

Information for cementing Livento® press restorations. Introduction.

Cementation

Choosing the correct cementation options available today are crucial for a harmonious colour effect of a full ceramic restoration. Depending on the indication, Livento® press restorations can be fixed in an adhesive, self-adhesive or conventional manner.

Brief description of the cementation methods

a) Conventional cementation

In this method of cementation, attachment is virtually based only on the static friction between the restoration and the cementation material. To provide conventional cementation, a retentive preparation with a preparation angle of 4° to 6° is necessary to achieve the highest possible static friction. Please note: in conventional cementation, the overall strength is not increased by fixing the ceramic restoration!

b) Adhesive cementation

In adhesive cementation, the attachment is largely based on a chemical-micromechanical bond, on the one hand between the restoration and the cementation material, on the other, between the preparation and the cementation material. A micromechanical bond to dentine and enamel is created using special adhesive systems. In this type of cementation, static friction plays a subordinate role, therefore a retentive preparation is not necessary. In adhesive cementation, the overall strength is increased by fixing the ceramic restoration!

c) Self-adhesive cementation

In self-adhesive cementation, attachment is based on a chemical-micromechanical bond as well as static friction. Retentive preparation is therefore recommended. As the cementation material has self-etching properties with regard to the tooth substance, no additional pretreatment of the tooth surface is necessary.

Please note: in self-adhesive cementing, the overall strength of the ceramic restoration is not increased!

Type of restoration	Conventional cementation	Adhesive cementation	Self-adhesive cementation
Veneers	–	■	–
Inlays, onlays and partial crowns	–	■	–
Anterior and posterior tooth crown	■	■	■
3-pontic bridges	■	■	■



Please observe correct processing according to the manufacturer's instruction for use enclosed in the packaging.

Source:

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First choice.

Adhesive luting composite.

Pretreatment of restoration

Etching with 9% hydrofluoric acid

Livento® press 20–30 s

⚠ Etching with hydrofluoric acid

1

Cleaning

37% phosphoric acid, etching time 60 s
Rinsing/ultrasound

2

Drying

of inner surface of the restoration

⚠ Use oil-free air

3

Silanization

Reaction time, evaporation time 60 s

4

Bonding

Finely coat the inside of the restoration

⚠ Protect from light / polymerization can influence the accuracy of the fit

5

Luting composite

Filling the restoration and coating the material
(prior try-in recommended with try-in paste)

6

Pretreatment of tooth

Cleaning

Fluoride-free prophylaxis paste or pumice stone
mixed with chlorhexidine mouth rinse

⚠ Silicize/silanize large composite build-up fillings beforehand

1

Etching

37% phosphoric acid
Enamel 30 s
Dentine 15 s

2

Rinse with water

approximately 30 s

⚠ Hypersensitivity

3

Priming

15 s

4

Application of bonding agent

20 s

5

Bonding

Coat stump thinly with a brush, blow off
with oil-free air until a thin film remains

⚠ Protect from light

6

Integration

1. Apply the restoration on the stump to the final position (strong finger pressure).
2. Remove excess cementation material with foam pellets and dental floss, check the position of the crown.
3. Depending on the cementation material, apply glycerine gel and complete curing with light polymerization (at least 20 s) from all sides.

4. Thoroughly remove the remaining excess.
5. Polishing of the restoration margin with matching ceramic polishing set or corresponding rotary instruments.

⚠ Avoid using temporary cement containing eugenol!
Adhesive cementation is only possible if eugenol-free cement has been used.

Alternative.

Self-adhesive luting composite.

Pretreatment of restoration

Etching with 9% hydrofluoric acid

Livento® press 20–30 s

⚠ Etching with hydrofluoric acid

1

Cleaning

37% phosphoric acid, etching time 60 s

Rinsing/ultrasound

2

Drying

of inner surface of the restoration

⚠ Use oil-free air

3

Luting composite

Filling the restoration and coating the material

4

Pretreatment of tooth

Cleaning

Fluoride-free prophylaxis paste or pumice stone mixed with chlorhexidine mouth rinse

⚠ Silicize/silanize large composite build-up fillings beforehand

1

Selective enamel etching

⚠ Improving the bond (not a must)

2

Integration

1. Apply the restoration on the stump to the final position (strong finger pressure).
2. Brief hardening from all sides (approx. 2 s) and removal of excess cement in gel-like state.
3. Depending on the cementation material, apply glycerine gel and complete curing with light polymerization (at least 20 s) from all sides.
4. Thoroughly remove the remaining excess.

5. Polishing of the restoration margin with matching ceramic polishing set or corresponding rotary instruments.

⚠ Avoid using temporary cement containing eugenol!
Adhesive cementation is only possible if eugenol-free cement has been used.

Crown.

Conventional bonding cement.

Pretreatment of crown

Etching with 9% hydrofluoric acid

Livento® press 20–30 s

⚠ Etching with hydrofluoric acid

1

Cleaning

37% phosphoric acid, etching time 60 s

Rinsing/ultrasound

2

Drying of inner surface of the restoration

⚠ Use oil-free air

3

Bonding cement

Fill crown and fully coat material

4

Pretreatment of tooth

Cleaning

Fluoride-free prophylaxis paste or pumice stone mixed with chlorhexidine mouth rinse

1

Drying

⚠ Use oil-free air

2

Integration

1. Press the crown onto the abutment tooth up to the final position (strong finger pressure).
2. Wait until the bonding cement has reached a gel-like state.
3. Removal of initial excess.
4. After curing (5 min) remove the remaining excess.

5. Polishing of the crown margin with matching ceramic polishing set or corresponding rotary instruments.

⚠ Conventional cementation should only be performed with sufficient retention and sufficient stump height.