NobelProcera™ Cementation Guide

Recommendations for NobelProcera Alumina and Zirconia Ceramics

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Basic principles for cementation of oxide ceramics

• No temporary cementation
• Conventional or adhesive cementation possible
• Special surface treatment protocols necessary for adhesive luting
Conventional cementation NobelProcera™ C&B on prepared teeth

Step-by-step conventional cementation with glass-ionomer-cement (GIC), resin reinforced glass-ionomer-cement or zinc-phosphate cement:

1. Try-in the veneered NobelProcera™ crown or bridge ensuring that no major adjustments are necessary
2. Clean and dry the internal surface of the crown or bridge
3. Clean, condition, dry and isolate the preparations according to manufacturer’s instructions
4. Mix cement according to manufacturer’s recommendations
5. Apply cement to the internal surface of the crown or bridge
6. Seat the crown/bridge with finger pressure paying attention to moisture control
7. Remove excess material
8. Perform a final check of occlusion, adjust as necessary and polish as described below

For occlusal adjustments use low speed diamond and rubber polishing points with copious water irrigation and light pressure, followed by polishing with a diamond polishing paste.
Adhesive cementation NobelProcera™ C&B on prepared teeth

Step-by-step resin cement:

1. Try-in the veneered NobelProcera™ crown or bridge ensuring that no major adjustments are necessary
2. Intaglio surface cleaning after try-in! Sandblast internal surface with 50µm Al₂O₃ (1 bar pressure, 10 mm distance)
3. Clean in an ultrasonic solution of Iso-Propanol for 2–3 min and air-dry

Care must be taken to guard the margins of the restoration
Adhesive cementation NobelProcera™ C&B on prepared teeth

4. Apply ceramic primer containing phosphate monomer (MDP) on the internal surface of the crown or bridge according to manufacturer’s recommendations

5. Condition the preparations according to manufacturer’s recommendations, paying attention to moisture control

If resin cement does not contain MDP, a ceramic primer must be used which contains the Phosphate Monomer (MDP).
Adhesive cementation NobelProcera™ C&B on prepared teeth

6. Mix resin cement and apply to the internal surface of the crown or bridge

7. Seat the crown/bridge with finger pressure paying attention to complete seating

8. Remove excess material and light cure resin

9. Perform a final check of occlusion, adjust if necessary and polish as described below

For occlusal adjustments use low speed diamond and rubber polishing points with copious water irrigation and light pressure, followed by polishing with a diamond polishing paste.
Conventional cementation NobelProcera™ C&B on NobelProcera™ Implant Abutment

Step-by-step glass ionomer cement / resin modified GIC:

1. Try-in the veneered NobelProcera™ crown or bridge ensuring that no major adjustments are necessary

2. Clean and dry the internal surface of the crown or bridge

No pre-treatment of abutment necessary
Conventional cementation NobelProcera™ C&B on NobelProcera™ Implant Abutment

3. Carefully place a retraction cord in the sulcus around each abutment

4. Clean, dry and isolate the abutment and close the screw head with an appropriate removable material (e.g. cotton pellet)

5. Mix cement according to manufacturer’s recommendations

6. Apply cement to the internal surface of the crown

7. Seat the crown/bridge with finger pressure paying attention to moisture control
Conventional cementation NobelProcera™ C&B on NobelProcera™ Implant Abutment

8. Remove the retraction cord and excess material

9. Perform a final check of occlusion, adjust if necessary and polish as described below

For occlusal adjustments use low speed diamond and rubber polishing points with copious water irrigation and light pressure, followed by polishing with a diamond polishing paste.

Removal of retraction cord and excess material
Conventional composite-resin luting agents and conventional silane coupling agents do not provide long-term bond strengths to high-strength ceramics. A primer or resin cement that contains special adhesive monomers that have the ability to chemically bond to metal oxides are needed.


The use of the MDP-containing composite resin on air abraded zirconia ceramic can be recommended as promising bonding method.


Silanising sand blasted Al₂O₃ increased bond strength of conventional resin cements significantly.


Ceramic cleaning methods after try-in procedures have a significant influence on the resin-ceramic bond strength. Air abrasion of contaminated zirconia ceramic is the most effective.

sandblasting >> 37% phosphoric acid >>>> 96% isopropanol