

Aesthetic crown workflows

Strong solutions for beautiful teeth

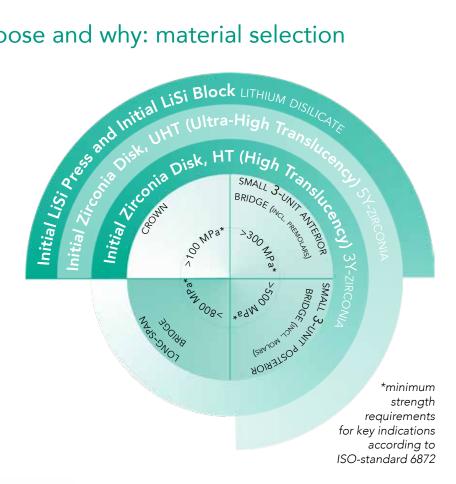


From all indirect restorations, full-coverage crowns remain by far the most popular ones. Nowadays, full-ceramic options exist, which are aesthetically pleasing. Each step along the way from planning to placement holds significance, ensuring optimal outcomes and long-term success. Embark on this exploration of full-coverage crowns and their integral role in preserving your oral health and smile. Let's have a look at the sequential process of crown placement, emphasising some important reminders for each step that are essential for a smooth procedure.

1. Know what to choose and why: material selection

Dental professionals have a wide variety of options when selecting a material to fabricate a single-unit crown. The final choice and recommendation to the patient can depend on various patient and tooth factors, such as tooth location, aesthetics, masticatory factors, and the patient's expectations and resources.

Reasoned material selection not only underpins the longevity, functionality and aesthetics of your crowns, but it will also determine your next treatment steps.





Initial Zirconia Disk: the perfect framework for your most demanding cases

- High masticatory load
- Subgingival margins
- Choice of translucency and strength level
- Entirely geared to the Initial ceramics line



Initial LiSi Press:

unsurpassed physical properties and the most natural, lifelike aesthetics

Initial LiSi Block:

fully crystallised block with all the best properties without the need for firing

- Beautiful opalescence and translucency
- Supra- or juxtagingival margin
- Entirely geared to the Initial ceramics line
- Perfect marginal adaptation

2. Prep smart: adapt to the requirements!

While the right material selection is undoubtedly crucial, preparing the tooth accordingly holds equal significance.

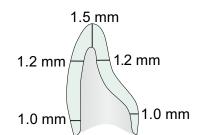
Adapt the thickness to the material

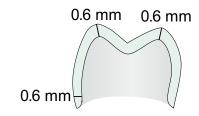
Removing just the right amount of tissue ensures that you prepare in the least invasive manner while respecting the minimum thickness of the framework.

Minimum framework dimensions

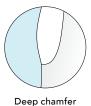
for Initial LiSi Press & Block for Initial Zirconia Disk UHT

for Initial Zirconia Disk HT





Recommended margin types





Accepted for Initial Zirconia Disk HT



Feather edge

Adapt the margins to the material

While the round shoulder and deep chamfer are horizontal geometries that have been proven for many years, vertipreps without finishing lines are increasing in popularity.

Vertical preparation techniques such as the biologically oriented preparation technique (BOPT) are accepted to be used with 5Y-zirconia (Initial Zirconia Disk HT).

To achieve optimal impression quality, ensure that the margins are clearly visible. Use gingival retraction if necessary.



3. The aesthetic touch: finishing options

Experience the convenience of GC Initial's intuitive workflows, with logical steps from the framework to the finishing. Choose your preferred workflow depending on the specific needs for your case, and always get the best possible result.

NOTE: Initial LiSi Block does not require firing to reach full strength. It can also simply be polished if characterisation is not required!

TIP: Customise white zirconia with Zirconia Coloring Liquids (in just a few minutes!)





A. Full contour/monolithic painting with Initial IQ Lustre Pastes ONE (zirconia or lithium disilicate)









B. Micro-cutback/micro-layering with Initial IQ ONE SQIN (zirconia or lithium disilicate)











C. Cutback/layering with Initial Zr-FS (zirconia) or Initial LiSi (lithium disilicate)











4. Seamless crown placement

Optimal pretreatment protocols

Initial Zirconia Disk

Initial LiSi Block and LiSi Press

MICRO-RETENTION

PRIMER

Surface roughening

Sandblasting with 50 μ m Al $_2$ O $_3$ (10 s / 0.2 MPa (2 bar) / 10 mm distance)



Etching

Etching with hydrofluoric acid (~5-9%) during 20 s

Chemical adhesion: MDP

FujiCEM Evolve: no primer required G-CEM ONE: no primer required (contains MDP)

Chemical adhesion: Silane

FujiCEM Evolve: no primer required G-CEM ONE: use G-Multi PRIMER



Cement or bond, depending on the case and your preference

Cement with FujiCEM Evolve





Zr crowns with subgingival margins. Courtesy of Dr J Tapia Guadix, Spain

- Ideal when margins are subgingival
- When retention/resistance shape are sufficient
- High bond strength to zirconia
- Low chance of post-op sensitivity
- Preferred when the caries risk is high



Bond with G-CEM ONE





Single crown restoration with high aesthetic demand. Courtesy of Dr A Forster, Hungary

- Universal, versatile option
- Can be used with G-Premio BOND or G-CEM ONE Adhesive Enhancing Primer if retention/resistance shape are insufficient
- 4 aesthetic shades, colour stable over time
- Excellent dark-cure performance (for thick/opaque crowns)



Aesthetic crown workflows



SCAN FOR MORE INFO ON EACH STEP



Initial LiSi PressLithium disilicate solutions for pressing



Initial LiSi Block Lithium disilicate solutions for CAD/CAM



Initial IQ Lustre Pastes ONE Three-dimensional paintable ceramics



Initial LiSi
Veneering system for lithium disilicate



G-CEM ONE Universal Adhesive resin cement system



Initial Zirconia Disks Zirconia CAD/CAM disks for demanding cases



Initial Zirconia Coloring LiquidsWater-based coloring liquids for pre-sintered zirconia frameworks



Initial IQ ONE SQIN
Painting and micro-layering
system



Initial Zr-FS
Veneering system for zirconia frameworks



FujiCEM Evolve
Resin-modified glass ionomer
luting cement

GC EUROPE N.V.

Head Office Researchpark, Haasrode-Leuven 1240 Interleuvenlaan 33, B-3001 Leuven Tel. +32 16 74 10 00 Fax.+32 16 40 48 32 info.gce@gc.dental https://www.gc.dental/europe

GC UNITED KINGDOM Ltd.

Coopers Court Newport Pagnell
Buckinghamshire
MK16 8JS
United Kingdom
Tel. +44 1908 218 999
Fax.+44 1908 218 900
info.uk@gc.dental
https://www.gc.dental/europe/en-GB