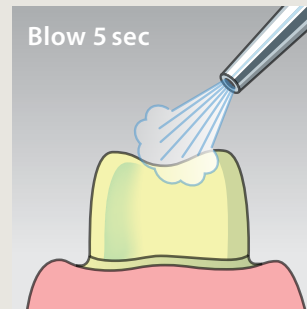
These steps are only required if restoration wall thickness is > 3 mm and light curing of the inhibition layer of ONE COAT 7 UNIVERSAL can not be guaranteed. Otherwise they can be skipped.



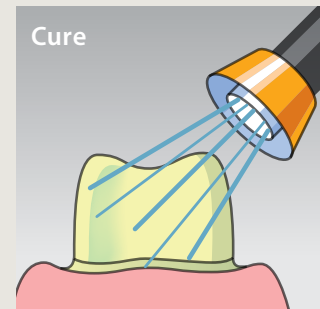
Dispense one drop of ONE COAT 7 UNIVERSAL and one drop of One Coat 7.0 Activator into the dispensing well and mix it with a clean disposable brush (approx. 5-10 sec).



Apply the mixed bond to dentin and enamel with a disposable brush.

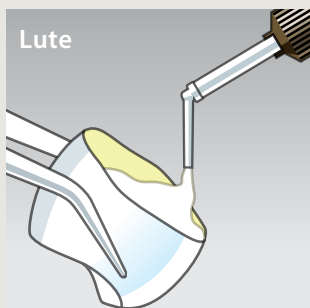


Blow gently with oil-free compressed air for 5 sec.

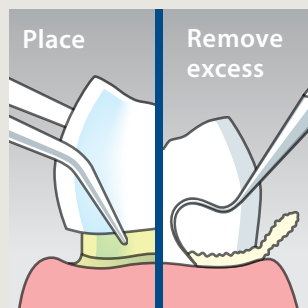


Light-cure for 10 sec (Light intensity $\geq 800 \text{ mW/cm}^2$).

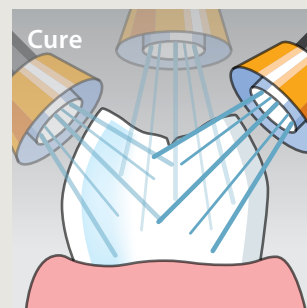
STEP 5: LUTE



Apply DuoCem directly to the inner surfaces of the restoration.
Note: Before applying, dispense material and discard until an even, homogenous paste is flowing out.



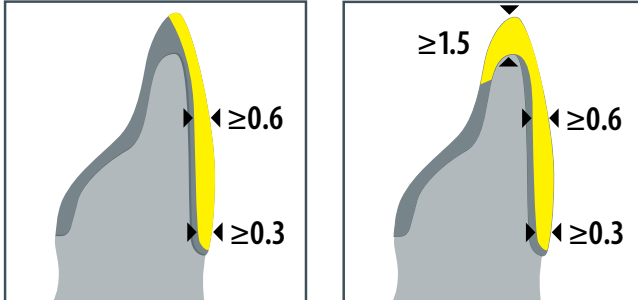
Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.



Light-cure each surface of the restoration for 30 sec (Light intensity $\geq 800 \text{ mW/cm}^2$).

STEP-BY-STEP GUIDELINE VENEER

STEP 1: PREPARATION



- Minimal occlusive thickness 1.5 mm
- Minimal cervical thickness 0.3 mm
- Minimal labial thickness 0.6 mm

COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL
(mandatory)

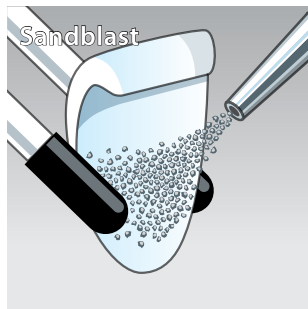
Bond to tooth surface
ONE COAT 7 UNIVERSAL

Etch
Etchant Gel S

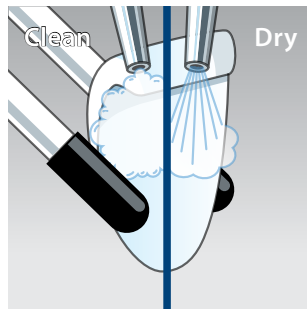
Lute
BRILLIANT EverGlow

If other materials are used, the exact procedure can slightly differ. Please proceed according to manufacturer's instructions for use.

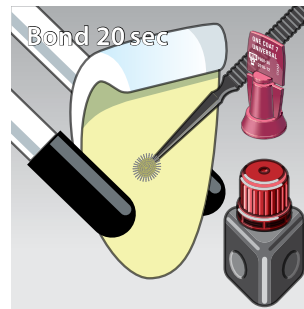
STEP 2: TREATMENT OF THE BRILLIANT CRIOS RESTORATION



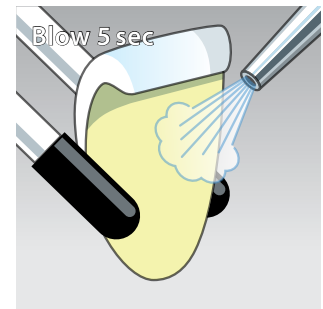
Sandblast the surface to be bonded with 25-50 µm aluminum oxide at 1.5 bar. **Note:** Do not etch the restoration with hydrofluoric acid.



Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

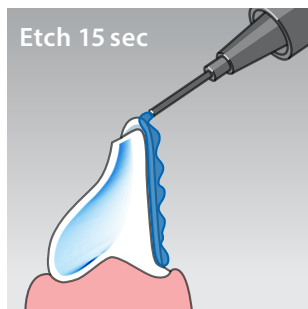


Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 sec. **Note:** Do not use other bonding agents or silane!

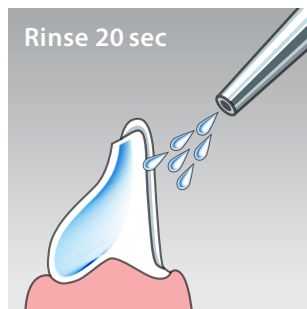


Blow gently with oil-free compressed air for 5 sec.

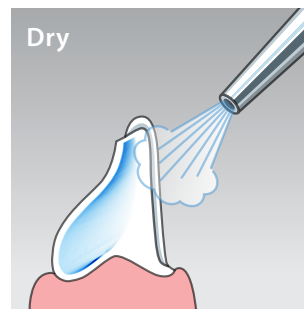
STEP 3: ETCH



Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 sec. **Note:** Total-etch is recommended for optimum adhesive results.



Rinse thoroughly with water until all traces of Etchant Gel S have been removed.



Dry with pressurized oil-free air, taking care not to overdry the dentin.

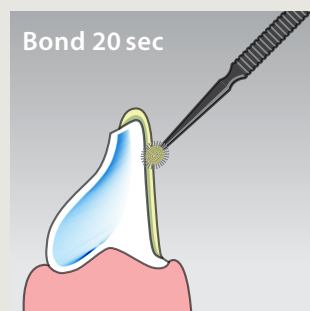
BRILLIANT EverGlow®

Light-curing composite

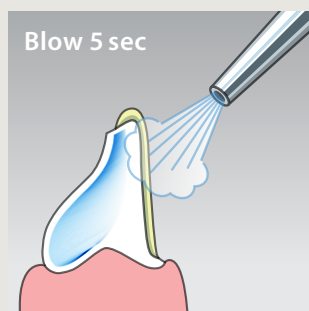
- Smooth consistency
- Exceptional polishability
- Excellent gloss retention
- Very good wettability



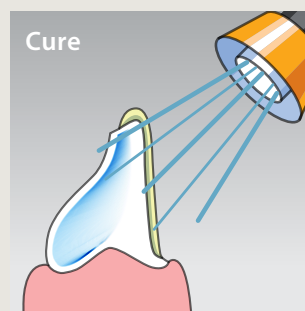
STEP 4: BOND



Bond 20 sec
Apply ONE COAT 7 UNIVERSAL to dentin and enamel with a disposable dentalbrush and rub in for 20 sec.

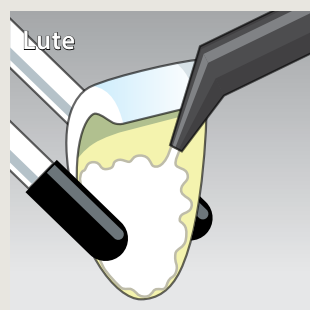


Blow 5 sec
Blow gently with oil-free compressed air for 5 sec.

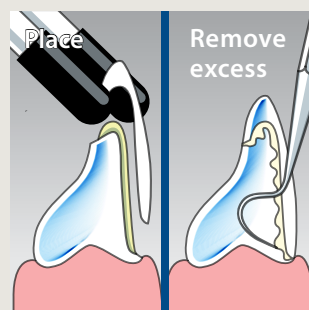


Cure
Light-cure for 10 sec (Light intensity $\geq 800 \text{ mW/cm}^2$).

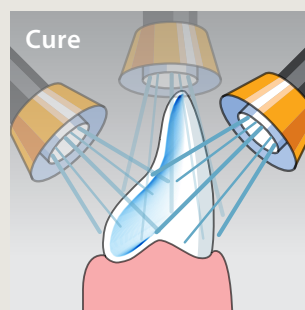
STEP 5: LUTE



Lute
Apply BRILLIANT EverGlow to the contact surface of the restoration and shape to the margins.



Place
Position the restoration on the tooth and move carefully to the final position. While holding in position, remove excess.



Cure
Light-cure each surface of the restoration for 30 sec (Light intensity $\geq 800 \text{ mW/cm}^2$).

STEP-BY-STEP GUIDELINE CROWN ON IMPLANT ABUTMENT

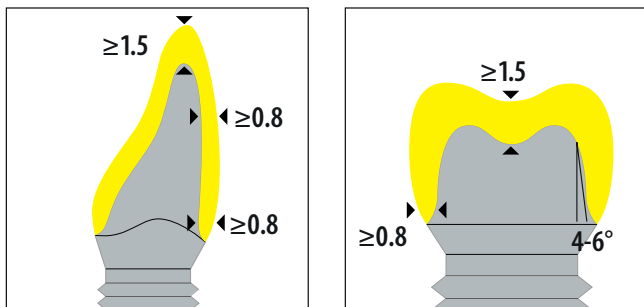
COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL
(mandatory)

Lute
SoloCem (≤ 5 mm wall thickness)

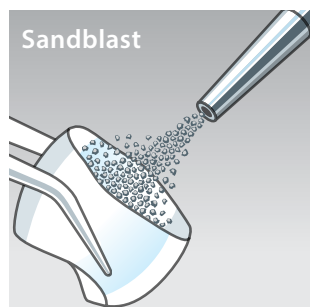
If other materials are used, the exact procedure can slightly differ. Please proceed according to manufacturer's instructions for use.

STEP 1: PREPARATION

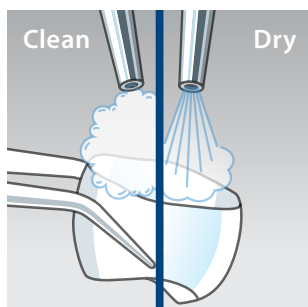


- Minimal occlusive thickness 1.5 mm
- Minimal buccal thickness 0.8 mm
- Minimal thickness under supporting cusp 1.5 mm
- Minimal cervical thickness 0.8 mm
- Preparation angle: 4-6°

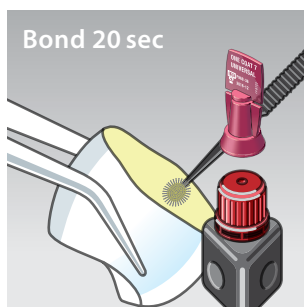
STEP 2: TREATMENT OF THE BRILLIANT CRIOS RESTORATION



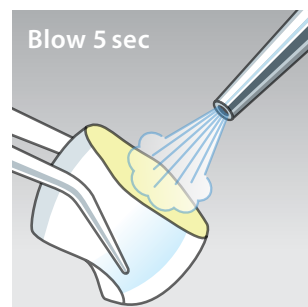
Sandblast the surface to be bonded with 25-50 μ m aluminum oxide at 1.5 bar. **Note:** Do not etch the restoration with hydrofluoric acid.



Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

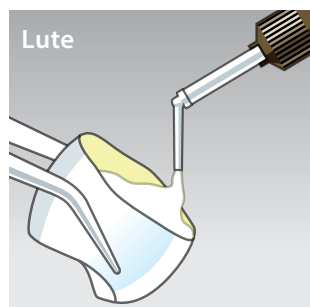


Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 sec. **Note:** Do not use other bonding agents or silane!

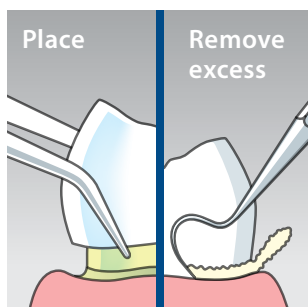


Blow gently with oil-free compressed air for 5 sec.

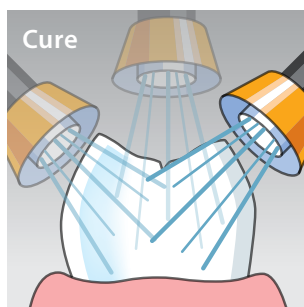
STEP 3: LUTE



Apply SoloCem directly to the inner surfaces of the restoration. **Note:** Before applying, dispense material and discard until an even, homogenous paste is flowing out.



Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.



Light-cure each surface of the restoration for 30 sec (Light intensity ≥ 800 mW/cm²).

SoloCem®

Self-adhesive, dual-curing resin cement

- High bonding strengths
- Low shrinkage
- Antibacterial zinc oxide
- Easy to use and time saving



STEP-BY-STEP GUIDELINE POLISHING CHAIRSIDE

COLTENE SUGGESTS

It is recommended to polish BRILLIANT Crios intraorally using Alpen® ShapeGuard composite polishers for a fast and superior high luster result.

All Alpen polishers can be used without paste and should be used wet when polishing intraorally.

STEP 1: ADJUSTMENT AND FINISHING

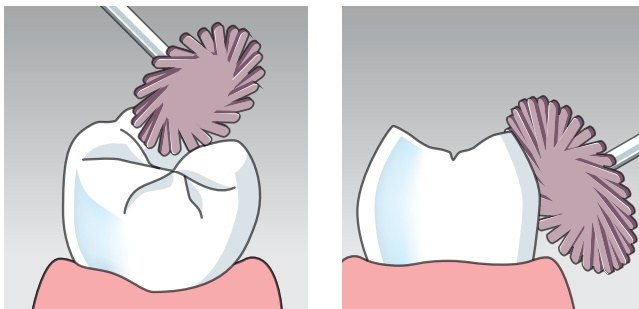


Grinding off sprue, grinding-in of the precontacts and modification of cusp slopes with a fine diamond bur (R368F023FG). Finish off the sprue area and, if necessary, other surfaces with a flame shaped polisher (RP230293RA).

RPM R368F023FG: 40,000 – 75,000

RPM RP230293RA: 3,000 – 8,000

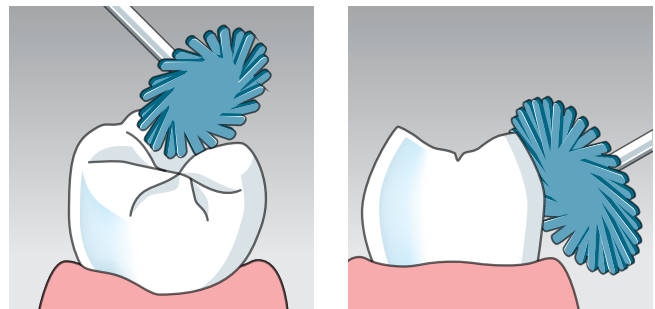
STEP 2: PREPOLISHING



Prepolishing of the occlusal surface (60021904), buccal and palatal (60021905) with Alpen ShapeGuard for composite (Composite Plus Step 1).

RPM: 10,000 – 12,000

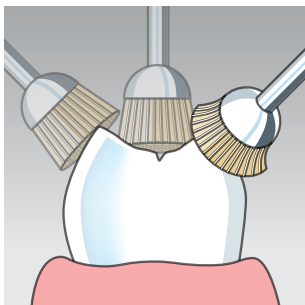
STEP 3: HIGH LUSTER POLISHING



High luster polishing of the occlusal surface (60021906), buccal and palatal (60021907) with Alpen ShapeGuard for composite (Composite Plus Step 2).

RPM: 10,000 – 12,000

STEP 4: FINAL REFINEMENT



Final refinement with Alpen brush (RP232002RA) for a tooth-like enamel gloss. RPM: 5,000 – 10,000

Alpen® ShapeGuard Composite Plus

STEP ①

STEP ②



STEP-BY-STEP GUIDELINE MODIFICATION OR REPAIR

BRILLIANT EverGlow® Light-curing composite

- Smooth consistency
- Exceptional polishability
- Excellent gloss retention
- Very good wettability



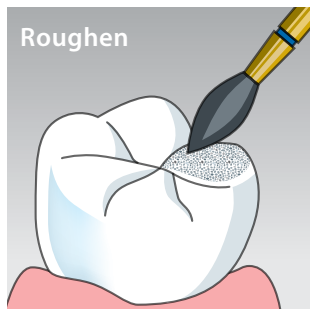
COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL

Modification / Repair
BRILLIANT EverGlow

If other materials are used, the exact procedure can slightly differ. Please proceed according to manufacturer's instructions for use.

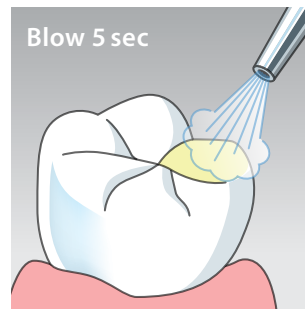
STEP 1: PREPARATION STEP 2: BOND



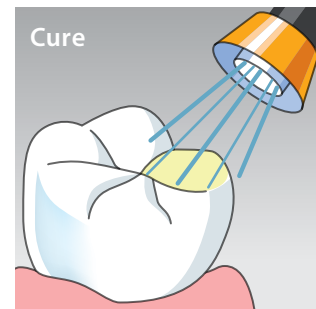
Roughen
Roughen the surface of the restoration using a diamond-coated rotary instrument.



Bond 20 sec
Apply ONE COAT 7 UNIVERSAL to dentin and enamel with a disposable dentalbrush and rub in for 20 sec.

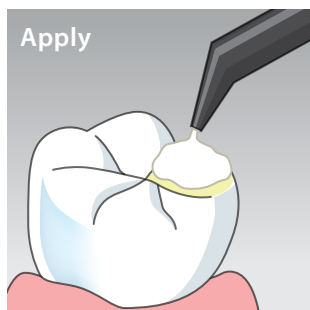


Blow 5 sec
Blow gently with oil-free compressed air for 5 sec.

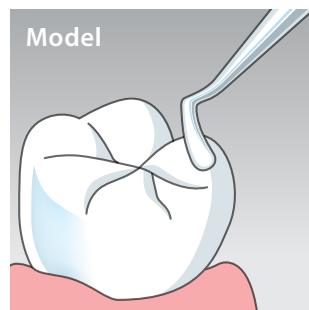


Cure
Light-cure for 10 sec (Light intensity $\geq 800 \text{ mW/cm}^2$).

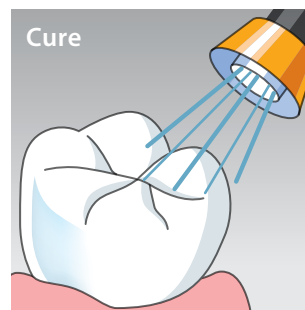
STEP 3: MODIFY



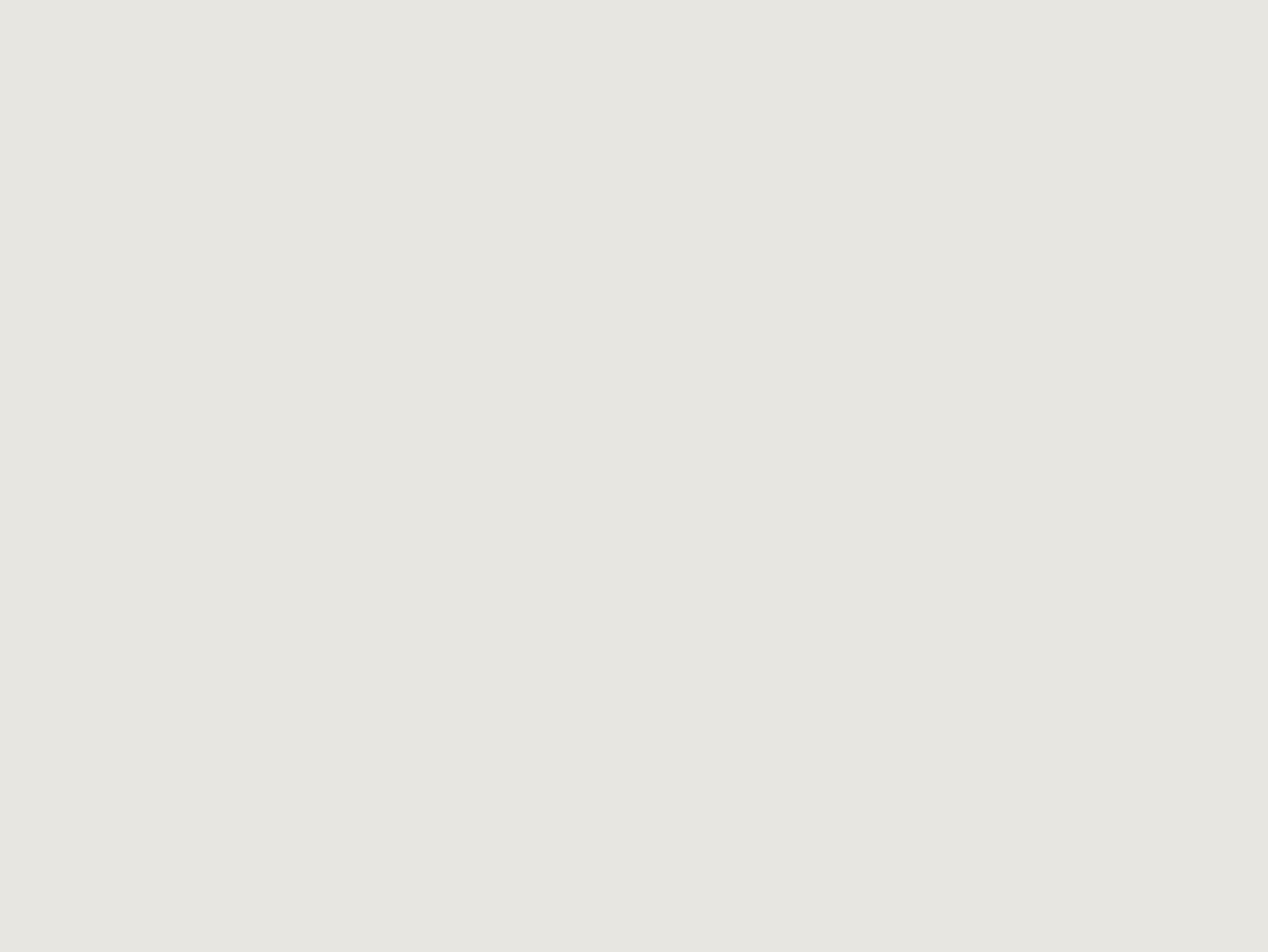
Apply
Apply BRILLIANT EverGlow to the surfaces.




Model
Model to the desired shape.



Cure
Light-cure for 20 sec (Light intensity $\geq 800 \text{ mW/cm}^2$).



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