frequently asked QUESTIONS

ceramir® CROWN & BRIDGE

Q QUESTION - INDICATIONS	A ANSWER
Q What are the indications for use of CCB?	A High-strength ceramic crowns and bridges suitable for conventional cementation (e. g. zirconia, lithium disilicate and alumina).
Q Why is use of CCB not recommended for cementation of Empress or Lava Ultimate crowns?	A The manufacturer of Empress and Lava Ultimate only recommends adhesive cementation, since the strength of an Empress construction isn't strong enough for conventional cementation. Regular Lava crowns are zirconia and are suitable for conventional cementation. Lava Ultimate crowns are a hybrid composite/zirconia material and are not.
Q Can CCB be used on composite build-ups?	A CCB has not been tested over composite build-ups. Multiple clinicians confirm successful use over preps with both glass ionomer and composite build-ups in hundreds of cases. Clinicians should evaluate each case.
Q Can CCB be used on composite/fiber posts?	A No, use on composite posts is not a tested indication and therefore not recommended.
Q How does CCB work for implants?	A There have been no clinical studies on CCB used cementing implant crowns. What we do have is empirical evidence and customer feedback: Several doctors in Sweden have cases 5 years old for cement retained implant crowns. Feedback from users in the US is: They love CCB for implants for a few reasons: Unique viscosity allows for easy seating even with parallel abutment walls. Opaque shade allows for excellent visual confirmation to confirm all excess cement is removed sub-gingivally. CCB is radiopaque so they can also check for excess cement on a radiograph. CCB's unique chemistry allows for exceptional biocompatibility – the University of Pacific Dental School has recently selected CCB as the cement of choice for cement-retained implant crowns.
Q How does CCB work for translucent crowns, does it come in any other shades?	A At this time, only opaque white. This helps with easy clean-up, and it gets much more translucent after a two-week period. For esthetic anterior cases, this is something to consider. If you have a full 1.5 mm of rounded-shoulder on your prep (which is what Ivoclar recommends for e.max®), then show-through should not be an issue. If you have less than that, you may need the added strength of a bonding agent, as well as have to worry about show-through.
Q Can I use CCB for pre-fab SSC (Stainless Steel Crowns) (pedo)?	A Yes.

Q QUESTION - INDICATIONS

Q	A
Can I use CCB for ortho brackets?	Not an indication
Can I use CCB for space maintainers (pedo application)?	Not an indication.
Can I use CCB for ceramic inlays/onlays?	Not an indication.
Can I use CCB for Maryland bridges?	Not an indication.
Can I use CCB with my CEREC?	Manufacturer method doesn't change the indication; however, make sure the crown is properly cleaned after manufacturing before 5% HF acid etch is applied for 20 seconds. If not properly cleaned there is a risk getting low retention.
Where can I NOT use CCB?	Veneers, any low-strength ceramics, composite crowns and fiber/composite posts.
Where is CCB approved?	CCB is approved both in EU, USA and Canada. Approval follows all regulations for medical devices.

Q QUESTION - CHEMISTRY AND PHYSICS

Q	A
What are the constituents of CCB?	The main constituents of the powder are Calcium aluminate and Glass ionomer. In the liquid the main constituent is water.
How does the material adhere to the prosthetic construction?	Through the same mechanism as when binding to tooth surfaces, Nanostructural Integration. The material wets the surface & fills every irregularity of the surface. The nano sized crystallites precipitate and create a stable interface towards the construction.
What is nano?	Nanometer (10^{-9}m) is a prefix used to denote a length equal to one millionth of a millimeter (mm) or one thousandth of a micrometer (μm).
How strong is the retention with CCB?	Tests have shown the retention of CCB to be on the same level as or above some of the self adhesive resin cements. See values in CCB monograph on CeramirUS.com.
Is CCB dual-cure? Self-cure?	Totally self-cure.

Q QUESTION - CHEMISTRY AND PHYSICS

Q	A
What is the film thickness?	Around 15 microns. This has such a low and unique viscosity that there is no hydraulic pressure when seating the crown. Many evaluators have noted how easy it is to seat the crown with CCB.
Does CCB shrink or expand?	No shrinkage. No expansion.
What is the pH after fully set and how long will it last?	8.5, forever, protect the living tissues from acid attacks over time.
Are there any other cements on market with the same chemistry and characteristics?	None.
Is fluoride released?	Yes, for the first 30 days Fluoride is released in the approximate amounts of some glass ionomers.
What is the fluoride release?	Because of the GI portion of the cement, there is an initial burst of FI that is similar to other GI cements. However, after that, the calcium aluminate technology "kicks in" – and maintains the high pH to help resist acid, bacteria, and secondary decay. It's a new way of looking at it. Fluoride isn't all you need!

Q QUESTION - HANDLING

Q	A
How shall the tooth preparation be treated before using CCB?	If needed, clean the tooth using pumice or prophy paste (with or without fluoride). Remove excess moisture.
Do I have to do anything special to the tooth?	No. No etching, priming/bonding/conditioning to the tooth. Using any such pre treatments may compromise bonding.
Do I have to do anything special to the crown?	No. No silanes, no special cleaners, no primers on the crown. Using any such pre treatments may compromise bonding. (Still must 5% HF acid etch IPS e.max® for 20 sec).
Which activator should be used?	The Ceramir activator should be used.
Which applicator should be used?	The Ceramir applicator, or the 3M ESPE Aplicap applicator or Voco's AC applicator.

Q QUESTION - HANDLING	A ANSWER
Q Which types of mixing devices may be used?	A CCB can be mixed in high-frequency (4,000 to 5,000 rpm) oscillating mixing devices (titruators) intended for dental capsules (e.g. CapMix (3M), Silamat (Ivoclar) etc.). A rotating capsule mixer (RotoMix (3M)) may also be used. Refer to the respective instructions for the machines before using.
Q Can you provide a list of mixer brands that work with the shape/size of your capsule?	A High speed mixers or triturators that fit the CCB capsule size can be used. The CCB capsule has a nozzle and therefore the mixer/triturator arm needs to have an open slot to accommodate this nozzle.
Q Can I use my other equipment (activator/applicator)?	A 3M/ESPE activator: This works in most cases, so it can be recommended to doctors who want to try a sample of CCB can try their 3M ESPE activator. However, please note: if the doctor experiences activation problems (the symptom of this is, when you take the capsule out of the mixer, powder comes out when you go to extrude the cement) it's an activation problem, not a capsule problem. Applicator: Recommended applicators (Ceramir applicator, 3M/ESPE applicator, VOCO AC applicator) have been tested to give the stated amount of cement. If you use any other brand of applicator we can not guarantee the extruded volume of cement will be within stated limits. Particularly let the customer know the GC applicator (used with Fuji brand capsules) has a shorter plunger and will not push all the cement out of the CCB capsules, so it should not be used.
Q Can I use gluma before seating crown filled with CCB?	A Doxa has not tested CCB with gluma. For the purposes of being used as a desensitizer, gluma is not necessary due to CCB's unique chemistry, alkaline pH, which will not cause sensitivity.
Q Is it OK to clean the tooth surface with conditioner before using CCB?	A Yes, as long as the surface is properly rinsed with water before cementation.
Q Can you use eugenol containing temporary cements for the temporary construction?	A Yes, we have tested this and using eugenol containing temporary cements is NOT a problem.
Q Will chlorhexidine on the tooth immediately prior to cementation interfere with the CCB interaction?	A We recommend alcohol and have not tested chlorhexidine, although it should not be a problem from a chemical point of view.
Q Is it OK to clean the surface with Tubulicid before using CCB?	A Yes, but it is also OK not to use Tubulicid.
Q What is setting/working time?	A 2 mins working time (from time you take it out of the mixer) Reaches a gel phase at 2 mins after seating - incredibly easy clean-up, peels off in one piece, can floss gently down at this time, Fully set at 6 minutes after seating, patient is out the door.
Q How to use CCB on zirconia and lithium disilicate?	A Videos with step-by-step instructions for both materials are available at CeramirUS.com.
Q Can I use Ivoclean with CCB?	A Yes, Ivoclean can be used as it will not negatively affect the way with CCB works. However, there is no need to use Ivoclean as its purpose is to remove phosphate contamination. CCB works well in the presence of phosphates so an extra cleaning step is not needed.

Q QUESTION - HANDLING

A ANSWER

Q How's the clean-up?	A Incredibly easy - for docs switching from resins, this is the thing they notice most. [When resin cements cure onto the tooth, have to be ground off with a high-speed instrument – time consuming, and can damage the crown or adjacent teeth with accidental contact]. It reaches a gel phase at 2 minutes after seating and it all comes off in one or a few pieces.
Q Can I use dental floss when cleaning up?	A Yes but only in apical direction, remove the floss in lateral direction.
Q When can the patient eat?	A A good rule for all self-curing materials is to wait at least one hour before loading the restoration.
Q How moist should the prep be?	A Air-dry gently with oil-free air. Alternative method is to use a cotton roll to remove excess moisture.
Q How many crowns can I get out of SingleCap? DoubleCap?	A The size of the prep will determine, however the guidelines are: SingleCap 1-2 crowns, DoubleCap 2-4 crowns.
Q Can crowns cemented with CCB be cemented with resin cement later on?	A As long as all remedies of cement are removed from the construction and abutment and the surface is properly reconditioned according to respective cements instructions for use it should be possible. However, all cements are different and we have no tests conducted on this so there are no guaranties.
Q Why isn't CCB in a syringe or auto-mix?	A We understand that the US market has a preference for syringe delivery systems. Some customers may feel this is an obstacle. However, once they understand the unique benefits of CCB, many are willing to go back to using a mixer. Also, CCB is very sensitive to needing just the right amount of water to get the best mix, and there is just too much variation in the 2-barrel syringe systems. So, a capsule is a guaranteed fresh mix each time.
Q Can I get samples?	A We have decided to give 100% satisfaction guarantee of the starter kit instead due to the need of specific tools.

Q QUESTION - COMPLICATIONS

A ANSWER

Q If the prosthetic restoration comes loose, where does it fail?	A This is a hypothetical question. However, laboratory tests have shown in most cases a failure would be cohesive, meaning the cracks will appear within the cement thereby loosening the restoration.
Q How can a prosthetic construction be removed when luted with CCB?	A "Knock" it as usual when removing prosthetic constructions. If that is not sufficient the construction may have to be sliced.

Q QUESTION - COMPLICATIONS

Q What if the cemented crown comes off?

A ANSWER

A Following the recommended indications, constructions cemented with CCB have excellent retention. If a crown cemented with CCB comes off it could be due to silanization or use of primer on the construction. Also make sure your preparation is suitable for conventional cementation.

Q There doesn't seem to be enough cement in capsule, what's wrong?

A Most likely technique issue: Either using GC applicator which (although it fits the capsule) has a shorter plunger and doesn't push out all the cement. Or, under-rotating tip of nozzle and a significant amount of cement gets "lost" in transfer between capsule body and tip.

Q QUESTION - CLINICAL EVIDENCE

A ANSWER

Q Clinical studies?

A 6-mnths, 1-yr, 2-yrs and 3-yrs publications, all with excellent results are available at CeramirUS.com.

Q QUESTION - PATIENT EXPERIENCE

A ANSWER

Q Any post-op sensitivity?

A Absolutely none. There have been tens of thousands of crowns cemented with this product here and in Europe, and zero cases of reported sensitivity. Being a water-based cement instead of acid-based, there is also no "zing" at seating like you get with resin-modified glass ionomers, so the patient feels NOTHING when seating the crown - very gentle!

Q Any taste?

A None.

Q Is CCB good for patients with allergies? Can I get tox study info?

A Yes, in this case we will help you to get in touch with R&D at the HQ in Sweden.

Q QUESTION - GENERAL

A ANSWER

Q How does it compare cost-wise?

A Comparable to self-adhesive resin cements, in addition you don't need to buy primers and cleaners.

Q I am happy with my current cement. Why should I switch?

A No other cement is as close to the natural tooth structure as CCB. It is more biocompatible than other cements, and has had no reported sensitivity due to the material. With a permanent seal, such natural properties, and retention test results equal or better than resin cements, it's an excellent choice to give your patients the best possible long-term results.