REINFORCED CAD/CAM COMPOSITE FOR PERMANENT RESTORATION

# **BRILLIANT** Crios Handling Guideline



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# **BRILLIANT CRIOS**

# BRILLIANT CRIOS IS A REINFORCED CAD/CAM COMPOSITE FOR PERMANENT RESTORATION

- High flexural strength for resistant restorations
- Tooth-like modulus of elasticity for a shock-absorbing effect and pleasant bite feeling
- · Blends in extremely well to provide natural aesthetics
- High wear resistance and low abrasion on antagonist
- Secure bonding due to ONE COAT 7 UNIVERSAL
- Suitable luting material for every situation

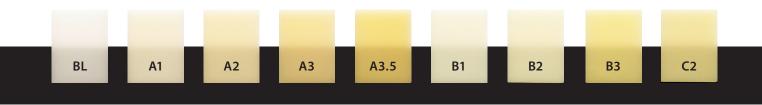


#### SHADES

Low Translucent

**High Translucent** 

**SHAPES** 



A1 A2 A3 B1

Super Translucent



Disc only available in certain shades.

BRILLIANT Crios is available as block

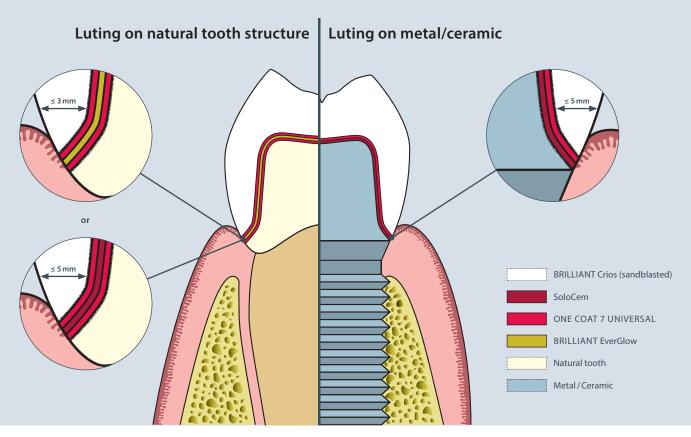
(12/14) and disc (H14/H18).





## **RELIABLE LUTING SYSTEM**

As part of its adhesive filling therapy, COLTENE offers a matched and proven luting system for BRILLIANT Crios. The key component of the luting concept is the universal adhesive ONE COAT 7 UNIVERSAL. The smooth BRILLIANT EverGlow composite or the dual-curing resin cement SoloCem offer indication-appropriate solutions, depending on the wall thickness of the restoration and the luting substrate, ranging from natural dentine to a metal abutment.





BRILLIANT EverGlow®

Light-curing composite

Ideal for luting indirect restorations with thin wall design to natural tooth substance or composite:

- Smooth consistency and excellent wettability to simplify restoration placement
- Exceptional aesthetic and long-lasting results

For restorations up to 3 mm wall thickness



#### SoloCem®

Self-adhesive, dual-curing resin cement

Convincing universal luting solution for any kind of substrate:

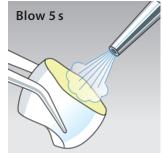
- To tooth/composite using ONE COAT 7 UNIVERSAL as additional bonding agent
- To metal/ceramic abutments, without requiring an additional bonding step

For restorations up to 5 mm wall thickness

# **KEY LUTING STEPS**

#### **STEP 1: TREATMENT OF BRILLIANT CRIOS RESTORATION**

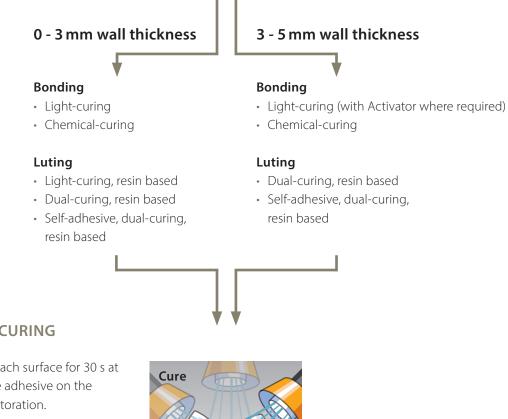




Sandblast the BRILLIANT Crios restoration. Use ONE COAT 7 UNIVERSAL as bonding agent on BRILLIANT Crios. Note: Do not use hydrofluoric acid or silane!

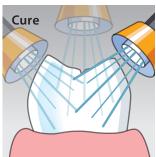
#### **STEP 2: BONDING AND LUTING TO SUBSTRATE**

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 manufacturer's instructions for use.



#### **STEP 3: FINAL CURING**

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



# IMPORTANT NOTES TO ENSURE A 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, whereas the use of other bonding agents on the tooth substance is possible.
- If a light-curing bonding is used on tooth surface, always light cure before placing the restoration.
- Only resin based luting materials are allowed to be used.

#### DON'TS

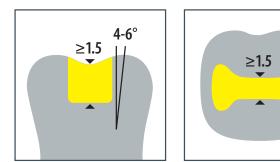
- Do not use silane.
- Do not use inorganic cements.
- Do not lute with light-curing opaque shades.
- Do not fire BRILLIANT Crios.
- Do not use hydrofluoric acid.



# STEP-BY-STEP GUIDELINE

#### PREPARATION GUIDELINE

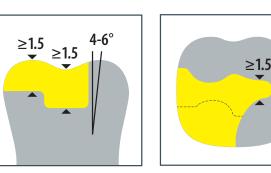
#### INLAY





• Preparation angle: 4-6°

#### ONLAY



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



#### **Bond to restoration** ONE COAT 7 UNIVERSA

(mandatory)

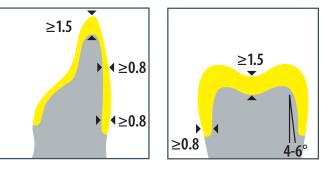
**Bond to tooth surface** ONE COAT 7 UNIVERSAL\*

**Etch** Etchant Gel S

**Lute** SoloCem

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

#### CROWN



- 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°

# Sandblast

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



**STEP 1: PRETREATMENT BRILLIANT CRIOS RESTORATION** 

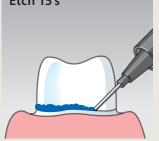
Clean with ultrasonic cleaner (e.g. 1 min, ethanol 70%) or steam cleaner (e.g. 5 s per unit, 4.5 bar).



Dry with oil-free compressed air.

#### **STEP 2: PRETREATMENT PREPARATION\***

#### Etch 15 s



Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 s. **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 dentine.

#### **STEP 3: LUTING**



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



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



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



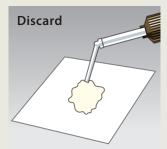
Blow gently with oil-free compressed air for 5 s.



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



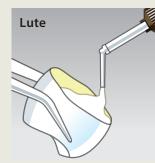
Tack cure for 3s or wait for chemical curing.



Dispense material and discard until even, homogeneous paste flows.



Remove remaining excess



Apply SoloCem directly to the interior surfaces of the restoration and/or to the preparation if necessary.



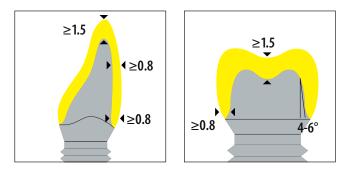
Light-cure each surface of the restoration for 30 s (Light intensity  $\ge$  800 mW / cm<sup>2</sup>).



Fix the restoration in place by applying light pressure.

## STEP-BY-STEP GUIDELINE CROWN ON IMPLANT ABUTMENT

#### PREPARATION GUIDELINE



- · 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)

**Lute** SoloCer

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

#### **STEP 1: PRETREATMENT BRILLIANT CRIOS RESTORATION**



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



Clean with ultrasonic cleaner (e.g. 1 min, ethanol 70%) or steam cleaner (e.g. 5 s per unit, 4.5 bar).



Dry with oil-free compressed air.

#### **STEP 2: PRETREATMENT PREPARATION**

#### Metal/Zirconia, Sandblast



Sandblast according to the instructions for use of the respective manufacturer.



Clean according to the instructions for use of the respective manufacturer.



Dry with oil-free compressed air.

#### Silicate Ceramic, Hydrofluoric Etch



Etch according to the instructions for use of the respective manufacturer.

# Rinse

Rinse with water according to the instructions for use of the respective manufacturer.



Dry with oil-free compressed air.





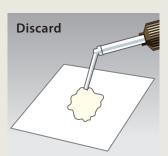
to the bonding surface with a disposable dentalbrush and rub in for 20 s. Note: Do not use other bonding agents or silane!



Fix the restoration in place by applying light pressure.



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



Dispense material and discard until even, homogeneous paste flows.



Apply SoloCem directly to the interior surfaces of the restoration and/or to the implant abutments or stumps if necessary.



Tack cure for 3s or wait for chemical curing.



Remove remaining excess

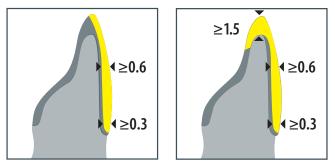


Light-cure each surface of the restoration for 30 s (Light intensity  $\geq$  800 mW / cm<sup>2</sup>).



# STEP-BY-STEP GUIDELINE VENEER

#### **PREPARATION GUIDELINE**



- 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 1: PRETREATMENT BRILLIANT CRIOS RESTORATION**



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



Clean with ultrasonic cleaner (e.g. 1 min, ethanol 70%) or steam cleaner (e.g. 5 s per unit, 4.5 bar).



Dry with oil-free compressed air.

#### **STEP 2: PRETREATMENT PREPARATION**



Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 s. **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 dentine.

#### **STEP 3: LUTING**



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



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



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



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



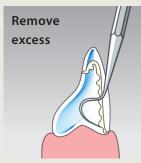
Blow gently with oil-free compressed air for 5 s.



Position the restoration on the tooth and move carefully to the final position.



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



While holding in position, remove excess.



Light-cure each surface of the restoration for 30 s (Light intensity  $\ge$  800 mW/cm<sup>2</sup>).

## **STEP-BY-STEP GUIDELINE** POLISHING CHAIRSIDE

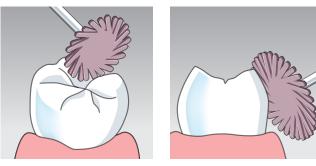
#### **COLTENE SUGGESTS**

#### **STEP 1: ADJUSTMENT AND FINISHING**



Grinding off sprue, grinding-in of the precontacts and modification of cusp slopes with a fine diamond bur (368-314-023-5F). Finish of the sprue area and, if necessary, of other surfaces with a flame shaped polisher (2303RA). RPM 368-314-023-5F: 40'000 - 75'000 RPM 2303RA: 3'000 - 8'000

#### **STEP 2: PREPOLISHING**



Prepolishing of the occlusal surface (23SG11RA), buccal and palatal (23SG14RA) with DIATECH ShapeGuard for composite (System Comprepol Plus). RPM: 10'000 - 12'000

#### **STEP 3: HIGH LUSTER POLISHING**

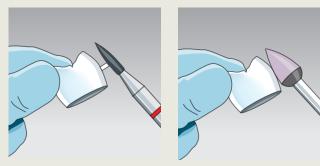




High luster polishing of the occlusal surface (24SG11RA), buccal and palatal (24SG14RA) with DIATECH ShapeGuard for composite (System Composhine Plus). RPM: 10'000 - 12'000

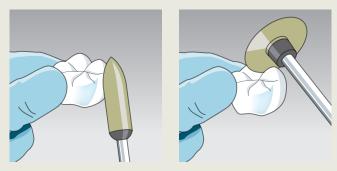
## STEP-BY-STEP GUIDELINE POLISHING LABORATORY

#### **STEP 1: ADJUSTMENT AND FINISHING**



Grinding off sprue with a fine diamond bur (860-104-012-5-F). Finish of the sprue and, if necessary, of other surfaces with a flame shaped polisher (2303RA). RPM 860-104-012-5-F: 70'000 – 140'000 RPM 2303RA: 3'000 – 8'000

#### **STEP 2: PREPOLISHING AND HIGH LUSTER POLISHING**



Prepolishing and high luster polishing of the occlusal surface, buccal and palatal with DIATECH Diashine Compomant Plus (9104HP and 9121HP). Please use an elevated pressure for prepolishing and reduced pressure for high luster polishing. RPM prepolishing: 7'000 - 10'000 RPM high luster polishing: 3'000 - 8'000

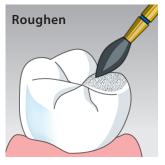
## **STEP-BY-STEP GUIDELINE MODIFICATION OR REPAIR**

#### **COLTENE SUGGESTS**

Bond to restoration

Modification / Repair

#### **STEP 1: PREPARATION STEP 2: BOND**



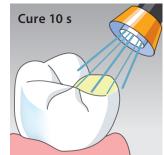
Roughen the surface of the restoration using a diamond-coated rotary instrument.



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



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



Light-cure for 10s (Light intensity  $\geq$  800 mW/cm<sup>2</sup>).

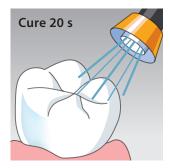
#### **STEP 3: MODIFY**



Apply BRILLIANT EverGlow to the surfaces.



Model to the desired shape.



Light-cure for 20s (Light intensity  $\geq$  800 mW/cm<sup>2</sup>).

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